BARCELONA – Name Collision Analysis Project (NCAP) Public Session Wednesday, October 24, 2018 – 15:15 to 16:45 CEST ICANN63 | Barcelona, Spain

JAY DALEY:

Hello, everybody. We're going to start in a couple of minutes. I think we're expecting about another 400 people, so we're just giving them all a chance to turn up, and then we'll kick off. Okay?

Okay, folks. The room is at maximum capacity now, so we're going to begin – oh, no. No, no. Standing room only, I think we're at now.

So, this is the public session on the Name Collision Analysis Project. Anyone who's come to the wrong room can leave now quickly, but otherwise, the doors will be locked. So, we're going to go—

UNIDENTIFIED MALE:

[inaudible]

JAY DALEY:

Yeah. Sorry. Thank you. My name is Jay Daley. I am one of the co-chairs of the Name Collision Analysis Project. I'm an SSAC member. I'm joined up here by, starting from the end, chair of the SSAC, Rod Rasmussen, vice-chair of the SSAC, Julie Hammer, then Dennis Chang, who is avoiding sitting down, who is the ICANN staff project manager. To our right is Jim Galvin, from Afilias, the other co-chair. Then, we have Chris Roosenraad, from where I –

Note: The following is the output resulting from transcribing an audio file into a word/text document. Although the transcription is largely accurate, in some cases may be incomplete or inaccurate due to inaudible passages and grammatical corrections. It is posted as an aid to the original audio file, but should not be treated as an authoritative record.

EN

CHRIS ROOSENRAAD:

SSAC.

JAY DALEY:

SSAC. That's right. Thank you. And, Barry Leiba, also from SSAC, all members of the work party. So, I'll save you introducing yourselves correctly.

So, our agenda today is that we're going to, first of all, try to weed out those of you that came to the wrong session by going through the technical details of how we define name collision. I thought it'd be useful for you to actually have –

UNIDENTIFIED MALE:

[inaudible]

JAY DALEY:

It's working already. That's right. I thought it'd be very useful for you to have this upfront because there are one or two registry KGB offices around that want to check that we're not getting into their space with this. So, we need to get that out front.

Secondly, it proves that we have actually done something already because we've got some definition associated with it.

So, we'll do this first about name collision, the definition, then we'll open it up to some questions about that because that's a relatively



EN

detailed topic. Then, we will talk to you about the conflicts of interest management within this project because some people have some questions about that.

Then, we will explain one of the most important things, which is a revised management structure proposal that we have put to the Board Technical Committee recently, based on us now getting to grips with this project and the scope and the scale of this project.

Finally, for approximately the last four hours, we're going to go through the public comment and the report and the responses that we wrote to that.

Then – oh, I forgot I put it on there. At the end, there'll be a short exam as well for those you still left in the room.

So, I'm going to move forward assuming there are no questions at all.

Great. So, this is going to get straight into the technology. No apologies here. So, first of all, there are two use cases which we regard as in scope for the Name Collision Analysis Project – I'm going to call it NCAP from now onwards – which will be the subject of data studies. That means we will be looking at the data in those – or, actually the data will be looked at in order to understand the impact of those and understand potential mitigations and the efficacy of any mitigation in that way.

It'd be helpful if any SSAC members could sit right at the back so that, if they come to the microphone, I have time to cut them off. That'd be great.



Okay. So, the first one them is that we have a user, Alice, who uses example in a private context before example is delegated in the public DNS. examples is now delegated in the public DNS, and user Alice suffers an adverse impact as a result.

For example, we cold cure the entire problem of the dark web by delegating onion tomorrow. But, we're unlikely to do so.

So, this is a classic one where people have been using private TLDs. This is one of the most important ones that we're looking at.

As you're probably aware, part of the Board resolution that has initiates this project is specifically about three top-level domains that may suffer from this problem, which are .corp, .home, and .mail of which have been used in a private context and all three of which have been applied for through the current [leaders] finishing [off-round] of new gTLDs.

So, the second one is where registrant Alice uses example as a label anywhere except as a private us to top-level domain and relies on search list processing, where the label, .example, is the terminal label as an intermediate step in that search list processing.

So, for example, a user that wishes to search for dashboard.example.com types in "dashboard.example" – it should say dashboard.example there; sorry – and that will work with the current search list processing.



EN

But, when .example is delegated, that would actually resolve to a domain name, potentially, and they would therefore go somewhere different.

Now, just to be clear on this last one, we are not at all confident we will be able to distinguish this from the data, but we believe it is a use case that we need to look at. It is a use case that is referenced in a previous SSAC document of ours as well: SSAC064. So, that's why we'll be looking at that.

Okay. I'm going to move on in the definition. So, when I finish the definitions, that's when well open up to questions.

So, there are three use cases which are in-scope, but they will not be the subject of data studies. Rather, we will provide general advice about them. So, the first one is where registrant Alice uses example.tld, where tld is any current TLD in the public DNS, and .example is now registered in the public DNS. Registrant Alice now receives multiple queries as a result of search list processing of users of domain names under .example.

This is the ordinary DNS. This already happens. We are not going to worry about this.

So, just to be clear then, what that's saying is that, if somebody registered in .mail, for example, anybody who has mail.com, mail.net – those type of things – would potentially get some traffic as a result of it, and that's fine.



The next one is where the registrant Alice uses .example as a top-level domain in the public DNS and then lets the registration expire. Registrant Bob then registers and delegates .example, and traffic intended for Alice's use of .example is now received by Bob's use of .example and potentially by the registrants of domain names within that.

I know this is a very theoretical one because we're still delegating let alone un-delegating top-level domains, but, again, it's something that people have raised with us. Our advice will be, basically, to deal with this by policy and provide some suggestions on how you can measure impacts and things within that policy. But, we won't be looking at it in the data.

Then, the final one is the very ordinary thing that happens when a domain name is cancelled and there is a gap and then the domain name comes back again. So, registrant Alice uses example.com and then lets the registration expire. Registrant Bob then registers and delegates example.com, and the traffic intended for Alice's use is now received by Bob.

Again, this is ordinary DNS. This happens all the time. Our suggestion will be about – "Deal with this by policy," our recommendation will be.

So, just to remind you then, we have the ones that are in-scope and will be the subject of data studies. These are the ones that are in-scope but not data studies. So, something just very simple involved there.



Then, the final ones are two that are out-of-scope ones. This one is a little bit artificial. This is a bit flip. So, this is where a domain name that is searched for by somebody is affected by a cosmic ray. This does happen. This is a noticeable, measurable effect. That cosmic changes a bit in one of the letters, one the characters, in the top-level domain. As a result, a different top-level domain is looked at.

Anybody who has run a top-level – well, anybody with access to DNS data will see this as a measurable effect. It already happens with, say, .na and .no. So, it's out of scope for us. It's not related to the intent of the registrations. It's an accidental effect.

Then, the other thing that is out of scope are any general IDN confusion issues, of which there could be many. We have previously issued advice on those. If any of you have been on Twitter the other day, I have been picking arguments with people about emoji domain names just because they are so dumb it is untrue.

So, going back then, these are the things that are in scope. If anybody has any question about these or would like to – please step up to the microphone. Thank you very much.

Please, if you can introduce yourself. [Floated away from] -

UNIDENTIFIED MALE:

[inaudible]. My apologies if missed it from a slide as I came in. What about confusions where there are strings which are available in both singular and plural? We've had support questions from people who



EN

can't remember what their own domain name is and have complained that their traffic or their website has been hijacked because they've [brought] it into Google, and Google has shown the .autos instead of the .auto.

JAY DALEY: Right. The answer is no. That would be under the same thing as general

confusion issues within the text of the domain name.

MICHAEL CASADEVALL: Michael Casadevall, ICANN Fellow. To what extent is the SSAC looking

at name collision issues with internationalized domain names?

JAY DALEY: It isn't. That's the last one of those that we're not. So, nothing specific

to IDNs.

MARK SVANCAREK: Mark Svancarek from Microsoft. Actually, I think Michael has left out one

of the cases he was concerned about, which was not specifically IDNs

but IDN variants. So, that's different from the general IDN confusion

issue.



JAY DALEY: Okay. Again, we're bracketing all of those together in IDN confusion

issues, and we're not looking at those. Those are a very different

category of these things being done here.

Christian?

CHRISTIAN HUITEMA: I think you do leave one case our that I see when I'm looking at the

actual name collisions that are hopping on the root. [I know] the name

collisions on the root are [inaudible]. You see things with naming, which

are pieces of Java script or bad copies.

One example of string we do see is DHCP space host. Nobody is typing

that, but some software is. If someone delegated it, then those kinds of

errors will result in resolution, and God knows what happens.

JAY DALEY: Are you saying that those are deliberately used in a private context or

that that is an accident that they then publicly resolve?

CHRISTIAN HUITEMA: It is an accident. It's probably a bug in software somewhere. But, it

represents something at 0.5% of the traffic through it, and it's not

negligible.

JAY DALEY: Rod?



EN

ROD RASMUSSEN: Yeah, I think I understand what he's asking here. So, there would be two

cases there. One would be if that string actually was delegatable under

the rules.

CHRISTIAN HUITEMA: Yes.

ROD RASMUSSEN: Then, it would fall under the first case.

CHRISTIAN HUITEMA: Yeah.

ROD RASMUSSEN: The second case is where it's un-delegatable, where it's an invalid string

as a DNS entry.

CHRISTIAN HUITEMA: Yeah. There are a bunch of those like that that pop up in the [top-level

domains].

EN

ROD RASMUSSEN: Right. That's what he's trying to get at. It wouldn't be a collision

because there wouldn't be a chance to delegate that. So, I think that's

outside of the set.

CHRISTIAN HUITEMA: You might want to say so in any case.

JAY DALEY: Yeah. That would make sense. I'm not convinced it is the same as the

first one, the first bit, because it's not deliberately being used in a

private context.

CHRISTIAN HUITEMA: People are not aware that they're doing that, typically. It's being done

by some kind of ...

JAY DALEY: All right. Okay, Christian. That's very useful. Thank you.

CHRISTIAN HUITEMA: You're welcome.

JAY DALEY: Would anyone else like to comment on that at all?

EN

No? Okay. Great. Thank you. Do we have any further questions on the name collisions definitions at all?

No. Okay. So, we're going to just talk about conflicts of interest management because this is something that has been quite important to us throughout this project. There are two potential issues here. These are all perceptual issues, but these are all, nonetheless, things that should be managed.

The first one is a perception that NCAP participants may be attempting to promote or resist a subsequent round of new gTLDs. Now, the mitigation for that is still being developed, but we understand that we need specific mitigations in place.

The second one is the perception of conflict of interest around SSAC members having unfair advantage when bidding for work associated with NCAP.

So, the mitigations are in there parts here. SSAC members involved in specifying the statements of work are disqualified from bidding for any work. So, those of those up here are the ones generally involved in that, and we are the ones that are disqualified, not doing that.

The statements of work are confidential, so no one has any additional access to those. The full procurement process will be managed independently by ICANN org staff, their procurement staff and various other staff, in that way, and so will not be managed by anyone internally.



So, those are the ways we think of doing that.

Now, obviously, people would say to us, "Why don't you ban all of SSAC from doing anything to do with this?" Our concern is that that would potentially leave plenty of people to leave SSAC because, if that was going to be a general principle that was applied in the future, that'd be difficult. A number of people in SSAC are independent contractors. And, also, because the whole ethos of SSAC is to get the people who understand this type of issue the best. So, we've gone out to get some of the best people on SSAC. So, if we then said, "Now you're not allowed to do anything in this space," we're going to undermine our ability to deliver these things.

So, that's the conflict of interest perception. Anybody like to talk about that at all? Please come up to the microphone.

No? Okay.

UNIDENTIFIED MALE:

[inaudible]

JAY DALEY:

Good. That's excellent. We'll move onto the next bit then. So, this is the revised management structure proposal. NCAP, as it currently is constituted, is very different from any other SSAC working party for four reasons. It was initiated by a very detailed Board reception, which requests very specific outcomes. One of the longest Board resolutions I've ever seen.



It requires allocation of its own substantial budget. It must delivered to a specific time table with possibly specific dependencies on that time table, and it requires formal, professional project management, ongoing monitoring, and regular formal communications.

So, our conclusion that we have come to recently is that NCAP is a business project. It is not community advice. So, we have proposed to the ICANN Board Technical Committee, which will then make its way through to the Board, a new management structure for this, that, firstly, this is treated as an ordinary ICANN org project, that there is a steering group of the Board Technical Committee, SSAC leadership, NCAP leadership, and OCTO, and that the role of that steering group is to monitor the strategic direction and progress of the project all together.

UNIDENTIFIED MALE:

[Have you explained] OCTO?

JAY DALEY:

Sorry. OCTO should be the Office of the Chief Technology Officer within ICANN.

Then, we have the role of ICANN org, which is to manage this as an ordinary business project, determine what should be contracted, facilitate statement of work for contractors – that sort of stuff – and manage all procurement. So, they're the actual managers of this project. They're the people that take it forward.



EN

Finally, SSAC's role. So, SSAC's role will be baked into the project. It's not optional, and it will be to provide technical input, guidance, and analysis at specific stages. The sign-off, then, at each stage and then the final report of the analysis and recommendations will come from SSAC and have SSAC behind it.

So, that is our new proposed management structure. Do we have any questions about that at all? Feel free.

UNIDENTIFIED MALE:

Is somebody monitoring Adobe Connect?

JAY DALEY:

Yes. Kathy is. Eric – oh, sorry. [Sebastien]?

ANNE-AIKMAN-SCALISE:

Anne Aikman-Scalise from Lewis Roca Rothgerber Christie. The question is, "Do you foresee that role as one in which the SSAC will in fact read all the studies submitted, or will you be dealing with summary information from somebody inside ICANN.org? Or, how closely with SSAC members analyze the data? Thank you."

JAY DALEY:

The plan is that independent contractors are used to do the initial analysis of the data. The general approach is that, when they find something there, they will need to extract relevant data from that data



to be able to show to SSAC, to be able to explain and justify their conclusions that come from that.

We expect there to be a significant amount of data, and we don't think it appropriate that we all just jump into it. There needs to be more of a structured approach around that. To be frank, it's a lot of work as well, which is why we're looking at contractors doing it. We want it delivered as a project within a time table.

So, SSAC will ask for the sufficient level of detail we need from the contactors doing that in order to be able to understand that. That will certainly include sets of data with it as well.

ERIC OSTERWEIL:

Hey. Eric Osterweil, George Mason. So, I have a question that may not make sense, in which case, I'm happy to just sort of table it. Have you all thought about what the structure – it says that the contract will be worked out, but as far as engagement as a consultant and the artifact of writing it up and publishing it and stuff like that, is there any thought how that would work with a consultant's ability to sort of carry it forward to other publication venue? I don't know if I'm being [inaudible].

JAY DALEY:

Yeah. We haven't thought about that.



JIM GALVIN:

I think that, to the extent it's public, then that's fine. There'd be no restrictions with what you can do with going forward. Obviously, we have had discussions in the past about the possibility of being given data that might be confidential for one reason or another. We have processes in place that allow the contractors to get access to things and show things. If something turns out to be confidential and can't be displayed, we're going to have to manage how to draw conclusions from data that the community can't see. So, you would obviously be restricted in that case. But, that's kind of a different issue.

This is all public, so you should be able to do some – the goal is to allow for an independent verification of our conclusions. The goal is to be able to publish enough data or make enough data available that the community can do that. But, we can't promise that, and we can't guarantee it.

So, we're going to have to manage the possibility that there might be data that people can't see. I'm not exactly sure how we'll deal with that, but we'll get there as we go along, and we'll expose it to the community as we need to.

ERIC OSTERWEIL:

That sounds great. Thanks.

JAY DALEY:

Next?



EN

HEATH DIXON:

Heath Dixon from Amazon. A couple of questions related to the previous question. The first that you've specified that ICANN org will manage this an ordinary business project and that they will determine what should be contracted out.

It then sounded, though, like you were saying that all of the work would be contracted out. Is that true? Would all the work be contracted out, or would ICANN org [inaudible]?

JAY DALEY:

ICANN org does have significant data processing skills and analysis skills in this specific technical area. So, there are certain things that they would be doing. But, in terms of the way that SSAC works with them, we would be treating the same as if they were a contractor in terms of what we expect them to provide for us to be able to sign that off.

HEATH DIXON

Okay. Then, I guess following up on that and the answer that you gave to the previous question, it sounds like you will be directing the work and you will be providing the requirements to the contractors and to the ICANN org. So, it sounds like SSAC would actually have the role of managing this and providing the requirements in addition to the roles that you've identified.

JAY DALEY:

Not quite. So, we will be specifying what we need for us to do our work.

ICANN org will be turning that into the statements of work as required



EN

for contractors or doing it itself internally. It will then be managed in the contract process that way.

So, we will be saying to them, "This is what we need," and then taking it from there.

HEATH DIXON:

So, then as the work progresses and questions come up from the contractors or from the ICANN org staff performing the work, will they come back to SSAC, or will they continue to work with ICANN org as the management structure until the end point, at which point SSAC would do the review?

JAY DALEY:

There is a staged process throughout this. So, there are various interactions required at the various staged. It would depend on the question. If the question is, "When is my invoice going to be paid?" we will have nothing to do with it.

If the question is, "Can we try to find more data to do this?" then, yes, that will come up to SSAC. So, it depends on the nature of it.

HEATH DIXON:

Okay. So, then, the final question I have is, is this going to be the final type of proposal that comes out? Or, how are you going to document the way that these relationships and roles are going to work?



EN

JAY DALEY: That's a good question.

UNIDENTIFIED MALE: [Yes].

JAY DALEY: Yes. I think, largely, this is us pushing this back to ICANN org, and it will

be ICANN org's job to do that, to take that forward, how they're going

to manage this in that way.

HEATH DIXON: Okay. Because it feels like these questions should be answered and

documented somewhere, so we should make that decision and then

publicize that.

JAY DALEY: Yes. That's reasonable. Rod?

ROD RASMUSSEN: I would add that this proposal is now into the Board Technical

Committee, and they will take that, and, if there's any tweaks that need to occur, they'll work with us on that. Then, that will be tweaked and turned into language that would be taken to the full Board as some sort

of resolution to move forward with the work. And, it would specify in

that resolution how the structure gets set up because it isn't in the

current resolution, this type of structure.

EN

So, we've had that conversation with the BTC on this already, and they're aware that we're going to have to work that part through to make sure there's language that covers this.

UNIDENTIFIED MALE:

Can anyone follow up?

UNIDENTIFIED FEMALE:

Sure.

UNIDENTIFIED MALE:

So, I just think it's very important to document that well because, when you're handing the process off, if you don't document it well, it opens up for this to take a lot longer than it should.

ROD RASMUSSEN:

Let me also add that this steering group – each of these parts of this steering group play a role. That's part of how we're trying to make sure that we manage this. We're going to have regular meetings, but this all of the members of this group to make sure this project is moving around. The BTC has agreed that that's a good idea.

ANNE AIKMAN-SCALISE:

Anne Aikman-Scalise again with Lewis Roca. This could probably be treated as a follow-up question. Will it be clear in the tweaking of all this that SSAC has the approval of the statement of work as formulated by



EN

ICANN org? In other words, will the SoW have your stamp of approval before it goes out?

JAY DALEY:

Γ

Yes, it would. It may largely be written by us, but ICANN org is the one that has to then contract somebody to do it. So, they need to have their own stamp on it, their own parameters and other things around it. So, yes. But, it will be signed off by us.

Great. Anybody here like to add anything to any of the responses so far?

No? Marvelous. Okay. Do we have any other questions on this bit?

Okay. Now we get onto the really exciting bit. We go line by line through the public comment response.

Ryan, could we please switch now?

Thank you very much. First of all, I'd like to thank all of the people that replied back to us. We had a lot of people who sent us comments. There are also a lot of interesting issues that come out of the comments, which is why I'm going to through this potentially labored process with all of you, just so that we're clear about those things and you can get a chance to ask them questions.

So, can we scroll down to the first response?

All right – actually, so we can see the summary just above that table there – well, no. The table is there. Right.



EN

Okay. So, this is just a brief outline here of the type of comments that we have. I'm not going to dwell on that. We'll carry on.

So, to the first comment, please, Dennis.

Right. So, the responses that we've written all start with the word "response" in capital letters and bold and then a number afterwards so that we can refer to those.

So, there are a number of people – so, just to be clear, an original project plan has been published previously, and that was part of the public comment. There are a lot of people saying, "Please do things differently to make it quicker," "Please parallelize some things," or do other things, and that sort of stuff.

The general tone of the comment here is that we have. That's what we did when we put that together. Unless the scope changes, it's different for us to do anything else. Every attempt was made to put that together in a particular way. So, anything that someone might mentioned about things being parallelized or doing things together or using more resources – all that kind of stuff – had been thought through, we think, generally.

I'm going to keep on going. If I see somebody twitch like they're going to the microphone, then I will slow down a little bit.

Next response, please, Dennis.



EN

This is talking about the conflict of interest that I've already talked about. This is slightly more detailed, slightly older as well. So, some things are changing.

We'll move on to Response #3, please.

So, the studies. Study 1 is reviewing all of the previous work on the subject of name collision because a number of people have said, "Hang on. This has all been done before. Hasn't somebody reviewed it? Hasn't somebody produced reports on it?" Those sort of things. The answer is yes. A lot of work has been done on this, but clearly, the Board feels that much further work is required because the Board has initiated this project.

So, our Study 1 is to review all the previous work. That will then enable us to then understand if any elements have already been resolved and sorted out. Otherwise, the rest of it will be treated as things that will need to be looked at and explored further.

Thank you, Dennis.

So, this is a really, really important one. We have some people saying to us, "Please state clearly that the next round must wait until NCAP is completed." We have other people saying to us, "Please state clearly tat the next round can go ahead without NCAP." None of them offered us money, either. What is the point, really?

So, thank you very much for those words.



EN

UNIDENTIFIED MALE:

[inaudible]

JAY DALEY:

Yeah. They have been treated with all the respect that the number of bank notes that came with them had. So, we will be providing advice those who will decide on the dependency, which is not SSAC. That advice we will be providing is effectively this: that, if delegation of new TLDs in the next round takes place before the risks are understood and the study, too, is complete, it is highly likely that there will significant problems in some unspecified and unquantified number of TLDs.

Then, going back a step, if application begins before the risks are understood, then, when the names are known, it is possible that the data collection will be compromised through such mechanisms as gaming or proprietary use, and the NCAP will be unable to produce a result.

Now, that is not necessarily a significant risk, but it is a risk that we need to make sure people know and understand. There are bound to be people attempting to game it, but whether or not we can spot it is a separate matter.

So, this is possibly the most important comment response in the entire thing here. If there are any registry KGB officers in the room that would like to come and ask questions about this, you can do it in the chat room so we don't know who you are or anything. Otherwise, I'm going to move on.



EN

Great. Number #5. So, this is a comment that expected us or asks us to determine which un-delegated strings could be considered collision string.

Now, we are not attempting to do that for multiple reasons. One of the reasons actually not written here is because that changes as usage changes and, secondly, because there are security issues with releasing those lists of strings. There are a number of other reasons why – it's a fool's errand for us to produce a banned list, so to speak, or a collision risk. For example, there may be a specific one that has a specific set of collisions that somebody has a good mitigation about.

So the scope is, instead, to identify suggested criteria for determining whether a specific undelegated string should be considered a string that manifests name collisions, otherwise placed in this cached [inaudible] collision string. This is, again, very important to understand the expectations.

Number 6 here. A number of people have been saying, "Well, what is the threat?" or, "Please prove that there is a threat initially," and our initial starting point is that there is a threat, that that has already been identified by prior work, and that the Board resolution starts from the presumption that there is a threat. So, we're not attempting to prove that and going back to the starting point.

Yeah, please ask a question. Thank you.



EN

UNIDENTIFIED MALE: [inaudible] again. On the subject of not picking which strings you're

going to publish that are potential threats, did ICANN not do that pre-

Round 1, when they thought out that the list of X399721 was a potential

string that should be reserved because we were seeing lots of DNS

traffic for it? There was a massive amount of things that were then tied

back to NGOs and things that we were told were really collisions.

[JIM GALVIN]: There's no banned string list that I know of.

JAY DALEY: We're not aware of ...

UNIDENTIFIED MALE: It was enormous [inaudible]

[JIM GALVIN]: There was no banned list of strings. There was a reserved list of strings

- oh, Warren seems to have answer. Let him speak.

WARREN KUMARI: Yeah. I suspect that you're meaning the reserve list, which is stuff like

the Red Cross and those sorts of things.

UNIDENTIFIED MALE: Well, yeah, but it had some very peculiar things on it, like X123GFFFFF.



[JIM GALVIN]:

I don't remember anything like that, unless you're talking about an IDN name of some sort. But, you're right. There was a reserve list that ICANN had stated and included in the applicant guidebook the first time around. That was – well, it was either arbitrary or deliberate criteria in which they created that list. But, whatever it was there.

ANNE- AIKMAN-SCALISE:

So, I work on – this is Anne again with Lewis Roca – the Subsequent Procedures Working Group, and one of the policy recommendations likely to come from Subsequent Procedures is that there needs to be developed a "Do Not Apply List" due to name collision risk. What I understand that you just is that you don't see anything of that nature as an outcome of your work in the NCAP study.

So, we always have potential conflicts in terms of advice that's being given from different entities within ICANN, but if I could understand a little better because I think there probably was some public comment on the necessity for a Do Not Apply List, especially because gTLD applicants are putting up there \$185,000 plus all their work to plan out their business plan for ten years and that kind of thing.

But, maybe I've misunderstood you.

JIM GALVIN:

Well, from a technical point of view, our goal in this project is to identify criteria by which you might identify a collision string. So, the important



EN

distinction to make is that we're not going to state in advance strings that should not be used. But, we'll offer criteria. We can imagine that, over time, a collision string list will come into existence as a result of that, and then they will become Do Not Apply strings for the future, moving forward.

I'm imagining that your next question will be, "Well, happens about people who applied that were then suddenly identified as a collision string?" Well, that's a policy question that we won't be speaking to. The community and/or the Board will have to figure out how they're going to deal with that issue.

ANNE AIKAMN-SCALISE:

Okay. Just a quick follow-up, Jim. So, when you're saying – and, this is very good new as far as I'm concerned that you will develop criteria. So, that will be a part of the study: requesting the data in order to develop criteria to gauge when a particular application comes in how to gauge the risk associated with that application?

Because we can deal with things like refunds and whatnot, but criteria is pretty critical.

JIM GALVIN:

Yes. I want to agree with you and say yes right up front, but I do want to be a little bit careful. Some of this is subjective. There is a little bit of risk analysis that goes on as to what's important and what's not. So, we want to provide a way to provide some guides as to how to identify



things that are at risk and perhaps at high risk or low risk. As we look at the data and begin to see what's visible, what can be measured, what

can be seen, we'll provide some guides about that.

My only hedge here and why I'm backpedaling a little bit is that I'm just trying to be careful. I don't want you to interpret this as, "We're going to come up with some set of absolute rules that's going to draw a line

in the sand about yes or no." That's really not what this is about.

So, yes, we'll create criteria or guidance for the Board in helping it make its decision. But, ultimately, we don't believe that there's a yes or no answer for most of these, for most things that are going to happen in

the future.

Guidance is better anyway because you don't really know what the future is going to look like. New strings are going to come around. People will do new things. It's hard to know what's likely to happen.

Does that make sense?

ANNE-AIKMAN-SCALISE:

Yeah. Is it still within scope in the project to develop specific data in relation to .home, .corp, and .mail?

JIM GALVIN:

Yes.



EN

JAY DALEY:

Yes. We might differ on the use of the word "data." We're not developing data in this regard. You also mentioned earlier about asking for data from new applicants that I wasn't clear about there as well – no.

ANNE-AIKMAN-SCALISE:

[inaudible]

JAY DALEY:

Okay. So, no. The Board resolution specifically identified .corp, .home, and .mail and asked for those. So, those are the key ones that need to be looked at, so we need to provide a framework by which a decision can be made on those. But, someone else will make that decision, and they may interpret some of the risk differently.

Rod?

ROD RASMUSSEN:

I'd also like to point out that we are going to be, as part of third study, providing potential mitigation methodologies, which also factors into the future process. One can imagine where something comes along and there was a question of whether it would hit a certain threshold that somebody will decide to apply based on the criteria and then the next step could be, what are the mitigation options that might be able to deal with that?



So, there's a lot of things that come out of this that allow for a variable set of decisions that can be made that can lead you to eventual delegation or non-delegation.

But, what we're trying to do is be able to provide the information and the criteria for somebody to make a risk assessment to say where that goes.

JAY DALEY:

Okay. We're at the halfway stage of this meeting. Congratulate yourself for surviving this long and moving forwards.

We were asked by a number of people, "Please give particular stakeholder groups special communications," engagements – that sort of stuff. "Marvelous multi-stakeholder model. We'll be doing it equally with everybody." I'm sure there was no surprise with that one.

So, here's a more complicated one. Somebody said – and this isn't meant to be rude, but the expectation they had of us was, "Can't you do the answer before you do the first bit of it, the question?" So, can we provide a gap analysis of the work against the current state of affairs?

The point is that we have to do the analysis to get the current state of affairs in order to do the gap analysis. There's no shortcut in this, whereby we could sort of magically do the work we're going to do later now, so that we could then compare that against what's already happened.



EN

So, we're going to have to do the three studies. Possibly, I think I'll just identify those three studies a bit for you because that's not clear.

Study 1 is analysis of the previous work that has taken place. Study 2 is analysis of the data to understand all of the mechanisms for name collision within scope of our definitions. Study 3 is to assess mitigation mechanisms to understand how well they might work.

So – yeah?

JIM GALVIN:

I want to add something to this. In the study, too, one of the things that's interesting here is that we believe that there'll be additional data available to consider that was not available in the case of the JAS studies.

The most obvious candidate is resolver data. We were hoping, since we have a number of global resolver providers, that one or more of them will be able to provide some data for us or some analysis against that data and that will help contribute. So, it'll be more available to us as part of the analysis. I think it's important to call that out.

JAY DALEY:

Okay. Thank you. So, we'll move on then. So, here we are. We have a question about legal and/or privacy concerns. That led to controlled interruption that's out of scope for this. The last thing you want to do is have any technical person do legal things. Otherwise, they'll all do it



correctly and we won't spend time arguing and the entire legal industry would collapse. So, that's very important. We're not allowed to do that.

Okay. Response 11, please. Second-level collisions. It didn't specifically mention it. We sought clarification from the ICANN Board, informally through the Board Technical Committee. What we got was, "Go and think of it yourself." We've done that now through the definition that we presented to you earlier.

So, there are some things that can happen at the second level that are in scope, but the general thing about second-level name collisions, as in someone registers a domain name, it then drops, and then, some time, someone else does it we're not doing.

Ultimately, the use of the phrase "second levels" is confusing in itself. We're simply not going to talk and use that phrase here.

Okay. All right. Response 12. Yes, we are always open for new data and things coming on this way. We need to get a certain amount of data to be able to start work on this, but we need for that time for that data. But, we also want to start work as well. So, we think we've got the appropriate balance here between waiting for the new data and working to a definitive result.

Thank you.

Carry on.



EN

ANNE-AIKMAN-SCALISE:

Sorry. It's Anne, again, from Lewis Roca. I don't think I necessarily understand. The good news is that it's actually one of our technical qualified people who will be following this project. But, here's my general question. Is there some discussion group that's going to be – by the way, it's still going to happen? Okay, good.

I don't think I understood very well what you said about the names at the second level. Could you say why you wouldn't be using that term and how – does that mean you're not looking collisions at the second level? In terms of the scope of the work, what ...

JAY DALEY:

What it means is that the use of the term "second-level" has so many different nuances in it that it confuses. In fact, it collides in multiple places when it comes to the definition here. So, we are simply not going to use that. We're going to stick with the definitions that we gave at the beginning in the interesting technical part of this session, which everybody loved and which had all the great questions about, apart from your questions now, which are great as well.

So, yes. We're just going to avoid talking about it because it's just a phrase that caused problems. So, just stick to the definitions. The definitions, I think, are reasonably clear. We have the potential for the one that Christian gave us for us to tidy up, but otherwise, we're really comfortable that they capture the nuance of first, second, and other levels.



So, Response 13. Somebody has put here, "It's likely that NCAP researchers will come across parties that will not be willing to share their data. If it turns out that the data is not available, then just kill off."

Yes, if insufficient data is found, then there may be a need to kill off.

But, we have a couple of mitigations in place against this risk, taking that as a risk than rather sort of a rule. We are looking at anonymization standards. So, those are things that people can do to their data before they share it with this project that may alleviate some of their concerns about sharing it with us.

Then, the other thing is that part of the scope we're looking at is the development of a simulation system so that there are certain things we can test through that, even if we don't have sufficient data, both potential mechanisms for collision and potential mitigation mechanisms as well. It will be quite important that we have that in the mitigation system.

Our initial discussions are that we think a reasonable simulation system is possible to be developed here.

Good. We'll move on. Thank you. So, this is what Jim talked about earlier. Somebody said, "There must be a mechanism for independent verification of validation of the data and results. General good scientific practice that independent researchers, accredited," blah, blah.

Now, we very strongly agree with this in principle. We think that is important. We are, though, worried about the data that is going to be



EN

provided to us that some large data owners that we desperately need may only provide the data under restricted terms to us.

So, we're going to aim for independent reproducibility for methods and results. So, that means that the data will not simply be published at the end of this. Independent researchers will have to go through some significant hoops to get access to that data. Those hoops will be explained to the data submitters in advance so they can understand how well we will be protecting that data.

I think that's the best we can do. It's not necessarily ideal. It presents a bit of a barrier, but we think that is actually a reasonably standard in many scientific research circles. I see the grown-up scientist at the front nodding his head. So, good. We've got a response there. Fantastic.

Okay. Response 15 we'll carry on with. Don't worry ... yeah, that's fine.

Okay. "Costs of work. How will this be paid for?" We are not talking about money today at all. That is a Board thing. The Board talks about money at length.

Then, 17. People are asking us here about the money. They want to see in depth the budget. Now, this is problematic because detailed pricing information about it or budget information sends signals to potential contractors. Some contractors are very good at understanding how ICANN publishes data and other things, and other people aren't.



EN

So, only the headline figures are being presented. Ultimately, this is a question for the Board. They may choose to do this differently. But, that's our approach.

I realize that that's not a particularly transparent approach. I apologize for that. But, because of the commercials behind it, that's quite reasonable.

Okay. The next one. Jim, would you like to talk a bit about workshops and why we have them and the plan to [inaudible]?

JIM GALVIN:

So, we obviously have a requirement from the Board as part of the primary resolution to be inclusive as much as possible with the community at large. But, SSAC also has a desire to be able to work effectively.

So, what we're going to do is we're going to have open meetings like this one at every ICANN meeting so there'll be an opportunity to report out to the community. We are going to set up a mechanism whereby the work party will conduct as much of its work as it can in an open mailing list that people can subscribe to and thus can independently contribute to and be a part of.

We will have a separate mailing list that will be a private list. If the group ever needs it, then we'll have a place for just work party members to be a part of it.



EN

There will be one requirement for those on the discussion group, and that, just as ordinary work party members will have to fill out a special statement of interest, we will require that anyone who subscribes to discussion group will also have to fill out the same statement of interest that will be published on the ICANN website as part of the wiki.

This is just standard ICANN process. For any PDP, you have to do your statement of interest. That'll be visible and seen by people. It has the standard front part, and then we have some additional questions that are part of the NCAP party, which is also common for PDPs. Sometimes they have extra questions they want answered. That will all be posted up there in general.

We hope in this way, by conducting our work – this is something different than what we've talked about before, but the goal, again, is to conduct as much of our work as possible on the open and public mailing list so that people can see it. You'll see the interactions. If you're interested, you can identify yourself, and then you can also participate in the discussions.

ANNE AIKMAN-SCALISE:

Just a quick question about the more detailed statement of interest. I recall reviewing a form in Panama, and there were, I guess, many calls for deletions of specific questions, which I thought was a bit of a concern.

So, to what degree has that form been modified?



JIM GALVIN:

We actually did submit the form to ICANN Legal to get their advice on what they thought about it. Just as you are reporting, they actually identified a number of questions for us that they thought were of very little utility and suggested that were remove them.

So, in fact as I recall, there were seven or nine – I forget now – extra questions on there, and I think that's been reduced to five. I forget, but that form will be made visible again. We don't have it handy for you today. But, as part of this thing all kicking off and getting ready, all of that will be made visible and put out through this point.

So, it has been reviewed, and we've taken that consideration and reduced what's required there.

The other thing that I want to say about timing and location of workshops is that, additional to the public forums that we'll have here, folks should just know that we are going to take advantage of ICANN meetings. The previous project proposal had this idea of having independent workshops that were multi-day workshops, and all work party members would come to those workshops and spend some time there.

We've instead revised that, such that we will have a full day of just the work party – a private meeting – available to us that will happen coincident with an ICANN meeting.



EN

So, the proposal is an extra day in front of an ICANN meeting so it doesn't conflict for the work party to have a face-to-face meeting. We'll do that at ICANN meetings going forward from the time the project formally kicks off. In addition, we'll have these public forums to ensure that the community at large has an opportunity to interact with the work party on specific issues.

JAY DALEY:

Great. Thank you. So, Response 19. I think this was some misunderstanding how we had to scope the project scopes in that we had included all of the internal costs so that ICANN org understood what those were. That wasn't a recommendation that no ICANN org staff were allowed to be used and we had to go and get independent everybody to do that with.

Okay. So, a number of people asked us to insert additional things, such as, in this case, an early termination option after six months. Our view is that six months is arbitrary here. There's no particular justification for it. It's problematic, just having an arbitrary one.

So, in developing the project plan, we put in all of the review points that are there, and those review points are implicitly kill points as well because there may be something sufficiently wrong that we need to do that. There were additional implicit review points after each part of the contracting process as well.

So, while we understand that people want this – the people have very different views on how quickly or how long this should take and what



EN

impacts it should have and other things – this is a project that the Board initiated that, if it is to be done correctly, has to be done correctly and we can't arbitrarily shorten it.

Okay. Response 21. "These studies should not be used as fishing expedition to find problems or to identify solutions to problems that may not exist." Well, it is actually a fishing expedition. That is the very nature of it. It's not the second part. It is a fishing expedition to find problems.

I'd be very surprised if we identified solutions to problems that may not exist. That would be a failure. But, we are going to be looking in the data to see what problems are there.

All right. The next bit is Number 22. It's exactly as Jim just explained. This is about other people joining, and we have mechanisms in place for that.

JIM GALVIN:

Yeah. Actually, what I should add here is – this is one additional detail – that there is a distinction between the discussion group in which we will let identified community members participate freely – identified being filling out the SOI– there is still distinction between whether you are an NCAP work party member or part of the discussion group.

The way in which we will select people to be part of the NCAP Work

Party – and we do expect to include people from the external
community – is, as this project gets started and gets going, we are going



EN

to be looking for people on the discussion group who are participating and engaged in a way which is progressing the work. We will invite them and bring them to be in to be part of the NCAP Work Party so that they can be part of that group. So, we're looking for people who are active and engaged on the discussion group. That's how you become a member of the NCAP Work Party.

JAY DALEY:

Great. Thank you. Response 23. "Prioritize those studies that may have a direct impact." All of the studies may have a direct impact. There isn't anything here that isn't directly related to new gTLDs.

Next, please. So, this was a question about advice regarding refunds. We're just saying that's out of scope for this work party.

Then, there's a question here about the mitigations to be identified, and our intent is to consider all potential mitigations. That means as well as the ones that anyone external develops or can propose.

Response 26. So, there have been a number of people trying to either increase or narrow the scope of NCAP. Our answer is there is that this scope has been set by the Board resolution and it's not within our remit to be able to narrow that or not. We can clarify it as we've done, but that's basically not changing the scope.

So, Response 27. People are worried about the data being manipulated and also worried about independent people working on this as well. So, it say, for example, "The studies contracted for using ICANN funds



EN

should be performed by independent technical experts who are free of conflicts of interest to the greatest extent possible."

I think that only means Eric sitting there. I don't know if anybody else necessarily falls properly into that category of a fully independent expert in this regard. So, unfortunately, we just don't think that is possible, given the interconnected nature of our industry.

So, we are going to actively work to eliminate bias. We showed that at the beginning with the conflict of interest stuff, and we will continue to work throughout that. We hope that the transparency around the project will make it clear and give other people an opportunity to do that.

Issues relating to trademarks. People asked us to look at the alternate path of delegation. I didn't really understand that comment. It's nothing to do with the scope of this project.

Then, here we're being asked that the SSAC should prioritize developing a testing mechanism to be deployed during the evaluation of applications of new gTLDs. I was obviously getting a bit tired and a bit touched at this point, so I've written, "This is exactly what the NCAP is aiming to do." Okay.

All right. Let's keep going. So, Response 31. So, now we're getting into the comments from the people who – many of the previous comments had been the "Hurry up/Get on with it/Narrow it" – that sort of stuff – and now we're getting onto the "Oh, this is a real problem. Take your time. If it take another 500 years, that's fine" – that kind of stuff. These



are people pointing out the risks to us, and we very much do understand the risk. That is what we do.

All right. So, the stuff here has been about conflict of interest. Since we wrote this, we have spoken to ICANN Procurement to get the rules about disqualification. I explained those rules to you earlier.

So, that's it for the public comment responses. So, we've still got a little bit of time left. You're largely awake, I'm pleased to say, so we can open up to general questions that any of you may have now. After that, we'll have a little song – no. Any general questions? Please. Anything at all about this project?

We're going to treat silence as a scent for any further criticism or question that may ever be asked about this project.

ANNE AIKMAN-SCALISE:

Hello, again. Anne with Lewis and Roca, working on some pro. In the policy recommendation that went out in the initial report, there was one, obviously, that was completely independent of the work that you're doing that stated that the community should somehow identify strings that are low, medium, and high risk.

We were looking at having Do Not Apply and then low, medium, and high risk, and then having the ability for an applicant to specify its own mitigation plan.

So, although I know that there's not a good way for there to be coordination as between these two efforts. Do you anticipate that your



output might somehow, in the development of the criteria, look at the degree of risk? Or, is that just going to be, as the project evolves, you'll make decisions about that?

JIM GALVIN:

Well, the degree of risk is a judgement. What we hope to be able to do is to talk about what risks are present from a technical point of view and speak about what that is. Whether that is a high risk or a low risk, at the moment it's not clear that we will have any judgment on that. We might in some cases, depending on the data, so I don't want to exclude the possibility. But, the general principle is that that really is up to the decision makers – so, it'd be up to the Board – to the cast the risks that we will identify to them in appropriate categories. Then, they can make decisions on delegation or not based on that position.

So, we'll see what the data shows us.

JAY DALEY:

Just to answer that, a risk is normally categorized as the product of likelihood and impact. We probably will be able to understand impact, but likelihood is more problematic. So, that's why we're sort of hedging our bets around that.

Another question?

UNIDENTIFIED FEMALE: [inaudible]



JAY DALEY:

Oh, sorry. Julie would like to answer this bit.

JULIE HAMMER:

I just want to add, too, that what's also relevant here is, what is the residual risk after potential mitigation?

KRISTINE DORRAIN:

Hi. Kristine Dorrain, Amazon Registry Services. I participated a little bit in the Registry Stakeholder Group comments, so one of the things I wanted to call out – I know you said that the gap analysis request was really putting the cart before the house, but maybe I can clarify.

So, one the things that we were talking about and thinking about is there was this JAS report that had a whole bunch of work done. Obviously, we want to be a frugal organization and not spend a lot of money twice or do a lot of work twice.

So, have you thought in your project plan about how you will not repeat work, or maybe there's off-ramps? So, this is kind of a big plan, but what if you get – six months was the number used – six months in and you realize, "Oh, shoot. We're not finding anything new," or, "Oh, it looks like we're just –" are there off-ramps to sort of stop spending money and sort of say we're done? Thanks.



EN

JAY DALEY:

Okay. So, on the first bit, Study 1, there is a degree to which there's a gap analysis in that in that there may be certain things that we – or, whoever does Study 1 – regards as resolved and understood. That would mean that both the mechanisms and the risks are understood and the mitigations are understood. So, it's unlikely, but it is possible there. So, implicitly, there is a bit of a gap analysis taking place there.

But, the reason we've explained that about the gap analysis is that none of those reports really looked at mitigations. This is the big bit: to get as far as the delegations.

The staging of these things within the projects implicitly has off-ramps, but it's not timebound. So, when we make a request for data, there is obviously a bit of time boxing of that. When we get the answer to that, we can look at that and say, "Right. We haven't had enough day. Do we extend that or not?" That way.

So, there are lots of different stages in this which can limit this or potentially extend it as well in that way, yes. So, it's a standard project in that sense in that it has the review elements built into it.

KRISTINE DORRAIN:

Thank you. That was very helpful. I kind of read it to mean that you were going to do all of this work and you weren't going to conclude anything until you got several years down the road.



EN

JAY DALEY:

So, Study 1 will have a report associated with it that will say what we thought of the previous work so far. As I said, that will attempt to say if anything has been done well and where some potential gaps are. Study 2 will be about what's found in the data, and then that will be there, and the mechanisms behind that. Study 3 will then be the mitigation.

Within those bits, there are the breakdown elements of getting the data, analyzing the data, and simultaneously creating the simulation system and other bits. So, each one of those has its own tracking and stages associated with it.

We have Dennis here, who's an ICANN project manager, working on these things as well, who's able to do all that stuff.

JIM GALVIN:

One thing I want to add which I think is important here to keep in mind is that the JAS reports and at least that work that's been up to that point in looking at that history looked at a certain set of data. I do think that's important that we're aware now that we have other data sets that we might want to look at. It'll be interesting to see if there's actually any academic work that has dealt with those particular data sets.

But, it's important to get through Study 2 and look at those additional data sets. The expectation is that it's unlikely that everything has been fully addressed in Study 1, but, as Jay says, there might be things that we can discharge. But, we still want to do Study 2 because it's likely there are new data sets that we did not have access to before that were not available before, notably resolver data, which you really could not



have gotten when that stuff was done. So, it's not an oversight on there part. It just wasn't an option.

So, we should probably make sure that we at least include some of that, and then we can quickly decide what went well. We can decide in an appropriate timeframe whether there's more there.

DENNIS CHANG:

Kristine, in a way of this type of public that we'll having at every ICANN meeting – you already heard that – that's a two-way conversation. Also, we're going to have that discussion group. You're welcome to join and be part of that discussion.

Thirdly, there's going to be a way we're going to intake questions on our community wiki, even if you're not a discussion member, a group member, both in terms of offering us data or opinions. So, there's that.

Then, also, we're going to plan some sort of a regular readout of the project status, so you'll all have that. In addition, you just heard about us forming a steering group that will have people from the leadership from different organizations that'll oversee the work party activities.

KRISTINE DORRAIN:

Thanks, Dennis. May I ask a follow-up?

DENNIS CHANG:

Sure.



KRISTINE DORRAIN: I actually was – you just led into my next follow-up, which is, for the non-

technical people – I mentioned this discussion group – will you have maybe a more formal list of roles or opportunities or things that you might be looking for guidance, or is it just sort of jump in when you see

something interesting?

JAY DALEY: We haven't thought about that.

KRISTINE DORRAIN: Thank you.

JAY DALEY: No, none of us had.

UNIDENTIFIED MALE: I'll add, I guess, that the usual ICANN model of, whoever wants to swim

is welcome in the cool.

JAY DALEY: Yuck. Carry on.

ANNE AIKMAN-SCALISE: It's Anne from Lewis Roca. One question, one comment. The question

is about when you would anticipate a final project formulation being

shared with the community.

JAY DALEY: That's with the Board now.

ANNE AIKMAN-SCALISE: All right. The comment actually is probably more relevant for Dennis

than anyone else in that, one the Subsequent Procedures Working

Group, we did have a meeting on Saturday in which the co-chairs

indicated that they are going to, once our final report comes to GNSO,

recommend immediate institution of an implementation review team

for subsequent procedures prior to the final Board approval of the

policy that's being recommended.

Several of us noted that there were certain dependencies, that it might

be possible, of course, to address questions that are pretty much

resolved or are non-controversial by constituting an implementation

review team right away, even when policy has just been recommended.

That'd be different from what's been done in the past.

DENNIS CHANG: Very different.



EN

ANNE AIKMAN-SCALISE:

But, there could be efficiencies going parallel in terms of arriving at the next round or whatever. So, we all mentioned – some of us mentioned – the certain dependencies, things such as GAC advice, things such as whether the Board adopts the CCTRT recommendations, what should the constitution of the implementation review team.

A couple of us mentioned a dependency on the NCAP project, but the co-chairs indicated that they did not review NCAP as a dependency at all in the notion of the implementation review team constitution.

The reason I say it's relevant for Dennis is that I don't think that this necessarily affects the SSAC in any particular way, but there's some of us who think that it would be a bit of a waste of time and money if IRT proceeds with its own view of name collision policy and analysis, whereas communities have not yet had the benefit of the NCAP project.

So, that's why I raised that, because there's a definite desire to fast track over there. I also want to say that I don't oppose the idea of constituting an IRT on non-controversial, non-dependent issues. But –

JAY DALEY:

Okay. Thank you, Anne. That's very useful. Thank you. Yeah, the concept of ICANN duplicating something else absolutely never happened and is not going to happen again, definitely. So, we need to be careful about that.

Thank you, all. Thank you all very much for your questions, for coming here. As I mentioned earlier, the fact that you've all come has been



EN

noted – your names and photographs taken and stuff. You're now the official supporters of NCAP. Thank you very much.

We hope to see you at a future meeting when we have some more to say, hopefully. Thank you.

[END OF TRANSCRIPTION]

