

ICANN75 | AGM – Driving Local Change for Universal Acceptance (UA) Adoption Globally Tuesday, September 20, 2022 – 13:15 to 14:30 KUL

SARMAD HUSSAIN: Thank you all for joining the session on driving local change for universal acceptance adoption globally. The session has a panel coming from UA steering group leadership being chaired by the chair of UASG Dr. Ajay Data. So let me hand it over to Dr. Data to lead through the session. Thank you.

AJAY DATA: Thank you, Sarmad. Good morning. Good evening, good afternoon. Before we start, may I request people sitting on the back, if you want to join the table, it's all right. You need not to sit in the back, table is empty, but choice is yours, whatever is suitable to you.

> So thank you for joining in. This is a session on bringing the change for universal acceptance through local initiatives. We are going to listen to many speakers today where we will more importantly listen what's going on in the world through our local initiatives.

> So, this is the overview we have. I will share a little bit about universal acceptance, what it is all about and what are the challenges that as UA we are facing. And then we have what are the best way forwards from the academia side, from ambassador side, and what's going on in local initiatives in four different regions in the world.

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And then of course, we will listen to the audience here, to the remote participants here if we have questions and suggestions more importantly, how we can be more effective in the UA work. Next slide please.

The universal acceptance vision is very simple. All domain names and all email addresses work in all software applications. We all know that. This is simple, but there are problems which we are going to share. Next slide.

The impact which we want to bring is bring choice to the consumer, improve competition and provide broader access to the end user that allows more and more people to come online. Next slide please.

This is the slide which gives kind of a scope of universal acceptance. All domain names and all email addresses, when we talk about them, which are these domain names and which are these email addresses? And here are the examples in front of you. New short top-level ASCII domain names. So you can see the word is not only supporting .com, .net, .org which used to be the traditional ones. Now you could have .ski, .sbi, and so on and so forth, many three-character or more domain names are possible. These are new short label.

Now there could be new long top-level ASCII domain names, which could go up to 64 characters after the dot and such example is like .engineering. This is another example of new domain names which are coming in force. And the third category is the domain names which are having at least non-ASCII characters. And there is an example which has no English character or ASCII character in the domain name.

These are the domain names which has a problem of acceptance. And these domain names obviously also have matching email address examples. Below you can see ASCII and ASCII where the email address also have long top-level domain name. Another example shown to you is .Istanbul. And you can see that email addresses now will have a domain name which could have top-level domain name of 64 characters. So there's a new category of email addresses coming in force.

ASCII@IDN. This is another example where you can see there are some special characters. And in the example here, mark@site.org, where you can see they are not just ASCII character, they may look like an ASCII character, but they are the IDN characters. Unicode at ASCII, you can see there's an example .com, but the mailbox name is not ASCII, and it's a Unicode mailbox name. Another example is Unicode at IDN. In fact, this is my own working Hindi email ID. And you can see there's an example there, Unicode@IDN, it has no ASCII character neither in domain name, neither in top-level domain name, neither in mailbox name. All those characters all are Unicode at IDN domain name. And another example, which makes the IDN domain name more complicated, that is right to left script. Normally, we write left to right. And this is script, which is an Arabic script, gets written from right to left.

Universal Acceptance Steering Group has come out with five pillars to make your applications UA ready. Accept, validate, process, store, and display. Let's take an example. Can I type in my Hindi email address into a site, which means accept? Can my website accept that email address? Can it validate it as okay email address, not declare this as invalid email

address, which means validation has to happen? The process, it can process it well for whatever purpose I'm entering into the website. It can store it well into database or the way they want to store it and display it back whenever it is required. If any software or an application can follow those five pillars, then only the website or a software is UA ready. Otherwise, we have the problem to solve. Next slide please.

A little bit of history about Universal Acceptance Steering Group. It was created in 2015 with the task to undertake activities to effectively promote the universal acceptance of all domain names and all email addresses. Obviously, the main objective is to raise awareness, awareness that there is a problem, awareness that there is an opportunity, also build documents to help developers how to make them enabled for making the systems UA ready, by providing documentation, by providing tools, by providing common standards and knowledge so that they can make softwares UA ready.

Also, encourage businesses and government to ask developers to supply them UA ready solutions. Obviously, it has a merit because if you don't make software UA ready, you might lose customers. And also, which is a very important thing, we may do whatever we like, but if we don't measure the progress, we don't know how much progress we have done. And hence, the measurement becomes a very important tool of universal acceptance. Next slide please.

Universal Acceptance Steering Group works with working groups internally. There is a technology working group which oversees the remediation for standards, programming languages, tools, and develop platforms. It's a very technical working group. Second is email

address internationalization working group where this very focused activity on email servers, email clients, email services happen so that the email part of the UASG gets taken care, very focused, and they try to create the standards and documents so that people can follow them and see that systems or EAI ready.

Measurement working group. It identifies readiness gaps in tools and technologies. And it's a very important one to identify and try to bridge the gap through technology working group so that we know that these are the gaps which are there to make a software UA ready and then bridge that gap by bringing libraries on board, bringing the solution on board.

Communication working group is a group which takes the message out for each stakeholder and tell this is what is required for universal acceptance in your software, whether it is academia or a government or developer community. Whatever community is, communication working group builds the communication for them.

Local Initiative working group is a very important initiative which UASG has taken. We are creating local initiatives in different regions, where a group of volunteers create the group and they take the UA further in that region. Forming those regions together forms a working group automatically. So all local initiatives, chairs form a working group and the vice chairs together, and they share knowledge, exchange ideas, and create awareness in their own region, trainings, and engagements, whatever is best suited for that region.

And the last is UA ambassador. So we appoint ambassadors in regions for that particular area. And they do the training and outreach at a national and regional level. These total working groups summarize the entire working of UASG. Next slide please.

So these are the focus areas for collaboration, where we are right now focusing and we see at the end of the discussion, if you have any other ideas to take it further. Collaboration requires effort for all of us. Obviously, we understood it very clearly that UASG elected leadership and working group chairs alone cannot do in isolation. And it has to be done in collaboration.

It is very simple. If my mail server supports UA but yours does not, email in a local exchange will not work. If I have a domain name with IDN and your software application do not support that, it is not going to work. So we will have a broken Internet. And we need a collaboration with everyone who is using Internet.

Remediation and technology. This is where we focus on shifting from identifying the gap in a system to providing solutions. So we will provide a library, let us say some library is not ready for UA in Python, we will try to see that gap and also try to remediate that problem and providing that library back to the community.

Government is another focus area where we go on government for policymaker, for top-down UA approach for requiring UA support in their procurement contracts. And we understood that if the government starts writing universal acceptance need and which is the need for everyone, then it becomes a driving factor for people to submit

the software and bid for softwares which are UA ready. This creates a business eligibility and business opportunity for people to make softwares UA ready. And obviously, for developers and everybody else who are building software, it becomes a career opportunity for them. Imagine a Java developer with a UA readiness knowledge will get an edge over just a Java developer. It is like that. So it's a career opportunity which we try to focus on.

In academia, we have obviously built a capacity building. We need to train the professors, students and obviously, we have our own training curriculum which we can give to the universities and I'm sure Nabil, my colleague, is going to share a little bit about it in this presentation. Next slide, please. I would invite Nabil to please share [inaudible] academia. Thank you.

NABIL BENAMAR: Thank you, Dr. Data, for the excellent presentation. So, I would like to present our work regarding what we have done so far in academia which is a new task that we are tackling in the measurements working group. Next slide please.

> Okay, so in the measurements working group, we have been testing different software, different applications, and their UA readiness. And now we are tackling this challenge which is to prepare a suitable curriculum for academia to be implemented.

> So the curriculum in relevant technical programs in majority of universities, if I don't say all universities, do not cover background in Internationalization and technical topics specifically covering IDNs and

EAI. So if you pick any random faculty member or student, you will see that he is not aware of UA or the challenge of UA and that there is a solution for this.

For example, for different majors like electrical and computer engineering, computer networks, computer science, AI, software engineering, Information System technologies, all these measures have lots of content related to UA, that can include UA but they are not aware of this and it's not yet included. So faculty and students are not aware of this and we need to prepare some and to bring some awareness to cover this important topic in our measures, and in our program and the whole curriculum.

So lack of information and training allows students to continue to develop and deploy software that obviously is not UA ready, so we need to make the change. This should be the new the new way of covering the topics and the UA should be by default integrated in all curriculum. Next slide please.

So, the plan is that for sustainable impact on UA adoption globally. So we have planned three phases. The first one is to identify topics and the modules that cover UA related material, internationalization with the Unicode, IDN, EIA which means email address internationalization and using DNS tools for IDN. There are lots of other topics and models like Unicode programming databases, networks, network service configuration, operating system, mobile programming and computer programming.

So, here is another challenge, which is to make the difference between existing material for mobile platforms and desktop platforms. And in the whole work that we have done so far in our working group, we have been focusing on both system, both platforms to test everything in both platforms. So the same thing should be done for the curriculum, and to test and to implement different stuff in different platforms.

The second step is to develop relevant UA course materials, so this is to help faculty members and academics to have their content ready to use and all practitioners to develop content for courses that is also linguistically diverse, meaning that we need to prepare [inaudible] content that covers the majority of UA related topics, the necessary topics, the necessary content, the necessary knowledge, and it should be in different languages so that not only in English for example, we have some other languages, where courses all around the world are taught with these languages, for example, in Arabic, in French and Spanish, etc. So not only in English.

The third and last part would be the outreach to academia to train them on this material. We can first start with what we call train the trainers program, so that we can make some face-to-face workshops with faculty members, that we are sure they will implement UA in their curriculum and then this will help spread the word.

So first work with few IT related programs to test the modules and finalize the material because there should be an important step in testing the material see if it's correct, if there is no bugs, if everything is clear. During the workshop, the train the trainer workshop, this will be raised and it will be fixed definitely.

The second step is to work with global academic organization to encourage adoption of curriculum changes that incorporate the UA teaching in their program, meaning that when we have the content [with ready program, ready content] UA, and we have tested everything, we can then send and collaborate with different universities all around the world and see if they are able and they were able to implement this in their curriculum. Thank you.

AJAY DATA: Thank you, Nabil, for this wonderful knowledge about academia. And obviously, this is very well suited for our mission to train the trainers and bring the next generation ready for universal acceptance. Next slide, please.

[SEDA AKBULUT:] Before we move on, we have a question from Sávyo.

SÁVYO MORAIS: Hello. Good afternoon. I'm Sávyo Morais from Brazil. I'm part of the fellowship program, but in a more longer time in the community since I was NextGen in 2018. And we're talking a bit about my personal experience on teaching general concepts of computer networking and email addresses and so on, this is of great importance and in my personal classes, I have included a bit of the contents in regard to universal acceptance, as if it was a natural thing. Obviously, letting clear that it email addresses and domain names were initially developed to work with ASCII, and my students understood it well and

now they often talk to see and make me see that the experience on working sometimes, they face some issues in the companies that they are coding and working on, because they have already the idea of universal acceptance in their coding in their daily life, but the company has issues on dealing with it. And, well, what I would like to share is that [not exactly] changing the official curricula of the disciplines and the universities [is] necessary. Basically, the teachers need to know about that. And it's easy to adapt the classes and talk about universal acceptance as a natural thing. Thank you.

NABIL BENAMAR: Very good, thank you very much for your comments and for the added value of your experience. So please join our initiative, send an email, so that you can be part of the group that's working on the curriculum, preparing the curriculum. Thank you.

AJAY DATA: Thank you. Any other questions?

[SEDA AKBULUT]: Olévié Kouami.

OLÉVIÉ KOUAMI: Thank you. I wanted to share a few words with you. I would like to talk to you about my personal experience with ICANN. ICANN is not ready for universal acceptance. Coming here alone, while I was filling the forms for traveling as a fellow, I realized that the characters for my

name were not accepted. And I had to create it in ASCII. I thought it was quite difficult because at ICANN, we keep on talking about the universal acceptance, and ICANN itself is not ready. So what do we do?

NABIL BENAMAR: Let me just ask you, please, what was your script?

OLÉVIÉ KOUAMI: It was Unicode with different accents on the vowels.

NABIL BENAMAR: ASCII code, it's a Latin script, but with accents. So this is something that I think we are still working on. It's less complicated than the non-Latin scripts. But I agree with you. So different platforms are not yet ready, even though we are talking about this and we are raising this awareness and we are claiming that Internet for all and should all script work equally in all email, and web servers and websites. Yes, so he told us about his experience in filling the ICANN form to join here. And he said that he was struggling with entering his name, which is written in French so with Latin script with accents. So the ICANN platform still doesn't accept this.

YAOVI ATOHOUN: Excuse me, I don't have my computer to raise my hand. But I need a clarification from him so that we can better help. I want to understand the issue. Because I speak French, I want to know if he's not able to type French on his keyboard. So it is something different. What he's saying,

he is not able to type French on his—or he's using an email address with [other] characters. So that's my question. We need a clarification,

OLÉVIÉ KOUAMI: Filling the form, I wanted to type my first name and my first name has accent. And I receive a response from the application saying that these characters did not go through. And I was on the ICANN platform, and the E with the accent in the French language were not recognized. You have to type in ASCII characters so it could go through. So you have to remove the accent. It's not a solution. The name is badly pronounced because without the accent, it's not the same pronunciation.

NABIL BENAMAR: —email address, but the name itself, just the name of the user, because it contains accents, it was not accepted by ICANN platform.

YAOVI ATOHOUN: [inaudible] so we have the clarification. So what he's saying is that not email, but some characters, when he used these characters—we'll follow up with him to be clear.

AJAY DATA: I think it's a simple problem other than that domain name and email address. He could not type his name itself in the ICANN platform somewhere, I think. Right?

YAOVI ATOHOUN: Yeah, this was what he said, so we'll follow up with him to better understand the issue. Thank you.

AJAY DATA: So I think, [ask questions, and Seda,] now we can queue the questions and take them at the end. That will be easier. Let's follow the flow and we will have Abdalmonem who is not just the UA ambassador chair, he is the vice chair of UASG.

ABDALMONEM GALILA: Yes. Actually, I start my mission now as universal assistant ambassador, before going into my slides. What's said by Dr. Ajay is that universal acceptance cares about IDNs, EAI and also new generic top-level domain names for all application, devices, and the system that are connected online to the Internet or connected offline internally so through your LAN.

> What I mean? A new multifunction machine, a scanner, you could go for the scanner and scan the document and write the email address to scan this document to your image and to send the scanned copy to your email address. If this multifunction machine or scanner couldn't realize what is written in this email address, it is a problem.

> So universal access cares about all of this. This is the first point for me as universal acceptance ambassador and want to promote my work. And now I will have the head of universal acceptance ambassador chair for the program.

So universal acceptance ambassador program created since 2018. The main goal behind that, to raise awareness locally or regionally about universal acceptance through conducting some sessions, technical sessions, conducting a hackathon, conducting something related to the project of universal acceptance that the concept is caring about IDN, EAI or the new generic top-level domain names.

For this program, we have currently have 12 universal acceptance ambassadors covering seven countries from about more than 150 countries worldwide. At same time, in this world, we have 90% of the worldwide population doesn't speak English as a finished language, only have 12 ambassadors for seven countries. At same time, we have more than 7000 languages existing online and spoken today.

So our mission is somehow have many arms in order to tackle, as my colleague said. So during our mission, we have some challenges. Some of these challenges are—let me think of challenges as threats. Some of these threats or challenges are converted to be opportunities for us. Could you go for the next slide?

For example, the challenges that are converted to opportunities for us, like for COVID-19, for ambassador, we have two arms here, we have pros and cons. Cons is that we couldn't meet face to face, couldn't conduct face to face training, face to face workshops, or couldn't deliver the message in a proper way. We believe that, believe it, achieve it. When you see the issues that universal acceptance try to solve, you will believe it, so you will achieve it.

What are the pros for COVID-19? You know that during COVID-19, all the students didn't to go to school or universities, they go to e-learning environment. How could students who couldn't speak English at all write their own local language to access their own local language elearning environment and receive notification from such environment? That is an issue.

So it was our opportunity for this. At same time, during COVID-19, there are many digital transformation project done by the government. So the government needs all the services will be published online for the citizen. So when the citizen [inaudible] speak English, couldn't write English, and they wanted to have the services, it is a problem. They couldn't access the service at all. This is for COVID-19.

For different stakeholders, we are trying to contact to increase awareness or deliver the message about universal acceptance. We worry that they don't have sufficient awareness about the future of IDN and EAI. You know that more than 50% of the content published online is not English and the domain name is English. You subscribe to this local content website using your English email address, not your own local address like the content of this website. What is the return of investment from deploying universal acceptance if you don't have [inaudible] about that? You don't know that it is an open gateway for the next billion Internet users to be connected online. One of the issues that affects 50% of worldwide population to be connected online is the language. We need to take care about that.

For all communities are stable with this email system, we don't need to change—you have to change to comply with universal acceptance. No,

I am stable now, I don't have any need to deploy that. It means you don't have an idea about what is the benefits of deploying the concept of universal acceptance.

At the same time, all the softwares developed before and currently in development relied on APIs, Application Programming Interfaces, developed 20 years ago that is not compliant with universal acceptance at all.

As said by my colleague, Dr. Ajay, is that we have five criteria for universal acceptance readiness. So these five criteria doesn't apply for these APIs at all. So let us go for our opportunities that recovered from these threats in the next slide.

Yeah, also, these challenges during COVID-19, we succeeded going from north to south from Africa, Africa Internet Governance Forum, University of Dodoma for graduation project, universal acceptance ready graduation project, and also from the Middle East to have APTLD 82, we conducted a session there and going to Asia, to my colleague from India, Harish did a massive job to increase awareness about the concept of universal acceptance.

Going to my colleague from Arab region, CITC, we conducted a session about the promotion of universal acceptance, why it is important, what are the issues? And also for my colleague from China, he did a massive job increasing awareness, especially China have, I think, a larger number of EAI provider which is good for them. And also, this is not all activities done during this vast period of time. Actually, we have many



events happen. But for sake of time, it is just a short one. Let's go for the next slide.

Yeah, some opportunities we have, it is already done. And there is another opportunity we need to have it for our way to going forward. The first thing is that we need a plan. What I mean by a plan? If I am universal acceptance ambassador for Egypt, I know very well how academia works, how government works, how public sector works, how private sector works, so I could have an imagination, how could I contact this different stakeholder within my country.

So we need to have this plan for every ambassador. Of course, it will be strengthened and supported by UASG to drive this plan, it will be a good idea for that. We don't have this till the moment. We need to conduct more awareness sessions about IDN, EAI and universal acceptance. I don't forget here the new generic top-level domain names.

We need to increase to make awareness about the return of investment, ROI, of deploying EAI. I know that most of you know that this is an annual opportunity, \$9.8 billion, Dr. Ajay, if I'm right. Yeah. So there is a business behind the deploying universal acceptance.

Look for amazon.com. The times they add another language, the sales increased by 100%. So if you add more language as a content, 100% increased from the sales from the previous one. So if you have different URLs with different language for the same application, for same content, it will be a good idea.

Okay, that is a second thing, we need to get to the origin for all the softwares, we need to go to software analysts, software developers in

order to design and develop API that is UA ready from scratch, that will be used for the future development of the application or device or system. API works for all of these.

Actually, also, we need to consider the registry and registrar systems. We need to, for example, make the [EPP,] the communications, the protocol between the registrar and registry to be universal acceptance ready. As I said before, we need to have more universal acceptance ambassadors to cover more areas in this world. We need to strengthen the communication between universal acceptance ambassador and local initiative and with the government. It could be done through GAC representative. Actually, maybe I am lucky somehow that I joined some of this group and I could defend for that. So that is for me at the moment. Thank you.

AJAY DATA: Thank you, Abdalmonem. You're always passionate, and we can see in your ambassador work also. So now we have local initiatives leaders joining in here. Sarmad, we have Harsha from Sri Lanka. Do you want to start from him or at the end?

SARMAD HUSSAIN: Just good to share that that initiative is joining the ranks, I guess.

AJAY DATA: Okay. Great. Thank you. We have Harsha. Do you want to speak line and before we take? Because you're starting the new local initiative for UA in your region.

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HARSHA WIJAYAWARDHANA: Thank you, Dr. Data. Good morning to everybody. We are very excited to be part of this local initiative now. So, we will try to—in fact, we have these two ccTLDs which is .Lanka and [inaudible] in Tamil. For the last I think eight years that we have not been properly—I mean, we have used it for internationalized domain names, but we have not used it for email, we have not started using those, even the domain names right now, both domain names are very—few people are using it. So that's another thing that we need to do right now. So we need to popularize it.

> So we thought of actually doing it. So we have already started setting up servers right now. We have started talking to the ISPs. In fact, [inaudible], I think you have tried some of the email addresses, I think you did—I think I know that you have done it. So we actually looked at the [inaudible] in terms of—so we are trying to introduce it right now.

> So we have started now configuring the service. Basically, my observations are actually very few literature is there right now. In fact, for the domain configurations and stuff like that, we had some issues. And we worked on it last few weeks. So I think we need more stuff, we have to develop more tutorials and especially in this universal acceptance arena, I think that type of thing, we need. So we already started doing some work on that as well. So we are very excited about that. And thank you very much.

AJAY DATA: Thank you, Harsha, and welcome on board for the local initiatives. It's a very important country and region for having this initiative. Thank you very much. So now we will start local initiative updates and we have Rui joining from China.

RUI ZHONG: Thank you. Hello, everyone. This is Rui Zhong. I will be representing the China local initiative and very honored to join this session remotely. And thank you for inviting me to share the UA work update on China. As you may know, China is a big country with over a 1.4 billion population who speak and use Chinese. To realize the Chinese IDN, UA readiness will be of great importance to facilitate the use of the Internet by majority of Chinese users, especially those who aren't familiar with English.

> However, even though we understand how important and how meaningful the UA is, it is still not easy to put it more forward or with a quick step. The current major issue and the challenge is how to deal with the supply and demand side relationship [or recording] which come first, the egg or the chicken.

> So for the user side, people had to get used to US English or Chinese phonetical transcription spelling when typing in the browser address bar or writing email address before the new gTLD coming out. It is not an easy task to change forming a new pattern or habit of usage. So I think this might be the same situation for most non-English speaking country or regions.

So in terms of a proper awareness, the early days of new gTLD enter into Chinese market, although the registry and registrar conduct a lot of market promotion and education, at that moment, not so many application [in your suggested] scenario could support the adoption of Chinese IDN. Actually, the Chinese companies still knew little about the new gTLD at that time.

As for the Internet service provider, [inaudible] just like the previous speaker said, they did not have much intention or strong motivation to update the services to adopt the UA due to the less user or lower market value. Even if they have the technical ability to realize it. But the reality is, it is needed to be persuaded that this should bring profit so that much resources can be invested into rebuild and the transformation of products and services.

Another fact is to realize the UA, also needs a long process to carry out both from the system building to internal decision making process. So you could see there's a big disconnect between the two sides. But we are very happy to see that [things tend to be] getting better and better and achieve some progress already. With support of the UASG, we have carried out some work or campaign to promote the UA readiness for Chinese IDN. And next slide, please.

For the average work, we conduct face to face visit to Internet company to reiterate the importance of the UA and hearing their voices on business concerns. And for those who would like to make an update for service, we provide technical consultation services by inviting expert into our team, including ICANN Beijing Engagement Center, Zhang Jian-Chuan, CNNIC [Jiankang Yao,] and former PTI Board

member, Wang Wei, and our three Chinese UA ambassador. With their help, we all can make a communication with the industry.

[inaudible] with the communication with the Chinese government. The Chinese government is also of much importance to this work, and which joint efforts promoting the Chinese IDN application and [inaudible] environment construction has been written into the 14th five-year plan on the national ICT development, which will be a huge policy supporting driving force.

To implementing this five-year action plan, we organize media campaign to enhance the education and then conduct a series of training or lectures in different college and for our member companies. It's a pity due to the COVID-19 situation, most event for last year, we have to organize via online. Maybe for the future, the situation get better, we will move to the on-site events.

And according to the UA tests conducted last month, we found that although not all the Internet service fully support the Chinese IDN, some products have gradually taken great progress. For example, most of the domestic browsers began to suppose the Chinese IDN such as the Tencent, Sogou, 360, Xiaomi, OPPO, they all support the Chinese IDN. And the for the email, the new version of QQ mailbox of Tencent already fully supports EAI. That's good news.

And generally, although some applications do not fully support Chinese IDN for now, but they can only be displayed in the punycode transcoding, but believe in the future as we continue work of the UA, there will be much more get improve. And next slide please.

And looking forward to the coming future, we will continue to enhance education to improve the public awareness by training, by participating in various events such as the UA Day or by encouraging industry to set the set example and to join the [standing setting.] At the same time, we will continue to enhance the communication with the government and to conduct the UA tests to guide the industry to further improve the UA adoption.

Just some days ago, we also published a proposal document named Chinese domain name application environment construction initiative, are calling for more partner to join us to enhance public education to development of products and information services to meet the UA standard and to calling for more Chinese Internet access methods, including the use of Chinese accounts should be encouraged to adopt in various Internet company, Internet applications. Okay, that's all for my sharing. And thank you very much. And I hope you enjoyed the meeting.

AJAY DATA: Thank you very much. Now we have Maria online. Please go ahead.

MARIA KOLESNIKOVA: Okay, thank you so much. Yes, I'm Maria Kolesnikova, chair of local initiative in the Commonwealth of Independent States in Eastern European region. So we have members from seven countries of the region, and most of them represent IDN TLD registries and registrars.

Our work on local level is mostly focused on IDN and EAI issues. And today, I will provide some short overview of our generalized or common experience which will have got so far working on UA adoption in the region. So next slide, please.

Okay, so let's start from the current challenges. So in general, I would say that the main challenge with IDNs is a low demand. So we see it in almost all countries of the region. And [well-formed] demand is recognized in Russia only where we have about 700,000 second-level domain names registered and almost 80% of them are used for real sites and email addresses.

So our experience shows that IDNs are demanded as a niche product, mostly for internal market. And the good thing is that after 12 years of using IDNs, local community has recognized that IDNs work, and they won't disappear. So I would say that from the technical perspective, so far, we see that there are just few remaining problems with IDNs which users can face now. The most complained one is displaying. It means when users see IDNs converted in ASCII with prefix xn-- rather than in Unicode. And particularly, it's negatively faced on the popular social media platforms, such as Facebook or V Kontakte where users spend lots of their time and actively try to advertise their online businesses.

So the second mostly claimed issue is linkification of IDNs. First of all, problems with copy paste of such URLs, for example, from browsers to any office or as a client application, and of course, percentage encoding particularities, because users just get, when they have encoding, in percentage, they really get long URLs. So it's very inconvenient for them.

But the most challenges that we see are connected with EAI. So developers don't recognize EAI as high demand service. And in some cases, they even claim that to implement EAI may require too much time and money, especially for some big corporate systems where emails can be used for authorization purposes in many companies of its systems.

And in general, I would also say that software or website developers, they have, let's say, old professional habits, they got used to behave in the same way since times when only ASCII domain names were available, that's what we see. And now there is a need to form their new habits and skills, which should be UA ready also.

And from the usage perspective, we see one big issue in the region, users cannot register international emails even if they want to. So today, users and companies prefer to use cloud mail services, or at least free open source mail software. But now there is no full EAI support in any cloud mail service, global or local one available.

For example, Gmail allows only send and receive options to users of EAI addresses but not their creation. I think you know this. And as for the most popular open source stack of mail software, which covers about 75 percentage of installations on the market, it is based on such decision like Dovecot, but it doesn't support EAI at all.

So besides, we often hear from IT experts about lack of best practices on how to work with Unicode or the local part, concerning normalization issues, naming issues and etc., we hear that EAI standard has no continuity with ASCII, which slows down adoption and some

opinions that email is dying. So this is our current challenges. Next slide, please.

So taking into account the list of current challenges, our local initiative considers the following activities as possible countermeasures. So [to form] demand on the local market, our members continue to promote IDNs and EAI. Our full PR and marketing efforts. We also use IDN and EAI in our own projects. To motivate developers and system administrators, we think that it can be more effective to communicate with local decision makers and influencers, such as local governments, software manufacturers, who can task them to develop UA ready software or to do right choice of UA compliant software to be installed and learn how to make necessary settings in this.

So decision makers can also help to motivate [inaudible] to learn new skills on how to work with you new code, and as I mentioned earlier, to form new professional habits, because technical specialists are usually interested to learn new skills, which are demanded and well paid by their employers.

So for this, we also collaborate with academic sector to outreach students and young specialists to form UA ready professional habits from the beginning. So we in the nearest future can get new IT professionals on the labor market with necessary universal acceptance skills.

And to assist developers and system administrators on technical aspects, we of course accumulate knowledge on universal acceptance, IDN and EAI standards, adapt it for local level, share and provide trainings and testing tools to make implementation process easier for them.

And for end users, we think we need to work with users in parallel with technical audience. So we share education materials on how they can improve their user experience with IDNs or internationalized emails today.

So we explain what software already supports universal acceptance and can be used by them, what additional settings or software packages they can use and install for proper usage of IDNs and EAI, and how to check their software environment and even [how to claim on gaps] in UA support. Next slide, please.

So in general, all these activities actually are the best way forward that we figure out so far. And we also see some need for help. So from the ICANN and global technical community, we think that there should be a global support and popularization of IDNs, because if it will be popular [and trend service,] it will have better demand and software providers can implement it, they can see this demand on the global market.

So we also need help to outreach global mail services and social media platforms, developers and open source project maintainer such as Dovecot or any alternative by functionality services. So to implement full EAI support. And we think that there can be very helpful if we have comprehensive guidelines on how to adopt EAI standards in the software, because RFCs and interpretation of them are not really easy task, even for technical specialists, so we need help in this. And

probably if we talk about universal acceptance implementation on all levels, it's time to implement Unicode support in DNS. So that's all from my side. Thank you very much. And I'm really glad to have this discussion today how to drive local and global change in universal acceptance. Thank you.

AJAY DATA: Thank you, Maria. Next slide. We need to be quick, and two other updates, please, Sarika, over to you from India.

SARIKA GULYANI: Thank you, Dr. Data. Hello everybody. I'm Sarika Gulyani. I look after the local initiative in India and I'm a director at FICCI. Next slide please. So, a little brief on why India has a very complex language and a multilingual Internet landscape.

> So, I like to put few figures in place that from the digital landscape, India is like one of the very fastest growing countries of the world. We are like the second largest telecom Internet subscribers like around [1167] telecom Internet subscribers with 825 million Internet users and the next gen of 450 million more would be coming online with the multilingual Internet.

> So, we are talking about a huge potential for both the multilingual Internet and the UA implementation. Now, coming on the challenges, I would say a couple of learnings which we have got while being operational for two years from now, is that the Indian multilingual Internet industry is still evolving, and it's really complex. So, it is a very

famous saying which has been said in our country: every mile in India, there is a change of [inaudible] and every four miles, there's a change of languages.

So, we are a country with 22 official languages and 1600 plus dialects and almost 32 languages where we have more than a million speakers. So, we are talking about reaching to that number of our audience with our local initiative on the UA. So, the diversity and the complexity which comes in, and also for our languages we have, there are languages which have multiple scripts, which are there for example, you talk about Konkani or Punjabi, there are multiple scripts for the same language. And there are languages which will have single script response, but like the Devanagari would be applicable to Hindi or Marathi and others.

So this complexity again creates an issue when you talk about the challenges we need to overcome. Then there are issues of, of course, the awareness, which my previous speakers have also been talking about. We have heard a lot about it. So I'm not going to go into why UA is important. Of course, it is important. And we do realize that. And when we talk about such a big geography, definitely, it has further more importance to look into it. We are a population of around 1.4 billion. And with that high number of diversity, diverse language landscape.

So definitely, the awareness amongst the industry for the UA implementation and its benefits is one of the things which is very important. And I will not say it's a challenge, I will say it needs further more push because we are talking about the big numbers.

So I'll cover the activities the initiative is doing, but the awareness at the different levels. Here it is which is required, which is like the CTOs in the CXOs where we talk about the top to bottom approach, then the academia as well as the technical communities where we talk about the bottom up approach. And then there are the student community whom we want, that they need to take it as part of their career growth so they can use it being as an entrepreneur or as a developer being employed any of the companies.

So there are various level of awareness which is required. Then, of course, the need of the technical skill force, which is very much important for implementing the UA thing. Then as we have a very diverse landscape, there are various people who are working in silos. So the cohesion is very much important. Then, of course, the policy frameworks, because we have a structure which is at the center in the states. So we would want of course the adoption across various state governments and the center. Next slide, please.

In terms of the activities, the local initiative has been able to do it successfully to overcome these challenges. Of course, the priority is the community building. So we have been working high on the community building. We have more than 500 members who have become part of our community and they are constantly I would say contributing, and we have been very happy that more get added to it. Although the number is small when you talk about the population of the country, but we are happy that we started almost like 1.5 years back and we have

have more people who can contribute with their activities and spread the message to the nooks and corners on the UA implementation.

Then of course, there are technical training programs we have been running. We would also like to thank the trainers and the UASG ambassadors who have been part with us for these technical training programs. We have been able to successfully conduct the programs on the EAIs, IDNs, and of course, strong capacity building workshops with various academic Institutes, the technical institutes at various levels. I would say the [inaudible] to the other institutes, we have been able to talk about the technical skill development for UA. So that has been a very enriching experience as part of a local initiative.

Then, of course, we have been involved in [inaudible] one of the important areas of UA awareness generation and the multi stakeholder engagement. So we have had interactive sessions with the government, both at the center with the ministry of commerce, department of telecommunications, and others, along with the state departments with various states which we have reached out to Madhya Pradesh, Rajasthan, and others. And then the interaction with the National Forensic Science University. This was of course, we had a collaboration with our UASG ambassador. Along with him, we were able to deliver that.

Then we had had interactive sessions in terms of fireside chat, where we have a UASG ambassador, Vijay Shekhar Sharma who is of course the CEO of Paytm, one of the biggest financial services company within our country. So we've been able to have a fireside chat with him on the

UA during the flagship event of FICCI-ILIA, which is in the language Internet alliance with the Government of India.

So we were successfully able to conduct that. Then we had a small room brainstorming sessions with our community. And then as part of our local initiative, we collaborated with IIGF, is Indian Internet Governance Forum that was first of its kind held in India. And we were able to actually put UA as an important event agenda of IIGF both in the pre IIGF sessions as well as during the IIGF.

Of course, we have been having various multistakeholder and working group meetings and various promotion through social media. We're thankful to the chairman UASG to give us a video which we have been able to promote on a very regular basis to the community as well as to the other members as part of UA.

We have also had a case study development on mera.bharat. So, during the discussions, of course, we have been able to put forward the real-time case studies what people have been facing what they have been able to do, what are the things they need to implement. So the discussion subject, while awareness and technical have been discussion about getting them groomed and also letting them know how benefits these UA implementation gets on board. Next slide, please.

These are some additional initiatives in India. I've been hinted by the organizers on the time limit. So I'll try to just limit myself here. Rajmail is of course one of the state initiatives where the government of Rajasthan is able to give free email service to every citizen of the state.

DataMail is world's first IDN compliant free email service. And we are very happy that as part of the local initiative, there's lots of work we have been able to contribute and work with the government of India.

So there are various stakeholder groups where the local initiative plays an important role at the policy development, both at the center and the government and we are happy to say that the center government is working on the policy which is going to be there for the multilingual Internet and UA specifically, and of course, the various departments of government of India developing multilingual websites. Next slide please.

The way forward, we definitely look forward to community development and collaboration. In fact, 72 hours from now, we are hosting another UA zero day before [inaudible] event in Hyderabad with the help of our community. So, we are working on various collaborative measures and there are things we are doing.

We would be doing a three-phase hackathon again with our community members where we talk about the UA remediation, and of course, stage one, stage two and stage three aspects which need to be taken care of. We are of course focusing very high on the capacity building and awareness sessions and the technical training workshops at, again, the multistakeholder levels. The government acknowledgement at various central and state would continue and especially the state government will take up the focus.

We are also working on developing a knowledge repository in terms of various articles, updates, and also something which we are looking

forward to working on a white paper on UA with respect to India, and we are looking for global collaboration. Here we would like to explore the partnership model with the other local initiative chapters where we can have knowledge exchange sessions, the best practices being exchanged, and also the thought leaders being hosted. And we would like to contribute heavily on establishing on the UA Day various activities which can be done around that area. With this, I would like to end here. Thank you.

AJAY DATA: Thank you very much. We are very short of time. Can I have Anawin? And sorry to say that you have only four minutes and then we will have questions.

ANAWIN PONGSABORIPAT: Yes. Hello everyone. My name is Anawin from Thailand local Initiative. For current challenges for Thailand local initiative is, like everyone, my colleagues said, that when we go to our prospect organization, the first question that we get, what benefit they get when they implement to be the UA ready? The profit, customer, reputation? And why do they need to do this? And also, how to make that system to be UA ready? Is it hard? Or how many resource, money, time, people, how many they have to invest into this? And then when they understand of them, they say that, okay, I don't have resource to do it.

> Secondly, social media, still not support UA ready yet. Like a Facebook. So when we try that, copy the IDN to the Facebook [inaudible], you will see [inaudible] local script. And lastly, most Thai people don't know

about the UA yet, don't know that we have a Thai domain name, Thai email. Next slide please.

So the current activity that we outreach and follow up with our .th resellers to make them aware and plan for the UA readiness. Secondly, outreach and sponsor to the universities to raise awareness on benefit and the importance of IDN and EAI to teacher, faculty, staff, students and all stakeholders.

And also, we try to develop tools for checking UA for the email, domain name and top-level domain based on the UASG guidelines, called UASG Python training. And also, we have the gift free IDN domain when Thai when they register .th domain with us. Also, we give the EAI email called [inaudible] to our customer so that they know that they have Thai domain name and Thai email address. And next slide please.

So the best way forward for Thai local initiative, as I said before, that we are developing to UA ready for easy implementation, rather than we ask them to develop for us, then we try to develop and let them use for us. So all of you can go to our GitHub that I will send you the link in the chat that you can try that we developed some software already, like a PHP mailer, and some configuration like [inaudible] to support the IDN and an EIA already.

Hopefully, all of you can go and try that, is it supported or not, and then give me your feedback. Also, we try to outreach and get support from the influencer and [inaudible] people our following organization like government, C-level management, and IT manager. And lastly, we try to get collaboration from ICANN and our community as a group to get

attention and support from global provider like a Facebook. Yeah, that's all for Thailand local initiative.

AJAY DATA: Thank you. Impressive that you could do this very fast as required. The floor is open, you can raise hands if you're remotely there. I will manage the queue. And if there are any questions, we can—Dennis, please go ahead.

DENNIS TAN: Hello. Thank you for those presentations. Very insightful. Just have a question reflecting on the experiences and presentation from the local initiatives, people that are on the field that we are hearing. IDNs, EAI is a niche product, there is low demand because those issue as well as implementing those.

> So what is the approach for the UASG from this point? Is it a top-down like working through procurement requirements or whatnot to require certain applications, but then those implementing don't have the tools or a bottom up approach where you build the code, you build the components so that who is willing to implement or deploy UA ready software, they can have the components, the libraries, the applications, the platforms, protocols, or whatnot?

> I just want to hear your thoughts right at this point, because throughout the years that I have followed the UASG, that's the constant, right? Low demand, issues with technical issues, but still, we are trying to build a base of components so that those who are willing can deploy the

software. Slowly, but surely, I guess, moving forward, but I just want to get a sense of where we are today, how do we want to take this in the next years. Thank you.

AJAY DATA: Thank you, Dennis. You are a veteran to this area. But let me address a little bit of hands-on experience what we saw. So we are trying to actually do both the things, to create the demand and increase the supply. And this is done in various steps.

> By creating awareness—UA Day is one of them, which is coming up on 16th of February, which is about creating an awareness globally that there is a problem in the software, there is demand of the EAIs and IDNs, and we need to be ready. So till we do not have that, we cannot stop because if somebody has an email address, let us say I have an email address in Hindi, and if I cannot sign up for a Twitter account or a Facebook account, it could mean two ways. One, service provider do not provide them, or service providers continue providing them and we also solve the problem that they get accepted everywhere.

> And this is what is happening right now. So sometimes it could sound like catch 22 situation, what to do first. But I think in my experience, we are doing both. And what Sarika shared as an example, what Rui shared as an example of China, that now the large service providers are making their applications UA ready for at least phase one.

> So it is about to acceptance. So if Microsoft, Google and Apple in the ecosystem of the world are now phase one EAI ready, that gives a lot of confidence that almost 90% of the email platforms who are being

provided by them are at least supported EAI. Now, there are obviously large population which is providing another email services which are not ready. But at that time, I think the supplies increases and everybody gets on to the queue of providing the better platform softwares which are UA ready.

I think these are the two parallel tracks which are going on right now there. And sometime, we push the supply side, sometime, we push the demand side more. This is how the equilibrium is right now. But to me right now, the biggest challenge is awareness, biggest challenge is that people do not really know that it can happen, the belief was missing. It is coming more and more when they see it in action, that it is possible, it works and it is solvable problem. It is not an unsolvable problem if the plan comes here. This is my little experience of last five years in UA. But I'm sure you have experience there, not less, rather more. But I guess if anybody wants to add, please feel free, the floor is here. Please go ahead.

OLÉVIÉ KOUAMI: Regarding the UA Day, is it an international day, or is each local initiative to choose a specific date?

AJAY DATA: UA Day is going to be celebrated worldwide. And Universal Acceptance Steering Group is also going to hold their own event but they are going to empower almost every partner organization. I would encourage you and encourage everyone to look for that day and plan an activity. We will support you with all the content and knowledge to host that event

in your region. And you can champion it in your region and with our support, whatever support is required. Sometimes we also support financially if something is required logistically. Not in every case. But I think we have that model also there.

Thank you very much. Sorry, we cannot take more questions. Time is an issue. We thank everyone for joining this session remotely, physically here. This is a very important and engaging session we had. And those people who could not ask questions, please write to us at info@uasg.tech. That email address is also on the slide, you can take it from there and write to us. We will certainly respond to you. If you have any bug in an application you find which is not UA ready, you can notify it on uasg.tech website, we will certainly follow up and try to get the remediation, at least contact the companies and try to provide the solution. Thank you very much for joining.

SARMAD HUSSAIN: Thank you all. And just before we close, there was a question about there's no update from Africa. Just to quickly respond. We are always keen to support other local initiatives in other regions. And if there's any group of enthusiasts who would like to contribute, we welcome a proposal from you. So we look forward to your participation as well. With that, let's close this session and stop the recording. Thank you.

[END OF TRANSCRIPTION]