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ICANN Transcription

Transfer Policy Review PDP WG

Tuesday, 09 July 2024 at 16:00 UTC

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JULIE BISLAND: Good morning, good afternoon, and good evening, everyone. Welcome to the Transfer Policy Review PDP Working Group call taking place on Tuesday, the 9th of July 2024.

For today's call, we have apologies from Owen Smigelski (RrSG), Eric Rokobauer (RrSG), Prudence Malinki (RrSG), and Zak Muskovitch (BC). They formally assigned Essie Musailov and Rich Brown as their alternates for this call and for remaining days of absence. As a reminder, the Alternate Assignment form link can be found in all meeting invite e-mails.

Statements of Interest must be kept up to date. Does anyone have any updates to share today? If so, please raise your hand or speak up. Seeing no hands, all members and alternates will be promoted to panelists. Observers will remain as an attendee and will have access to view chat only. Please remember to state your name before speaking for the transcription. As a reminder, those who take part in the ICANN multistakeholder process are to comply with the Expected Standards of

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Behavior. Thank you and over to our chair, Roger Carney. Please begin. Roger.

ROGER CARNEY: Thanks, Julie. Welcome, everyone. I think a quick update here before we jump into our agenda. Our goal, as stated last week, is about three weeks away, it looks like. Maybe an hour and a half from three weeks from now, where we hope to be through the review of the Initial Report and everybody's comfortable with where their Initial Report is three weeks from now, and that we can proceed to Public Comment with it. Again, as we talked about last week, homework is going to be important over the next few weeks, more so than probably the rest of the time we've done anything here. So homework will be heavy for the next three weeks. I appreciate all that are doing the homework assignments and getting that in. We'd have a few things we need to cover from the Group 1(a) stuff for this week, and then again moving on, we'll be moving on to Group 1(b) and then 2. Thanks to Theo for already jumping on to the other sections and starting to put stuff in. That's great. I encourage anyone to go ahead and get as far as they can on it and get comments. It'll help the discussions go along and get be smoother as we get to them. But again, for today, we'll talk about the 1(a) homework. There were a few things identified. So we'll go through those. And then we'll move into discussions on some identified things from Group 2 that Theo put in as well.

But before we jump into the agenda, I will just make a call for stakeholder groups to come forward if they want to have anything they have to discuss, any questions they have, any comments, any discussions they've had that they want to bring forward. So I'll open up to stakeholder groups. Theo, please go ahead.

THEO GEURTS: I don't have a stakeholder group comment here. But reading the report, I read the entire thing, and not because I was bored or don't have a social life that doesn't have anything to do with it. But these initial reports, draft reports, those are, from my perspective, very important reports because this is where you sort of get the whole picture. We've been painting a very huge painting here. And at a certain point, you don't know what you painted on the left, and then you have to zoom out what you did on the right. And sort of in this report, it all comes together. It's also the moment where you sort of realize at least that's how I always approach these reports. Can I implement it for the registrar I work with? Can our developers code it and all that kind of stuff? It's a great way, a great exercise to sort of hammer out all the stuff that isn't really—sometimes things are not aligned or not in sync. And that's where you read these reports, you sort of got the opportunity there to make the finishing touches there and get it ready for the next phase. As a report goes, especially one as complex as this one, this is a technical, operational heavy report, working group, PDP, whatever you want to call it, and I'm amazed, actually—and this is not sarcasm, I'm not making any jokes here—but I am actually amazed how much stuff we got right. Sure, there are some spelling errors here and there. But overall, when it comes to the technical stuff, very well done from this group. This is going to be a very important PDP. It's going to be used by millions of registrants over the years so this is a very important PDP in case you sort of forgot that. Thanks.

ROGER CARNEY: Great. Thanks for that, Theo. I appreciate that. I agree. Not all policies really reach all the way down to the registrant, but this one will have direct impact on registrants in the whole chain here. So I think it is big. And to your point on the Initial Report, obviously, it's really important that we're comfortable when we release this. The more comfortable we are, the quicker the process goes from this point on. So I think that it's

important that we spend this time and make sure over the next three weeks that we're comfortable and we're happy with where we're at. And as you said, this initial, especially the draft of this Initial Report is that important before it even goes to Public Comment and getting it right. So I appreciate that, Theo.

Anyone else? Okay. I think then I will turn this over to Caitlin maybe to take us through, or Christian.

CAITLIN TUBERGEN: Thanks, Roger. As Christian is getting the documents to display on screen, I just wanted to, I guess, give an overview of how we'll be conducting the review. So far, we've only received comments from the Registrar Stakeholder Group or members of the Registrar Stakeholder Group. Typically what we do is we'll review the "cannot live with" items first for obvious reasons, since these are the issues that groups have where they're uncomfortable with the publication of the report with this particular text in the report. We have a couple of items here that reflect not Group 1(a) recommendations. So we'll save those for the end and allow representatives from the Registrars to introduce those items to the group. But we want to make sure we get through the Group 1(a) recommendations first since that was the assignment for the week. So we'll start with the "cannot live with" item there, then we'll move into the "can live with but prefer a change". And for each of these items, we'll ask the group or individual who input the issues to present them to the group and make the suggestion, and then allow the working group to discuss to see if they're okay with that change. If not, we'll move on to the next one.

Then for the last category of edits that represents grammatical or typographical edits, typically what we do is we don't go through those one by one, but rather, we'll leave those in the sheet for the group to review just to ensure that those are in fact typographical edits, rather than someone trying to make a substantive edit as a grammatical edit.

So at least from a support staff's review, these just seem to be numbering errors when we change the order of the Group 1(a) recommendations to reflect the various steps of the inter-registrar transfer. But we want to make sure everyone has time to review that just in case they object to any of those grammatical edits. But we won't be going through those one by one because, as you all might imagine, those are pretty tedious. But thank you to the registrars who did read through all of those grammatical edits and made the helpful suggestions. I see Roger's hand is raised. Roger, please go ahead.

ROGER CARNEY: Thanks, Caitlin. Just before you get into our agenda here, I wanted to pull something off that you said there. Again, we've made it pretty clear that the homework here over the next month is going to be important. So we're assuming everyone's doing it. So when we get into our discussions each week, we're assuming everybody's done the homework and everything. Now that doesn't mean obviously that come two weeks from now and someone identifies a big problem in Group 1(a), we won't talk about it, but that's not the goal here. The goal here is to keep up and keep pace with the homework. Again, we're making the assumption that whatever's in this document is what we need to talk about, and that's all that's been found from the whole group for the week. As Caitlin mentioned, registrars put here some notes. Again, I'm assuming that all the stakeholder groups and all the participants have gone through this and looked at it for the week, for the Group 1(a) stuff for this week, and then each week after that. I think the important part here is the homework and taking the time, the a couple of hours that it takes to go through the review of each of these sections and make sure that we get everything discussed as we go along. Again, we want this to be as clean and as agreeable as we can when we go to Public Comment. Sorry for the interruption, Caitlin. I just wanted to throw that out. Thanks.

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CAITLIN TUBERGEN: Thank you, Roger. I think one last thing to note in terms of these charts, which I think we tried to make clear, but just in case someone may have missed the call or the instructions, when we're looking at the categories of cannot live with, we're talking about cannot live with for the publication of the Initial Report. So if your group still has an issue with a recommendation, you're, of course, welcome to submit public comments on it. But if you're uncomfortable with the recommendation being published as is and there's a real issue with your stakeholder group, we'd really like to call attention to those to see if we can amend them prior to the publication of the Initial Report. So again, this doesn't mean that you're perfectly okay with the way everything is worded. But rather that if something makes you uncomfortable being published in the Initial Report, please do flag those so that we have a chance to amend those prior to the publication.

So with all of that being said, as you can see, the first Group 1(a) issue was in reference to Recommendation 21. And this is the recommendation of revising the reasons that a registrar may deny or NACK a transfer. So in this chart, on the left, you'll see the reference to the current section of the Transfer Policy. The current text of the NACKing reason is evidence of fraud. And the group revised that to the third column, evidence of fraud or the domain presents an active DNS security threat as defined here. And then the rationale is included as to why the group made that change. Again, as we noted last week, the yellow highlighting that's present in the report represents changes that were made after the group reviewed public comments on the report. So the group has already seen this yellow highlighted text way back when, but we just wanted to call it out as these are differences from when the first Initial Report was published.

So with all that being said, the Registrars had an issue with the language regarding DNS threats. So if a registrar would like to explain that to the group and explain what the proposal would be, that would be very helpful. Theo, please go ahead.

THEO GEURTS: Since I'm the one who is tripping up over the language here, not the entire language, but DNS threats. I was reading it and I was going like, "What the hell is a DNS threat?" Then basically when you go down on DNS threats, you talk about DDoS attacks, DNS spoofing, but that's nothing to do with domain names. And what we're talking here is where we deny a transfer because we suspend the domain name for fraud or for phishing or for malware. And I'm a stickler for terminology. I mean, this entire discussion about DNS abuse is an imaginary one, it has nothing to do with domain names. And then we get the terminology like compromised domain names, and you use that outside ICANN and nobody knows what you're talking about. I want to make sure that we use correct terminology. DNS threat is something that is mentioned in the Bylaws but it isn't applicable to the stuff that we're dealing with here. So if anybody has a good suggestion here. Personally, when I talk about phishing, malware, it's all cybercrime in my opinion, and you have different types of cybercrime. We have stuff like phishing, but that's perfect terminology to point out a problem. And it's a different problem when you're talking about malware or botnets. It's all somewhat cybercrime related, but you have all these separate categories that sort of label the problem exactly what it is. And when you have conversations or discussions, if you're going to talk about DNS threats, nobody knows what you're talking about. If you talk about phishing, everybody knows what you're talking about. So that's just what I'm pointing out. It's not something I'm going to die on a hill here kind of thing, but I would like to call a spade a spade. I guess that's the entire dialogue here. Thanks.

CAITLIN TUBERGEN: Thank you, Theo. I see that Rick did have a comment, which support staff was also a little bit confused about where it says DNS threats. But is your issue with the language an active DNS security threat?

THEO GEURTS: I was actually tripping up on a DNS security threat, and I'm not sure what that link was supposed to do, but it wasn't opening for me. So I couldn't actually get into the details what that was. Okay. Apparently, it works here. It didn't in Doc. Okay. Thanks, Sarah.

CAITLIN TUBERGEN: Sarah, please go ahead.

SARAH WYLD: Thank you. Hi. As I recall, and we all know that my memory is terrible at for things that are not written down, but I think we wanted to include language around if DNS abuse is happening, then you can deny the transfer. But the problem, as I recall it at the time, was how do we define DNS abuse in this? Like, we wanted to refer to some kind of external existing definition that we didn't have at the time, except for in this ICANN page about DNS security threats, where the security threats include five broad categories of harmful activity, which are the categories we're all familiar with. But now the RAA amendment has happened. And so if we look at the updated Registrar Accreditation Agreement Section 3.18.1, it includes the same set of what those DNS abuse terms are. So if we don't like linking to the security threat mitigation page, perhaps we want to instead refer to that updated RAA. Thank you.

CAITLIN TUBERGEN:	Thank you, Sarah. Rick, please go ahead.

RICK WILHELM: One, I'll plus one what Sarah said. I think I agree with both her recollection in the rationale and also of her suggested mitigation. I would also say that that is a more an upgraded approach, given the amendments exist that we should refer to them, as opposed to not referring to them, because I think that future readers would actually wonder why we didn't refer to the amendments since they are going to be in effect at the time that this policy goes into effect. So I double plus one what Sarah said.

I actually raised my hand because I must have missed why we're starting with the third one in the list of the spreadsheet as opposed to the first one in the list of the spreadsheet. This one here that we're on which is numbered 925 for some reason—I'm just wondering why we're starting with that one, as opposed to the other ones. But I missed the meeting last week, and so maybe that's my fault. Thank you.

CAITLIN TUBERGEN: Thanks, Rick. Apologies for not explaining that well. So what we are proposing to do is go through the Group 1(a) issues first because the homework assignment was to review the Group 1(a) recommendation. So the recommendation specifically around inter-registrar transfers and part one of the Transfer Policy, and make sure that we're able to get through all of the cannot live with and propose changes for the Group 1(a) recommendations, and then we'll return to the first two, which in this column, which deal with Group 2 recommendations, so that the registrars can present those issues. But the agenda for today was Group 1(a), and some groups may not have gone through the Group 1(b) and Group 2 recommendations yet, though we know everyone's familiar with them. But we just wanted to make sure that we got through the 1(a), which we

should be able to do as this is the only cannot live with for 1(a), and then there's a few can live with but prefer a change.

RICK WILHELM: Got it. Thank you.

CAITLIN TUBERGEN: You're welcome. Just as support staff is clear on the proposed change that Sarah is suggesting, Sarah, is what you're suggesting for the revision to be evidence of fraud, or B, DNS abuse as defined in the RAA?

SARAH WYLD: That sounds great. Thank you.

CAITLIN TUBERGEN: Okay. So we will take note of that. Does anyone have any objections? Ken, I see your hand is raised. Is this in reference to Sarah's suggestion?

KENNETH HERMAN: Yes, it is.

CAITLIN TUBERGEN: Okay, great. Go ahead, please.

KENNETH HERMAN: Ken Herman for the record, Non-Commercial. Yes. Thanks, Sarah, for the pointer. I've just been having a quick look at the RAA 3.18. And this really talks about the registrar's responsibilities in terms of reporting and

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investigating abuse as it's defined. I'm not seeing anything—and maybe I just haven't read it close enough—that says, "Any action that the registrar is obliged to take." So the concern that I think we'll have is that a registrar will interpret this, we've investigated this, and then we don't really know what sort of result has been, there doesn't seem to be a lot of process for actually determining that abuse has occurred. And on that basis, we're going to sort of halt all activities regarding a domain name, and I think that might be construed as being a little extreme. The registrar's responsibility is to investigate and report. Then it's unclear as to who is going to take any action. So I think that we might want a bit of clarification. I'm not quite sure what to suggest. But I think it's an improvement than just to refer to the RAA, rather than this rather nebulous concept of DNS abuse, which our stakeholder group has many issues with, and say something about this. So I think referring to DNS threats and abuse of various kinds when you're talking about taking action is going to be somewhat problematic for some of us. Thank you.

CAITLIN TUBERGEN: Thanks, Ken. I see Sarah raised her hand, so she probably has a response to that.

SARAH WYLD: It does. Thank you. This is Sarah. I feel like Ken and I might be talking about slightly different things here. So what I'm focused on in this situation is specifically the revision for the 3.7.1 that's on screen on the left. And what we as a group, I think, wanted to do was indicate that a transfer may be denied either for—so it's evidence of (A) fraud or (B) DNS abuse, which means there does need to be some evidence that the registrar holds. The concern was that DNS abuse needs to be defined somewhere. So that's why we are referring to that section of the RAA, it's because that is where a community—well, I don't know, certainly a binding definition for registrars exist. So it's not about what the registrar

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does under that RAA requirement to investigate and respond because that's a separate issue. And here we're just focused on the registrar might deny a transfer. They have the option to do so if there is evidence of DNS abuse as defined in the RAA. So that's why I think this is appropriate and a good change. Thank you.

CAITLIN TUBERGEN: Ken, is that a new hand?

KENNETH HERMAN: Yes, it is a new hand. Thanks. I just wanted to just come back. Thanks, Sarah. I appreciate that. I think for now, it's better to refer to the RAA, in my view, than the link to just nebulous security threats. As we are speaking, Sarah's reading the text RAA, and I think yes, it does call for some for the registrars to take some action. So I think if there's evidence of that, I think as discussions of the RAA sort of proceed there, there might be some further discussions about that. But I think it's better anyway than just referring to the ICANN DNS abuse security threat text that's there. I'm okay with referring to the RAA. Thanks.

CAITLIN TUBERGEN: Thank you, Ken, and thank you, Sarah. Does anyone else have any comments on this issue or any objections to the text in the chat, which essentially takes the reference to active DNS security threat and the link to the ICANN page to a definition in the Registrar Accreditation Agreement? Again, this is just a reference to when a registrar could choose to deny a transfer request. Theo, please go ahead.

THEO GEURTS: Just throwing it out there. Okay. So now, basically, we have two reference points when we can deny a transfer. There's either fraud,

credit card fraud comes to mind, so we can stop the transfer if we are dealing with credit card fraud. And then we have the stuff that is called DNS abuse, and that is phishing, malware, and a couple a lot of things. But isn't that too limited? I'm just asking the group here. What happens if I suspend a domain name because it's involved in PIC butchering or BC fraud? That's all not covered within the RAA with the DNS abuse section. I'm just throwing out two examples here but I probably could do another 100. What happens to all these other cases? We just let them go? I mean, it's okay that a fake crypto exchange moves around from registrar to registrar? What's the feeling here? Thanks.

ROGER CARNEY: Great, Theo. Actually, I think we did discuss this and we got through it. I think we came down to most of those things fit under fraud in some instances that we know would work. To be honest, this DNS threat here, I believe it was a placeholder because we were talking about DNS abuse. And that process was in works, but it was not necessarily done. But to your point, Theo, I think that we did decide not to get crazy on trying to list everything. Then we weren't trying to be specific here, as the registrar does have the ability to fall back to what they perceive as fraud in dealing with some of those things. That's just what I remember in the discussion.

CAITLIN TUBERGEN: I don't see any other hands raised. So I assume that means the majority of folks on the call are okay with the proposed revision from the Registrars. We will include that in the notes, just in case people want to have another look at that and propose additional changes if you're not comfortable with that or you need a little bit more time to react. But seeing there as are no more hands, we can go to the next section of the report. This is the category of can live with but would prefer a change. And this is for the beginning of the report, I believe, where we talk about

the new structure of the report so that readers understand that this report differs from the standard GNSO template. So it looks like the issue is with line 59. The main body of the report includes a table for each policy recommendation. I think the issue is that folks would like to make clear that the recommendation text is what the group is proposing. And the other sections of the table do not mean—or not actual policy language that the group is recommending, but rather more explanatory text. Sarah, please go ahead.

SARAH WYLD: Thank you. A couple of notes. All of the rest of the comments that were submitted by the RrSG, I have to admit those were me and Rich. We spent some time going through and leaving comments yesterday. And I'm really sorry. I did not have time to actually share those comments with all the other RrSG members ahead of submitting them to the working group. So I put RrSG because that's the group that we fall under. But maybe that was not the best choice, and I just wasn't sure how to explain that. So now I've told you. So that's where that is. And in terms of the specific suggestion or comment, yes, that is exactly what the intent was. I don't think anybody actually thinks that items A and C through F are policy to be implemented. They're helpful supplemental info. But I just think it could be more clear, maybe a footnote. Thank you.

CAITLIN TUBERGEN: Thank you, Sarah. Does anyone have any concerns with adding a footnote to clarify that the actual recommendation text is what the group is recommending? And the other parts of the report are supplementary text and not what would ultimately be implemented by when the policy is implemented? Rick, please go ahead.

RICK WILHELM:

Rick Wilhelm, Registries. I wouldn't agree with Sarah. I wouldn't put it in a footnote. I would just put it very clearly somewhere in between lines 53 and 78. Maybe it's after the closing of line 77 where we return to the level of line 59 and say, "For clarity, the only normative text is the recommendation text that is in B, where it says recommendation text. Something like that. I wouldn't put it in a footnote because footnotes are sometimes overlooked, right? It might not have the same way. I would be like more, "For clarity…" or "For avoidance of doubt, blah, blah, blah, blah, blah." But I would be stronger than a footnote. Thank you.

CAITLIN TUBERGEN:

Thank you, Rick. I see agreement there. So I'll pause for a moment to see if anyone has an objection to inserting some language, noting that the policy recommendations are what the group should be focused on. Okay. Not seeing any hands, I think we can go to the next issue. Support staff will suggest some text based on what is in the chat, and we can propose that at the next meeting.

So the next issue is 361. I think, Sarah, you mentioned that you and Rich propose this. So if you don't mind, I'll turn this over to you to see. Thank you.

SARAH WYLD:

You bet, Caitlin. I'm happy to. Half apologies to everybody else for talking so much today, but that's what happens. Okay, you've got the recommendation at the top of the screen. Also, Christian, way to go putting both of those things on the screen, I'm impressed.

Okay. The recommendation is what it is. On the third line 361 in the rationale, just because it says the words, "The working group recommends that the policy must…" it sounds like a recommendation, but it's not. It is helpful explanatory text. So I suggest rewording in a way

that is so close to meaningless but I think it is still helpful to say the working group is recommending that the policy does this in order to highlight blah, blah. So hopefully it makes it clear as a rationale without being potentially confusing as being recommendation text. Although I will say even if it is confusing, they do both say the same thing. Thank you.

CAITLIN TUBERGEN: Thank you, Sarah. Are there any objections to that suggestion? Okay. I see support. I will just pause for a few more seconds. Excellent. There was a question about this particular recommendation, actually, in the grammatical edits. And I just wanted to explain that the teal highlighted text, the original recommendation that was published had 120 hours, but it didn't include the five calendar days. And through the rest of the report, we're using both calendar days and hours to make it consistent. So that was a staff addition to make that report consistent. And the asterisk was just to note that we would come back to that. So that would be removed and the brackets would also be removed. But I just wanted to explain that because I think someone pointed out but didn't understand why the brackets were there.

Okay. So, moving on to the next issue which is line 591. I will turn it back over to Sarah to explain this concern.

SARAH WYLD: Thank you. Okay. I might be off track here. That happens sometimes, and that's okay. So I'm trusting everyone to let me know. Okay. So you see how on the left, in line 591, "The registry operator must reset the TAC to null when it accepts a valid TAC from the gaining registrar." Okay, so here's my concern. A transfer is initiated by the gaining registrar submitting the valid TAC to the registry operator. Then the transfer can sit in a pending status for up to five days, right? So my concern is if the registry nulls the TAC immediately, then there could be

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this period of time while the transfer is pending but the TAC is already gone, and that seems weird. So my suggestion was that the TAC should remain in existence until the transfer process is finished, which could be a successful completion and it could be a failure for some reason or a denial, but it shouldn't be the whole time. However, it has been pointed out by some colleagues that it actually is okay for the TAC to be nulled immediately after it has been validated. And so if that's the case, then we should just confirm that we agree that that's what the recommendation says, because it says when it accepts. So is that the same time as after verification of the TAC and initiation of the transfer? Or is that different? Thank you.

CAITLIN TUBERGEN: Thank you for explaining that, Sarah. Jody, please go ahead.

JODY KOLKER: Thanks. I guess the way that I see this is that once the request for the transfer comes in, the registry will verify that that Auth-Code is correct and can start to transfer. And that's what the Auth-Code is used for, is to start to transfer. So I guess I see it kind of literally as a one-time use, and the one-time use is to start to transfer. And once the transfer starts, you don't unwind the clock. It's going to go through or it's going to get denied by the current registrar. Once it's denied by the current registrar, it can't be used again anyway, it should only be a one-time use. But I'm not a registry. I'd like to hear some of the registry speak up about this. But that's the way that I would see it being used. But I'd really like to hear what other registries have to say. Thanks. So I guess what I'm saying is I think it's fine to null it as soon as the request starts or the request comes in and the transfer five-day period starts. Thanks.

CAITLIN TUBERGEN: Thank you, Jody. Rich?

RICHARD BROWN: Hi, everybody. I just wanted to point out here before the registry start talking about things. In our recommendation, it states that once the TAC is presented to the registry, then it's nulled. It's like a movie ticket. It gets torn once it's used. My problem I have with this statement here is—mind you, there was some confusion yesterday when I was working with Sarah and I was like, "Oh my God, if they delete the null, how can they verify it?" Anyway, the point being, it should state that after the transfer has been initiated, not when the TAC is given, but after it's been given, validated, and the transfer has been started, meaning pending transfer applied, then it goes to null. And I think that's the issue in the Rec that it's not clearly defining that those steps have to be done in order. We're just saying, "Hey, once it's given, they can delete it." I think for policy, we need to be more clear in the definition. Thanks.

CAITLIN TUBERGEN: Thank you, Rich, Jim?

JIM GALVIN: Thank you. Jim Galvin for the record, Registry Stakeholder Group. I want to go back and support what Jodi said. It's important to keep in mind that the security model that was defined probably two years ago, the TAC is single use. It is absolutely single use, and you can't allow it to be presented more than one time. So the specification that once a TAC is received from a gaining registrar, if it matches what's currently in the registry database, then it now gets nulled and it cannot be used again. So now you have a transfer which is pending, but just that transfer is pending, and there is a five-day grace period while you wait for that transfer to sort itself out with the losing registrar. Bearing in mind that

there's no need to validate a TAC, because if you don't want that particular transfer to take place as a registrar, when you get the request from the registry that says, "Hey, I received a valid TAC and it's going to go here," you can simply deny the transfer, you can say no in that five-day grace period, and then set a different TAC. So you simply put out another one. TACs are free and ubiquitous and unlimited. So you don't ever have to check and see if the right one is there. If you're uncertain under any circumstances, just put another one out there. And that resets everything. That's just the proper thing to do. You have your relationship with the registrant.

The other thing I want to point out, though, is one thing Jody didn't offer is single use is critical here. It really is an essential component of all of this. And everything else just plays out simply. But from the registry side, the issue that you run into is you don't want more than one active gaining registrar at a time. So if I allow the TAC to continue to exist, what happens if it gets presented again? I don't want to allow another use of it. And what happens if it comes from a different registrar for that matter? I mean, if it comes from the same registrar, you could argue, "Oh well, it's okay." You just assume the first one is still valid. But if you're going to allow that TAC to continue to exist for this five-day grace period, now the registry has to keep track of who sent the TAC? What time it was sent. If I have two different registrars I'm dealing with, does one overtake the other? I have to keep track of that question. How do I notify the first one that, "Oh gee, I'm sorry, you no longer have this transfer because this new one took over"? It just complicates the whole situation tremendously. It's much simpler to have a single use TAC. And if you need another one, you just make it because they're bringing unlimited. So it's really quite straightforward to deal with. Thanks.

CAITLIN TUBERGEN: Thank you, Jim. Jothan?

JOTHAN FRAKES: Hello. I'm hearing that we want to invalidate the TAC upon a successful transfer request. And that sounds absolutely 100% correct and valid. What I'm concerned about here is that sounds—I want to make sure that there is ability to validate that the TAC is legitimate without actually processing the transfer, whether that's a no op option of the transfer or an info command that the presence of the TAC on a domain than typical, it would not invalidate the TAC to do so. What happens like scientifically and academically, what Jim described is [inaudible] in the—

JULIE BISLAND: It looks like we lost Jothan, you guys.

CAITLIN TUBERGEN: Thanks, Julie. As noted by some working group members in the chat, the audio is very choppy. So I'm not sure anyone caught what Jothan was saying. But I see Jim's hand is raised. Jim, if you'd like to go ahead.

JIM GALVIN: Thanks. I did actually just type this into chat while Jothan was speaking. When I was talking about validating the TAC, yeah, I was expressly addressing the issue of validation by the registrar. Again, I think that a registrar, although it's interesting to talk about a registrar being able to validate whatever the value of the TAC is at the registry, keep in mind that the registry is not going to be able to provide that to you because the TAC has to be stored in an encrypted way. That's also one of the requirements. So the registry will never have it available to give back to you anyway. That is also part of the security model. Single use, it's an encrypted value, it's hashed and stuck out there. In fact, in any case, it really is quite simple. If a registrar, for whatever reason, finds itself in a place where it fails, it's not certain what the TAC value is at the registry,

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just create a new one. It's much simpler. Why validate what's there and confirm what you said to the registrant? Just put a new one out there, then you know what's there, and go forward from there. It's a much simpler model. But you can't retrieve it because think of it as a password in that context. And therefore, the registry does not store it and has no access to it in its plain text form. It receives it that way then it hashes, it stores it, and then it's gone. Thanks.

CAITLIN TUBERGEN: Thank you, Jim. Rick?

RICK WILHELM: Thanks. Plus one to the comments that Jim made. I'm just going to address the comment that Jothan made in chat. Registrars, need to make it—regarding Jothan's comment in chat where he said "just create a new one" is going to frustrate customers. If it does—and I say this with respect and love—quite literally the registrar's problem, because for the registries, it's going to be as easy as send an EPP request and the registry will generate or TAC for you, with you being the registrar. The way that it needs to be thought of is not in the way that it currently is with Auth-Info Codes, but more the way it is when you're logging in with multi-factor authentication. Let's say that right now you use a multi-factor authentication that sends you a text with a number in it at some sort of a thing, when you click a button, it says, "We sent you a text to your phone. Did you get that text? If you didn't, click here to generate a new one." And then you type that code in. The interface that registrars present to the registrants needs to be like that for generating these Auth-Info Codes. It needs to be cheap and cheerful like that. That's what the security model is to be. And it's not registries wanting it to be simple for registries. It's us as an industry wanting this to be simple and secure for the registrants. That's what this security model is about. It's about the making the TACs ephemeral. And this is what we've been working on for

two years. So the user interface model and the interaction model for that registrars present to the registrants has to change. That is one of the changes is going to be. It needs to be cheap and cheerful to generate these things and present them to the users and allow them to get them on their side. They are ephemeral in nature. That is the essence of the TAC, and that's what we've been talking about. I'll stop there because we obviously need to be moving on and not get stuck on this. This isn't even the issue that is raised by Rec 13. It's one-time use and that's what the topic is here. Thank you.

CAITLIN TUBERGEN: Thank you, Rick. Roger?

ROGER CARNEY: Thanks, Caitlin. Thanks, everybody. Great discussion. Obviously, we talked about this more than two years ago. So I think it's great a good review and I appreciate Rich and Sarah going through this and making sure that they understand it. It's important. But as everybody stated, I think that one of the keys here is it allows the flexibility at the registry to handle their own database integrity issues. So I think that is appropriate.

To Sarah's question about when it exactly happens, again, that's going to be the registry that has to handle it. But to Sarah's other question is, can it be null right after it's verified? I think the answer is an absolute yes. And to everyone here, it should be nulled as soon as possible.

To Jothan's question about being able to check it, I think that we had that discussion. As Rick just mentioned, we purposely made sure that that wasn't a viable thing to do as it is a path for someone to try to hack into the system. I think that this is correct, the way we've got it. And hopefully everyone, after today's discussion, can see that. Because again, we did

talk about this more than a couple of years ago. So I think it's important to get clarity, but I will be quiet and turn it back over to Caitlin and Sarah.

CAITLIN TUBERGEN: Sarah, please go ahead.

SARAH WYLD: Thank you. I just wanted to thank everybody for the conversation on this topic. I feel that I have learned and I am happy to retract this suggestion and stick with the text in line 591.

CAITLIN TUBERGEN: Thank you, Sarah. Okay. I think we can move on to the next, which should be fairly simple, because this is a copy-paste error. And that is that Recommendation 17 deals with the losing FOA, which is status quo keeping the losing FOIA because the group wasn't able to reach agreement on whether to eliminate or change it. And under that recommendation, you'll see that support staff—and that would be me— inadvertently pasted the implementation guidance for what is now Recommendation 18 under Recommendation 17. So, Christian, if you scroll down, you'll see that the exact same implementation guidance is pasted in Rec 18, and this is about how there needs to be some situations where that restriction is removed.

So if we can scroll back up, the question that was raised in the table is that is there actually any implementation guidance for Recommendation 17 and it's just that the wrong one was pasted? And after going back through the report, there isn't any implementation guidance for Recommendation 17. So, obviously, the errant implementation guidance should be removed. But if there's anything that you wanted to provide additional context on, Sarah, please go ahead, or if anyone has any

issues with us removing the text. Okay? So we will note that that implementation guidance will be removed.

The next two changes are earlier in the report and kind of fall under the same category, and it's essentially noting that this is in the rationale, I believe. Oh sorry, in the policy impact, there is a reference to GDPR. The proposal is instead of referencing GDPR to reference the introduction of the Temporary Specification, because that is ultimately what made the change to the requirements for the gaining FOA. Sarah, do you have anything to add here?

SARAH WYLD: Thank you, Caitlin. I do not have anything to add to that. That is exactly it.

CAITLIN TUBERGEN: Thank you, Sarah. The suggestion is clear here. So I'll open it up to see if anyone has any objection with changing the introduction of GDPR to the introduction of the Temporary Specification. Okay. I'm not seeing any hands raised.

Okay. So earlier in the call, I'd noted that when it comes to grammatical edits, we're not going to go through all of these one by one, but rather, if anyone has concerns with any of the suggestions made, you might want to go through these, review them and see if you're okay with them. Again, we did a cursory review of these. And huge thanks goes out to Sarah and Rich for going through all of the lines of the report and finding misnumberings and such. So thank you for going through that. And again, I invite the group to go through and make sure they're okay with staff applying these changes. We'll have a grace period here so that people have time to review those before we implement those changes.

Then also, as noted, there were a couple of cannot live withs in the first table that applied to Group 2 recommendations, but we wanted to just make sure we could get through Group 1(a) first. We will turn it over to—I think Theo may have been the one that put these concerns with Recommendation 35 and 40 into the table. So I'll turn it over to him and just note that we'd like to reserve about five minutes at the end of the call to go through the upcoming homework assignments and make sure everyone's comfortable with those. So I think it was Theo. Is Theo still on the call?

THEO GEURTS: Yes, I'm still awake.

CAITLIN TUBERGEN: Okay. Thank you, Theo. Were these your concerns that you'd like to bring? Or if it was somebody else, please let us know. I just want to make sure the right person is presenting the concerns.

THEO GEURTS: Yeah. Those are from mine. Basically, when I was reading the report, I was going like, "Okay, that didn't go as well in my mind as it should have been done." When the TAC was introduced, I already painted the picture like, "Okay, we already have a very problematic transfer process among resellers. Where do you want to move portfolios?" That's all already somewhat problematic. But with the current policy, these business models, like resellers and wholesale registrars, they can still exist. But with a TAC, then the registrant is fully in control here and no longer the reseller. There's lots of reasons there when a registrant is in full control. Basically, when we are talking about resellers… I mean, registrants who register domain names at the reseller, they pay a reseller to do all the work. They don't want to be hung up on how things are working. That is

the business model of resellers to make sure that there is no problem for any registrant to deal with "How do I transfer domain name? How do I renew a domain name?" all the surfaces. Of course, you pay a little bit of an extra fee with those business models. And with a TAC, I'm sort of looking into the future. I'm going like, "Okay, this entire thing, resellers moving to a different registrar, whatever the reasons they may be, better infrastructure, better surfaces, better fees, God knows what, it can be all, it can be something in between, that will go away. I think that is problematic, not only because within the Bylaws of ICANN we foster competition, I don't think we can produce a policy that sort of limits competition. I think we're going to run into all kinds of issues there. I put a bunch of reasons there. But basically, that is the issue. We got most of the stuff done correctly, a bit when it comes to the full portfolio transfers, but with the partial ones, that is left to the BTAPPA process and that is sort of a free for all there. That's a process that's already there for several registries. And it's my experience and I don't think I'm the only one. That process is not sufficient there. It's unpredictable. We don't know when something is going to be approved or not. There's all kinds of different rules and regulations around them. So I think we got a lot of stuff done correctly. But when it comes to the partial portfolio transfers, that is a bit of an issue. We don't have any predictability there, and that needs to be somehow modified, corrected, or else we're going to have a problem somewhere down the line. Thanks.

CAITLIN TUBERGEN: Thank you Theo. So in the column that says "proposed updated change" it makes a reference to the recommendation number, but it doesn't actually give a proposed change. So I think it'd probably be helpful to the working group and to support staff to better understand if there's a specific change that would make you more comfortable with the recommendation as written, or if instead, you're proposing to eliminate the recommendation entirely because we aren't sure. Theo?

THEO GEURTS: I'm not sure where we want to go. I'm just laying out the problem here, where we are creating policy that is limiting competition. That is problematic. That's why I mentioned it three and a half years ago, like if you're going to take a left here, then we're going to have a problem on the right here. I thought within the discussions that we had that we sort of sold everything until I read the Initial Report last week and we're going like, "Yeah, putting the partial transfers into the BTAPPA process. That's not a great recommendation. That needs to change. I actually want that to be sort of governed within ICANN like we did the full portfolio transfers. That thing is, in my opinion, that's correct. That's okay. Though I do have a little bit of a problem with a fixed fee in the sense like there could be some kind of regulatory forces can come into play here. Here in the Netherlands, we have some regulators that are very keen on open markets. The company I've worked for prior to joining real-time registrar, we ran into an issue. We were not competing in an open environment. Basically, we got dinged. That company got dinged by the regulator. Essentially, the company went belly up because they got to find way over the top, and that was the end of the company. That's how I actually ended up at Realtime Register. But with that in mind, fixed fees can have unwanted results that the working group did not discuss, foresee, whatever. So there's two problems here within that I'm just highlighting. Fixed fees could lead to regulatory issues. And again, the second problem is resellers cannot move their portfolios with the proposed policy that we have now. And the solution that we now have formulated with that in the BTAPPA process, that is a registry thing. And that hasn't worked in the past. I'm afraid that it will not work in future for the same reason that it didn't work in the past. And how are we going to deal about it? I don't know. I'm going to leave that up to the group. And that's it for me. Thanks.

ROGER CARNEY:	Excellent. Thanks, Theo. I appreciate that. I'll just make a couple of comments, before letting Rick jump in here, on the fees. Again, I think when we talked about this originally, and as we talked about fees, we understood the issues around competition and everything, and we talked about it, if that's going to be an issue or not. My one comment is the fees have been in the Transfer Policy and in BTAPPA. They're pulled back and forth from each other for a decade or more. I'm not saying that that's an excuse or a reason to keep them. What I'm saying is I don't know that that's been challenged for this aspect. Just that simple comment on that. As far as the partial portfolio moves, my understanding is our recommendations are exactly what you're asking for, Theo, is we've pulled BTAPPA into policy and that we've added a couple of different features to what is today's BTAPPA, but what will be policy. And that it does allow for a much more flexible execution of, again, what is BTAPPA and what will be policy. But I'll let Rick talk. Rick, please go ahead.
RICK WILHELM:	Thanks, Roger. Rick Wilhelm, Registries. I haven't discussed these points with the other registries, so I'll just speak for myself. Thanks for the comments. I have to admit that I don't quite understand the point. Maybe there's nuance that I'm not getting. But on the first one about the retainment of the full portfolio transfer fee ceiling and stuff like that, Roger is correct. My strong recollection was that we didn't have any consensus on... These are full portfolio transfers where an accreditation is being they're voluntary full portfolio transfers where accreditation is being moved about in a business transaction. We didn't have any consensus on eliminating the fees and we didn't have any consensus on lowering or raising the fees. Therefore, what we did is we kept the fees the same and we did achieve consensus on changing the allocation of that fee and such. This thing didn't do anything with regard to—I don't understand the bullet points that are purported there about competition and consumer choice and things like that. Furthermore, I think that kind

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of analysis is dangerous when we're talking about this unless it's well-founded. Because we specifically avoided these questions in our discussion because we were cognizant of these competition concerns, and I think the records in the transcript show that we considered and didn't want to engage in anything. These are not related to bulk transfers, as it says in the second block there where it says market fairness. These are not bulk transfers. These are acquisitions of accreditation and things like that. I don't understand the discussions with this. I think that kind of throwing about those sorts of things needs to be carefully considered because people that aren't present or involved in these discussions could get the wrong impression by just seeing this kind of stuff. So I would carefully consider that.

With regard to Rec 40, actually, I really don't understand this one. It says inclusion of bulk transfer. In the first paragraph, the TACs aren't involved in the BTAPPA system. Full stop. They're just not involved at all. Secondly, the changes that we made to the BTAPPA fundamentally loosen and open it up to make BTAPPAs easier for resellers. Thus, promoting competition and making it easier for all registrars and resellers to do deals because it, one, makes it easier for BTAPPA to happen, and two, causing all registries to have to implement BTAPPA. It means it's ubiquitous across the industry. Therefore, any BTAPPA that someone wants to do won't be stopped by having some sort of a holdout registry. So I really don't understand this one even more. Maybe I'm undercaffeinated or it's because I didn't have a chance to eat lunch here, it's 1:10 Eastern Time, but I don't understand these. Happy to get educated more, but I just don't think that there's anything here around these two. Because I think, actually, that the group has done a pretty good job of considering a bunch of options around these things and I think we've made substantial improvements to BTAPPA. I think with the first one on the full portfolio transfer fee, I just don't know if there's a good and any better option that's available to us. We might consider just not making any changes and not even touching allocation mechanism,

but that's an option that the group considered and rejected the first time. But that would be the only other option that consider. Thank you. That's all for now. Roger, if you're talking, we can't hear you.

ROGER CARNEY: Thanks, Rick. Sorry about that. It had such great points and they made sense. Now I was going to say thanks for your interjection there. I just wanted to make one comment that BTAPPA, we're basically absorbing BTAPPA into policy and we're eliminating BTAPPA as a standalone thing, as Rick just mentioned. BTAPPA is becoming policy and then we can, I suppose, quit talking about BTAPPA because now it's policy and now we've, as Rick mentioned, expanded the policy to incorporate more scenarios. Specifically, I think one of them says something about adding support for resellers. I think that the key is BTAPPA, basically, as an RSEP as it is today, is going away and the functionality with some enhancements is being pulled into the Transfer Policy. Just to make it clear. Theo, please go ahead.

THEO GEURTS: Thanks. Maybe I need educating. Let's drop the discussion on the full portfolio. It's just something that came to me and maybe it's a cultural difference. Maybe it's just because of my job. I don't know. But let's just leave it at that. I mean, if everybody feels happy about it, I'm not the one who's going to ruin the party here. But on the BTAPPA thing, maybe I need education there. We say we roll it into policy. Yes, that's what the recommendation says. But from my understanding, and maybe I'm totally wrong here, but when it comes to the BTAPPA, it's the registry who sets the requirements in that BTAPPA, right? I mean, it's what the registry puts in there. Like, "This is how our BTAPPA is going to work." And even though we're going to have BTAPPAs all over the place, everybody's going to get one, it's still the registry to say like, "Well, this is how our

BTAPPA is going to work." At least, that's my assumption. I could be totally wrong here. Thanks.

ROGER CARNEY: Great. Thanks, Theo. BTAPPA should be the same wherever it goes so I can't say, "Let's go ahead and drop BTAPPA." The bulk trend of the partial portfolio moves will be the same across the board for all the registries. Obviously, a registry has some responsibility and some role if they feel that this request for a partial is fraudulent or whatever, they have that responsibility to step in and do that. But overall, all registries are going to handle a request for a partial the same way. Again, today's BTAPPA didn't allow for partial moves, but our Transfer Policy specifically adds in that ability so that the partial specifically for a reseller wanting to move from one registrar to another can do that and is allowed to do that by policy so a registry wouldn't be able to deny it because of that.

I appreciate Theo bringing these up so that we can clarify and make sure everybody's comfortable with that direction. Because we did go through this quite a bit. It's not a simple straightforward thing so everybody needs to take a read of it. I appreciate that Theo was thinking about this and went ahead and did it early so we could start talking about it because we'll have an opportunity in a couple of weeks to really dig into it as well. But I think maybe I'll just leave it there. Again, we'll visit these and make sure that everybody's comfortable with them in two weeks when we cover the Group 2 issues. But anybody else have any comments on this? Otherwise, I think we can leave them for thought. As Theo mentioned, maybe the bulk one, the fees... Again, I think that we're covered there. As Rick mentioned, we were trying to be responsible. I hope we were responsible when we started talking about these and trying to make sure that we weren't getting into competitive issues and we actually purposely discussed that.

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Thanks, Caitlin. There are several partial transfer recommendations. I think it's 40 through 46 or something like that. That's a package there. Jothan, do you want to say something on the TAC validation? We have some time.

JOTHAN FRAKES: I'm hoping my mic works.

ROGER CARNEY: I hear you.

JOTHAN FRAKES: We did discuss this to you. I want to come back to this TAC one-time use thing. I am hearing, I think, that the group said that we settled on there will be no way to validate. Am I hearing that correctly?

ROGER CARNEY: Well, there's a way to validate it. You use it and it gets validated.

JOTHAN FRAKES: The challenge there is that it's in the way of how so many cart systems work. Just verifying the Auth-Code is even legit before processing. There just needs to be a means to do that. I'll go ahead and circulate it to the Registrar Stakeholder Group because I don't want us to get caught on this if I am in red stapler mode about this. But I really do think that we have a challenge here that being detached from an interaction with a customer can give maybe a more academic view of this. I understand in principle what's trying to be accomplished here. But the challenge is when you get to the customer interaction, just telling the customer to go get another one, it's hard to do that in the cart process. I need to read

this again. I'm going to circulate an e-mail to the Registrar Stakeholder Group and see if we have some comments on it. I think is the right approach forward.

Some registrars are doing it one way. Other registrars are doing it another way. I think that what I'm suggesting one more time is that the people participating in this group from the registrars talk to your TAC teams and really listen to how they're processing this step by step to make sure that we're not breaking stuff. I'm just picturing if I go to process... Because I'll get for a customer hundreds of domains at a time, they'll go and they'll acquire them from across a variety of different registrars. We have to go test them out, make sure they're going to go through and then we process a big order for them. The ability to have just a portion of them fail and say, "Go get another one," I know that the rules are going to change, that are going to compel losing registrars to be a bit more responsive about providing Auth-Codes. But there are some registrars where you really have to run a gauntlet to get that from them begrudgingly. Just saying, "Hey go get another one," oh my goodness. That customer is going to just go somewhere else. They're not going to engage with you. Anyway, I'll let this go. But I think I'm going to circulate something to the Registrars to see if we have a stronger comment or something here. Just to make sure it's not something we missed. Thanks.

ROGER CARNEY: Thanks, Jothan. I appreciate that. I think you were going down that path. But keep in mind the reasons why the security aspects of the TAC in that discussion. I'm not saying it's a good discussion to have. And my other, I guess, wish is that if when you start hearing back—I hope you don't wait until the next meeting, throw something on the list and then this discussion can continue there. But I think it's worthwhile to post in

RICK WILHELM: Thanks, Roger. Obviously, I won't be on a discussion because I'm not a registrar. I think that when the discussion happens, I think it's important for the discussion not to be about how it does happen, but about how it will happen. Because remember, the current registrar of record, but the registrar who is about to be the losing registrar when the current registrant is going to request a transfer. Right now, they may have the Auth-Code in hand, but in the future they won't have the Auth-Info Code in hand, and they will have to go get it to even initiate the transfer period. There's no registrant will have an ambient Auth-Code to even go start a transfer. Under the new TAC regime, under the new TAC era, the post Auth-Info Code era, the situation that Jothan speaks of, which I don't at all doubt that today is true, I know it to be true, it's hard to get Auth-Info Codes and things like that, that is going to need to change across the registrar base. This notion of being able to go to a registrar, go to their account dashboard and generate a TAC code will have to get easier than it is today where some registrars, not the ones with a near shot stonewall, we'll use blunt language, that sort of thing. And the ability to throw a name into ready to be transfer mode and generate a TAC is going to have to be easy and fluid in the manner that I speak it to be. I hope that when that discussion goes out onto the registrar list, it's not considering the world of today where Auth-Info Codes are whatever they are, however we want that to be described. But it envisions a world of tomorrow.

Look, cart processes may have to change, that sort of thing. I say that as a former registrar myself. The cart hasn't been a constant thing over time. Cart processes have changed. We may see cart transfer processes change for things like this. I don't know. I haven't really thought it through

ROGER CARNEY: Great. Thanks, Rick. Again, thanks, Jothan, for bringing that up and taking it to your group and seeing where we can move with that.

We've got about six minutes. Anything else from anyone? I think staff wanted a few minutes here. Anything else before we turn this back over to staff? Okay, great week. Great discussion. I appreciate the comments in the document to let us review these and make sure everybody's in a comfortable spot with them. I think I will go ahead and turn this back over to staff so they can talk about next week's homework and close us out.

CHRISTIAN WHEELER: Thank you, Roger. I'll drop in the chat now the link to the next homework assignment. It looks very similar to this week's. This is what it looks like right here. Similar to the last homework assignment where a group went through Group 1(a) as well as some other annexes, it's going to be the same for this next week, except it'll be Group 1(b), which you'll recall is change of registrant data. Now it looks like there's a lot here. It's just because it's a lot of annexes. But these annexes should be very familiar already as they've been pulled from the original Initial Report from Group 1(a). Some of these items will look pretty familiar working group approach. The Annex 6, working group membership and attendance, the details of that will be updated later. So don't worry too much about the details of those just yet. We'll save this for one of the last meetings. Some of these will look very familiar already so there aren't really any changes here.

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The important thing is really Group 1(b) recommendations and impact analysis. And Annex 3, which goes into the charter questions and working group deliberations. It'll be less pages for this main Group 1(b) text. But just to get through everything, we do ask you to also review these annexes as well just to make sure everything is on the up and up everything looks good to everyone. Then that will be the assignment that people will go through. Same tables as last time. Please do drop in any updated text, you see anything you can't live with, before the next meeting which will be July 16.

If anyone would like to get a head start on Group 2, I'll just drop that in the chat too. These can all be found in the group shared drive. But next time, we'll be focused on this number two assignment before we move on to number three, which will be Group 2. If anyone has any questions, please feel free to raise them now or on the list. Thanks all.

ROGER CARNEY: Great. Thanks, Christian. With a whole three big minutes left, it is a lot of homework. Hopefully, it's a good review. Again, we've looked at all this stuff multiple times, but it is a lot of homework to go over. A lot to review. We appreciate it, but we do want to get done this month so that we can get moving forward on this. Cookies or cheese, maybe, Sarah. Now that we're down to two minutes, I'll let everybody go. Thanks for the great discussion today. Hopefully we can have this done in a few weeks and move on from here. Thanks, everybody.

JULIE BISLAND: Thank you, Roger. Thanks, everyone, for joining. This meeting has concluded.

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