
COPENHAGEN – Security, Stability and Resiliency Review Team (SSR2) – Public Consultation
Sunday, March 12, 2017 – 13:45 to 15:00 CET
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DENISE MICHEL: ...is newly appointed and we have not had an opportunity to meet face-to-face yet. But because of the opportunity that Copenhagen meeting presented, we're having an initial public consultation and then we'll spend some quality time together later this week delving into our scope, objectives, timeline, work plan and all of that. So, thank you so much for giving us an hour and sharing your views with us.

So, we'll quickly go through and have this SSR Review Team members introduce themselves. Why don't we start at the end down there?

BOBAN KRŠIĆ: Hi, folks. Boban, my name. I am from DENIC Security Officer over there and part of the SSR2 Review Team. I'm related with SSNCO.

JABHERA MATOGORO: Hello. I'm Matogoro, Jabhera. I'm working as the Assistant Lecturer at the University of Dodoma, Tanzania. I will be representing ALAC in SSR2 Review Team. Thank you.

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RAMKRISHNA PARYIAR: Okay. Hello. This is Ramkrishna Paryiar from Nepals. I am working as a Senior Network Engineer at ISP. I have working in the community last 15 years in different roles. Thank you very much.

ALAIN AINA: My name is Alain Patrick Aina from Africa. I live somewhere in West Africa. For the last ten years, I worked for AFRINIC, the original internal registry for Africa. And now, I work for myself and I work part time for the West and Central Africa Research and Education Network. I have also served at the SSAC, the ICANN Security and Stability Advisory Committee for 10 years. Thank you.

CATHY HANDLEY: My name is Cathy Handley. I'm with ARIN. And my focus has for about last ten years on government affairs and public policy. Thank you.

ZARKO KECIC: Hi. My name is Zarko Kecic and I'm working for Serbian TLD Registry of CTO. My tasks are security, stability and resiliency of DNS and registry system in Serbia.

MOHAMAD AMIN HASBINI: Hi. My name is Amin. And I'm a security researcher with Kaspersky Lab. My focus is around the investigation of cyber-attacks and smart city's research or smart city's security.

DENISE MICHEL: Hi. I'm Denise Michel. I'm with Facebook. I'm responsible for DNS strategy and management, Internet identifiers. I was nominated by the GNSO.

EMILY TAYLOR: Hello. My name is Emily Taylor. I'm the CEO of Oxford Information Labs. I'm an originally a lawyer and have been involved in the DNS space since 1999. And at the current time, I do a lot of research with EURid, the .eu registry into issues relating to multilingualism.

I'm also have set up with colleagues a registrar called Netistrar. And it's through the RRSg that I've ended up finally on the SSR2. I'm also an associate fellow at the Chatham House thinktank in the United Kingdom and editor of their journal of cyber policy. Thank you.

ERIC OSTERWEIL: My name is Eric Osterweil. I'm a principal scientist at Verisign. I run the Applied Security Research Team and I work on a lot of DNS measurements.

GEOFF HUSTON: Hi. I'm Geoff Huston. I'm the Chief Scientist at APNIC, one of the regional Internet registries. I've been nominated here from the Security and Stability Advisory Committee. And my apologies in advance, I'm going to have to run away at 2:15. Thanks.

KAVEH RANJBAR: Hello. I'm sorry I'm not seated but I'm number 16, Kaveh Ranjbar. I'm coming from ICANN Board. My day job is I work at RIPE NCC. I'm in-charge of K root and that's also how I'm on the Board. I am representing RSSAC on the ICANN Board. I am also involved in many DNS measurements because RIPE Atlas is one of the projects I'm in-charge of.

DENISE MICHEL: Perhaps we could get you a chair and you could join us. Are there any SSR Team members joining remotely? As you can see by the list, there's a few that weren't able to be here in person. Anyone on the phone? Don, would you like to introduce yourself? Karen, I'm not in the chat room. Does he have an open

line? Don, please feel free to speak up at any time if you're joining on audio.

If we could have the next slide please, and the next one.

So, the purpose of this session is for all of you to talk. But we wanted to give you the context for the SSR reviews who have a framework for your comments. ICANN's Bylaws dictate the scope of our review. We've got one may and two shalls when it comes to the business of this Review Team.

So, the issues that we may assess include security operation stability, resiliency matters, both physical and network, relating to the coordination of the Internet's unique identifiers, conformance with appropriate security contingency planning frameworks of the Internet system of unique identifiers and maintaining clear and globally interoperable security processes.

For those portions of the Internet's unique identifiers, we are required to assess whether ICANN has successfully implemented its security efforts, the effectiveness of those efforts and the extent to which those efforts are sufficiently robust and address the threats to security, stability and resiliency of the DNS that are relevant, of course, to ICANN's mission.

And finally, the team is also required to assess the extent to which the first SSR review recommendations have been

implemented. You can find the links to SSR1 report on our wiki page. That's available. If not in the session page, it'll be available in these slides which also will be posted.

So that's the context. I'm going to turn it over to Emily for some additional caller commentary.

EMILY TAYLOR:

Thank you very much, Denise. Could we have the next slide, please, because I think it should just put into few bullet points some key messages from all that text you last saw in the previous slide.

The ICANN Bylaws require the organization to enhance operational stability, reliability, resiliency, security and global interoperability of the system's processes, both internal and external, that affect the Internet's unique identifiers.

There's actually an awful lot of complexity compacted into those words. And many of those words will probably need to be teased out and understood in a bit more detail. But there do seem to be some themes around stability, also inward looking but outward looking and what is meant by, I would suggest, the Internet's unique identifiers both now and in the future. Next slide, please.

Denise mentioned that there is a wiki page for this team. And there are already quite a few useful resources for anyone who wants to get an introduction to the work and also the previous report of this Security Stability Review Team #1.

There's a lot of work that has gone on in the intervening for five years in tracking implementation. And there is reports are also there on the wiki and I would really recommend them to anyone who's interested in getting to grips with this. Next slide, please.

So, this is really your session. As Denise said, many of us haven't met each other and we haven't met as a group yet. And it would be incredibly useful at this early stage to hear from members of the community who are interested in this work, what you see as the key issues that we should be focusing on.

We need to report back to the ICANN Board in fairly short order what our scope of work is going to be. So, you helping in us framing that would be greatly appreciated. I think the next slide has some suggested topics but really, we would like to hear from you and to invite you to stand up and take the microphone. Thank you very much.

DAVID CONRAD:

Hi, I'm David Conrad, ICANN CTO. I actually want to thank you all for participating in this review. You have no idea what you're in for. But with that, could you go back to page seven, please?

I would like to actually ask, I'm not going to suggest what you all should work on. I just want to get a clarification here. In whatever year that was, when the AoC, the Affirmation of Commitments was written, there was a footnote, footnote number 1 that decided to redefine the term DNS to actually refer to not only what most people would normally consider the Domain Name System but also IP address and on protocol parameters.

In the context of Bylaw Section 4.6 Specific Reviews, at the top, it talks about Internet system of unique identifiers. But in C.3, it actually talks about the DNS. And I would be interested to know from the some old august body here, whether that term DNS is in the traditional sense of DNS, the one that most normal people would think of, or whether it's in the context of the redefinition that occurred via the AoC. Thank you.

DENISE MICHEL:

Yes.

EMILY TAYLOR: Thank you, David. Does anybody want to take a swing at that? Although I do question whether any normal people ever think about the DNS. But does anybody want to respond to David?

UNIDENTIFIED MALE: Yes. For me, DNS, so for me, since our last meeting, I'm taking the DNS to mean what is in the AoC instead of the Domain Name System which cover all the unique identifier ICANN in-charge of coordinating.

UNIDENTIFIED MALE: So, as mentioned, we haven't met yet so we still have to discuss in scope this. But my personal opinion where I stand, I would interpret DNS as DNS as we understand it because personally, I think if You wanted to go for the larger scope, the amount of work would be really much higher. And also, because there will be external parties involved, it will raise some other concerns which might affect the quality of the actual work. So, I would stand for focusing on DNS. But that's my personal opinion actually.

UNIDENTIFIED MALE: I would love to think that we can separate the DNS from IP addresses or other related identifiers on the Internet. But sadly,

that is as far as my knowledge, that is absolutely not possible. And whenever we do have any type of abuse or security related issues, it's the whole image which is blurred and everything gets affected.

And sometimes some issues do affect the different identifiers or different identifiers are used inside and attack. And I don't see we can really separate them. I agree that this enables a very large space for us to look into. So, we need to be really careful into choosing our focus points. Thanks.

CATHY HANDLEY:

I think one thing will be crystal clear if it's not already and that's there's no agreement at this point as to what DNS means. I look at it as the traditional DNS, not the AoC. So, I think you're going to find we're going to have a really long day on Wednesday when we have our very first meeting to get through some of this.

EMILY TAYLOR:

My personal view is you've, of course, raised a really central challenge for this team which is to define its scope in a way that is tractable but also a way that is useful not just at this point in time but for the coming years ahead, to look at the situation now and as it looks like it's going in the future. And there's a lot

of uncertainty about identifiers particularly when we're looking at Internet of Things.

So, as Cathy says, I think we're going to probably have quite a long day on Wednesday trying to get to this but thank you for raising that very important point.

UNIDENTIFIED MALE: I will suggest that maybe before we have the meeting on Wednesday to agree, so everything we publish like this light, we should put the footnote like it is in the AoC. Then we know where we are coming from.

EMILY TAYLOR: Does anybody have any questions? There's a very, very inviting looking microphone there in the center there. And if anybody wants to come and contribute their ideas, thank you.

YOSHIRO YONEYA: Hi. This is Yoshiro Yoneya from JPRS. I have one question. Does this team focus on the diversity of DNS software implementations? Because for example, BIND. BIND is one of the very major DNS software but sometimes it appears as a vulnerability so the operators have to update their software. But the announcement or the vulnerability is very just before the

attack or such kind of disclosure of vulnerability. So, I think they help keep the security in the software environment is one of the very important focus point in this thing.

EMILY TAYLOR: Thank you. Does anybody want to comment on that? Geoff, did you?

GEOFF HUSTON: Thank you for your question. The wonderful thing about security is it takes on cosmological proportions within microseconds because almost everything you can talk about has implications. And you touched upon the issue of the software coming out of DNS vendors in doing the name resolution and serving name function amongst many.

I think you have to understand the gene pool of where we are and why we are. And as David had mentioned in his earlier question, the gene pool is about ICANN and about things that touch upon this particular community and its relation outward.

So, while there is a massive amount of potential issues that you could fall understand security and stability, within human lifespan and within the small amount of folk you see in front of you plus one or two others necessarily the filter will be vicious.

And the DNS vendors will take a brief sigh of relief, it is less likely that we would be wondering that far away from business that is more essentially business around the topics discussed in these kinds of meetings under the broad umbrella and community that is ICANN itself. Thank you.

UNIDENTIFIED MALE: I just have to say plus one to whatever Geoff said. And I think that they might show up just as some risk factors but I don't think we will get to discover more than that on that side of business because it should focus on ICANN in my opinion.

EMILY TAYLOR: Thank you. Does anybody else want to ask a question or make a comment?

ALICE JANSEN: Hi. This is Alice Jansen. Sorry, this microphone is really high. Can I just say I think this is a really intimidating setup for asking questions because people have to come out to the front. It might be better if there was a microphone to pass around.

I'm a student. This is my first ICANN. And I just want to ask considering I found no one else my age here. I'm 20. I'm considering that one in three people on the Internet is a child.

How are you thinking of incorporating youth perspective into what you're doing?

EMILY TAYLOR: Does anybody want to tackle that question?

UNIDENTIFIED MALE: We can mention that we will be having public sessions which would have people be participating, just guests. And they can express their opinions, ask us about involvement in specific topics whether related to child or young people. And this is definitely very important.

JABHERA MATOGORO: Yes. Jabhera Matogoro. As the member of the team representing the At-Large or ALAC, youth will also be represented as we're going to also agree on the various methodology and approaches to be used especially on correcting the inputs and the comments. So, when doing that and when contacting the end user of the Internet, then youth will also be included within the comment that we are correcting. Thank you.

DENISE MICHEL: Thank you. Thank you so much for your comment and for coming up and raising that issue. Steve has a roving microphone so if you'd like to just sit in your seat and talk to us, just wave your hand and he's kind enough to volunteer to walk around.

Also, this is the first of what I suspect will be many engagements in different ways with the public. So, we have an e-mail address. We'll have public comment periods online. You've given us a great idea to look for other ways to engage audiences that traditionally don't come to these meetings. And we really appreciate, I really appreciate that. And we'll definitely incorporate that in our planning discussions. Thanks.

UNIDENTIFIED MALE: I'm not going to try to answer that or to comment on your question. But I just wanted to thank you for standing up and asking the question because this is a very important first step in engaging. And this is what we miss in many venues especially from younger people to engage and stand up and ask a question. And I know it might be hard at the beginning, but thank you very much for doing that.

NICK SHOREY: Hi. Nick Shorey, U.K. Government on the GAC. First of all, apologies, I'm a little bit late getting in if you've already covered

this. I'm wondering if the SSR review is also going to look at ICANN's compliance processes associated to any security issues identified.

DENISE MICHEL:

So, you may have missed the first part where we confess that we're just meeting each other and we haven't actually physically met yet but are having this session because of vagaries of the ICANN schedule I guess.

So, this is something that we'll be discussing when we meet Wednesday and as part of our development of our work plan in consideration of our scope, personally, I would think that it would be difficult to really address security in ICANN's mission without addressing some compliance issues. But again, that's a personal opinion but we'll definitely be discussing that. Thanks.

NICK SHOREY:

Thank you.

EMILY TAYLOR:

Anyone else on that? Nick, thank you for your question. Personal view, I've been asking myself the same question [as] building up to this meeting. And I think that it comes back to something we

were discussing which is to try to get the scope into something that is possible to achieve by humans in this lifetime.

Also, I think another thing that we need to be wary of or be aware of on this review is that there are other reviews that will be kicking off at similar times, the ATRT, the RDS I think it is. Yes, and of course, the consumer trust is well on its way.

I think it would be ideal if we're not tripping over each other's feet and looking at the same thing. So, these are things that we're all going to have to really try to get a handle on. Thank you very much for raising it.

Does anybody want to ask a question? You don't need to come up to the microphone. We have a roving mic. So, if you would like to stay in your seat and raise your hand, you're very welcome to make a comment.

If I'm not seeing anybody immediately coming forward, perhaps I could invite various members of the panel to maybe give their own personal view. This is a difficult thing to do because we haven't actually met and we haven't had these discussions internally. But perhaps to explain or give some view on what you are hoping for from the outcome of this Review Team. Anyone, please? Otherwise, we've got 40, 50 minutes sitting here looking at each other.

DENISE MICHEL: So, one of the issues I'm mindful of is that with the first SSR review, new gTLDs haven't been launched yet. So, the DNS landscape very different. Among the many issues that I'm thinking about within the SSR framework, I'm particularly interested in looking at how the domain name space has evolved and the abuse mitigation issues surrounding that as well just to throw out one idea.

We'll be really interested in any ideas or thoughts that the audience has on the changing landscape of the gTLDs as well as IDNs and both the gTLD and ccTLD space and whether those raise particular security issues or resiliency issues in your minds.

EMILY TAYLOR: Any other members think?

MOHAMAD AMIN HASBINI: It's not hidden that ICANN ten years ago is a lot different than ICANN today. As human beings, we rely increasingly on digital technologies and we are almost dependent on digital technologies now. And we are in countries whether in Europe in the U.S. or even in the Middle East or in Asia, we are moving towards what we call smart cities. And smart cities implement

technology in everything. Everything is digitally connected and communicating. And they will all be using unique identifiers to communicate.

I hope that we'll be able to look into this massive or mass scale security issues that we'll be having. And it's already in the news about the attacks using the botnets and doing denial of service taking down countries using DDoS or Denial of Service attacks.

These are things that I believe we should be looking into to secure the future not for ourselves but also for our children. Smart cities cannot afford being not available or disconnected. Hopefully we'll be able to push. We're here to push a little bit forward hopefully.

EMILY TAYLOR:

Anyone from that under the table to...? Yes.

UNIDENTIFIED MALE:

Okay. I think the unique identifier we use on the Internet has been involving significantly even if you look at the naming space or if you look at the number space. Sometimes some of the challenges also we'll see is even stabilities. What is the meaning of a domain name? What is the meaning of an IP address, for example? So, what are some issues?

And then it's good to see how ICANN is prepared, how ICANN is dealing in terms of ensuring, enhancing the stability, security, resiliencies of a unique identifier. I think this is very, very important these days.

It's also true that ICANN does not have operational role or the identifier. So, ICANN has talked to other entities, etc. And sometimes it's good to you to look at how relationships works, etc. The last review was conducted five years ago. I think it's important to see how things has improved and see how ICANN is now, especially that we have moved and with the post-IANA transition so I think where there are various issues, there's opportunities as well for this Review Team I think.

CATHY HANDLEY:

I think that we need to look when this review is done, have a very forward looking view so that when the review is done, it's not just done. It'll be a time and space that you mark it. But we need to look at the changes that are coming whether it's IOT, smart cities, whatever you want to call it. They're coming at a much more rapid pace than they did when the last review was done. And they will continue to speed up.

And I think it's important when we look at this review, we also need to take consideration policies that are changing and

whether they're being established or changing and how that affects the review that we do. Thank you.

MIKE:

So, I think we will need to have that meeting very seriously because I see very different views which we need to sync. And my personal view is also more on with a more pragmatic approach I would call it, because, for example, I would like to focus on three areas. One would be the scope of the work ICANN does especially on policies. One of them, for example, which has always been a question for me, I'm not for or against it but just use as an example is the worry which has been raised multiple times by SSAC or other constituencies about the visual similarities, for example.

So, I want this team to look into how deep ICANN in general should go in policy making and should they go to something like as deep as visual similarities or not. That's one area.

The other area is consistency of policies because I already have few examples that policies are not inconsistent in what they content but inconsistent in a way that in the rationale behind that. So, I want to make sure there is a rationale or if we can find a rationale based on SSR values as you mentioned here behind them.

Finally, I can't formulate it in one word but I will use an example. For example, we have the requirements to register a name when the contact information is not complete. Now, it's policy for gTLDs is being practiced which is good thing. But the other part is the only way to have registrant information is on WHOIS. And if you read WHOIS RFC, it says that only characters that is Latin one.

So basically, if you cannot write down your address in Latin, by policy, you cannot hold a domain name. So, and I want to understand that we have all of these things harmonized basically or at least know all the facts. So, this is my idea.

EMILY TAYLOR:

Thank you for that, Mike. I think that also brings into play some of the work of other Review Teams as well in terms of things like that. Eric, you wanted to come in.

ERIC OSTERWEIL:

Yes. I just wanted to point out that I think this is a really good opportunity for people in the audience to help give us a little bit of a direction that we can incorporate as reforming since you can hear a lot of perspective up on the panel that covers things from IOT to DDoS to a lot of secondary systems that rely on DNS and so on and so forth.

And so, at some point, we'll converge. And like a lot of people said, we'll pick a tractable amount of work and focus. But the extent to which people in the audience have thoughts about what security, stability and resiliency really means to you all, I think this is a great opportunity because we're going to wind up circling in pretty quickly.

EMILY TAYLOR: Thank you.

PATRICK JONES: Patrick Jones from the ICANN organization. Key difference for SSR2 from the first review is that we're now operating under a more narrowly constrained mission. That should probably be one of your considerations as you look at the language that's guiding the review is how the mission may have be interpreted differently by this Review Team from the first review.

EMILY TAYLOR: Sorry. Patrick, while you've got the microphone, I believe that you were involved in starting or involved in the first review. Can you help to inform us about some of the key issues that you see a different now? You've pointed out that there are differences in narrowing. Can you just help us with what some of those are?

PATRICK JONES: I've already been providing some knowledge transfer to David and Steve, observations from the first review lessons learned. And I'm happy to continue to do that and also follow the work of this Review Team as you get started. So, I think that you may be coming back to these questions again and again and I, with others on staff, are happy to help.

EMILY TAYLOR: Thank you very much and look forward to that.

DENISE MICHEL: I just wanted to note that there's also an Adobe Connect room. So, if you go to the session page, it has a link to the Adobe Connect room. Also, feel free to jump on that and type any questions, issues, suggestions that you have if you'd prefer to do that rather than to speak up at this session.

So, perhaps a provocative question might generate a little more comments from the crowd. If we jump forward a year and the SSR Team has issued its report, what are the three things that you'd be really unhappy if we didn't include in that report? What would you consider a successful report to contain? Anyone? Anyone?

ZACK COLEMAN: Hi there. Zack Coleman with Valideus. I suppose I don't necessarily want to speak to what's success or not. But I would be interested if we've heard a little bit about how this might overlap with WHOIS and with a collision and the potential for collisions. And I suppose success and whatnot might be how that interplays with something like, for instance, subsequent procedures and then how any advice that you might give. I don't mean GAC advice in the capitally GAC sense but only recommendations that you offer might interplay with things like other working groups in there like PDP such as subsequent procedures. Thank you.

EMILY TAYLOR: Thank you very much.

DAVID CONRAD: As ICANN CTO, it's not really my place to tell you what you all should consider that with, of course, be the communities. However, I would like to request that the recommendations that you do come up with be something that is actionable and is easily understood both the actionable items within it and the context in which the action should be performed.

We have on staff received many recommendations and unfortunately, sometimes the recommendations we receive can be a bit ambiguous and sometimes challenging to interpret in a way that is in line with what the Review Team that had generated the recommendations had intended. And the way things work, it's usually we start working on the recommendations long after the Review Team has just expanded. So, it makes things a little more complicated just trying to figure out what it is we really should be doing.

I would please request that with the recommendations that you do come up with keeping smart concepts and having them easily actionable. Even if they are incredibly hard to actually take action on, at least make it easy for us to understand what the intended action is.

EMILY TAYLOR:

Thank you very much, David. I think that's a really good reminder to anyone who's giving advice especially the Review Teams. And perhaps it's something that as the reviews evolve and take shape and we can learn from things that happened in the past and not repeat those issues. Nick, did you want to say something?

NICK SHOREY: Yes, please. I'd be interested for the team to consider around all of these reliability, resiliencies and security issues also the effectiveness of ICANN's communications, strategies and transparency of reporting around all of these as well which as we move forward and I'm thinking from a U.K. perspective, European perspective around this directive, all those interesting things, that would be something that I'd be interested to see come out of the team. Thank you.

DENISE MICHEL: Just a quick follow-up, Nick, are there particular items or issues or topics that come to mind that you'd like to see more communication and more transparency on?

NICK SHOREY: I can't think off the top of my head. If there's been an instance of major stability issue with the operation of the DNS over the last several years or an incident that's led to outage of maybe one root zone for a while. In addition to, okay, what was the issue, what actions did they take to resolve it. I'd be really interested to get your assessment of how effective was the communication strategy around it and how useful and open and clear was the reporting of such incidents and other people to address issues in further, more broadly.

DENISE MICHEL: Thank you. That's really helpful input. I take it you see part of ICANN's mandate to act as an aggregator of information, facilitator of communication on major DNS security incidences. Is that what you're saying?

NICK SHOREY: No, within the context of ICANN's role. Within the context of ICANN's role and its job, issues associated to that. It'd be good to know what, how effective. You believe that common strategies around all of, in any incidence, all these kinds of things, has been the availability, transparency and usefulness of the reporting that's within the confines of [inaudible].

UNIDENTIFIED MALE: Hi, Nick.

EMILY TAYLOR: Thank you very much. There's a question in the audience. Did you want to –

UNIDENTIFIED MALE: Sorry. I will quickly give a comment. I agree that we should consider transparency very related to these concepts but I

disagree with your examples because basically ICANN doesn't do any operations in this area, correct? If it does, and whatever it does, I think that should be involved. But your examples were mostly like registry operations or ccTLD operations or gTLD operations which is basically done by them like the server availability or outage in, let's say .com is basically Verisign's thing.

ICANN does a project, ATHI, we had really look at indicators and all of that but that's not their core functionality, correct? It's easy to extend all of that even outage in the second level domain which has millions underneath but I think that would be really out of the scope of this thing. And again, with the disclaimer that we haven't discussed any of this within the group.

EMILY TAYLOR: Thank you. Sorry, sir. Please go ahead with your comment.

UNIDENTIFIED MALE: I am just [inaudible] for my team. Just I would like to follow at one small comment that might have to create a successful SSR report. The SSR report I suggest is good to consider latest developments such as IT and particularly because of the internationalization process or initiatives, new rules are being

generated. That's the comment I would like to follow. Thank you.

EMILY TAYLOR:

Thank you very much. Does anybody else want to raise their hand and contribute some pointers to the team? I think that Denise's thought experiment is of, imagine ourselves in the future reading the report what would you be disappointed if it did not include, if that's not too many negatives in one sentence.

DENISE MICHEL:

So far, the bar is very low.

ERIC OSTERWEIL:

So, one thing that might actually help us call us on things as we go forward is in regards to what people think their role of identifiers in the future Internet would be. EUNIC is just waxing poetic about ICO identifiers being used this way or that way. We know we talked about smart cities and IOT up on the panel. So those sorts of things give us an idea what the underlying stability concerns would be for this space.

EMILY TAYLOR: Eric, I'm glad you mentioned. The IOT just seems to be coming up from different speakers in different context. And if we're all standing at this point and looking to, we're on the threshold of mass adoption. It's already happening. From my understanding, we still are very far from having interoperable and standardized naming and addressing or unique identifiers for that space. And my understanding is that there are many security issues that will flow from that fragmentation, if you like.

MOHAMAD AMIN HASBINI: Yes, you wanted to comment?

PATRICK JONES: I'm just going to say I don't know if it would be within or outside the scope but someone mentioned that name collision and ICANN's relationship with the IETF around special use names is something of interest to me. It's only I don't know whether it would be outside the scope or it might be a consideration.

MOHAMAD AMIN HASBINI: Thank you. I see that we are getting a little bit into the topic of the abuse of unique identifiers. And I do think that we should be trying to address that like we need to keep in mind that we will be offering actionable information, actionable data. We'll not be

able to save the world but we will be pushing towards something like that.

It's important to know and to identify and forecast what could be happening in the next few years around a mass scale utilization of digital technologies. Again, I mentioned that again. But I'm addressing here the abuse side of things because we need maybe to put in some ground for forecasting, performance issues, availability issues, abuse issues like, as of now, we still see a lot of abuse, anonymous abuse of unique identifiers, people who are able to register some identifiers and fake names. Maybe we should be addressing that somehow. I'm just opening up discussions.

So, I'd love also to hear from the people involved in registrars and gTLDs around the challenges that they see on their side locally on their side, on a country level or on a regional level. I think also some of our friends here could be able to help us with that too. Thanks.

DENISE MICHEL:

I think we'd also appreciate suggestions, guidance on particular groups we should reach out to as well. APWG, MAAWG, IETF, SSAC. You may have others that you interact with you think

would have useful information, input to the team. We could get that as well.

ERIC OSTERWEIL:

So, a couple of things that just occurred to me that I think we might wind up talking about and I think if this resonates, if anybody now would be a great time to hear from people. But I think one of the things that will probably come up is privacy versus the way in which telemetry or threat intelligence is identified or used with identifier spaces. So, I think that's something that if people in audience have thoughts on, now is the great time to hear them because I suspect we'll wind up talking about them ourselves at some point.

Also, we keep talking about larger and larger scale and the need for identifiers to reach into bigger and bigger systems like IOT or resulting DDoS attacks or something like that. The need for collision-free name space becomes increasingly important. So, name collisions have come up twice now I think. And I think that probably will be something we'll wind up spending time on because if we do wind up having a lot of dependent technologies that require collision for name spaces and order scale, then certainly name collisions becomes very topical. Again, I don't know if anyone has any thoughts on that but this is a great time for us to hone our thinking around it.

EMILY TAYLOR: Could I just make a contribution to this or a suggestion? In other policy environments, so I spend some time in ICANN and sometime outside of ICANN. A lot of people are talking in terms of security about the promise or otherwise of the Blockchain or distribution ledgers. I would be interested to know whether members of the group or members of the audience view that as something that is would be worthwhile this team looking at, thinking about in terms of improving security, stability or is potential within the DNS or whether that is viewed as completely off limits.

UNIDENTIFIED MALE: May I?

EMILY TAYLOR: Yes.

UNIDENTIFIED MALE: I would strongly suggest that we do not enter that arena because the way I understood SSR2 and maybe I'm wrong so we have to discuss that further, is to really what's happening today and then come up with recommendations if there are issues

there and how to fix them not to draw the path for the future and strategize on how to move forward.

I love those technologies and I play with them and I actually advocate them in some areas but scope of SSR2, I definitely do not think so because they are not in use today for any of ICANN business.

MOHAMAD AMIN HASBINI: Yes. Exactly, I absolutely agree that currently Blockchain technologies are not being actively used or forecasted even to be used inside part of the unique identifiers or the DNS systems. And as long as we don't have that as a strict fact, I don't think we should be having that part of our work or research.

I have a few questions for the audience. And I'm trying to identify what type of audience we have today. Do we have government people? Can you help us raise your hands government people?

EMILY TAYLOR: One.

MOHAMAD AMIN HASBINI: One, two, three. Nice. Maybe private sector? Private sector? All right. We've seen some students too. Financial, media.

EMILY TAYLOR: Contracted parties.

MOHAMAD AMIN HASBINI: Contracted parties, ICANN people. All right. Do you see any challenges currently with the ICANN operations? We're here for a reason. And I can see a lot of ICANN people today here with us. What are the challenges related to the SSR scope of focus? What do you think that could be of interest?

We've heard from students. We've heard from private sector. We've heard from the management. But ICANN people can you share with us some of your insights, please.

STEVE CONTE: Steve Conte, Program Director for Offices CTO. I don't want to bring the unicorn. I don't want to expose the unicorn in the room. But my hope is that the end of the report or during this process that the Review Team reviews the first SSR report and that as you produce the second SSR report, we're not talking about just doom and gloom. We can reflect of work that has been done and implement from the other report and showing not just ICANN.org but showing where the community where we've seen improvement already and that we're not necessarily

focusing entirely. And I know it's a security thing but entirely on the end of days but how we're moving forward.

EMILY TAYLOR:

Steve, thank you very much for that intervention. Can I just put you on the spot since we have some time? Could I ask the same question of you? If you were saying what do you think of the major changes and achievements that have been done since the time of the previous review that you would like to see recognized?

STEVE CONTE:

Sorry. I don't have the previous review committed to my head so I apologize if I'm not specifically addressing the review itself. But having worked in SSR Team within ICANN.org, now within CTO office, I know there's been a significant amount of work between the SSR Team and say the public safety sector with law enforcement and other aspects.

I think that kind of engagement and that kind of outreach has really come a long way. And bringing in a new working group into ICANN for one thing, that was monumental in that. I have noticed that we have members of MAAWG here today, not in the room but here at the meeting today.

And I think bringing in those new communities who are part of the SSR, of the larger ecosystem, is important and getting the two-way dialogue between these groups that haven't necessarily, they've not spoken which is not because of any animosity but because they didn't know that they should be speaking together. And I think that's been a good thing.

DAVID CONRAD:

I thought that was a really good comment. One of the things that makes me want to [throw] the team just in general is I think one of our remits should be to describe in the ways in which the interdependencies to make up the SSR landscape, to document those, to some extent.

Obviously, not completely but I think one of the things that you hit on this like we could do a gloom and doom view of things and I think that might be some of these reports tend to look that way. And I think one of the things we could do is we could make it our charge to document the important aspects of the dependencies that justify what security, stability and resiliency of the namespace needs to look like. In other words, do a "This is how things work today and for tomorrow." Thank you.

EMILY TAYLOR: Maybe just to develop that thought about interdependencies and the different groups who are looking at various aspects of stability and security. There's been a lot of talk out in the media and in the communities where I'm working about warfare and the cyber aspect of traditional warfare.

To what extent does ICANN or does ICANN see its role as having some sort of communication with the [Neto], the tele-manual guys and all of this sort of thing?

STEVE CONTE: You're really putting me on the spot, aren't you? My personal view, not speaking as an organization at all, I think we have a significant amount of subject matter expertise within the organization that we can contribute to the dialogue, we can build foundational knowledge.

And it's not just about cyber warfare. And I think in any place where we're having a higher-level discussion, having a foundational level understanding of the technology that drives that discussion is critically important. And I think ICANN.org can really contribute to that.

EMILY TAYLOR: Thank you. And thank you for being a sport.

MOHAMAD AMIN HASBINI: Steve, hi.

STEVE CONRAD: Boy, do I regret to come [to the microphone].

MOHAMAD AMIN HASBINI: Quick question. How much do you think that the SSR2 Team as per your visibility is able to collect challenging information from a legal enforcement perspective? Meaning legal enforcement people are currently the most involved in cyber warfare, cyber attack, cyber espionage, cyber sabotage related issues. And we've seen them in many different cases all around the world. How far have you seen like collaboration is possible from a law enforcement perspective? Do you think we should go there? That's my point.

STEVE CONTE: So, I'm going to be really careful answering this question because I don't want to give the impression that ICANN.org or even SSR within ICANN feels that they're part of the cyber police force. We're not. We have no intention to be.

With that said, we do have dialogue and communication with professionals around the world that I think the relationships that are built have been really important. I think if you're going to take that path as a consideration, a great entry point to that would be to have the dialogue with the PSWG, Public Safety Working Group which is a working group of the GAC where not just law enforcement but other public safety sectors come in and discuss ICANN related challenges. That would be a great entry point to discuss the viability and feasibility whether or not that has impact on this structure [we built].

MOHAMAD AMIN HASBINI: Have you seen that happening in SSR1?

STEVE CONTE: That structure didn't exist during SSR1 so I can't answer that question really.

MOHAMAD AMIN HASBINI: All right. Thank you very much.

EMILY TAYLOR: Folks, good news, bad news. Good news, we've done an hour. Bad news, we've still got 15 minutes to fill. So, I would really, I

really thank you for all of the contributions that you are making. And this will very much inform the thinking of this new team as we get to know each other and get to grips with what we're supposed to be doing.

So, if there are any other things that you would like us just doesn't have to be particularly on this slide up here but just any other things that you would like us to bear in mind, this is a great chance now for you to come forward or to just raise your hand and the mic will be given to you.

DENISE MICHEL: Yvette, could we have the SSR Team e-mail address slide up?

EMILY TAYLOR: Does everybody feel like they've had the opportunity to make the points that they came here to make? Because my proposal to the team and to the room is that we could wrap this up and get 15 minutes ahead of the TQ.

DENISE MICHEL: Slide 10 actually has the wiki page for SSR. Hopefully the e-mail address to contact, the Review Team is on that. But we would encourage you if additional thoughts come to mind after this session is over. Please e-mail the Review Team. Get in touch with

us or get in touch with ICANN staff to relay messages. And thank you.

[END OF TRANSCRIPTION]