ICANN77 | PF – New TLDs Need Digital Inclusion: UA Readiness is Just the Beginning
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NAELA SARRAS: Welcome to the session titled New TLDs Need Digital Inclusion, Universal acceptance is just the beginning. We hope this session title was intriguing enough to help you come here and we're really happy to have you. My name is Naela Sarras. I am the vice president of stakeholder engagement for the North America region on the team we called global stakeholder engagement team here at ICANN. Our team is a fairly large team divided into groups that look after the different regions within ICANN. And my team here looking after North America, I will quickly just have the camera hopefully zoom around them, is to my right is David Huberman, Joe Catapano, Giose McGinty, Alex Dans, and then Justin from the comms team. Hello, Justin. I'm very fortunate to have them all on my team and joining this session.

This session here is traditionally what's called the space session. So I know the other regions also hold them. So this one is called the North America space session. The regions label them after the region. This is a fairly new initiative that we started here in the North America region, the space session. And when we laucnhed it, we said we'll use this session as our space to discuss topics that are of interest to what we think are of interest for the region. So it's really more for the region to talk about things that they're interested in, for us to discuss. This

session here I hope is the beginning of many areas of discussion that will take digital inclusion.

We have several panelists that are on this panel today, but since I'm waiting on one more panelist, I'm going to wait on introducing them. And I'll tell you a little bit about why we picked the topic digital inclusion is needed for new TLDs for this session. We are all familiar and have been working on the work that ICANN, the organization, and the Universal Acceptance Steering Group are doing for universal acceptance. We all recognize this is really important work and is very much a needed step that we have in order to make domains, all domain names, regardless of the script in which they're expressed, regardless of their language, regardless of their length, even when expressed in ASCII letters, accepted and used as domain names and then associated email addresses.

ICANN recently celebrated its inaugural Universal Acceptance Day, UA Day, on 28th March, where it was an initiative to invite people around the world to talk about these issues and to discuss what it is that's hindering some of these acceptance issues and what we can do as a community, as an Internet community, to start bringing these issues to light and work on them. The Universal Acceptance Day was by large a very successful event. I believe there were about 50 events held over 40 countries around the world, many communities participated, they were community-led meetings, and I think we all learned a lot. We all learned that there's interest in that, but we need action. We need to keep talking about them in terms of action and what we can all do to help the situation.

And then the reason why we're sort of taking this to the next step, or we're calling it digital inclusion, is there's many reasons why we want to look at this as a digital inclusion issue. Looking at this from the recent past experience that we've all had in the last two to three years, our lives have only more and more migrated to be online. According to recent statistics I was looking at, I think this is according to the ITU, despite the fact that it feels like all of us are online, working online, only 66% of us are. And so that's another one-third of the world that still needs to join us online and be connected. And once it does, it needs to feel included in terms of their scripts and their languages and their TLDs are accessible and usable by the developer community that's creating systems to use those domains.

So it's out of that need for not just putting new TLDs in the root zone, it's putting them in the root zone and making them usable and inclusive for everyone in the world to use them, that we wanted to talk more about this as a digital inclusion. It's a term that everyone seems to be using around the world, but we're really not using this as a buzzword. We really want this to be everyone needs to feel included, committed to making this successful for everyone else to work. So that's sort of the concept of why we came up with this. We framed this session around digital inclusion, and we wanted to spend a little bit of time sort of talking with our expert panelists this morning, or this afternoon, for them to take us a little bit about their insight and their vision on the topic. And then they were kind enough to let me prepare a few questions that I will take the panelists through, and then I'm hoping that our audience will jump in and join us for a little bit of a Q&A.

So let me a little bit, just introduce you very quickly to our panelists today, and then I want to give the microphone to them to give their intervention about the topic. So to my immediate left, we have, and I'll just go by how they're laid out here. We have Ashwin Rangan, known as Ash. Ash is the Senior Vice President of Engineering and Chief Information Officer at ICANN Org. Next to Ash, we have Ram Mohan, Chief Strategy Officer at Identity Digital. And we have Edmon Chung. Edmon is a member of the ICANN Board of Directors, and is currently serving as the CEO of DotAsia organization. And then last but not least, we have online, Mr. Bhanu Neupane. He is an Advisor in Universal Access to Information, Division for Digital Inclusion Policies and Transformation at the Communications and Information Sector at UNESCO. So he's joining us online today.

Welcome, everyone. Thank you for being on the panel. And I would like to go ahead and start with having our panelists share their views and their inputs into why we're constructing this panel today. And Ram, I'd like to start with you, please. Over to you, Ram.

RAM MOHAN: Thank you, Naela. And my apologies for joining this session a few minutes behind. I apologize for that. I'm Ram. And one of the important things to think about when we talk about identities online is that for better or for worse, domain names are the way that most people, most organizations represent themselves online. It has become the gateway to representing oneself online. So that's a good thing. We understand that domain names are kind of at the foundational layer for identity and establishing identity online.

Now, for the general public, they don't actually know what a domain name is. At best, they probably know what a website is. And we know that for those who are in the cognoscenti, they know that the domain name is not the same as a website. But really, for the world, what we are doing is the web. That's one thing.

Now, the second thing is that when you have that diffusion of understanding and when you have people saying, I want to be on the web, I want to be present online, they go to practitioners, they go to experts, and the experts say, oh, if you want to be on the web you can get on Facebook, you can get on Instagram, that you're on the web. Or you can get a domain name, and we'll help hosting, and then you can get on the web. And you can establish your identity online.

So even to begin, you have a landscape where the terms are not exactly clear. And when the terms even are explained, the more you explain sometimes, the more your eyes glaze over. Because each layer of explanation is further detailed, further technical, rather than each layer of explanation becoming simpler and simpler.

So when I look at digital inclusion, when I look at ICANN itself and its remit, what ICANN is supposed to do, why it's doing what it's doing, it's really we talk about an open and interoperable internet, but an open and interoperable internet happens when I have an identity, and you're able to access my identity. When I have a presence, and you're able to recognize my presence online. When my organization wants to be communicated to, and regardless of the language you're communicating to me, or regardless of the technological way you're communicating with me, you ought to be able to reach me.

So those, if you look at it, I'm building up some foundations, those are foundational things that we ought to take for granted. We ought to say that if you're an organization, if you have an identity online, that online identity ought to be reachable, accessible, and available. And that's a base expectation. That's not too much to ask. If I'm spending time and money, and I'm buying a domain name, I'm building a website, I have a social presence, it's a rational expectation that I am reached, that I can be communicated to.

But a level above that is if you want to reach me, and I have a site that's in Spanish, and you do not understand Spanish, and you want to be able to still communicate with me, there ought to be a way to get back and forth. And in that area, for, I would say probably more than anything else, email is the way that people do that. You can write to somebody else, and you just have this expectation that if you send an email to somebody, it'll just reach them.

And then a level on top of that is if you are vision impaired, if you're hearing impaired, if you have other natural human impediments to accessing the world, including the digital world, you, as an individual, should have a reasonable expectation of still being able to reach the airline website, still being able to reach the place where you can make a donation online. And if in that process, you encounter a CAPTCHA, and the CAPTCHA says you're visually impaired, and the CAPTCHA asks you to do something that even people with great visual acuity have trouble getting through. Now you have, I posit, you have an inclusion problem. And the alternative that the CAPTCHA tells you is we can call you or you can listen to something, but if you're hearing impaired, that doesn't work for you either. And if you have your money in a bank, and the only

way you can get through is to go past the CAPTCHA, and you have these impairments, now you're digitally an orphan. You've now been cut out.

So that's a very straightforward thing to understand. But let me share with you something that happened to me just a few days ago. Towards the end of this year, my family and I have, for a long time, we've been planning on this, and we said we want to go and take our children to go to Disney. So, and that's something that so many people aspire to. So we were very happy with that. And my daughter is 12 years old, so I said let me assign her a task. So I said, here's your task, go sign us up, buy us tickets for Disney. And she couldn't. She came back and said, Daddy, it's not possible, I cannot do that.

And it turns out that it's not because of lack of competence, it's not because of lack of ability, it's because the Disney registration process does not recognize her email address. Our email address ends in .info, which was the first new gTLD from 2001. And 22 years later, you still have something that is that is so huge and so well known, Disney, doesn't accept it. And in fact, the error that it provided was, you have provided an invalid address, please go fix it.

So eventually I had to tell her use something that is two or three letters long as a top-level domain, then it'll work. She did it and it worked. But that's terrible, because now you have excluded an entire set of people who have identities online that are not two or three characters long. And they are simply not available and have no ability. And there is no other alternative digitally. If you want to go to Disney, you must have a ticket. The only way to get a ticket is online, and the only way to get

online is to have an email address. The only way you can have that email address is if it is two or three letters long.

That's, in this day and age, not good enough. And if you're a corporation, if you're an organization that has this really terrific set of ideals, and you say you focus on DEI and diversity and equity and inclusion are really important for you, that's wonderful, but where are you online? Where are you digitally? You cannot just say that you are inclusive in the real world and exclude in the digital world, because anymore, the digital world is as much the real world, if not more than the real world.

NAELA SARRAS: Thank you. That's really powerful, the Disney story, on so many levels, and the fact that it left a child disappointed. That's really very powerful. Thank you, Ram, for laying the foundation of why we're talking about this. That's really good. Thank you. Edmon, I believe I said I will go to you next, and I'd like you to talk to this, please, from your experience, as someone who's been in this field for a long time, you've launched TLDs and gTLDs, I know I've worked with you on both, you're someone who's working with communities that are automatically disadvantaged, because despite the fact that only 20, 25% of us are either first or second language proficient in English, the rest of the Internet still acts like we're all using English on a day-to-day basis, and we're all proficient in it. So I'd like you to take it from that perspective, please, from inclusion of languages and cultures on the Internet, and how that relates to domain names. Thank you.

EDMON CHUNG: Thank you, Naela, and yeah, Edmon here, and always excited to talk about internationalized domain names and universal acceptance. And as Naela has mentioned, I've been working on this, I guess, alongside Ram for 20-odd years, then maybe we failed spectacularly. But I guess it is not an issue of that, because one of the things that I realize, and I think why digital inclusion is such an important, actually works very well with this issue, is that this is not an issue that is one and done. This is something that needs to be put forward for a long time. And a lot of the work that was done in the last 20 years is not lost. I think, for example, internationalized domain names, we've spent the first 10 years of the last 20 years in developing the technology for it. And then we spent another 10 years before we are able to actually put the right policies in place, because internationalized domain names actually bring along different challenges as well.

As Naela mentioned, I think when I speak in the Chinese community, it's very easy to understand, because Chinese, we actually use a simplified Chinese in mainland China and in Hong Kong, we use traditional Chinese together with Taiwan. And they are considered the same. In fact, more and more from the general community, when we write Chinese, it's mixed, especially in Hong Kong. So those characters are the same. And in terms of policy, those need to be put together. And the community spent the last 10 years making sure those policies are in place.

So now, coming back to now, is when I think it comes together. And so I don't think 20 years is that long of a time, because there are actually a lot of things done. One interesting thing Ram mentioned about Disney, I took a quick search and see if .Disney exists. It doesn't. But Disney did

apply for new gTLDs. Disney did apply for .ABC. So how could they not know? Well, maybe they did, because that's why they did a three-letter domain.

But what I only mentioned is very relevant, is about the languages. Because I think beyond a different type of domain that some of the system doesn't recognize, the world doesn't only speak English. In fact, English is not the most spoken language. There are many other languages. However, one of the interesting things, though, is that the world of the web is still majority English. In fact, 57%, based on recent research, about 57% of web pages are in English. But that also means that almost half, or at least almost 40%, is in other languages. And then you'd want to ask a question, which I'll come back to, is whether internationalized domain names will make a difference for that.

We know that the world, at large, doesn't exist in a world where a majority is spoken in English. Obviously, we are here in the US. We feel this way. But the real world out there is not like that. And if you look more into the TLD statistics, it's even more interesting. Currently, we have about 1,500 top-level domains in the root. Just about 10%, 150 of them, are internationalized domain names. So we're talking about 90% of it is English. And even if you map that to the 57% that I just said, there's still a huge gap in there. Then you look at the registered domains. In fact, registered internationalized domain names, there is only about 1.6 to 2 million internationalized domain names registered under these top-level domains. And that means just about less than 1%, which the total domain registrations is over 360 million at this point. If you look at that, 1.6 million is less than 1%.

That's the gap. That's the current gap. And why? Well, I think it's a matter of the maturity of the policy and the technology, as I just said. But it is also a matter of what I would call a clear market failure here. There is a latent user demand that is not being revealed. It's not being seen. Even English email addresses with longer top-level domains are having problem. There is even more problem. In fact, some of the statistics that the Universal Acceptance Steering Group has been working on shows that situations like .info is now very small percentage, just a few percentage points. But if you use a full Chinese email address, for example, only 7% or less actually systems would support it. So there is another huge gap.

And I think the problem is, of course, you hear that, oh, there is no demand for it, so we're not building it out. Well, that's exactly what the problem is. The problem is market failure, because suppliers, in this case hosting providers or email providers or websites, they don't see the demand. They don't see the issue. And therefore, that's what's really rendering international domain names into what I would call second-class citizens. Today, that's the problem. And what we need is probably market intervention in that sense, and that's where policies come in place.

And I want to talk about digital inclusion. I think that's a really important concept and also one of the things that I'm pretty passionate about. And when you think about digital inclusion, there are two types of policy intervention. When the digital divide is very wide, that means a lot of people couldn't get online or a lot of people not being able to take advantage of the technology, then the policy intervention is to promote the use of the technology.

However, even when the digital divide is very narrow, a different type of policy intervention comes into play, because then you have the marginalized. The marginalized becomes even more marginalized. And that's the way we need to think about universal acceptance, and that's why I think digital inclusion makes a lot of sense. So I'll come back to this. But first of all, right now, we're looking at a situation, I think, that the digital divide for internationalized domain names is very wide. We're talking about 90% of systems not being able to support multilingual e-mail addresses. And that's something that we need to address.

And another important aspect is that when we talk about universal acceptance, we think it shouldn't be a very difficult thing to do, right, I mean, just to recognize e-mail addresses in these different languages, Unicode, everyone, it's quite simple to do. Every single change for that is actually quite simple. However, because domain names and e-mail addresses are used so prevalently around systems, if you look into your system, there are multiple different areas that links from your customer service area, from your shopping cart, from every single part of the way. That's a problem. So it needs a longer-term roadmap. It needs a longer-term thinking to deal with these issues.

And one of the things I think I'd like to leave with everyone here is, how do we deal with this? What are some of the things that can be done? Well, I think, as I said, policy intervention is important, participation by governments, participation by different companies. When they procure new systems, when you're looking at creating new systems, I think, I hope to leave one thing with you today is to think UA by design, universal acceptance by design, that you've heard about security by

design, you've heard about privacy by design. If we continue to work on it as a patchwork, it's always going to continue to be a second-class citizen. So UA by design is something that is really needed.

And I will now come to the last part of it and just note that here in North America, I guess English is a predominant language, but UA is not only about IDNs, it's about longer top-level domains, but also there are other cultures, there are still minority cultures in the United States, in North America, that internationalized domain names and email addresses are important to them. And also IDNs, not only about the majority, there is also the area where here, even in North America, there are indigenous languages. Are the indigenous languages included?

And here I switch to the other side of the digital inclusion concept. One is, this is the situation where the digital divide is small, most people are online and most people speak English, but the marginalized, which is the indigenous languages, become even more marginalized. And here is, I think a need for policy intervention to uplift the ability to use the different scripts from the indigenous languages.

So the final thing that I want to touch on is, so it's just a domain name, so it's just an email address. It's the content that is important. I mean, of course, when we talk about languages on the internet, it's the content that is important. Yes, maybe, but let me remind everyone that when the internet was developed, in 1983, the DNS was born. The web was not invented until 1989. So we had the identifier systems ready for the internet before we had the proliferation of content. So I do believe that now is the time to make sure that internationalized domain names

work, and it is a very important part of making the internet multilingual. So I'll leave you with that, thank you.

NAELA SARRAS: Thank you so much, Edmon. A lot there to pick up from and a lot to unpack, but for now, what I want to do is I want to pick up on what you said. Part of what you said is being deliberate in terms of your building systems, procurement, and make that lead into the discussion we'll have Ash lead from here, which is about systems. Ash, you're one that's responsible for ICANN's systems and leading them towards universal acceptance and digital inclusion. So I'd like you to please take us through some of the work that ICANN as the organization has done, and then really, if possible, and I know ICANN organization has spent a lot of time on making accessibility and inclusion a pillar of that in designing its systems and leaning on its providers. So I want you to talk a little bit about the experience, and then what has that achieved? Where have we made good progress, and where are we going from there? So over to you, Ash, please.

ASHWIN RANGAN: Thank you. Thank you very much. And thanks to my colleagues for laying some wonderful foundations so I don't have to iterate any of that, knowing that they've covered some of the most important ground there. Our systems are like systems in any company or any organization. It's just a matter of the size of the portfolio. The complexity of problems are the same, whether it's a small portfolio or a large portfolio.

In our case, we deal with systems which number in the hundreds, not in the thousands, but there are large organizations where that number tends to be in the thousands. For instance, in a different life prior to ICANN, I dealt with a portfolio of well over 10,000 systems. I was speaking with somebody from the Department of Defense recently, and they're managing a portfolio of about 14,000 systems. So these are large portfolios with deeply ingrained technologies that date back 40 years, in many cases, and run on mainframes, which are running proprietary code today on languages that have long since become extinct, honestly.

But they all have the same problem of whether or not they are available and accessible. When we think of accessibility, that speaks primarily to the disenfranchised in terms of physical capabilities. That's the first connotation that we pick up there. Is it an accessible system typically tends to be a question asked of web properties. Speaking for our portfolio, which, as I said, is a relatively small one, the showpiece that we've used to make sure that we have an accessible property is ICANN.org.

Many of the community members will remember that we started out on something called the Information Transparency Initiative. This dates back about four years, five years, the fifth year running now. We're increasingly starting with a base of nothing. We created a new platform, and we used ICANN.org as the spear tip with which to transition material that used to be in files over to a system that is online, easily accessible, easily findable. The accessibility there is for people who may have physical, literally physical inability to access the language, whether it's the language of English or some other language.

We chose to use standards that are now available publicly to design the content to conform to accessibility requirements, so much so that the ITI platform and ICANN.org and the content that we've transitioned to the ITI platform today, we can look back and say that it has accessibility built in by design. This is to the point that Edmon made, that it needs to be a part of the consideration set at the point of design as opposed to becoming an afterthought.

So if I set that aside and zoom out and start zooming in, the world population today is about 8 billion people, and it's said that roughly 5.2 billion people have access to the Internet. A large number of them are accessing the Internet through smartphones using iconography as opposed to domain names. That doesn't mean that they have access to the Internet in its fullest content and richness. It means that they have access to the Internet for a few specific services that are now available to them through iconography in a language that they know and understand.

The reason I make that statement is I oftentimes think of a state in India, in the southern part of India, where I happen to be born. It's a state called Karnataka, and it has a population of about 65 million people, of whom about 20 million people are extremely literate in a language called Kannada, which has its own script, has scripture that dates back 4,000 years. So there are scriptures that go back that far. And the script also includes numerology, so that arithmetic with Kannada characters is possible. These are fully literate people who know a language, who speak the language, who write the language, and do arithmetic in that language, except they have no other language that they know.

If the Internet does not speak Kannada to them, by definition, they will be disenfranchised as a population of about 20 million people. Like that, there are numerous pockets around the world who are literate in a language in which they have grown up because it's a part of their culture, but they just don't have access to the Internet because the Internet has not caught up with them.

So when you think of it in that way, and you look at the content on the Internet, today about 85, 90% of the content is in English or in a Latin-scripted language. It's only in the 10 to the mid-teens that the content is in a different language. And a case that we think of regularly when we train our systems to become universally acceptance-compatible is Arabic@Arabic.Arabic, which not only has the characteristics of a double-byte character, as do Chinese, Japanese, and Korean, but they also are parsed right to left on the URL bar. So that is the toughest of tough cases.

And using the toughest of tough cases, we've taken a look at our portfolio of systems and gone through a rigorous mechanism over the last many years. So this is part of the lessons that I'm transmitting here. It's taken us many years to go through our systems and determine, first and foremost, are they front-facing or a back-office system that don't need to be treated? That's the first parse that we take. The second is to look at, if it's front-facing, are there input strings that should, in fact, be universal acceptance-compliant? And if so, in which cases? Not every field in an intake form needs to be that way. Some fields should mandatorily be that way.

The third is, where do they back-end to an IDN or to an EAI, more importantly, an email which is internationally addressable? If it's an email system that has to be back-ended too, we quickly came to a conclusion that email systems have to catch up. The result of which was a coalition-like approach where we approached the major providers of email systems and started working with Microsoft and Google and others several years ago as a part of the IDN and the UA initiative with an ICANN.

We saw that some of them started to catch up, specifically Microsoft and Google released their products into market saying that they were UA-compatible with EIA compatibility two years ago. However, when you think of an enterprise environment like ours, the email chain is not limited to just the email system. It has other elements. For instance, we use a product called Proofpoint. It's like a chamber where all incoming email comes in and gets examined before it gets delivered to the email system itself. Proofpoint was not in any way in a hurry to get UA-compatible. They looked at us and said, that seems to be a special case. What's going on with you guys? We started working with them three years ago saying, here is the problem. Can you help us understand how your code will address this problem so that farther downstream, the email system that is now becoming ready can, in fact, take advantage of the fact that strings are coming in that are non-ASCII in nature and addressing internationalized email domains and so on and such like.

And frankly, the first two meetings were head scratchers for both them and us. We were very clear about what we were saying. They were scratching their heads saying, what is the problem here? We don't understand. Where's the money in this problem? So commercial

instinct on the one side, coming together with our desire to be a global public interest institution, showcasing the capability and saying, this is the way it should be. So reality literally came to the forefront at that point in time.

Happily, the story has a good ending. So Microsoft is ready. We have tested it. It works very well. We're able to patch it from our systems directly into Microsoft. Proofpoint is increasingly ready. In a pre-commercial release setting, we have access to it, and it seems to be working. It backends very nicely into our email systems today. And we're being told that in the July-September time frame of this year, there will be a commercial release of Proofpoint that will provide this as compatible services to the world at large. We're eagerly awaiting the launch date. That says that it's the trigger for us to integrate all of that.

But it also rings the bell to us on a third front, and that is, while we have done unit systems development with our portfolio of systems to make them all IDN and UA compatible with EAI capabilities, we have not had the opportunity to do end-to-end system testing. It's only after the commercial release becomes available that we will be able to hive off an entire environment to ourselves and start testing each of our systems that backends to an email system, either for incoming email or outgoing email, test that, confirm that it works, and release it. And we think that that will be a 12- to 18-month effort, given the size of our portfolio, which is, as I said, only in the hundreds.

So depending on the size of the portfolio, there's a ton of work that goes in. I recall early conversations with Edmon when he would look at me and say, how long do you think it will take? And being the optimistic

me, I would say a couple of years, maybe three years. Well, seven years later, I'm saying another couple of years. So I think he stopped asking me the question, saying, show me the results now. So thank you.

NAELA SARRAS: Thank you so much, Ash. And this is so important, because what we were hoping to come out of this session is a beginning of discussion of how do you get there. And your example of what you just told us, this is an ongoing discussion and a back and forth, and you have to work with your providers. And thank you, Edmon, because what you said earlier is it's not just as simple as just a domain name and an email address. Why can't you just make it work? So helpful. Thank you very much.

I'm cognizant of time, and I had some pre-prepared questions that I wanted to go over with the panelists. But before I do that, I need to give Bhanu his time to talk to us. Bhanu, as I said at the top of the session, is an advisor at UNESCO. They have been working on promoting multilingual Internet, and I want to give the floor to Bhanu to please talk to us about what UNESCO has been doing in that area. Thank you, Bhanu.

BHANU NEUPANE: Thank you, Naela. This is a great pleasure as well as privilege to be among you and talk primarily about a few things that we are doing as far as multilingualism in the cyberspace is concerned. Before I actually start, to give you a few points that you may like to consider, I'll give an example. Just recently, as a person who is in charge of 2003 recommendation on multilingualism in the cyberspace, we have

received country-level report from 32 countries. We analyzed them, and we have produced a report. It is available online. Perhaps my colleague, David, if he's listening in, he can post that report for your consideration. None of these 32 countries mention universal acceptance, IDN, or anything of that sort. These reports were prepared by top-class bureaucrats, technocrats, and the people who were primarily in charge of driving Internet governance as well as Internet issues for their country. At the same time, they were also part of a group that would ensure digital inclusion. That's the first scenario that I would like you to consider.

The second thing that I would like to consider is there are 486 million indigenous people. Quite interestingly, none of these indigenous people were not even – were brought, thanks to 2019 International Year of Indigenous Languages, their languages brought to the attention of the world. And in 2022, UN declared 2022 to 2032 as UN decade and International Decade of Indigenous Languages.

So we have started to work on that, and this decade also has a component of digital inclusion of indigenous people. So it's been 40 years since the Internet was created. And I think Edmon very rightly put, still there are 2.9 billion people, and I think this is the statistics that Naela also noted, comes from ITU, who have never even touched a computer before. So right now we're talking about, and we're at the spear of a situation, we call it leaving no one behind. Someone actually very rightly put that in the chat box.

So it looks like 2.9 billion people. Given the fact that financial intermediaries are now becoming increasingly digitized, we also have

many services that is delivered to these people that is also digitized. So apparently we are heading to a situation that 2.9 billion people will never see the kind of development that we take almost for granted. So this is a very sad state of affair, and perhaps the biggest reason of this exclusion.

Another thing that I would also like to point out is multilingualism is indeed becoming a priority for UN, both online as well as offline. Some of you may know that in 2017, the resolution 71-328 was adopted by the UN General Assembly, which recognized multilingualism as one of the core values of the United Nations. And it is working towards integrating multilingualism into all aspects of UN's operations. And this includes a digital strategy. Quite interestingly, many UN agencies, the UN system-wide adoption has already happened. But quite interestingly, even UNESCO, it will be tabling its resolution and digital strategy in this fall.

So I think if you can provide me how I can—because I'm also responsible for creating this document that will be examined by 194 countries, because [0:48:05][inaudible] just yesterday decided to rejoin UNESCO. We would definitely be putting some very strong points for the member states to consider.

So changes are indeed taking place. One of this is, I can give an example that this year, Kiswahili Languages Day, which will be celebrated about 15 days from today, maybe 21 days from today, that is on July 7th. The world will celebrate it with a theme of unleashing Kiswahili potentially in the digital era. So many of these almost low resources, as well as the languages that many people may not have even listened, have started to embark on our digital journey.

So one of the things that the first piece is this big hurdle, a stumbling block of are we part of the universal acceptance, given the fact that 32 country reports that just examined, none of them identify universal acceptance, or even IDN as an important issue to consider. But still, that said, the United Nations system firmly believes the linguistic diversity as an essential element of cultural identity and a fundamental human right.

So by accepting multilingualism, both off as well as online, the UN is ensuring that all individuals, regardless of their linguistic background, can access information and participate in decision-making process. As you may have seen, there is a recent surge in the interest in this domain. We want to work more closely with ICANN and see how this can essentially become part of the monitoring, say, schema that we have prepared per 2003 recommendation. And perhaps from the next year onward, we will be able to see how many countries have actually at least append the reason for being universal acceptance or regard that within their digital or internet governance frameworks.

The other thing which is extremely important, that's the third point, that's the localization of contents. And we all have a right to know who we are and where we are from. The people, places, and stories of our families are extremely important. Some of the examples which were given by Ram, and Ash also mentioned something along the same line, that what happens in the state of Karnataka in India. As digital approaches have now been regarded as a key vehicle to preserve cultural identities, multilingual top-level domains can become the most convenient as well as economically cheaper means to preserve and promote diverse cultural identities.

So I think this is becoming extremely urgent that we actually up our ante and do something. And this is also another thing, is when the internationalized domain names become mainstay, perhaps localization of content can happen. Search engine optimization will operate differently. And we think that among other things which I think many of the governments have started to worry about, universal acceptance and true acceptance of internationalized domain names can become a vehicle to offset disinformation that is becoming extremely serious in many parts of the world. So this not only enables us to cater to the specific needs of the different linguistic communities, but at the same time, it will also help to cater to the needs of a specific market.

The other thing is which is extremely important, which many of you have already said, that multilingual is indeed extremely important, but it is not happening the way it should happen. In order to address this issue, the General Conference of UNESCO adapted in 2003 the recommendation concerning the promotion and use of multilingualism and universal access to cyberspace. This standard setting instrument has many things, and one of the things that it also urges the governments to promote partnership in the management of multilingual domain name. And this was in 2003. We have not come four years. We have not come seven years. We indeed have, in fact, started to discuss this issue for the last 20 years, and our progress, of course, is quite dismal compared to where we want to be.

I must note an anecdote recently I was contacted by a New York Times reporter who opined on a very simple thing, the current disparity in the world is how language resources are available on the Internet. And this

has been mentioned by many people that of course English represents almost 59, 57 to 60 percent of the total web content. Russian, Spanish, German, French, and Chinese put together cover about 30 percent. But with 250 million active speaker, only 0.15 percent of the available content is in Bengali which is one of the languages very prominently spoken from Nepal to Bangladesh to India to several parts of the world.

So why is this thing happening? UNESCO had its mission, of course, and we want to preserve the languages around the world. And we've just now launched a world atlas of languages, and it actually documents that there are 8,324 languages globally. Some of them have already died. And in fact, we do not know how to keep them alive. And one of the best way to keep them alive is to provide more digital content online. These languages, many of these languages cannot survive if digital contents are not created.

But let's, in fact, look at the keyboard. There are only 2,000 languages have a digital keyboard that you can utilize. But what about 5,000 of living languages right now? So we're in a space, this decade of indigenous language, and there is already global plan for the decade, which has a digital strategy in place. But one of the things that we want to do is let us, in fact up this ante. Think about instead of sitting us around the table, what would have happened if the information and broadcasting minister or IT ministers were sitting around the table? What type of discussion that would create? Will they commit some resources? Will they commit some political will? Will they talk about at least changing how they report back to UNESCO on how they are implementing 2003 recommendation on such? I'll stop there. And if you have question, I'll definitely respond. Thank you so much.

NAELA SARRAS: Thank you very much, Bhanu. Very helpful. have 15 minutes left in this session. So I'm going to pause on the questions I have, and I want to take it to your questions, because all of our panelists gave us really actionable things to be looking at in terms of individuals and organizations to achieve digital inclusion. So I want to go to you guys, to the room and online, and see what questions we have at this point to engage with the panelists. I will start. I see Hadia. I see your hand is up. Can we start with you?

HADIA ELMINIAWI: Thank you. This is Hadia for the record. So I basically raised my hand to comment on what Ashwin was saying in relation to being UA ready. And I was wondering, why are we looking at the whole issue as we need to be fully UA ready? Like, why don't we just pick and choose the things that we can do quickly, and just do them, and become UA ready? We don't have to be fully UA ready at once. And you were mentioning seven years. I don't know what those seven years entail. So you mentioned when Edmon asked you in the beginning, you said two years, and then you said another—yeah, but those two years, what actually do you mean by after seven years, what do you expect us to see? And it's not only about ICANN. It's about, like, the general way of thinking.

ASHWIN RANGAN: Thank you for the question. I'm going to field that, because I think you implicated me in the question. So I'm happy to answer that. There are many systems that don't have a user interface, but they still need to

store, perhaps, and process non-ASCII information, even without a user interface. Those are easy to do, relatively speaking. And those are done and dusted, and they've already been put away. But there are many systems that need an interface with an email system. A good example, for instance, would be a registration desk system with a kiosk here, where you walk up and say, I would like to attend this meeting. One of the identifiers we use there is your email ID. You may choose to provide your email ID in the language Bengali that Bhanu was talking about, but if we can't accept that and process it, then there is no means through which we can acknowledge the fact that you even registered, leave alone produce a badge in the language of your choice. That becomes difficult without the entire email chain working from one end to the other. So the level of complexity that we're dealing with varies. What you're unable to see is, unfortunately, the things that can be done sooner. And the things that you see are, unfortunately, again, the things that you cannot get done sooner. So when I say it takes seven years, it's to convince our vendors in the value chain to also understand what the problem is, and making them play with their product development plans to make available their specific piece. And then to test the entirety, one after the other, and make sure that the entire chain works in the value chain. I hope that answers the question. Thank you.

EDMON CHUNG: Just adding to Ash. In fact, the whole process was very important for the universal acceptance development. So first answer is no, it's not like waiting for everything before it's deployed. Or in fact, through the deployment at ICANN, implementation at ICANN, we have learned to suggest other companies and organizations to go with a staged

approach. And in the ICANN case study, which is in the UASG documents, you can check out the Universal Acceptance Steering Group documents, because of ICANN's experience, we're now suggesting to develop roadmaps, to develop identifying which software that you can fix, which software that other people need to fix, and which software is completely off the shelf, and you need to wait for their lifecycle to change.

So there's stage one, stage two, and stage three. And I don't remember where ICANN is. Maybe Naela can add to that. But it's not like we're waiting for everything before it's done. And it's great input, and it's very important to have that kind of roadmap.

NAELA SARRAS: No, thank you, Edmon. I wasn't going to comment on what stage we're in. That Ash can answer to. But we are often told, we're here, this is where we need to go. So this is something Edmon is absolutely right. It's even communicated to us. What I wanted to point out is one of our colleagues who works with the Universal Acceptance Steering Group has been posting links in the chat to some of the documents that Edmon is referring to. So please do check those out. We have one more question from the room, which I will take now. And then I'm going to come to you, Alex, for the online.

NOJUS SAAD: Thank you. I have a question for Mr. Ashwin. First of all, I want to acknowledge, I loved how you raised the voices of the thousands of communities that speak native languages that are not recognized by

the UN, including my own community. So during COVID-19, we all saw the necessity of digitalizing our educational systems. But this sudden shift to online spaces left hundreds of rural communities, specifically, excluded. And from a civil society perspective, when we were delivering digital literacy initiatives, we actually had to teach these communities basic English language skills to ensure that they have appropriate access. So from your point of view, Mr. Ashwin, what practical steps can you recommend our national governments and the Global South for them to take to ensure that they incorporate these local languages into the DNS and these digital platforms? Thank you.

ASHWIN RANGAN: Thank you for the question. That's a very big topic that you're talking about, because we are talking about thousands of communities with languages and scripts that today are not yet on the internet. In looking at what the internet is being taught today, ICANN has taken an approach as a community to seat what are known as language panels, identifying those disenfranchised or poorly enfranchised communities, and has been working with language experts, linguistic experts from those communities, to understand what the scripts in their languages actually mean and how they can, in fact, be transcribed to train the internet to understand those scripts.

There are small nuances, again, to use the language set that Bhanu referenced, Bengali, as an example, where the Bengali that's spoken in the state called Bengal in India is different from the Bengali that is spoken and used in the country called Bangladesh. They both speak Bengali, but the Bengali in the two places, which are adjacent to each

other, have different connotations. So we have two different language panels that are addressing the specifics of those languages, because at the end of the day, the script to the internet is nothing more than a script, and the understanding, the semantics behind the script is something that we need to teach the internet. So the process that has to be gone through often takes time, but the result is that a previously disenfranchised segment is now able to interact with the internet on their language terms.

So in order for governments to lean into it, the work will be to recognize where there are high leverage points and therefore make them the priority, so to speak, so that they can in fact come online sooner rather than someone that may be farther down the chain. I hope that answers the question. Thank you.

NAELA SARRAS: Thank you, Ash. Alex, I want to go to you for online questions, please.

ALEX DANS: So I have a comment and a question from Maria Kolesnikova. The comment is, the problem is that many people think that internationalized domain names and email address internationalization are limited services for internal speaking one language market only. Something that there is no global connectivity because of using just one script language for an international domain name and email address internationalization known by just a group of people. That is what needs to be addressed also and for what we need

promotion. Even if you don't know some languages, you will be connected on a technical level with anyone in the world.

The second problem is that local developers are not linguistic experts. They can't work properly with so many scripts, solve homograph issues, etc. They are able to implement support for local language script mostly. This was the comment and this is the question. Do you think it is a good time for ICANN to develop a universal policy on working with all domains and emails which includes all technical aspects useful for software developers in one place?

NAELA SARRAS: Ram, you want to take this?

RAM MOHAN: Thank you, Maria. I think that's a good question. If you look at the Universal Acceptance Steering Group and you look at the materials that are there, already quite a lot of information and other things are there. But on the technical side, there are other places where work is also being done. So I would say at best, ICANN can provide some pointers to those other places. Rather than take on the task of collating and collecting what's available everywhere.

But I'd like to take that question and kind of lead from there because I think this is something that ICANN and our community, not just in the North American space, but in all the spaces, really ought to think about and do. Because I believe that digital inclusion is actually the prerequisite for universal access and universal acceptance. So of what use is it to have even the existing number of TLDs or IDNs or new TLDs

and more IDNs if organizations, individuals, but organizations in particular, do not commit to digital inclusion?

So if you take that as the real challenge for ICANN, my perspective is that what we My perspective is that what we need is the creation of a campaign on digital inclusion that has IDNs, universal acceptance, a number of these topics subsumed underneath that. But I would propose that what we need is a sustained campaign rather than a project.

And if you look at the components of what such a campaign would have, of course, there would be some structured communication about what we are trying to achieve. We would establish credibility. But we would also try to make sure that what we are saying is aligned with the climate that we're in. This is a climate of inclusion and of equity. And I think that is what we ought to try and leverage. Get opinion leaders who can help spread the message. This is not just something for ICANN to do. This is something where ICANN can help coordinate. But we need to make this much larger than just what we do. So I think there's a terrific opportunity to convert this into a long and sustained campaign rather than a long and sustained project.

EDMON CHUNG: I think adding on what Ram said, I think ICANN has a role, but not necessarily the single one place. ICANN has a role to coordinate. And also since 2010, ICANN and the community has worked together on those policies, as Maria has mentioned. And that has now translated into the root zone label generation rules to deal with the different issues of linguistic issues that relate to unique identifiers for the Internet. And

those items could be used for domain names, but also I think it is useful to look at it for email addresses and others as well. Yes, there's more work to do. ICANN has a role, but ICANN cannot be, shouldn't be the dictator of all the rules, I think.

NAELA SARRAS: Thank you very much. This is really important. And thank you very much for leading us into what I said when we started this session. This is the beginning of a discussion. We promise that we'll keep this discussion alive. We'll be talking to the community about how we keep it alive, whether it's in future NA spaces or where else should this go. I also know that my other colleagues in the spaces are interested in this, so they'll probably be talking about this as well. But I need to go ahead and close this session. Thank you, everyone. Thank you, panelists, for being here. I hope the audience found this helpful. Thank you so much for joining us today. This session is closed.

[END OF TRANSCRIPTION]