ICANN73 | Prep Week – Internationalized Domain Name (IDN) Program Update
Tuesday, February 22, 2022 – 09:00 to 10:00 AST

PITINAN KOOARMORNPATANA: Thank you. Welcome, everybody, to the very first session of the ICANN 73 prep week. Good morning, good afternoon, good evening. I am Pitinan Kooarmornpatana from the IDN and UA program team.

Let me welcome you with the IDN program update session today. It'll be a 60-minute session covering these following topics. First, we will have some updates on the IDN implementation guidelines and then move on to the topic of additional scripts to supporting IDNs and also the root zone LGR status update. So I'll go through a brief background. And on the summary of the Myanmar generation panels as well, and also, we have a member from the integration panel, Marc Blanchet, to give some update on the root zone LGR version 5.

With this, let me move to the first one. For the IDN implementation guidelines, as a background, the guideline is the policy and practice for the second-level IDN registration, and the objective is to minimize the risk of security and also consumer confusion.

For the gTLDs, this is contractually bounded as also mentioned in the RA Specification 6 Section 1.4, registry operator shall comply with the ICANN IDN implementation guidelines. Also in the RAA, Additional Clause 3 also mentions that registrars shall also comply with the IDN guidelines. These guidelines are also expected to comply by the ccTLD managers as well, as stated in the fast track process.

So while the guidelines are being updated now, the previous version of the guideline was version 3 which was 2011, so there's been additional analysis, data, operational expertise and experience with the IDNs. For example, the terminology of IDNs, the representation of the table which become machine readable in the LGR format in RFC 7940.

Maximal starting repertoire or MSR and also, we have the user experience study by SSAC as well. And also, many proposals from the root zone LGR project developed by the communities on how to use the script become available.

So then the communities that have the working group to update the guidelines to version 4. In version 4, it covers a total of seven topics by 19 guidelines. So there's the group for transition, the topics on the format of the IDN tables, the topic of consistency of IDN tables and practices, the variant labels as well, also the similarity and confusability of labels, also the publication of the policy and rules, and finally, the terminology.

These guidelines have been developed by the working group and then go through the public comment and finalized after the public comment, and then published in May 2018.

Since then, in 2019, the GNSO has made a request to the Org to allow it to study the guidelines before implementation. So the consideration by the Board has been passed based on this request. And then in May last year, 2021, GNSO has initiated the expedited policy development process on IDNs to address the additional issues related to the IDN not

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covered in the SubPro report. This also includes how to manage variants and how to update the IDN guidelines in the future.

So following that, in August, GNSO also requested the Board that the adoption of the guidelines be delayed until this EPDP is concluded due to some overlap. Then the Board also responded in October requesting the GNSO to analyze and define the guidelines that overlap in the topic.

So in January, GNSO responded in supporting the Board's suggestion and identified the following guidelines that overlap, so there are an additional five guidelines.

Currently, the Board is considering this first point, how to move forward. That's the status so far on the implementation guidelines. So let me pause here quickly and see if there is any feedback or comment or question before we move forward.

SARMAD HUSSAIN:              We don't have any questions. Thank you, Pitinan.

PITINAN KOOARMORNPATANA: Thank you. We do have some time allocated to Q&A at the end as well, so we can come back to this. All right, then let's move to the next topic, the additional scripts to supporting IDNs.

So as a background, by ICANN mission, we are working on making the domain names can be used in natural languages. So basically, this enables the IDNs. And the internationalized domain name standard or IDNA based on Unicode enable the IDNs.

With the IDNA 2008 standard, it is [inaudible] mechanism to calculate the codepoints, but it also asks to add more constraints depending on the analysis. However, it does not conduct script-based review in its conclusion.

ICANN has been working with the script communities to develop the secure and stable solution for this, and this is based on the root zone LGR procedure which so far in the first round of the work, we are scoping the work to 28 script which is the maximum starting repertoire. So these are listed here from Arabic, Armenian, Bengali and so on, and to Thai and Tibetan. So these are the 28 scripts identified for the root zone, and these same 28 scripts are used to develop the reference LGR for the second level as well for the gTLDs.

But actually, in the Unicode itself, as of now, version 14, it has 159 scripts. It also includes some of the historic scripts as well or not in modern use, and Unicode has also identified that not all of these scripts are maybe suitable for identifiers and domain name is also one of the identifiers.

So the question to answer is, out of these 159 scripts, what would be the scripts that ICANN Org should support? It'll be considered in the top level and also in the second level.

Take a closer look on the Unicode. So with these 159 scripts, the Unicode standard has the Annex 31, which identify the scripts into three categories. There are the excluded scripts, the limited use scripts, and the recommended scripts.

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For excluded scripts, there are 94 of them. Basically, scripts that are not in customary use, it might be historic or used in a very limited community or small community. And also, some of these scripts have some unresolved architectural issues. For example, rendering issues and so on. An example for this, Brahmi, Coptic, Egyptian Hieroglyphs are listed here. These are excluded scripts.

Another category is the top should be limited use scripts, this is not correct. So for the limited use, it's modern script but used in a limited community. So for this, to avoid security issues, then some implementation may wish to disallow, but it's still also possible. Examples of this, Balinese, Canadian Aboriginal Syllabics, Cherokee, and so on.

The last category, the recommended script, there are 29 of them and also some common inherited like the digits and hyphen. So for this script, it's the widespread use, modern customary, and there are large communities using them. Examples of this are Arabic, Armenian and so on, like the set of the script that we already work on in the root zone LGR project.

So to answer the question earlier, ICANN engaged the expert to conduct a review on this script and summarize into the report. So we can also link to the report from this presentation, but in summary, the report says that with these scripts, it is the recommended script, then it's suitable for root zone and also the second level. If it 's the limited use script, it might not be suitable for the root zone but it can be used at the second level but it has to be on a case-by-case basis. And for the

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excluded scripts, it's not suitable for either root zone or the second level.

Moving forward, the evaluation, evaluating the script, why the limited use script should be considered as the case-by-case basis, it's because of the script still can potentially present some security and stability issues. So the script communities actually need to help develop a solution that is secure. But because of its limited use, sometimes we might not be able to find the community to consult this with in order to develop the label generation rules. So for this, we might not have enough information to develop the reference data. So without sufficient information, we wouldn't be able to develop the reference and we couldn't support this script in an efficient way.

And these are some examples of risk that might impose from limited use script. So the list of scripts here, all of them are limited use, Cherokee, Kayah, Lisu, and so on. If you can see, there are some examples from some labels. Some of them may look like Latin capital letters but are actually different codepoints. So if you see the codepoints here, they're different from the Latin capital A. So it might impose the user to the confusability or phishing issues.

Also, some of them look like Latin small letters, like CEO here, and NEW here and so on. But basically, it just looks like that, behind, they are different codepoints.

Another example similarly, this is still in the area of the visual confusability. So this limited use script, some characters might look like recommended script as well, so for example, New Tai Lue might look

like Myanmar or Malayalam. You can create labels solely from New Tai Lue and another label in Myanmar script which looks pretty much the same but they are different codepoints. Also, Bangla, which is a recommended script already in use in the root zone, the Syloti Nagri could create something that looks similar.

Another example of risk is rendering issues. Because of the limited use in nature, some systems might not actually have the proper rendering mechanism or fonts to manage this script. This example from Newa script is one of the limited use scripts, and if we copy this character from the code chart, from the Unicode itself, 11420 and you paste it in software, in this case on the screen is Chrome on Mac, visibly, it cannot render and it turns out to be some question marks here. So this use of limited use script which doesn't have proper rendering support can also create some issue as well. And this list is some of the limited use scripts that we test and we found similar issues.

So go back to the conclusion previously, the very high level of summary that the excluded script might not be suitable for both top-level and second-level, the limited use may be suitable for the second level on a case-by-case basis, those are things in the report, we publish the report for the public comment. So the proceeding was open the 5th of January, it just closed last week, 15 of February, and the report is due early March. So right now, we are taking the input we received from this public comment into consideration on the next steps.

Let me pause here. Any questions or comments on this?

SARMAD HUSSAIN: There are a few more general questions. I'll read them out. Nabeel Yasin, "Do you think that the IDN will lead to Internet end-user isolation and internet defragmentation?" There's a follow-up question by Prince Andrew Zutah. "How do you overcome the language barrier when you receive an inquiry on IDN domain name in a different language?"

There are some responses to this in the chat already. There's also a question by Raymond Mamattah. "What are the main differences between universal acceptance and IDNs?" These questions are being responded to in the chat, but Pitinan, if you want to respond to anyone, please go ahead. Thank you.

PITINAN KOOARMORNPATANA: Thank you. Let me pick one perhaps, and if it's not covered, we can follow up in the Q&A. The difference between IDN and universal acceptance, so IDN is more like—we make the technology ready, so before, we might not have the solution developed by the communities on how to use the particular script properly. Right now, ICANN facilitates the community work with the community effort tremendously. This solution now become available.

But then the next step is, right now if this script is used, technically, maybe the software or other service provider in the Internet ecosystem might not know about it and might see—for example, if you have the e-mail in the internationalized domain names, which we call EAI, e-mail address internationalization, so if you have EAI and you use your e-mails in some of the websites, if you want to subscribe to something,

SARMAD HUSSAIN: Thank you, Pitinan. I have also shared a link to a session on universal acceptance which is tomorrow. There's a question by Dennis Tan. "Wouldn't the rendering issues be somewhat related to universal acceptance?"

PITINAN KOOARMORNPATANA: Yes. That's a good question, Dennis. Thank you. I think that's something we have to find the answer together. Yeah, I think to make a system accept the nontraditional ASCII domain names and e-mails, would be something that will be part of the UA as well. Okay, let me move forward first, and if we have time at the end, come back to some of these questions.

Next will be the root zone LGR updates. I will go through the brief overview of the project, then I will hand it over to Yin May Oo, co-chair from the Myanmar generation panel to give some update on the Myanmar root zone LGR and then we hand it over to Marc for root zone LGR version 5.

So just an overview, the brief history of the root zone LGR project, this started off from the community requirements that there is a need for the variant top-level domains. At that time, the community—this is from 2009-2010—came together and worked on the integrated issue report

which identified what needs to be done in order to enable the variant top-level domains.

So two things have to be identified. The first is there was no definition of variants. Basically, this depends from script to script. The second point is there is no mechanism how to manage the variants.

For the first one, how to define variants, community also developed LGR procedure how to develop the root zone label generation rules. So these rules basically generate the label for the root zone and within this rule is also identify the definition of variants.

This LGR procedure has been adopted by the Board in 2013. Since then, the community for each script started working on their own script and develop the root zone LGRs. In parallel, ICANN Org also start develop the recommendation on how to manage variant TLDs.

Moving forward to 2019, the ICANN Board resolved that the GNSO and ccNSO should take into account the recommendation for managing the IDN variants, which in this recommendation also integrate the root zone LGRs as well, and now this being taken account in the policy development by GNSO and ccNSO.

And also, in 2020, with the availability of various proposals by the community on the root zone LGR for many scripts, the ICANN Board also resolved that the GNSO, ccNSO should take the recommendation in the technical utilization of the root zone LGR into account. Early last year in 2021, GNSO also published the report on new gTLD subsequent round which also incorporates the use of root zone LGR.

And this gives a picture of the work done by the community. With the 28 scripts we identified for this round of the root zone LGR work, we are closing 26 scripts of it, and you can see some of the work that could last for a few years, working group last about five, six years already.

But early this year, we're coming to the close of all the active generation panels or the community group we call generation panels, and we still have Thaana and Tibetan script which we hope we can form a community panel and work on the root zone LGR as well.

With this, I will hand it over to Yin May Oo, the co-chair of the Myanmar generation panel to give some updates on the Myanmar root zone LGR. Over to you.

YIN MAY OO:     Hello everyone. These are the languages that we focus on based on [inaudible] that language users from 550 million to 500,000 language users. This language list is according to the number of language users of our Myanmar script community.

So Myanmar script has been used about 200 years nationwide, and we have borrowed so many vocabularies [in culture trade] and also including [inaudible] and many things from different languages, and this is a melting pot of the west coast of southeast Asia.

Over the years, we have adopted many [inaudible] from [inaudible] Tibetan language we have developed mixed with [inaudible] language users, Thai and many other historic languages that we have discovered.

So this is where we come from, and as you all know, Myanmar script is based on abugida system which is like across from India to southeast Asia we have adopted this system, and we have also adopted [inaudible] marks and many others from different ethnic groups and cultures. So we end up having a lot of consonants and many diacritics, like more than one. Diacritics extend up to six or seven to form one syllable. Next slide, please.

For one syllable, it could be one consonant and it can move up to a consonant which comes along with a medial which we can add one more consonant to change the power to different sound and then we can add the tone map to make it creaky or higher tone, like a long sound. So there are many possibilities and we have to make sure that the combinations follow Unicode canonical order so that we don't form any canonic rendering so that we can make sure the label is safe and secure. This label, [inaudible] human ability, one consonant can be changed by adding one [inaudible] and then it could be much more. Next slide, please.

As you can guess that in region, there are more than ten scripts being used. However, we have cut down to focus on six languages and we excluded [inaudible] codepoints and exclamation marks and obsolete characters, so to cover six languages, we end up having 90+ codepoints in repertoire. We have sadly had to leave behind the languages with less number of users and [with no reference to be found.] Next slide, please.

After we analyzed what codepoints to allow for the label, we studied through other languages to filter out what are the possible variants, and

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we have come across Latin letter, Greek letter, Cyrillic and Armenian. Since Myanmar script has decided to base on [inaudible] character, this is the first thing [inaudible] so from this letter, we discovered that many languages across the world also use this full circle character.

So here is the list that we have as a result. Since we have the circle shape, we have also open below, open on top and open to the side. Among them, this is the other shape that we found which could be variant to other scripts. Next slide, please.

So we have variants based on full circle characters and since the variants are—it seems like the variants are closer to western languages, and since our language have a lot of different types of diacritics, vowels, medials or [inaudible] to come along, we have to label which codepoint belongs to which group and which—according to the groups, they have to follow a certain order to form proper [inaudible]. So we have to [inaudible] and we have to make the rules according to the behavior that the letter will be formed. Next slide, please.

So we have to write the starting rules for each type of the diacritics, which diacritics should not come after the other type of diacritics so that it will create confusion or rendering problems so that we can eliminate and then make sure it doesn't confuse the users, because some users—most of the users surely know what is written, but there could be—people only know it through limited resources. In our country, in some rural areas, we may have people who don't know the full set of language but they still know the generic terms and they also

may want to use the Internet. So we have to consider that our labels are not making anything that could confuse their ability of reading.

So here are the label examples, and for each rule, we have to look through the whole list of generic terms and we have to make sure that nothing dangerous is formed and nothing invisible is there. Next slide, please.

So during the years starting from 2018 that we have formed our GP, we have concluded our proposal and this is our public comment opening on 2022 January, and we are still expecting to receive more comments. Against all odds and many situations, we still hope that we can reach Myanmar script and language users to understand that Internet is not only for English language and ASCII characters so that they don't have the fear to—if they have any fear to learn different languages, they can relate and start looking at different points. We hope that we can let the community know that Internet is ready for lowering the language barrier. Thank you.

PITINAN KOOARMORNPATANA: Thank you, Yin May. Is there any question or comments for Yin May?

SARMAD HUSSAIN: Thank you, Pitinan. There is a question in the chat, not directly related to Yin May, but to earlier part of the presentation. The question is by Andrey. "What is the reason to accommodate unused historical alphabets? If I clearly understood."

PITINAN KOOARMORNPATANA: Thank you, Andrey, for the question. We actually asked a similar question as well in the public comment that just closed. Thank you for the question. If you have input, it'll be good to let us know as well. I'm not sure if it has been pasted already, but Sarmad, if you could paste the link to the public comment, that would be great as well. Thank you. So some of the details of how to handle the different categories of scripts are included in the report. Thank you. Any other question?

SARMAD HUSSAIN: There are a couple of other questions which are being responded to in the chat as well. There's a question by Mouloud Khelif, "What is your relationship with UA and specifically the Universal Acceptance Steering Group?" There's another question, "So far, how many IDN TLDs have been delegated in the root zone?"

PITINAN KOOARMORNPATANA: Thank you. So the Universal Acceptance Steering Group is the community-led steering group which we work closely between the ICANN IDN UA program and UASG. So while the UASG [inaudible]—so then the UASG also has multiple working groups underneath as well. We have the sessions specifically for UA tomorrow and also in the main week. So you might be interested to join there as well. But basically, IDN and UA program also work with the UASG, which is the community-led.

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Next question is how many IDN TLDs … It's around 150-something for both CC IDN TLDs and gTLDs. I'll find the exact number in a bit. I'll post a link to that. Okay, thank you, Marc, it's 154.

All right, then let's move on for now. I hand it over to Marc Blanchet, the member of the integration panel to share with us an update on the next version of the root zone LGR.

MARC BLANCHET:     Thank you, Pitinan. So this presentation is about our work as integration panel since last ICANN meeting. Our purpose is to do really what the panel is about, which is integration. Therefore, we take on the generation panel LGRs and integrate them together to form the root zone LGR that is being used by the community for the TLD, the root zones. Next slide, please.

We're currently working on the fifth version of the root zone LGR. The fourth one was released in fall 2020. The root zone LGR 4 contained 18 scripts such as Arabic, Bangla, Han, Devanagari, Ethiopic, Georgian, Gujarati, Gurmukhi, Hebrew, Kannada, Khmer, Lao, Malayalam, Oriya, Sinhala, Tamil, Telegu and Thai.

We intend to integrate six new scripts, which are Greek, Hiragana and Katakana for Japanese which also contains Han, but Han has already been there in LGR 4, Korean which includes its own specific script, Hangul, and also some Han which is also in LGR 4, Latin, and Myanmar.

Interesting is that we had two scripts that were submitted to us many years ago, Armenian and Cyrillic, but we decided to defer them which

means that we didn't at that time integrate them into the root zone LGR because they were closely related to Latin and Greek. So we were waiting to get all the four scripts all together, the final versions so we can integrate them because they share variants and we have to, by the process of integration, to actually impose the various cross-script variants, one to the other. Therefore, we had to wait. We also had to wait because we wanted to make sure that there is coherence between the different scripts that are needed.

Therefore, the LGR 5 now has two sets of related scripts that are fully integrated, the CJK, the Chinese, Japanese and Korean, and Latin, Greek, Cyrillic and Armenian. In some ways, LGR 5 will be the most complex we ever did integration, and therefore, we're spending a lot of time in verification and making sure that we're correctly integrated. Next slide, please.

That LGR 5 version which we're currently working on will contain essentially 25 element LGRs. Element LGR means specific to a script. Why we have 25 is because we have 26 scripts but Japan has two script itself in one LGR, so 26-1. And we will also output a common LGR which is mechanically generated by the element LGRs.

We're targeting March 24th for releasing the root zone LGR 5 for public comments, and that means that we hope to get the Myanmar version that Yin just presented soon so we can integrate it.

We really [wish] to see people taking time to review the LGR 5, because again, that would be the most complex one and also most likely one to be used in the future for rounds and other stuff like that. This will

essentially conclude the integration of all active generation panel LGRs that we have received. Next slide, please.

Regarding cross-script variants which will be something pretty significant in this release, the cross-script variants will only become fully complete in common LGR, which is, as I said, mechanically generated from the element LGR where we take all the cross script variants between the different LGRs and we combine them together, applying transitivity and therefore creating the whole common LGR. The common LGR is used for collision testing among valid labels.

And what is shown below is actually what we decided as the way to do—what it is in terms of variant processing. So if there is a variant which is uniquely defined in the element LGR, it will be [listed] and integrated. Any in-script, therefore in [the whole] repertoire of the script, variant will always be listed in the affected and appropriate LGR. ASCII variants are always listed. Element LGRs from the set of Latin, Greek, Cyrillic and Armenian will list all variants in the set, but only Latin LGR will list variants outside that set.

Previously deferred scripts, Cyrillic and Armenian, variants imposed by integration are added, and a few other element LGRs such as Malayalam have selected variants that are imposed by new scripts in LGR 5. Here is a call for the generation panels that are involved in this. For example, Cyrillic, Armenian, Malayalam and others.

It would be very useful if you verify that the integration work we did which actually add new variants into your element LGR, that your element LGR—we didn't add any bug or any issues with the process of

integration. So this is really a call for essentially all GPs, but the whole community to double check our work so we're all in good shape for the next steps of this root zone LGR. Next slide, please.

So this has been presented last time, and I won't go too much into it, but just to say that typically, when you want to process or verify a label with a root zone LGR, you would first verify that the label is actually valid using the element LGR, then you would use a common LGR to verify collisions, and if you're still okay, then you would reuse the element LGR of the script to compute the allocatable variant so then you will have the various labels that are variants of your original label.

So that's how one would use the root zone LGR. Obviously, there's, for example, the LGR tool made available by ICANN that enables you to take care of all this process by a tool. Next slide, please.

Next steps for the integration panel, again, we intend to publish the root zone LGR 5 by March 24th, so this is in about a month. We really would like to see the community and especially the generation panels to review and verify the work that we will be doing, and it is a very useful comment for us if you find no issues but you still send a message to the comments portal to say we verify our script and everything is fine. So this is very valuable for us. So please, if you take the time to verify, let us know.

So we're tentatively targeting finalizing after the public comment for Q2 of calendar year 2022. There will be a possible next version of the root zone LGR if the Tibetan and Thaana generation panels are formed and submit their LGR to us for final integration. However, as we saw by

Pitinan's presentation, those panels are not yet formed. Therefore, we don't have any date for that new version which will most likely be LGR 6. We don't have any date for that work. And I think that's the last slide, end o f my presentation. Thank you.

PITINAN KOOARMORNPATANA: Thank you, Marc. Sarmad, is there any question in the chat?

SARMAD HUSSAIN:                    Yes, we do have a couple of questions. There's one by Bill Jouris. Why not list cross-script variants found by Cyrillic, Greek and Armenian, even if the Latin GP did not find them to be variants? Perhaps we can take this one and then the next one.

MARC BLANCHET:                      Okay, so the policy we did was essentially in the common LGR, all cross-script variants will be there, but not to get all the LGRs with a lot of variants which are not related to the script itself, we actually decided to restrict the imposition of some element LGRs for the purpose of readability of scripts. But you will always use the common LGR to get the full list of cross script variants.

SARMAD HUSSAIN:                    Thank you, Marc. There's one more question by Vadim Mikhaylov. "Am I understanding correctly, Latin in LGR 5 is not only basic Latin but extended Latin too? If it is so, which extensions, A, B, C from Unicode standard was included?"

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| MARC BLANCHET: | Actually, that question is more related to the Latin generation panel, and I think Bill is there, so he may respond. In general, every generation panel, what they do is identify all the languages with some level of use with specific well-known standard which is called [inaudible] and they define the scope of their work in terms of all the languages that will be supported by that LGR, script LGR, and therefore that creates the sets of codepoints that are reviewed. |
| | At the same time, they also have to look at the MSR, maximum starting repertoire, which is typically a larger set where all the historical glyphs that are no more in use are removed. Therefore, that creates the initial set of codepoints that are to be reviewed. So overall, it's all the Latin that are supported by, I don't know, about 200 languages or so in Latin. |
| SARMAD HUSSAIN: | Thank you. There is another question by Satish Babu. Will version 5 be fully backward compatible with version 4? |
| MARC BLANCHET: | Yes. Again, the final version is not yet done, but it is intended to be fully compatible and there's no reason at the moment to think that it will not be backward compatible. And if that ever happens, that would be highly written in the public comments for people to review. |

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SARMAD HUSSAIN: Thank you. There was another question which was also answered in the chat, but I'll read it out, by Nabeel Yasin. "Are all DNS systems such as BIND able to translate IDN domains to IPs?" There was a comment in the chat which said that in DNS systems, all labels are in a-label format, therefore I guess they are eventually converted to ASCII characters for internal resolution processing. But Marc, if you want to add to that. Thank you.

MARC BLANCHET: Well, the question is more about IDNA in general. There's two forms of domain name and internationalized domain name. One is within the script, the real value that the user will see, and that string of glyphs is the one presented to the user typically for example in a browser. However, that string of glyphs is not the one that is actually being coded into the DNS system. DNS system is still ASCII and we designed that for the purpose of not having to change all DNS systems in the world.

Therefore, the string of glyphs that the user writes in their own script will actually be translated, as Michael was writing, into what we call an a-label with an algorithm called Punycode which starts with xn-- and the rest is a list of ASCII characters. Typically or normally, the user would not see those. But that's what the DNS is using for resolution to IP addresses for example.

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SARMAD HUSSAIN: Thank you. There's a question for Raymond Mamattah. Are there any works done related to the Ewe characters? This is one of the major languages spoken in West Africa, especially Togo and Ghana.

MARC BLANCHET: I have no idea about this one. I don't know if Pitinan or Sarmad, you have, but that doesn't recall anything for me. Okay, Michael says that it has been considered in Latin. Okay. Thank you.

PITINAN KOOARMORNPATANA: Thank you. Any more questions or comments? We have one minute left. Okay, so just to close up, as a quick summary, for the update on the guidelines, then there's something we still see what would be the next steps.

For the public comment, which has just closed on the additional scripts to support in IDNs, if you still want to submit some comment, please feel free to do so as well, but we are developing the final of the comments received soon. And also for the public comment from Myanmar script, it's open until the 3rd of March. So even though it seems to be remotely relevant to you for the cross-script variants, this also included the O shape and some of the common shape. So you might find this interest to take a look.

Finally, for the root zone LGR version 5, the public comment should be expected to be released by the end of March, so that is something we would like to receive the inputs and it would be good if you can help

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review. And I guess that's all we have for today. Please feel free to contact us, IDNprogram@icann.org for any question or comment.

With that, thank you, everyone, for joining this session. I hope you have a good week and successful ICANN meetings ahead. Thank you.

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