

Baher Esmat: Hi, my name is Baher Esmat. I'm the regional manager with ICANN in the Middle East. I'm going to talk about IDNs – Internationalized Domain Names – and what ICANN has been doing in this area.

So, we're going to cover a quick introduction about what IDNs are about, IDNs from end-users' perspectives, IDN tests and protocol revision, the policy process that's been underway with ICANN for the past few years. What we call the Fast Track is the quick mechanism for introducing IDNs for country names. And then, I'm going to tell you where we are today, and where we're heading.

So, I'm sure that many of you know what IDNs are, but this is the usual introduction to say that domain names have been working with a very limited set of characters for the past 25 years, like what we call the ASCII characters, part of the ASCII characters A to Z, digits zero to nine, and the hyphen sign.

So what happened around years 2002, 2003, that the group that puts standards for the Internet, Internet protocol, etc, called IETF – Internet Engineering Task Force – they developed a protocol for Internationalized Domain Names for Applications, or IDNA. So, with that protocol, it was possible to have domain names written in characters other than the LDH or the ASCII characters that we know, so you can write, or you can have domain names in Arabic and Hindi and Urdu, in whatever language.

And, since 2003, there have been registrations for domain names in different languages under the existing popular domain. So, for instance, you can go and register a domain name in Arabic under .com. Or some of the ccTLD registrars do provide IDN registration on a second level for different languages. So what is not available yet is to have the top-level domain in multiple languages, as well, or multiple scripts, so to have the equivalent of .ae in Arabic, or the equivalent of .cn in Chinese, and so on and so forth.

So this is what we have today is to have an Arabic name.com, or a Chinese name.com, etc. But what we're heading for is to have the full address in the different languages, so IDNs will exist at the top level for both ccTLDs and gTLDs.

So what Karla covered in the previous session about new gTLDs, that includes IDNs. That includes names, and top-level names in different languages. On the ccTLD realm, what we found was that to develop a full policy for IDN ccTLDs, that would normally take from three to seven years. And one of the difficulties in there was that apparently, the country codes are based on a standards list, or a list that was developed by a standard body

called ISO. And this is the famous list called 3166, which includes country codes like uk, ae, eg, etc.

So there isn't such a standard list in the different languages and scripts, and it's not ICANN's task to come up with or to develop such lists. And that was based on feedback that we received from the community, especially the community in the Asian region, like from Japan, Korea, China and the Arab region, as well, that they need to have country codes in their native languages. So ICANN has to develop a mechanism for that.

So we came up with this idea, or this mechanism that we call the Fast Track, is to develop a quick mechanism for introducing country codes, names, in different languages, until the full policy process is developed. So this is what we've been working on for the past, almost couple of years now, to have the Fast Track implemented.

So we're done with the policy part, which was developed primarily through two of the supporting organizations and advisory committees within ICANN, the CCNSO Country Code Name Supporting Organization and the GAP, which is the Government Advisory Committee. They came up with the policy, and we've had communication back and forth with community on what has to be there. And then we came up with the final policy. That was sometime last year, 2008.

So why IDNs? Why do we need IDNs? Why do people need IDNs? The main reason is that the growing number of users in different parts of the world; in parts that do not use the English language as the prime language. And, if you look at this table, you would see that these are the numbers of Internet users by language. So currently, there are, for instance, in the Arabic community, there are 41 million users on the Internet. Their primary language is Arabic. If you look at the growth in the number of Arab Internet users since Year 2002, it's something like 1,500% increase in the number of users.

That same applies in other countries and regions, like China, like Russia. So there is a need to use the Internet in different languages. This is not all about IDNs, to be honest. So IDNs is not the only component in this equation. It's more about content and local applications, interfaces, etc, and then IDNs is one component that would complement the whole model.

So from users' perspective, the users want to have domain names in their languages. They want to be able to register domain names in their languages, so when they go to the registrars, they can find the interface in

Arabic, if we're talking about Arabic, or Chinese, etc, and they can enter their domain and register them.

Then what the registry do is that it encodes this name into something that the computer can understand; something that the DNS can understand. And this thing looks like X N dash, dash, and then some code. So this is the ASCII code that the DNS will be able to understand, because DNS will not understand anything but ASCII. But for the end user, end users can read and write the strings in their languages.

This development would also have an impact on the email system. So, eventually, users would need to write the full email address in, again, their local languages. And this is something that, again, the IETF has been working on to update the email protocols to support multilingual addresses, as well.

But in many cases, what the user writes is not necessarily what he or she sees, because apparently, for instance, if you look at the different Internet browsers, from Explorer to Firefox to Opera, and etc, you would find that when you enter a domain name in Arabic, for instance – this is my language; that's why I was able to try that – you would find the way the browser presents or represents the character is quite different.

So if you look at this one here, so this is what I entered. This is example.test in Arabic. But the way that the browser shows example.test, that is from one browser to another. And this is something that, again, people who develop standards together with people who develop applications, together with ICANN have been working on to make sure that whatever the user enters is the same as what appears on the screen.

So this is one of the things why it's important to make sure that IDNs work at the different level, at the application level, at the DNS level, and at the end-user level. So it's not only about that the user wants to have his name in his language. We need to make sure that there is a standard for that, and then the applications will implement those as standards.

Avri?

Avri Doria: That's a great example. What's the difference between the two bottom browsers? They both (unintelligible 10:46) but one (unintelligible) one's by the X, dash, dash, the other one's by the Arabic (unintelligible 00:10:52)?

Baher Esmat: Probably the third one, that was a different language. That was not Arabic for – yes, so that's why.

Also, in IDNs, one of the topics that has been raised is the user confusion, that people would be more confused with IDNs. And the fact is users might be confused today, because even with the ASCII characters, when you have an address with letters and digits that look similar, like lowercase "l" and uppercase "I," for instance, or digit zero and "O," then there is a certain level of confusion, as well.

The fact is that with IDNs, we're going to have a greater number of characters involved in the addresses. So it's natural that there might be more confusion. People might look at addresses or receive URLs in emails, with characters that look exactly the same. Like, for instance, the examples below, so the first one, PayPal and PayPal. So this is all in ASCII. This is something that happened a couple of years ago when someone registered in a name called PayPal.

However, the second "A" in PayPal was not the English "A." It was not the ASCII "A." I think it was a Cyrillic "A." And it looks exactly like the ASCII "A." However, it has a totally different Unicode. So for the DNS system, for the computer system, these are two different names. However, for the end user, this looks exactly the same name. And that was one of the reasons why, again, ICANN, together with registries and registrars, developed a recommendation in the IDN guidelines by which the registries are not supposed to allow for mixing between characters in the same name. So this is like an Arabic name. It shouldn't be mixed with English characters, or Cyrillic, or whatever.

So this example might and will, actually, happen again in different languages and scripts. Like PY and PY. PY is the country code of Paraguay, whereas the other PY is a Cyrillic PY that stands for Russian Federation in Russian or Cyrillic. And this is not the name that Russia wants to have as a ccTLD name, but it's, again, an example to show the confusion that might happen.

And the last one is two words in Arabic. Kitab, which means book. So one of them is with the Arabic qāf. So the first letter from the right-hand side, we put in qāf. So one is with Arabic qāf, whereas the other is with Farsi qāf. And they look exactly the same or in some cases, they would look exactly the same, or at least similar to each other.

So these are examples of the confusion that the user might have with IDNs. But the important thing is to know that confusion existed even with the ASCII characters.

One way to try to lessen, not necessarily to prevent, but at least to lessen the level of confusability is to have IDN Tables, and to define variant characters. IDN Tables are tables developed by the registers themselves, whether gTLDs or ccTLDs. And in those tables, they define or they list the characters that they are going to make available to the registrant to use in their registrations. So if I have a registry and I submitted my language table for Language X with 25 or 30 or 40 characters, then the registrant will only be able to register names that are composed of these characters. If he wants to have a character that is not in the table, then he won't be able to register the name under my registry.

So these tables are developed by the registers, and they should be submitted to IANA, at the time the registry wants to implement IDNs. And this has been the case even for registries today who provide IDN registrations under their ASCII top-level domains. They had to provide IDN tables to IANA.

The other issue is the variants. The variants is to define characters that may look exactly the same or that the registry wants to treat them the same. So the registry may decide that letter, for instance, yā' in Arabic, with two dots underneath the "a," and the yā' without two dots, are variants to each other. It means that if someone registered a name with this letter, so if someone registers a name like kitab, the book example that I gave with Arabic qāf, so the kitab with Farsi qāf, if I have the two qāfs in my tables, then the other kitab will be a variant which should or could be provided to the same registrant or may be blocked or reserved, so that not to allow another registrant to have it and then cause confusion between the two names. And this is policy that each registry would have to come up with within its domain.

Now, one of the things we're going to talk about later on in this presentation is to have variant at the top level. Because, again, in some of the cases, especially the cases I'm aware of, are related to country names. We at ICANN were then made aware of cases where some ccTLDs want to have their IDN names and want to have variants to those names. So I'm going to come to this point later on. I'm going to say why they may cause problems and why ccTLDs do need to have those variants.

So, in the past couple of years, ICANN, together with the technical community, have been doing tests on IDNs. Tests started at the labs, and then we moved to the live route, and we inserted strings in 16 languages, and scripts in the root for the example.test in different languages. And we have, this week, interface for end users to go and try using IDNs through the different browsers, and to have links with email addresses where the DNS portion of the email address is made available in IDNs like in Arabic or...

And the purpose of this test was to try the different applications and to see how the different applications did with IDNs, and to get feedback from users. And those Wiki pages, they're still available and people can access them, and can try the different languages we have in there.

On the protocol side, as I said, it's not ICANN that is in charge of developing the protocol. It's IETF. These are the technical folks who develop protocols. And IETF has been reviewing the version of the protocol that was developed in 2003, and been working on reviewing this version and having a new version of the protocol. And this is something we expect. IETF met in Stockholm last week. I'm not sure whether someone – Ali, were you there? So Alireza, our colleague from Iran, from the .ir registry, has participating actively in the IETF.

And I was not there, Ali, so maybe you can tell us. Because I knew that IETF made some progress, and they expect to have something before end of this year to finalize this work. So can you comment on that?

Alireza Saleh: Actually, what happened ([unintelligible 20:27](#)) decided to wrap up everything because they are in a rush to push through the ICANN faster, actually. So they just wrap up everything and said that, "Okay, whatever we have until this time is fine, and we can go ahead and process, and publish the IETF, and put the RFC to the last cause."

So, actually, there is no major changes. There is a little bit slight changes in "zwga" character. And maybe mixing the "an" and "en" numbers. But nothing will be changed in the draft. And maybe there is a small thing about mapping. I mean, the lowercase and uppercase in the context, that may be changed a little bit, because the Pete Resnick drafted may be a little bit changed, because in some of the cases, we are losing some properties when we are adopting the Unicode ([unintelligible 21:35](#)). It's too technical for this meeting, but I think that we should have the RFCs within two months or three months.

Baher Esmat: Yes, this is what I've been told. They told me that something before end of this year, which is good news for ICANN.

Alireza Saleh: Yes, actually, we assumed that we have two sessions at the IETF meeting but this, again, one has been cancelled because, I think that, just everybody decided to not come to the mic and just tell something that postponed the RFC from being published. So I think that we don't have any session in the Hiroshima ([unintelligible 22:15](#)) and everything. Those two.

Baher Esmat: Right. Adrian.

Adrian Kinderis: Do mind if I ask a question? ([Unintelligible 22:21](#)). So, is it your understanding they're probably running the 2008 copy, or were going back to 2003?

Alireza Saleh: No, they are going to the 2008 draft. And I think that they also - they are thinking about just moving the mapping draft to the rational, or just keep it as a separate draft, or something. But I think that IDN in 2008 will do the mapping. It will keep continuity in the mapping, and lowercase and uppercase.

Baher Esmat: Okay. Thank you, Ali.

Alireza Saleh: And the great sigma also ([unintelligible 22:57](#)) draft of characters has been decided. What often is "sharp zed," that's going to be allowed so there is a difference between "ss" and "sharp zed," and also the uppercase sigma. There's a sigma, and the other one, also, they are two ([unintelligible 23:12](#)). There's two types of changes that are going to happen, and also, the Turkish "i," also there is another thing that might be a little bit different between the IDNA 2003 and 2008. And for – I haven't ([unintelligible](#)) the most important is the "w" and "j." And IDNA in 2003, does that "w" and "j" character that is single-space...

Baher Esmat: Which is probably too technical for this session ([unintelligible 23:39](#)).

Adrian Kinderis: It's a half-space.

Baher Esmat: Yes, I know.

Alireza Saleh: It's a pseudo-space, and half space, it maps to nothing, but now, it's just accepted to there.

Baher Esmat: Peter?

Peter Resnick: In your opinion, is there any chance that, should ([unintelligible 23:56](#)) protocol. With ICANN going ([unintelligible](#)) and the new gTLDs is about ([unintelligible 24:03](#)).

Baher Esmat: Okay, this is a good point. And what I want to say before that – I'm going to come to this point – the importance of the protocol part is that it's important to have a standard, and to have everyone work with this standard. Again, as I said, like application provided, etc.

And that's why we're very much keen to have the protocol finalized, before the launching of the IDN, whether for new gTLDs or ccTLDs. And what ICANN said – I think it was in Mexico, a few months back – that in the event that IETF is not done with its work, as regards the revision of the protocol, that ICANN will most probably go ahead with the launching of IDNs, and at that time, we're talking about IDNs as IDN. So it applies for both. However, in that event, ICANN will have to make, in consultation with technical community, might have to take into consideration some technical aspects, and to have the registries implement or take those aspects into account.

Of course, that was not a very good - for technical folds, that was not a very good statement for ICANN, because they thought that ICANN should wait until the protocol is finalized. But on the other side, ICANN got pressure from community to get this thing finished. So I hope that, with the news from Stockholm, that IETF is most likely to finish its work before end of this year. If this happens, then it would be more or less synchronized and would get things implemented using the protocol thing.

Male: On behalf of my clients, I'd like to go on the record as saying that it would be completely unacceptable to go live with new gTLDs without ([unintelligible 25:59](#)).

Baher Esmat: Well, I totally understand that. I totally understand that, and I think this was discussed even before that, with ICANN. And the thing is today, we're not talking that there isn't a standard. There is a standard that has been working on second level for five, six years. That standard is there. What's happening is that IETF is reviewing the standard and probably enhancing it.

So whatever implementation that's going to take place without the new version of the standard, it's going to take place with the current version of the standard, taking into account whatever enhancements or improvements that will be available.

What you're saying is totally understood, and I think ICANN got this message before, and got other messages, as well, from people who said, "Well, we don't care. We need IDNs." But of course, it's not about getting things there without making sure that it works right.

So IDN policy process. Maybe Karla has touched on that. And I'm going to do it quickly, again. The policy process of IDNs was part of two different tracks. One is the ccTLD track, and the other one is the gTLD track. And then, in the ccTLD, we have what we call the Fast Track, the quick mechanism. And we have the policy development process, the long-term process that will take some time to be completed.

So on the Fast Track, the aim was to introduce limited number of non-contentious IDNs and ccTLDs within a short timeframe. That was the intention. That was the aim of the whole Fast Track thing. And when we say limited number, we mean that ccTLDs in countries that use Latin script in their languages, like in Europe, or like in North America, those countries will not be part of the Fast Track. So there is no point of having .de in Germany. It's already the same.

So the Fast Track was more about countries that use, in their official languages, languages and scripts that are not based on the Latin script. That was the purpose of the Fast Track. And they have to be non-contentious. So if we receive two applications from two different organizations within the country, and each one claims that they have the right to have the name of the country in the official language, then this kind of dispute will not be settled within the Fast Track process. The Fast Track process is fast, to get things fast.

So there are other considerations, like to have the name of the country with the directory listed in the ISO List, etc.

And then, on the generic part, on the gTLDs, so the new generic names will include IDNs and the same technical requirements as far as the protocol and the technical standards are concerned, they should apply. In developing the policy of the new gTLDs, especially with regards to IDNs, there was quite some work on how to prevent or lessen the possibility of confusability on cybersquatting, as I explained.

And then, the one in the middle, this is the longer-term process for developing a policy for having IDN ccTLDs, and this will include any ccTLDs, not necessarily the ones that are based on non-Latin scripts. And this will take some time, and the organization within ICANN in charge of ccTLDs, the CCNSO, they launched the charter of the working group that will be working on the long-term policy, the policy for IDN ccTLDs. I think they launched it last April.

So I expect that they would be starting soon on developing and kicking off this policy development process, and this working group expects to have its final report sometime in 2011. So it will take approximately two years to come up with the report, but that doesn't mean that this report will be the final policy. Then we'll have the usual consultation with community, and feedback, and so on and so forth.

So when we started the Fast Track a couple of years ago, it started with what we call an IDNC Working Group, which is IDN ccTLD Working Group, in November 2007. And this group was primarily led by members of the CCNSO and members of the Government Advisory Committee, and it took them some time, like maybe seven months, until they get their final report approved by the Board. In this report, they defined the principles and the policies that have to be implemented to get IDN ccTLDs to the root.

So some of those principles or guidelines was preserving the security and stability of the Internet. So, while developing a policy for IDN ccTLDs, they have to make sure that security and stability of the DNS system will be maintained. Compliance with protocol, so that was part, even of the policy process, to comply with the IDNA protocol. To take input from technical community on how to do that, and also to use the current best practices in relation to ccTLD litigation, and such processes.

So since November last year, ICANN staff has been working on the implementation plan for the IDN ccTLD Fast Track. And we came up with the first version of the Guidebook, or the implementation plan last October, October 2008, and we're currently at Version 3 of this document. So the document contained a number of modules from discussing or introducing the general subject to defining the eligibility requirements – who would be eligible to get an IDN within a Fast Track Process. The string criteria, the Technical Committee, the evaluation process and then, the delegation process, and there were a couple of issues that were included in the last section of the document, like Additional Topics. And in there, as far as I remember, there were a couple of issues that were not thoroughly discussed then.

One is about the relationship between the IDN ccTLD management and ICANN. Because currently, what we have with ccTLD managers, they all could be part of the CCNSO organization. They participate there in the policy development work. Some of the ccTLDs do have sort of agreements with ICANN. Some do not. So the question was, "So what would be the situation with the new IDN ccTLDs?"

The other topic that was not fully addressed in the first version was with regard to the IDN tables and the variant issue. So we published this version, and received input from community. Most of the input was on topics like the relationship with ICANN, financial consideration. This version of the draft implementation plan, it talked, from a high level, on why and how IDN ccTLDs should contribute to the ICANN budget, but there were not any details on the topic back then. So the community asked for more details on fees, etc. And there were also some comments on the possibility of contention between IDN ccTLD names and new gTLD names, and the IDN Tables, of course.

So what happened afterwards was that ICANN – actually, that was around the time, like October time, last year. When ICANN did a survey to try to predict the interest that ccTLD managers and governments have in IDNs and who or how many would be part of the IDN Fast Track Process. We got 74 responses from governments and ccTLD managers, 31 of which were positive. They said, "Yes, we need IDNs, and we're ready to be part of the Fast Track Process," and these 31 responses were for 15 different languages. And all the details on the survey and those who responded are posted on our Website.

And then, afterwards, we had the second revision of the – Mohamed, go ahead. Yes, sure.

Mohamed El Bashir: (Unintelligible 36:31).

Baher Esmat: Well, the rest were - when we sent this survey, we sent it to all ccTLDs, and to all governments. So those who, as I said before, those who are in Europe or whatever, they knew they couldn't be part of Fast Track and they might not be interested. Those were the ones that said, "Well, we're not interested, and we're not part of this."

Male: (Unintelligible 37:04) completely now. So, for example, that managers said, "Yes, I think it's a good idea." And the government say, "No."

Baher Esmat: No.

Male: No.

Baher Esmat: No, we haven't.

Male: So you're very much missing the...

Baher Esmat: Yes, we did. And actually, this is a good point, because it caused a bit of confusion to some that this survey was sent to governments, as well. I got questions from one of the ccTLD managers in the region asking, "So why did you send it to government? We are the ccTLD managers."

But the fact was the Government Advisory Committee was part of the whole process, and the subject of ccTLDs is very dear to the governments, anyway. And we had to take this input, because as per the recommendations of the policy document that there has to be some sort of endorsement from the government to the application of the IDN Fast Track thing. But there were no any conflicts in the answers.

So the second version addressed some of the parts that needed more elaboration, like IDN Tables, like the type of agreement that ICANN would want to have with IDN ccTLD managers, the financial contributions, etc. And we published this last February, before the ICANN meeting in Mexico City. We got feedback, and then we moved forward with the third version that was published last May, before Sydney.

And in this latest release, we've got a lot of parts of the document more matured, like the ones related to the evaluation process. So currently, we have a detailed evaluation process. We have a form of an online application form that the potential IDN ccTLD manager would use to apply for his string. We have more clear eligibility requirements on who is eligible for IDN ccTLD string.

We also issued a number of explanatory documents on the type of agreement that we would like to have, and we put some options in there on the type of agreement, the financial contributions, and the cost, and the cost recovery thing, as well as on the IDN Tables. And I'm going to come to each of these in more detail.

So on the Documentation of Responsibility, or DOR, so initially what ICANN said was that so this is a new process, and we're going to have new registries, whether they are the same ccTLD that is running the ASCII thing, or it's a new one. But this is a new thing, and we've got to have the rules and the terms clear from the beginning. So we need to make sure that, for instance, that the ccTLD manager would comply with IDN standards and would implement the IDN operation, as per those standards. So we need to put those terms in written and to have the IDN ccTLD manager agree to them.

Then we got feedback from GAC and CCNSO saying that current ccTLD managers are not forced, and cannot be forced, to get into any agreements with ICANN. And the fact is that even for the kind of agreements we have with current ccTLDs, they're all voluntary agreements, and the ccTLDs are not obliged to get into such agreements.

So we got this feedback, and we got some suggestions from members of the CCNSO and GAC saying, "So why don't you develop other options for those agreements, like having online applications with some terms and conditions, and once the ccTLD manager ticks the box, is fine and is compliant with those terms?"

So we developed such proposals. We put them in a document. And what we presented in Sydney was more or less three options of the DOR thing. One is to have a signed agreement with two parties involved. One is to have exchange of letters. So ICANN sends a letter to the manager, and the manager sends a letter to ICANN. And the other option is to have those terms and conditions inserted into an application form, and the applicant will put forward the application to get his string. And by applying or by submitting this application, so he's compliant with the terms and conditions.

And I think this last option was much more accepted to many, at least those who I'm aware of in this region – many ccTLDs and governments in this part of the world. However, that's not to say that this is the final thing that ICANN is going to implement. All these are proposals that have been discussed and are still under discussion with the community, and the ICANN Board has not approved any of them. So this is the kind of work we did on the agreement part.

On the costs, we were asked to provide more information, as it regards costs, and as regard what - because ICANN is all the time saying that IDNs cost ICANN money, and implementing the program, the tests, etc. So the community asked us, "So what amount of money you talking about?"

So we had three documents. The first one is not directly related to IDNs. That was a requirement from the community anyway, to be more transparent with regard to our costs. We issued the Expense Area Group Report showing the cost of each area within the ICANN work, like gTLDs, ccTLDs, global engagement of ICANN policy, the development process, things like public participation, etc.

So, from this report, the element that is related to ccTLDs in general, whether it's IDNs or not, was something around \$9 million, and this is the cost of the fiscal year that ended in last June. And this is something like 17% of ICANN's costs during that year.

The other documents were more on the IDN costs. So one is to present the cost of the program itself. So ICANN has been working on the IDN program for the past three years. We've done technical tests with technical experts, consultants, etc. We've done policy development work with many participants polled. So this whole IDN thing costs ICANN \$6 million, and this involved both ccTLDs and gTLDs.

So when we presented this number concerning the IDN ccTLDs with the Fast Track Process, we splitted the \$6 million into two, three, four gTLDs and three, four IDN ccTLDs. And the proposal is for ICANN to recover the

program development costs over time, so to have a percentage, something between 1 and 3% based on the volume of IDN registrations. So if the proposal says that if the IDN ccTLD registry got something like 20,000 domain names or less, the contribution would be 1% of revenues. I hope I'm not mistaken if it's revenues or profit. I think it was revenues. And then, anything between 20,000 and 50,000, the contribution would be 2%. Anything above 50,000, that would be 3%.

And again, this was discussed in Sydney, and we got feedback on that. And many members of the community still question the numbers and question the way we developed those percentages. So after Sydney, we've got feedback through the public participation process, and ICANN staff is still analyzing all the input been received so far, before getting to the final version of the plan.

The other part of the cost is the one that has to do with the application processing, and this has to do with the evaluation of the string, technically and linguistically. It involves consultants and experts from outside ICANN that have to be paid for, for that. And this was in the range of \$25,000, \$26,000 U.S. dollars. And the details of the number are in this document I'm referring to.

And the proposal is to have this number as an application fee. And again, we've got feedback from some ccTLDs on that number. The day before yesterday, I met with a number of governments and ccTLDs at the League of Arab States in Cairo. They are from the Arab countries. And some expressed concerns that \$26,000 for him, as a registry, is a huge number. So this is the kind of feedback that we have received from some members of the community.

Now, the proposal that ICANN is also discussing is to have those costs be covered based on prearranged agreement between ICANN and the registry. In other words, ICANN is not saying that those financial contributions are obligatory. This is what ICANN recommend, and we want to discuss those with IDN ccTLDs once they apply to get their strings, and to try to reach a mutual agreement on how to implement and how to get them to contribute with those contributions, or whatever we've going to agree upon.

So when I talk about the processing string requests, so this does not cover any of the program development fees. Program development was something else. It does not cover any if the IANA services part of delegation thing. So that was not part of the processing thing. And, as I said, the costs that relate to the program that we intend to recover over time were based on percentages between 1% and 3%.

IDN Tables and variants: So I think I explained a little bit what IDN Tables are about. Now, the important thing about variants is to realize that in some cases, and specifically, in some countries I know like Iran, like Saudi Arabia, like Pakistan, these are the three I'm aware of in the Middle East region. In their strings – and maybe my friends from Iran can elaborate on that – the strings they are applying for contain letters that – those letters could be in Farsi language or Urdu or Arabic, and in some cases, they look exactly the same. And for their communities, they have or they may have users with different keyboards, with Arabic keyboards or Farsi keyboards, etc. So for those users to be able to tie this string so, as a registry, they have to have both names, which look exactly the same. And then, as a registry, they will deal with all the policies on how to map the names together.

And when ICANN issued the first document on IDN Tables back in February, the recommendation that ICANN had at the time was that, although there is no technical solution to make aliases at the root level, it will be up to the registry to figure out how he's going to do this on the registry level. And ICANN was okay with giving those variants to the registries as part of the Fast Track Process. And then we received feedback from the technical community; from people who are involved in the development of the protocol at the IETF. And they said to ICANN, "Look, this is a bad idea. You're now allowing registries to have two strings that look exactly the same, and you're going to insert those strings in the root and cause the whole confusion to billions, or whatever the number of users are."

So this is a feedback that we got from technical community, and that we had to take into account, and based on which we talked to different people, and there have been discussions on mailing lists. And we've heard people from Iran, from Pakistan, from Saudi Arabia saying, "Well, we need variants. This is very vital and very key." And ICANN told them, "Well, there isn't a solution. There isn't technical solution. Try to come up with a technical solution to solve that."

And in the latest version of the IDN Table paper, we said that variants would not be allowed. They would be blocked or reserved until a solution is there or is available. And again, this is not a decision. This is a recommendation that is still being discussed. So ever since we had this document out, and afterwards with discussions in Sydney, and the feedback we've been receiving, so ICANN in Sydney said, "Okay, we're going to form a working team from community members, plus technical people, plus staff members. And this team will be in charge of discussing and studying this problem and coming up with proposals and solutions."

So I was talking to our IDN program manager, Tina Dam, last week. I knew that this working team is in the process of being formed, and I also knew that three members from ccTLDs in the Middle East will be invited to take part in this working team to come up solution to the problem of variants.

So this is where we are on variants, so far. **Sevach**, would you like to add anything, or Alireza, from your perspective? Yes, you have the mic, or you can speak without.

Male: Can you try and emphasize who you want (**unintelligible 53:52**)?

Male: Saudi Arabia goes to Pakistan and uses a Pakistani keyboard. He cannot reach an IDN TLD in his own country. This would be just against the idea of having IDNs.

However, I want take an issue with one of the statements there. It says so far, there's no technical solution to alias TLDs. In fact, there is no technical problem. The idea is there is no technical problem. If there is, let us know what it is, because all ICANN has to do or what the root operators have to do is to return the – let's say there is the word Iran. It has two renditions in Unicode. So if you get an Arabic issue of Farsi, just return that to the Iranian ccTLD, and they'll take care of that. They'll just alias it there, not at the root level. So there is no problem.

I understand that the only problem that may exist is ICANN may be worried that some ccTLD may use two TLDs instead of one. I think that's a policy problem. That's very easy. As part of the contract to give an IDN TLD, ICANN can stipulate and force the ccTLD manager to just use one of them.

And this morning, we heard that the ICANN can police the idea of some community gTLD becoming a non-community gTLD after getting the license. So they can also police this. I mean, there's no...

Baher Esmat: Also, bear in mind that as far as ccTLDs are concerned, ICANN has a more of hands-off approach to ccTLDs and policies regarding ccTLDs. We're not intervening in any policies with regard to ccTLDs. So what you're saying sounds very or more relevant to the gTLD space, where there are contracts in place, and terms and conditions.

Even the DOR, Documentation of Responsibility, has not been agreed upon for the whole community. So what I'm saying is policies for ccTLDs are mostly within the realm of ccTLDs, not within the ICANN realm. That's the issue.

Male: But let me just...

Male: I'm sure the final solution is (unintelligible 56:27). I see no other way, because this has been so important to the...

Baher Esmat: Yes. Understood. And I think that might be part of the work that this Working Team will be looking at, and try to come up with solutions that might or might not be technical. As you said, it might be a policy process, or a policy proposal, to deal with this issue.

So this is about the Working Team – Ali, yes?

Alireza Saleh: (Unintelligible 57:01)

Baher Esmat: Can you use the mic, if you don't mind?

Alireza Saleh: I just want to add that I think that if you assigned one IDN TLD to the ccTLD, the problem still exists, because, for example, I register XYZ.ir, and the character "X" to one person. And then I can register XYZ.iran to another person. So I think that the problem still exists, if you assign two TLD to one registry. So I think that there won't be a big change if you assign three TLD to one place.

Baher Esmat: The key difference is that as long as the problem is on the second level, so that's your problem. As long as the problem appears at the root level, that's ICANN's problem. See what I mean? Having two strings that look exactly the same at the root, this is ICANN's problem.

Alireza Saleh: So this is not exactly the same in the root, because you are storing X N dash, dash format.

Baher Esmat: Yes, but to the end user, they look the same. That's the thing.

We know the issues and we know the kind of discussions that are around. So what I'm saying is this is where we are, and this Working Team has been suggested to look at those issues, and to try to come up with solutions.

And by the way, the same Working Team will be also addressing the problem of the three-character restriction in the new gTLDs. So in new gTLDs, there was a recommendation that the gTLD string must be at least three characters. And then, feedback we had from polls in China and other places that this doesn't work with their scripts and languages. So again, this is another problem that the same team will be looking at.

And this is the charter of this team, to develop definitions of variants, as used in IDNs, to determine whether blocking or reservation of variant TLDs is necessary to prevent user confusion, and to determine under what circumstances TLD variants might be delegated, and to determine responsibilities of TLD operator to whom TLD and variants might be delegated. So this is the charter of this team.

Next steps. We're aiming at finalizing the draft implementation plan and to present the final version of the plan to the ICANN Board in Seoul, in October, and hopefully, to get it approved by the Board, including all details regarding DOR financial contributions, variants, etc, so that if we got the implementation plan approved before end of this year, we could start receiving applications, hopefully by Q1 next year on the IDN ccTLD strings.

The other thing we're going to try to implement, from now until the meeting in Seoul, is to have what we call pre-evaluation process – something that we want to test the process itself of the IDN ccTLD application. So we want to give those ccTLDs or governments who would be part of the Fast Track Application Process to apply, to use the online form. So we're going to provide the online application and we're going to receive the documents that we need for the process. So we want to make sure that the process does work beforehand, so when we launch the actual process early next year, at least if there were any glitches here and there, or something that we should learn or know about, so this pre-evaluation thing will help us do that.

So this is something that we're currently discussing within ICANN. And some of the ICANN staff had also discussed it with the ICANN Board recently. So we're going to try to implement this informally, process of testing. And this is, by the way, the purpose of this process is not to test the string, itself, and whether the string is eligible or technically acceptable or not. This is to test the process itself from ICANN's perspective, in terms of application, documents needed, etc.

So, first of all, Tina Dam is the director of the IDN Program, and this is her email address. If you have any question that you want to direct to her, you can use this email. She was planning to be here in this meeting, but she had to cancel at the last minute.

And then, the whole bunch of documents and papers I've been referring to are available on the ICANN Website. And also, here is my email if there is any question you want to send me at any time, please do.

Thank you. And I think we still have ten minutes for questions, so I can see your hands. Yes?

Male: (Unintelligible 1:02:28), I don't know – 1% of all domain names would be an IDN (unintelligible 1:02:42). Is any study being made, because sometimes I'm struggling maybe, understanding of the real market demand for IDN. I understand (unintelligible 1:02:57) of IDN, no problem, but in terms of just we are a (unintelligible 1:03:02) top-level domain. And I know that IDN second level is (unintelligible 1:03:06). If you look at the demand for IDN at the second level, it's very, very (unintelligible 1:03:16). So I was wondering, is maybe any study being done, or maybe your intention...

Baher Esmat: Well, the short answer is no. We didn't make any study as ICANN. So that's the answer to the question. But, again, having worked and talked to many people around the world, in my region, I've got the question all the time, "Will IDNs fly and succeed in the Arab region," for instance. Well, my answer, it depends. It depends on the difference from one country to another. When I talk to some end users who use the Internet today, they say, "Well, why do we need that? So, we're happy using the Internet as-is."

But if you look at a country like Egypt, we have a population of 80 million and we have 13 million Internet users. So maybe it's going to be the case that the next 10 million users will be those who do not speak or even use computers in English. Do you see what I mean? There is a demand, but there hasn't been any study that I could refer to.

Male: (Unintelligible 1:04:25).

Baher Esmat: No, that's fine.

Male: What kind of (unintelligible 1:04:30). There must be some cost in developing IDN.

Baher Esmat: Yes.

Male: And I know that ICANN is very keen (unintelligible 1:04:35) demand for IDN, apart from the fact that you said yes to IDNs. So are you planning to make any study in the future? Even it's probably too late, because your money's been spent, the program has been launched, but (unintelligible 1:04:57).

Male: I'm going to be controversial. But before I do that, let me just say that what our own experience is at second level. At second level, when I was at Munich, only 4% of our registrations (unintelligible 1:05:25).

Baher Esmat: Under .ir. Yes.

Male: But now comes the controversy. Now, of course, if it's at first level ([unintelligible 1:05:35](#)). I am for doing IDNs – IDN, .idn – and I hope this goes through, and everything is fine.

However, I think the main push for this has been by governments who own their ccTLDs. And because of the inefficiency of their ccTLDs, they've been looking for an excuse, and the excuse they use is that "it's not in our native script." And I think if the IDN is going to be run by the same government agencies, then you're going to have the same problem. So that's the controversial answer.

Baher Esmat: Yes. Fine.

Male: It is controversial.

Baher Esmat: Any other questions? Who will commence? Yes, Mohamed. Can you get the mic?

Mohamed El Bashir: I just would like to comment, as well, on the gentleman's question. Yes, you are right. We are not expecting a lot of IDN just to pick up suddenly. We see a lot of thousands of domain name get registered, just for nothing.

I believe that there are different layers of contribution towards promoting the IDN. The layer which we are missing, or we are actually not targeting as ICANN or a registry is the application layer. Well, the application layer is ready to promote the IDN in terms of is it user friendly, does the mail server support it in a professional way?

All of these things will definitely ends up with promoting the IDN more to the end user, because end users - the domain name itself, doesn't mean anything unless it's been used with a real application like Web browsers, email, or whatsoever applications that use a domain name in it. So I think each one has a part. ICANN does its part or is doing its part. We, as a registry, will be enabling the registration and the IDN.idn. But there is a part which need to be also focused on, which is the application layer. But the vendors, whatever application development need to also to look at it.

I guess ICANN, as one of its approach is also to reach those companies, or let's say, firms, who are doing the development of the applications, to see what is their opinion and updating or upgrading their application to support the IDN in a proficient way.

I do understand that certain Web browsers, there might be some attempt to the mail server to support IDN, but is it up to the level where the end user can

see it, "Well, this is attractive. Let me move to IDN, rather than using the ASCII.ascii."

So it would take time. I don't expect that suddenly people will say, "Okay, we shift to our native language." And it might take two to five years until people, they can perceive the concept.

Baher Esmat: Okay. Ali, do you have a question?

Alireza Saleh: Actually, one of the comments that I want to add to this conversation – I think that one of the problem that we're going to have, that it is that we are not know in which concept we want to use the IDN. Actually, when you are looking at the mailing list to the IETF Working Group on IDN, most of the things that they are just focusing is on the email addresses and Web browsers.

But, for example, if you want to listen to the music, or if you want to do a Whois, or if you want to telnet to somewhere, or SSA to somewhere, there are not consider this kind of application that they also need some names in front of them to just get connected to them. And, as long as you are using an ASCII version of IDN, then you understand that there is an ASCII version of each name that you are actually connecting to that ASCII version, it seems that is not very good promotion for IDN.

I think that a whole change in concept of communication in Internet, that changing to the – I mean that for example, some kind of technology that we don't need to change the Unicode things to the ASCII, and then connect to that. That thing may increase the promotion of IDN because, as you know, one of the problem that IDN and their working group has – and I think that there is a problem – is that they are confused in between of application and DNS.

Because when they named them, they are IDNA. But if they want to talk about for example, the URL, then we have another working group which is **RIRI**, that overruled the things that you are ruling for IDNA. And if you want to talk about the email address, we have another working group which is called EAI, which is Email Address Internationalization, that override all the rules that IDNA put.

So I think that there is some kind of confusion in technical concept of IDN that prevents this matter being promoted well. And also, I believe that we shouldn't been expected much registration in IDN.

Baher Esmat: Yes, I would agree, too. But we have not to overlook the fact that currently, in countries like Korea, China, they do have even proprietary solutions to overcome the IDN issue. And their users do enter the full addresses, with IDNs. So this is an example where the full IDN.idn, is needed and is actually being used.

And maybe that's why what I'm saying, I do agree that it's something that has been probably politicized a little bit and pushed by governments. I do agree. I do agree that it's not like a magic thing. It will come with applications and with other things, and how to promote it.

But at the same time, we also have to realize that it differs from one place to another. And there are places today like in Asia, like China and Korea, I think there's clear evidence that IDNs are needed as full IDN.

So I think we're just on time, so if there are no more questions, I'm going to invite you to have a 15 minutes coffee break right by the door. And then, we're going to be back at 3:15 with the policy update by Liz and Marika.

Thank you.

END TRANSCRIPT