CLAUDIA RUIZ: Good morning, good afternoon, good evening to everyone. Welcome to the NARALO monthly teleconference call on Monday the 9th of August 2021 at 19:00 UTC.

On the call today, we have Eduardo Diaz, Satish Babu, Adrian Schmidt, Alfredo Calderon, Bill Jouris, Brent Arnold, David Mackey, Glenn McKnight, Gordon Chillcott, Jessica Starkey, Jose Lebron, Marita Moll, Robin Gross.

We have received apologies from Dana Perry, León Sanchez, and Alan Greenberg.

From staff, we have Heidi Ullrich, Silvia Vivanco, Naela Sarras, Devan Reed and myself, Claudia Ruiz on call management. We also have Steve Chan joining us, and Joe Catapano has just joined the call as well.

Before we begin, I would like to remind everyone to please state their name for the transcription purposes. Thank you all very much, and with this, I turn the call over to you, Eduardo.

EDUARDO DIAZ: Thank you, everyone, for being here today on another NARALO meeting. This is the second call for the new NARALO calls for FY22. We're getting ready for ICANN 72. We're going to have the North American School of Internet governance is going to be virtual, it's going to be a couple of days before it starts. Something that we're going to do this year, we're going to do next year also in ICANN 73.

Also, I will eventually ask some of you to volunteer to help us on NASIG and the coordination of a social media event that we're planning to have during ICANN 72, and we'll give you more information about that later.

We're going to be simulcasting this on our NARALO Facebook and ALSes for our membership, and this is part of the NARALO FY22 outreach and engagement strategic plan which was approved in the region on July 23rd 2021. Its main purpose is for outreach to those boundaries outside of ICANN that belong to our membership and other people that have subscribed to our social media.

Other than that, I don't have any other announcements, so I'm going to leave Judith with you, if she's around. I'm not sure, maybe she's busy doing something personal. I think she's waiting for a refrigerator in her apartment. In any case, I don't know if you know that we have a defunct ALS which was called the At-Large North American Graduate Students ALS, and Judith was very instrumental for getting—I believe that she's a graduate student, but I'm not sure which college it is, but her name is Jessica Starkey and she agreed to be the representative for this ALS, and so this ALS has been reactivated.

Also, I don't have the details, but Judith has been looking at the membership and making sure that people are there listening to us and see if we can reactivate some of them. I don't have the actual report and the things that she has been doing, so I'm sorry about that. She said that she probably will join us later. If that's the case, then at the end after we finish with the questions and answers from the presentation from Satish, then we'll let her give her report on that.

Our next meeting is up for the second Monday in September, which is September 13th, and on that meeting, I'm working on getting a webinar to talk about the new IP protocol. I have heard a couple of webinars on that, it's a very interesting theme and we're going to look at the new IP protocol and the effects that could have not only on the internet as a whole but on the DNS system.

It's a very early thing to talk about the new IP, something that has been proposed in the ITU, but it's something that I think is going to be very interesting for all of us to know about. So we're trying to get an expert on that that can explain this in layman's terms, because it can get very technical. But that's what I'm planning to do on this September 13. And if the team is interested enough, then we can have a regular webinar, longer with more people.

So, does anybody have a question about today's meeting? If not, I invited Satish Babu who is the chair of the Asian Pacific RALO, APRALO, and he gracefully agreed to give us a presentation even though it's very late for him, it's about 12:06 or 12:36 his time. So we really appreciate your time, Satish, for providing this [inaudible] webinar.

And this webinar, I invited him because this is a policy development process that is starting. I think the first meeting is happening this week, August 11. So it's just starting. And I thought that it's very important for all of us to know what this is all about. You can read about it, but it's better that he explains it to us. He's one of the three members that have been appointed or elected to this PDP from ALAC. So with you, I leave you, Satish, for today's presentation. Thank you.

SATISH BABU: Thank you, Eduardo. Before we start, thanks, Eduardo, for giving me the opportunity to present to NARALO. Eduardo thinks that I'm an expert on this topic, and I told him I was not really an expert. There are others much better suited perhaps to put on these kind of webinars. But Eduardo said this is a kind of At-Large, maybe slightly simplified way of looking at this EPDP.

So this is what I would be covering. Some common questions. In fact, Eduardo has proposed a bunch of questions. Some basic information on IDNs, the work done so far, the EPDP rationale and scope and the current status.

So these questions, I found them very useful because some of them may look rather simple to some of the experts, but for the end user who's grappling with this question of what is this creature, this EPDP, why should it be different from the regular PDP, what is the difference and what are IDNs all about?

So these are the basic questions [inaudible]. I'm not getting into reading them, but some interesting questions. For instance, number three, why did it take us ten years to work on an IDN policy and still, we haven't reached the end of the road? What is the difference between an EPDP and a regular PDP?

Now, number four is, technically speaking, outside of the remit of this webinar, but there are some excellent documents available with ICANN which compares the regular PDP with an EPDP and there are some differences. This is expedited, as the name says.

Then some technical stuff, how are they delegated, what are variants, [is UA parallel with the EPDP? Technically, no.] What else is being considered?

So here's the basic information about domain names. Domain names are composed of labels separated by dots, so www.google.com would be three labels, www, google, and com.

Each label is composed of letters A to Z and numerals zero to nine, and the hyphen character of the Latin character set. Now, this character set, the respected character set for domain names is called LDH—letter, digit, hyphen. And you compose this using these characters. The dot is [inaudible].

Each label can be up to 63 characters long. It is not possible to use any other script, special characters or emojis to construct labels in the basic DNS. But unfortunately, if you cannot use anything but Latin, it excludes numerous scripts or writing systems used by a number of languages around the world. And therefore, it precludes a truly multilingual Internet.

Now, here we see that we have to differentiate between languages, scripts and writing systems. Language is what is spoken. Writing systems and scripts are the representation on paper or in the computer. There are various kinds of crazy overlaps. There are languages that use multiple scripts, like Japanese which uses four. There are multiple languages that use the same script. In India, we have a bunch of languages using the same script. So there are all these kinds of overlaps that are possible.

But from an inclusive, truly multilingual Internet, we need working domains in multiple scripts. So domain names also imply URLs, e-mail IDs and other artifacts that we create out of these domain names. So this is the big picture why we want to think of IDNs, because they're a hell of a bother, actually. And the true reason why we've not done it even after ten years is that it is complex.

Now, what is an IDN? An IDN is a domain name that has at least one non-Latin character in its label. Now, one fundamental takeaway from this webinar is that there are three ways in which IDNs are implemented at present. The earliest of this, since 2003, was IDNs at the second level. you can see here, bücher.com and this particular .org, the top-level domains are the regular top-level domains. But at the second level, we have special characters that are not Latin. In this case, this is German and this is Hindi or Devanagari.

So that's the first type at the second level. Now, this has the least impact from the resilience or stability perspective because .com and .org are established TLDs and it's only the second level—so it's actually the simpler of all the options.

The next one is IDN-based ccTLDs. Here we see examples. This is Thai. And so this is what is in English .th. And this is the Cyrillic, which is Russian language, and this is .ru. And this one is actually in a language that is mostly spoken in India but also in Sri Lanka and this ccTLD belongs to Sri Lanka. This has been available since 2010.

The third is new gTLDs in IDNs. So this has been available from 2012 onwards, but the actual domains started being available from 2013. They were included in the '12 round.

Now, because DNS still resolves using LDH—letter, digit, hyphen—IDNs cannot be used as such to resolve. So they're internally converted to LDH through a mechanism called ASCII compatible encoding, ACE. The resulting thing is called Punycode which is a pun on Unicode. And Punycode looks like this. The first four characters are always xn—and what follows is a kind of conversion of the special character or script into pure LDH.

Now, we are currently using domain names based on a lot of work done by the Unicode Consortium, IETF, the ICANN community and the ICANN Board. This is actually quite a bit of work that has been done, and the difficult is these are all different organizations with different culture. But we have to arrive at a common vocabulary, common way for working together.

Now, at the second level, there is the first category that we talked about. The document that was helpful in the early adoption of IDNs at the second level was something called the IDN implementation guidelines. This document has been driving the second-level IDNs which is the earliest 2003 onwards.

This document has been now kind of revised several times. The last one was the fourth which was completed in 2018, but GNSO said they want further time for reviewing it. So we are still following 3.0, although 4.0 has been released since 2018. And one of the things we'll see later

down the presentation is that GNSO will be looking at the 4.0 version. They have some concerns and they'll be looking at it.

So that was about the second level. How about what is driving the ccTLD-based IDNs? In 2009, ICANN Board approved the final implementation plan for IDN ccTLD fast track process. So this is the process that launched ccTLD-based IDNs.

So the ICANN Board resolution said that the implementation plan requires strings to be meaningful representations of a country or a territory, and it's supported by the government and the community. It also requires the string to be reviewed by independent experts for technical considerations and string similarity.

Now, this document is also being updated. There have been multiple versions. The latest version we have is 2019. And this is the status of IDN-based ccTLDs. There are 62 [IDN] ccTLDs from 43 countries. India, you can see the big stack here, has the maximum diversity of scripts. We have 22 languages and 15 scripts, and all of them are now available as a ccTLD.

Now, the third category is IDN generic top-level domain. Here is where we have a lot of problems, actually, practically. While preparing for the 2012 round, in 2007, GNSO suggested several principles and recommendations. The first is that some of the new gTLDs that would come out in 2012 should be IDNs subject to approval for IDNs in the root zone. And the reasons for introducing new IDN-based gTLDs is it includes that there is demand from potential applicants for new top-level domains in ASCII and IDN both.

And they also put forth the recommendation, if an applicant offers an IDN service, then they should follow the IDN implementation guidelines. So this is the status of—there are 92 IDN gTLDs available currently, and these were the first four, the Arabic word for "web," the Russian word for "online," Russian for "website" and Chinese for "game."

So basically, this has been the work done so far, and there have been other challenges that we have not worked much with. One of them, probably the most important of them, is IDN variants. So we have been kind of sidestepping this problem by various kind of shortcuts or temporary adjustments.

What are these IDN variants? When you look at language communities, which are the community of people who use or speak a certain language, they may use two words as variants. For instance, I put here color and colour. Now, we don't even recognize the two as different. We think they're the same.

Now, this one, ae, can also be written in some languages—for example, Portuguese—as this combined glyph. These are identical, and when you look at a word that contains this, we consider them to be exactly the same. And some languages like Arabic have large numbers of variant characters which can be substituted.

Now, some languages have multiple scripts. Chinese has traditional and simplified scripts, and the same word looks different depending on the script, but the community considers both forms to be the same. Unfortunately, to the computer that is trying to resolve this, these are

completely different strings. We have to take special action if we want both of them to behave the same way as regular domain names.

We can't also treat them as completely independent, because later on, we will see the same entity constraints. Whenever you have variants, they must be allocated, they must be applied for by the same organization. The registry should be the same for all the variants you have.

And imagine the case when you want to transfer a domain name from one registry to another. These two have to go lockstep. So it creates substantial kind of downstream effects when we look at variants. Variants can [cause the user confusion.]

If a label uses multiple variant codepoints—so suppose you have a gTLD that is using variants and then on the second level, we have another word that's also using variants, now this becomes a [inaudible] explosion. The numbers of the allowable variants rise rapidly.

And looking at the history of the work that we have done, we have not been able to precisely define IDN variants, and so we have sidestepped the issue through temporary placeholders.

Now, this is rather unusual. We have been grappling with an issue like DNS abuse for 20 plus years or more, but we only defined it properly maybe the last year when it became too much of a concern. So the fact that it has not been defined is not necessarily bad, but when you look at how to define it, that is the complexity that we're grappling with in this EPDP.

Now, what is the placeholder for the ccTLDs? In the fast track process, the following was the placeholder mechanism: the variant TLDs decide whether request for delegation must be indicated by the requestor. So the requestor had to think of what are the variants and [what do I want.]

Desired variant TLDs would be allocated to the requestor if successfully evaluated in order to be reserved to the entitlement of potential future delegation. It's not as if it is delegated already. But what is guaranteed is that nobody else will get that variant. A list of non-desired variants will be generated based on [inaudible] IDN tables and placed on a blocklist. So the idea is that you either allow them or block them, do not leave them in limbo.

And the ccNSO community is still working with this problem, not completely solved, but going ahead with resolving them. And for the next gTLDs, the 2012 applicant guidebook had the following instructions: when you apply for an IDN TLD, the applicant may also declare any variant TLDs for the TLD in its application. However, no variant strings will be delegated through the new gTLD program until variant management solutions are developed and implemented.

So you can claim that this is a variant of what I'm applying for, but you don't get to it. It'll be reserved or blocked, it won't be allocated to anybody else but it won't be delegated. Declaring variant strings is informative only and will not imply any right or claim to the declared variant strings.

Whenever a variant delegation process is established, applicants may be required to submit additional information such as implementation details and may need to participate in subsequent evaluation process which could contain additional fees and review steps.

Now, this is [inaudible] we have to repeat the same thing as a new string, that is a very elaborate, expensive process. these are actually not new strings, they're variants. So, can there be a special case? That's one of the questions that the PDP will look at.

So initial work on IDN variant TLDs, the Board had resolved in 2010 that no variants of gTLDs would be delegated through the new gTLD program until appropriate variant management solutions are developed. This is 11 years back. We have not done so far. We are now trying to attempt this.

In 2011, ICANN launched the variant issues project for five languages: Arabic, Chinese, Cyrillic, Devanagari, Greek, and Latin. And this particular initiative—now, if you look at the history of IDN programs, there have been at least something between half a dozen and a dozen reports done in various groups on grappling with these problems of how to take variants forward. And this particular report identifies two main gaps.

First gap as we mentioned is there is no definition of IDN variant TLDs. So to overcome this, what they did was to create a new process called root zone label generation rules, LGR. And this particular standard was created through community consultations. In 2013, ICANN Board resolved to adopt the root zone LGR. This one involves a generation panel and an integration panel.

The problem here is again that languages are opaque to non-speakers of the language. If you see an e-mail which is IDN, you don't know how to interpret it, where is it coming from. Because a roman e-mail, at least you know it's Gmail or it's coming from a particular ccTLD of which country. But if you look at an IDN e-mail, on both sides of the @, you are unable to read what it is all about. So that remains still a user experience problem. There is no easy way to kind of evaluate an e-mail ID.

Now, a quick and dirty way out of this is to strip those dots in-between and place the whole thing in Google Translate. In some cases, Google Translate gives you kind of not very meaningful but reasonably meaningful results.

So the idea of a generation panel is a small group containing experts on that language who will decide what is to be used, what are the rules to be applied, what are the variants. And as you can see, the next picture, there's a generation panel for every language, with some exceptions. Like I said, Chinese script has got three GPs. The same script is used by three different languages. Whereas the NeoBrahmi GP looks at nine scripts, or probably more than that also.

So there are these overlaps of all kinds, but the principle is one language, one generation panel. And they hand the work over to the integration panel who evaluates the work and then decides to accept or reject, and then the LGR rules are kind of worked and you finally have the delegation to the root.

So the generation panel generates proposals for scripts-specific LGRs based on community expertise and linguistic security and stability requirements.

Now, we must note that we are not using all the features of a language as it is presented by the Unicode code points of that language. We're using a limited subset of those codepoints. A codepoint is a single character encoded in Unicode.

So generation panels look at language specific issues and an integration panel tries to integrate all of them, and label generation rules decides what's permissible, what variants exist, etc.

This is the current situation. The panels, so many languages are already done. This is good progress that we have done so many, but there are still some lagging behind.

Now, what are the general principles for forming or creating labels for domain names? TLDs are intended for unambiguous labels for good mnemonic value. They don't represent anything more. There's no meaning, there's no semantics, you can't represent anything more than just the mnemonic through a label.

It is not intended to capture all facets of a writing system. It should focus on modern everyday use. So if you have a character set that for instance Devanagari character set contains a lot of characters used 3000 years ago in Sanskrit language which are no longer contemporary. So we don't have to use them for DNS, for a domain name. So there's a process for filtering out these kind of characters.

It's okay not to support some conventions. For example, [inaudible]. So there is some loss, but the objective of DNS is to cover the easy to remember label that human beings can use. There's nothing beyond that. so some labels are necessary to reduce systemic risks.

When you have a new script, what are the steps? The first thing is to start with the full set of Unicode characters of that script. Now, it is good for us that Unicode has finished work on most of the prominent languages, including some constructed languages, and we have a starting point there.

Now, Unicode does have updates. They keep adding a few characters or dropping a few. But the work is cumulative and we always have the latest with everything. So we do have a problem if a character that we've been using since 2003 gets dropped by the Unicode Consortium. That is a contingency that we have to look at.

So from the full list, a working set is created by dropping nonessential stuff like punctuations, joiners, historic characters, digits, religious, liturgical characters. In short, anything that is not in widespread daily use.

This set of characters is called a restrictive set, but it is enough for domain names. It's called a maximal starting repertoire. The current MSR version is 5.0. and label generation rules are formal specifications in XML that are used to decide—the language communities decide what combinations of characters are permitted, what the whole label combinations are permitted, and since DNS labels are mnemonics, LGRs

do not insist on grammar or meaning. There is no semantic content in labels.

That is the first gap, [there is no] definition. The second gap is that no IDN TLD variant management mechanism. So here, it gets somewhat technical so I'll [inaudible] high level. So in 2019 March, ICANN Org published a six-part report—this is, again, some monumental work—titled IDN variant TLD recommendations that laid out nine. I'm not listing all nine [inaudible]. So please note that if there is a contention between what I am saying and the document, the document of course prevails. These are all very detailed stuff and one of the big problems in IDN work is that there are too many details.

So the recommendations include the root zone LGR must be the only source for variant TLDs and the variants. Now, the IDN variant TLDs must be allocated to the same entity. Now, here, if you remember, we had this character, ae fused into this glyph and this ae separately. These are both gTLDs which are IDN variants. So the same entity constraint says that IDN variant TLDs must be allocated to the same entity.

Same labels under variants must be registered to the same entity. So here, we have this situation. You have a second-level myshop, so if I'm registering myshop on this registry, then only I should be allowed to register this one also. Because if somebody else can register, then it is a security problem. They can hijack my ... because the user thinks both are the same.

Now, suppose you have second-level variants. That means the second-level label like myshop actually has also variants. So then what'll

happen? Then you end up with four combinations. So this is the first, second, third. So here is the variant at the second level.

So this way, if you're going to use a lot of variant codepoints, that is, individual characters, you end up having a large number of variants to deal with. And existing policies and associated procedures of four TLDs must be updated to accommodate the recommendations for IDN variant TLDs. All the remaining existing TLD policies must apply to variants unless otherwise identified.

So this is actually where we are challenged. And now we'll move to SubPro's work on IDNs. Now, in preparation for the next round, which we don't know when it's going to come up, we have the SubPro working group which again did a very large—the report was very extensive and IDNs are referred to in that report, and that's where the EPDP comes from. So pages 114 to 118, affirmation number 25.1, IDN new gTLDs continue to be an integral part of the new gTLD program. That's an affirmation.

Recommendation 25.2, generation of TLDs and variant labels subject to compliance and checking. So all root zone LGRs must determine what label is blocked, what label is allocatable, and—I'm not going to get into details, but where feasible, use of algorithmic checking. Can you consider whether a particular variant is actually a variant? Can we [check it] using an algorithm, or can we generate all variants of this string using an algorithm?

Where the root zone LGR is not yet available, allow the application for this variant label—it can be processed but no contacting or delegation

subject to further evaluation. Single-character U-label gTLDs allowed for limited script language combos. What is a U-label? U-label is what the non-Latin string looks like, Hindi language or Thai language, that is a Unicode label. When you convert it using ACE, you get the A-label, ASCII label.

Now, single-character, for some languages like Chinese, etc. which are ideograph or ideogram, a single character represents your concept. So that is permitted, subject to some constraints. This is recommendation 25.4.

And in general, all IDN work is conservative. Wherever possible, there is explicit reason to be conservative, because we don't want any kind of stability or resiliency issues for the root zone.

So based on ICANN Board resolutions, GNSO set up an IDN scoping team which submitted a report in February 2020. That report proposed two tracks of work: one track to look at the IDN implementation guidelines that were released in 2018 which is not taken up by GNSO. So this working group should look at what are the issues with that report, what is difficult for registries to comply with.

Track two and EPDP. Here is where the request for an EPDP explicitly comes from. An EPDP that would include how to define, manage and coordinate IDN variant TLDs, how the IDN implementation guidelines which we talk about here, 4.0, should be revised in the future, because many of these things have to continuously keep getting updated—evolving, actually.

So one of the differences between a PDP and an EPDP is that a PDP does its own scoping generally. But an EPDP, it is explicitly taken out and the scoping is given to a different group before the EPDP starts.

So presumably—I'm not sure what the reason is, but presumably this is because of scope creep. If the same group decides its own scope, there is chance of that getting expanded. So here, for the EPDP, the scoping is done by a different team. That scoping is given to the EPDP when they start functioning.

So the scoping team proposed two scopes. First is a definition and how they could be managed, these variants. And secondly, how the IDN implementation guidelines 4.0 could be updated. These are the two core deliverables of the EPDP, how to define, how variants can be managed and how the IDN implementation guidelines 4.0 could be updated in future.

So the detailed scope, if you look at it, the first thing is to define the issue of variants. Then same entity, how to implement it at the top level, same entity at the second level. What are the adjustments required in registry agreement service, transition process and other procedures that relate to the domain lifecycle?

So like I said earlier, if you transfer a domain which is a variant, the full set of variants have to move. And even when applying for a second-level domain, the whole process might have to provide the option for asking for variants.

So this is going to significantly change a number of processes that we've been following so far. Adjustments to the objection process, string

similarity review, string contention resolution, reserved strings and other policies and procedures, adjustments in registration dispute resolution procedures and trademark protection mechanisms, process to update ...

So number one is one particular item. Two to six are all about managing variants, and seven is about how to update the IDN implementation guidelines.

So as I said, the EPDP team/Council has been seated. The first meeting is scheduled for 11th. The output of the EPDP would make it feasible to conclude IDN variant labels in the new gTLDs, and also recommend a mechanism for periodic updating of the guidelines. And after a long while, we will make a significant step forward for a truly multilingual, inclusive Internet.

So that's my last slide. Thank you again for this opportunity, and back to Eduardo for moderating questions.

EDUARDO DIAZ: Thank you so much, Satish. Does anyone have a question about this? While you think about any questions, I do have a question about the EPDP thing. I thought the EPDP was a new construct or framework to move the PDP process faster, that's what the E is for, for expedite. I didn't know it had to do with scoping, except that if doing the scoping outside the main group, I guess it's faster. So the question is, is this EPDP going to run for one year, two years? Is there a timeline already in place, or is it something that's one of the things that's going to be done or was done by the scoping group?

SATISH BABU: Thanks, Eduardo. I think there are others who can answer this question better, but my own take is that to the extent that this EPDP's work is independent, it'll be done pretty fast. But there are dependencies from the SubPro group or any other group. Then there may be lag. But I think it is meant to operate fairly fast. Like you said, the main objective of having an EPDP in the first place is to expedite the whole process. So I don't think it'll run for long periods. It should be relatively short, assuming that it doesn't have dependencies on other groups.

EDUARDO DIAZ: Okay. Alfredo, you have your hand up.

ALFREDO CALDERON: Yes. Thank you. Satish, I'm just trying to grasp the framework or the charter of what this group in which you are has to deal with. I completely understand that you're dealing with the IDNs as a subgroup of the SubPro process, so I'm guessing that there are sort of liaisons between all the other working groups within the SubPro to make this happen in a short amount of time instead of waiting another ten years. Thank you.

SATISH BABU: Thanks, Alfredo. Yeah, so the way this is structured is quite interesting, and it is new. And that is why in the ALAC call, we were saying that we should probably compare this model of representation, but open. So the way the EPDP team has been constituted is through official

representatives of stakeholder groups, plus open participants and also observers, the three kind of categories.

There are no direct liaisons between SubPro and this one, but many people are common. For example, our own team consists of Justine who's very much part of the SubPro group. There's overlaps of people, but the composition of the group is strictly by the constituency, stakeholder group. I'll stop there. If you have any follow-up question, I'll be happy to answer.

ALFREDO CALDERON: Yes, I do have a follow-up question for you, Satish. So I'm guessing there is a fixed number of representatives from each one of the constituencies or communities. Am I correct?

SATISH BABU: That's correct. The ALAC has three members who are allowed to vote. ALAC has three participants, again selected by ALAC, and observers, anybody can sign up and look at the mailing list and all that. So the voting members are three and participants are also three. Participants can participate in the meeting but observers I suspect cannot participate, they can only look at the mail.

ALFREDO CALDERON: Thank you.

EDUARDO DIAZ: I have Steve Chan with his hand up. Steve.

STEVE CHAN: Thanks, Eduardo. I actually support the GNSO, and I just joined to take advantage of hearing Satish speak on the subject. So I just raised my hand to hopefully provide a little bit of clarity on why an EPDP was chosen for this work.

The key difference, as Satish has mentioned, between an EPDP and a PDP is more or less the need—or lack thereof—for an EPDP for an issue report. So why you might not need an issue report is for a couple reasons. So the topic or the issue can be narrow and basically not a widely expansive set of issues, and then the other really big significant part and applicable to this area is whether or not the topic is well scoped. And there's quite a bit of extensive material already existing.

So that extensive material in this case is the work that the SubPro group did, and then also the six-part staff report that Satish mentioned as well. So in this case, it's because there's a narrow issue and that there's quite a bit of already existing work that's already been done. Those are the primary reasons why there's an expedited PDP, which doesn't necessarily mean that the work that the group will do is intended to go fast, but that usually is the circumstance because of the narrow focus of EPDPs generally. Hopefully that helps. Thanks.

EDUARDO DIAZ: Thank you, Steve. Are there any other questions? Alfredo, go ahead.

ALFREDO CALDERON: Yes. Thank you, Steve, for that explanation. But that brings me back to my original question. If this is an EPDP, there's an expectation that there should be a report coming out and it has to be based on consensus so that that could feed into the other events that need to take place. So I'm just wondering, again, how much time does this group have to invest to produce the report where there should be a consensus or positive recommendations to move forward via the work? Thank you.

SATISH BABU: Thanks, Alfredo. I think that question is better answered after the fist meeting. So you would be aware that this EPDP is headed by Edmon who's one of the foremost experts in IDNs that we have. And from what I can gather, we don't have too much time for this EPDP. It is going to be wrapped up reasonably fast. So I think after the first meeting, we'll be able to say what is the likely period of time, but the consensus process also, we'll have to see how it evolves.

There are some contentious issues here. There are two schools of thought. The staff report mentions that when you want to apply for an IDN, it should be kind of treated as a separate string, i.e. each variant should be a separate application process. But some parts of the community believe that no, it has to be bulk, it has to be one step. And we can't have multiple strings being applied separately because [inaudible] the processing time, the whole effort will be much longer.

So these are contentious, and so it'll be interesting to watch how this unfolds. Obviously, there has to be consensus, and the result of the [inaudible] about its effect on security, stability and resiliency-of the

Internet itself. There's also concern about the kind of work that registries and registrars have to do to kind of provide for variants, and there's also this question that pops up once in a while: is this really worth doing?

So the answer to that last question is certainly for certain IDNs, there has been very fast growth. But if you look at India which has got so many different scripts, most of the IDNs are still English, and the uptake in the other languages has not been really significant. But things are changing, and in fact, yesterday we had the announcement of the India IGF which was dead for many years. It has been revived, and they're saying that 10,000 users are going to participate in that IGF.

If so, it'll be one of the largest Internet governance meetings in the world. And one of the things that they're trying to push there is IDN-based domain names. So these are a bunch of issues which will come up in the background, but some of them are really central issues in this EPDP.

EDUARDO DIAZ: Are there any other questions? I want to comment, Satish, that this is going to be a nightmare for universal acceptance, because I just look at your presentation and I always focus on the top-level domain IDN, but I never look at the second-level domain. And it's true that it becomes just a nightmare, because it's the whole thing that you have to look at.

Like if you receive an e-mail in an IDN@IDN, really, you need to translate the whole thing, because you don't know. I don't know if you want to comment on that.

SATISH BABU:

Thanks, Eduardo. You're spot on. This is going to create a lot of issues for universal acceptance. Now, but then first point is that the universal acceptance challenges are not restricted to IDNs. I was reading about in our At-Large—some mailing list about .family, how the person had to struggle because nobody would take an e-mail based on .family for any kind of registration in websites and so on. So that is not an IDN, it is a regular Latin label. But the universal acceptance problem is there for that.

So universal acceptance is a bigger problem, and I as a chair of the UA tech working group which is supposed to mitigate the UA issues, when this is complete, it'll kind of move our goalpost further down the road and make it more challenging. But at the end of it, these are things which probably ought to be done. If you look at the future evolution of the Internet, we need a multilingual Internet.

This may not be the right time to go full hog on IDNs, variants and so on, but we certainly have to get it done as a community. So universal acceptance, however slow it is, we have to tackle it. And it might take quite some time and effort, but there's no other way. I hope I answered your question.

EDUARDO DIAZ:

Yeah. And I totally agree that IDN needs to be developed, so if you want everyone in the world to participate in the Internet. But I'm thinking that this IDN can create some kind of fragmentation in the Internet in the sense that if you use—for example myself, I just use Spanish and English

because those are the two—or Latin character type domains, but I'll probably never use Hindi or Chinese characters for domain names in my whole life. So if you look at it from macro view, you have fragmentations around the Internet with these IDNs, which is not fragmentation in the sense that you cannot communicate with the rest of the world but it's kind of thought of, of fragmentation that way.

SATISH BABU: Yeah, so I think that's a good point. Although there would be people who argue that it's the opposite, it's consolidation of people who speak the same non-Latin language. And now, if you take Spanish, if you want to put niño in a domain name, that N character with the tilde on top is actually not part of the Latin set, so you cannot encode it. So you will have to have IDNs if you want such a domain name.

And what IDNs will do is to kind of bring together speakers of—currently, people may be using various mechanisms but once you have IDNs in a single language, then they can all work together, they can come together and consolidate as an online community.

There is this element of if you get an e-mail from an unknown source and it looks very weird, what can you do with it? How do you trust this? So we need a mechanism that can show any IDN domain name or e-mail ID in some form that we can understand. That's still a challenge ahead. Maybe somebody can develop a tool that does it. But I understand your question and where it's coming from, it's absolutely correct.

EDUARDO DIAZ:	Okay. I have David Mackey, and this will be the last question for the presentation because we have to wrap it up, and I have Judith online and I want her to give a report before we all leave. So David.
DAVIC MACKEY:	Thank you, Eduardo. The comment I have is kind of a response to what you were saying, and maybe I'll roll it into a question for Satish. Eduardo, when you say that there is an aspect where it's creating fragmentation, I would suggest to you that that is not true if you look at it from different human populations. If you look at it from a computer perspective, in a current Internet perspective, you're right, but if you're looking at it from the end user, the existing end users outside of the Internet, we have communities in the world population that are not connected through language.
	So maybe the question goes to Satish. When I'm describing the difference between human populations communicating versus human populations communicating over the Internet, do you think that I'm on the right track? And if yes, is there also going to be a need for some sort of translation capabilities in the future beyond very basic mechanisms of the work that's going on with IDNs? And thank you very much, Satish. Very interesting presentation. Thank you.
SATISH BABU:	Thanks for the question. I think it is absolutely correct that we need some what they call interlingual, which means some representation that can be understood from—like I said, the domain name itself has no semantic content. It's just a mnemonic. It could be an abbreviation. So,

how do we make sense of such a thing if you are confronted with a message from such an e-mail ID?

So the difficulty that is obvious is that we don't know how to trust or whether to trust such a thing at all. And we have no tools right now except maybe Google Translate, which does not do a good job on this kind of data, to make sense of it.

Now, the only way to kind of handle this is to have the registries for each of these scripts should have some mechanism whereby the rest of the world can meaningfully decode. At least to some extent. It may not be 100%. But in principle, it would be nice to have a tool that would allow us to kind of look at all these different domain labels and make sense of them. And if somebody comes up with a tool, I think it will be wonderful. But there are constraints at this point, and I'm not sure—basically, although it relates to IDNs, it is I suspect outside of ICANN's remit, so it has got to be an independent—when you have sufficient number of people using these IDN domain names, then there'll be a natural requirement for such a tool. And I'm sure somebody can consider developing such a tool. But a very valid point indeed.

EDUARDO DIAZ: Satish, I really appreciate you taking your time to put together this presentation. And not only that, I really appreciate that you stayed late at night so you can communicate this information to our membership. So, thank you so much, and we're almost ready to wrap up this meeting but before that, I want to have Judith giving a brief report on the ALSes and the new ALS that she was able to rejuvenate. Judith.

JUDITH HELLERSTEIN: Yes. Hi. Thanks so much, Satish, for this great discussion. I just wanted to introduce Jessica Starkey. She's an AU graduate student. She came to the IGF USA and was interested in getting involved, and we managed to rebuild—she's going to rebuild the North American Graduate Students Association that was started by Anna, and our goal was to get many more graduate students involved and spread the knowledge of ICANN and Internet governance. Jessica is very new to the field but is getting her master's at American and maybe she could just say one or two words for introduction. Jessica?

JESSICA STARKEY: Hello. Thank you for welcoming me in. As mentioned, I'm a graduate student. I'm getting my law degree at American University. So I might need some help in the future just gaining my sea legs, but I'm excited. Thank you.

EDUARDO DIAZ: Thank you. So what about the work that you have been doing, Judith, on the ALSes?

JUDITH HELLERSTEIN: Oh, yeah. We are working with the other ALSes to try to get more people to be active. A lot of the ALSes we talked to are very busy with other volunteer activities that they have and aren't able to come in person to different events. So it's always a struggle about that, so some of them are working to find new people, others—we did have a new

person come on ISOC Canada and got them to be more active, and they're on the e-mail list as well.

But some of the other ones—we also are in the process of decertifying the ALS that Tom Lowenhaupt had started before his untimely death. We've written, we could not get anyone else to take over his work so we're going to decertify that ALS. But we welcome everyone to join as an individual unaffiliated member. But others, we're still working to t registry to get other volunteers to take over the other ALSes. We haven't had much success in many of these fields even though we reached out to them. So many people, especially during COVID, are so busy with some many other tasks that they just can't take on another task. Eduardo, that's my report in a nutshell.

EDUARDO DIAZ: Okay. Thank you, Judith. Thank you, everyone. With these last words, I declare this meeting adjourned. Thank you, everyone, for being here today. Bye.

[END OF TRANSCRIPT]