ICANN70 - Virtual Community Forum - ccNSO Members Meeting: ccTLDs and the Future (2 of 2)

ICANN70 | Virtual Community Forum – ccNSO Members Meeting: ccTLDs and the Future (2 of 2) Wednesday, March 24, 2021 – 16:30 to 17:30 EST

KIMBERLY CARLSON: Thanks, everyone. Welcome back to the session on ccTLDs and the Future, part two. My name is Kim Carlson and I will be the remote participation manager for the session, along with Kathy Schnitt. Just as a quick reminder, this session is being recorded and follows the ICANN expected standards of behavior. I won't go through the whole introduction on how to ask questions. Kathy will put the reminders in the chat. With that, I will turn back over to you, Sean. Thanks.

SEAN COPELAND: Thank you so much, Kimberly. I don't want to take too much time in my comments, here. I was feeling very energized at the end of the last session and I'm hoping that everyone is, as well. Olaf gave a great keynote speech and Roelof, Anil, and Frederico all dovetailed really quite nicely off of it. We were starting to get into some really meaty questions. So, I'd like to hand it right back to Biyi and let things organically go.

BIYI OLADIPO: Thank you very much, Sean. Welcome back, everyone. Before we left, we said we were going to continue the discussions from the question that was asked by Margarita, and that's where I'm just going to go straight and kick-off on. Margarita asked this question: do we have something to do to improve the participation of our government in the

Note: The following is the output resulting from transcribing an audio file into a word/text document. Although the transcription is largely accurate, in some cases may be incomplete or inaccurate due to inaudible passages and grammatical corrections. It is posted as an aid to the original audio file, but should not be treated as an authoritative record. GAC? So, I'm going to put this straight to the panelists, Anil, Roelof, and Frederico, in that order.

ANIL KUMAR JAIN: Thank you, Biyi, and thank you, everybody. Let me inform you that, as far as India is concerned, there is a constant participation in GAC by the government agencies, including both Ministry of Electronics and IT officials, as well as from the Department of Telecoms, which concludes the telecom network in the country. But overall, I would like to comment that, yes, government is an important stakeholder in the overall Internet governance.

> And instead of giving the option to the government, I personally feel that ICANN can make it mandatory for the government to have at least one represented from the government who shall take part in various discussions at ICANN, and not only just to attend. But I personally feel that they should contribute to the Policy Development Process. This will improve and I personally feel that this will also establish a multistakeholder governance model of Internet in ICANN. Thank you, Biyi.

BIYI OLADIPO: All right. Thank you. Roelof?

ROELOF MEIJER:Well, I think it's in the interest of a country to have a good, well-
informed GAC representative. So, if you haven't, I think then, as a CC ...
Because it's also in the interest of the CC to have that. Then, I think as a

CC you should see if you can do something to help the government find somebody. We have had good GAC representatives for a long time. We closely collaborate with our Ministry but also specifically with our GAC representative.

Typically, we have a pre-ICANN meeting for our community which we co-organize with the Ministry and with our GAC rep. We meet during ICANN meetings where we discuss topics that are being discussed during the ICANN meeting. We exchange views, etc. So I think, there, the CC can play a role. It's in the interest of your community, of your country, of your government, and of your CC to seek a good collaboration in that sense.

FREDERICO NEVES: In our case, we have been ... In the case of Brazil, we have a Foreign Ministry participation in the GAC for a long time. I think one of the things that is ... It helps a lot. It provides briefings and keeps the Foreign Ministry Representative as informed as possible. As others said, it's really important to have those members participating actively in the GAC as ... Trying to create, as Roelof said, a kind of forum or a briefing pre-meetings to these local communities is a way of trying to improve that, as well.

BIYI OLADIPO:Thank you so much. I just also would like to turn my voice to the fact
that it happens with .nl. It also happens with .ng. We usually have pre-
ICANN meetings where we discuss issues and then things that we think

EN

the GAC rep should focus on as they go there, which works perfectly. Thank you so much.

We have a question from Leonid to all panelists. The question was like this: "As most ccNSO members are small and medium-sized, ccTLDs, any advice, in three bullet points, what should they do to stay relevant in the years to come?" So, I'm going to start with Frederico, I'll go to Roelof, and then come to Anil. Frederico.

FREDERICO NEVES: I would say that the first one is keep the [focus and the services] to your customers. That's the main point because, if you don't focus on your customers, then you don't provide good services. With good prices, you will have no market, and then it's the end. I would say that your main goal is to focus on your customers and the products that they want.

> That's a part of the question, as Olaf was saying. I would say that we, as a community, need to try to bring a good ... How can I say? Discourse in the sense that having your liberty in identification in the Internet is very important in the sense of [you're a small] ccTLD and this is a good marketing way of trying to promote your service and especially, as I said, trying to keep it as cheap and as good a quality as possible.

BIYI OLADIPO:

Thank you. Roelof?

ROELOF MEIJER: I think by default in most countries there is a preference for the ccTLD. Maybe the exception is the U.S. because I think their .com is also considered to be something like the national domain. But I think we were lucky because we were one of the first to become operation in '86.

> So, we didn't end up at any time in a position where we were not in the leading position compared to Gs. I think in many countries that was not the case. So, there, either the CC wasn't operational yet or it was heavily regulated. And then, of course, in the end, customers choose what is easiest to register and what can be most widely used.

> I think we have seen also in Europe where the CCs were at a disadvantaged position compared to .com for instance. When they liberalized their policy it took them a long, long time to regain their position, just because all the free advertisement, the URLs in advertisements on the back of trucks, in newspapers, etc., if they all end with .com it's very difficult to promote your dot-whatever CC you have.

But I agree with what Frederico said that, in the end, it's about customer service. So, on the Internet, everybody hates it if it's difficult to do something and we always choose what is easiest to do. So, one of the things you have to make sure is that registering your CC domain is as easy as registering the most popular G in your country.

And then, of course, you have a position where you can be close to your customer, you can adopt your services to national needs, which is very difficult for a G to do. So, as soon as you have your whole registration, or sales process, or whatever you want to call it, if you have that in

order, then it becomes easier to regain your position and to become the top-of-mind TLD as a CC in your country if you adopt your services and the value that you add specifically to your local Internet community.

BIYI OLADIPO: Thank you, Roelof. Anil?

ANIL KUMAR JAIN: Thank you. First of all, I want to comment that keeping the ccTLD relevance is not only a requirement for a small ccTLD or a middle-level ccTLD but I personally feel of all ccTLDs, whether it is big, or small, or medium. This is number one.

Number two, when a person is selecting a ccTLD, whether it is ... Sorry, selecting a domain, whether it is ccTLD or gTLDs, they look at two or three aspect. Number one, how easily it is available, the desired domain name. Number two, the services which are being given by those particular domain operators. Number three, what is the price of this.

And fourth and most important is how much content we are able to get from those relevant ccTLDs. And finally, these days most impact is the data security, which is impacting everybody and is a concern with everybody. I personally feel that every ccTLD has to take care of these aspects.

As far as India is concerned, as I said, most of the government department has already adopted .in ccTLD as their preferred domain and they are putting on their website all the services of the government.

So basically, consumption of G2C information is very important for every citizen of the world.

So, it has automatically become a preferred one. I want to tell that, now, .in is closing the gap with .com and, hopefully, in one month or two months, we may cross the adoption of .in as the dominant adoption in India. That is why I said that we are growing almost 16-20% year after year. There was a big jump in COVID also, and we hope that we should be able to give satisfactory services to all of our users. Thank you.

BIYI OLADIPO: Thank you, Anil. Actually, see Leonid peeped into my notes because I actually penned this particular question down that I was going to ask in case nobody asked it. So, as a follow-on to this—and I would like to hear from Olaf as someone who is, should I say, independent as far as ccTLDs are concerned—not only are ccTLDs having competition from gTLDs like Roelof and Frederico had mentioned earlier but we also have competition from applications, and social media apps, and all of that, which today are not just for communication but are also for commerce. So, what do you think CCs can do to ensure that they keep their focus in going into the future?

OLAF KOLKMAN: Good question. The reason why it's a good question is that I was a little bit surprised to see that thread underrepresented in the first hour. Because if you look at future then one of the big questions that I would have is, what is the relevance of a domain name in the future? And I

think the judge is still out. But if you, to take my theme from the keynote, look at the death by 1,000 cuts then we already saw a number of cuts.

One of the things that crossed my mind when we were talking about that earlier is, for instance, a service like Slack, a messaging service. That took over the whole market because, essentially, it offers what people want. It's an easy platform to do corporate communication, and talk to your buddies, and maintain threads, and so on and so forth.

But it killed off something that was decentralized and independent called Jabber, based on open standards and so on and so forth. Somewhere, that community, the Jabber community, missed the boat. I don't know why that was. The products that were available basically died, were not well-maintained, were not well-funded. There was no corporate—open-source—interest behind it.

So, they disappeared. Jabber is just one of these things where you can have the personal identify [coupled] to a domain name and make it all very [personal]. I have, for myself, a Jabber name that I have been carrying around for years and it didn't change when I moved jobs, and so on and so forth. I think that's a nice feature to have. But Slack won. Slack won in the market.

Why? Well, ease of use. They offered what the consumers wanted. I'm not quite sure if the ccTLDs can make a difference, here. But organizing development groups, sponsoring start-ups that offer these types of

products that are based on the decentralized nature of domain names might be an interesting counter-balance to the big ones.

But it's very hard to compete at this stage because all these things, Slack, Twitter, Facebook, the messaging apps, all have their own identifiers and they have a network, now. So, you have to cope with the network effect. You have to fight that, now. And so, I think that is a cut that has been made, like maybe five to ten years ago. I'm not quite sure. And the effect of that is that you cannot easily go back to a system like that.

So, I'm not quite sure if that answers the question but it's sort of, looking out, does that domain name remain important? That is, I think, the [inaudible] question. Or will it be lost in a gazillion of other identifiers that we all used on a daily basis? A Slack identity, a Twitter identity, my phone number for all kinds of chat services, LinkedIn. You name it, it's there.

ANIL KUMAR JAIN: Thanks, Olaf.

BIYI OLADIPO:I have Roelof's hand up first, so I'll take Roelof and then I can take the
thoughts from Anil and go to the next question. Thank you. Yes, Roelof.

ROELOF MEIJER:Thank you, Biyi. Well, this is one of my popular subjects. When I joinedSIDN 15 years ago I said, "Listen, I don't believe in companies that doone thing and they do it very well and they think this will last forever."So, we will go and diversify because, otherwise, there will be one daydomains are no longer relevant and we will just be there and have toshut down everything, and close the door, and go home.

15 years later, that still hasn't happened. Yes, we lost most of the private individual markets. I think in 2008, about 30% of the registered domains on the .nl were owned by private individuals. That has really changed. They are on Facebook. They don't have their website where they publish their, maybe, photographs or their holiday stories, etc. They do that on Facebook.

But if you look at commercial use, not much has changed. We saw, I think, the signals that it was possibly going to change when, suddenly, a lot of advertisements and things that we bought had follow us on Twitter, look us up on Facebook, and then, somewhere, a very small script, WW-whatever-dot-TLD-whatever, indicating that the value of domains and of websites was going to be going down but it hasn't happened.

And I think we have seen that during this whole pandemic, also, that, in the end, companies use websites to sell their stuff. Small companies, big companies. Yes, there are a few that use other means but most of them use website. And I think that is also ...

One thing I forgot to mention when we were talking about "what can you do what when you're a CC?" I think one of the best things you can do when you're a CC is make it very safe for the user—as safe as you can. Fight abuse. Do everything. Hunt for fake webshops. Because once consumers in your own country have more faith in the ccTLD than any gTLD, their demand will push e-commerce parties to register their shops, their companies, under the CC, and they will start selling.

That's the kind of snowball that makes itself bigger all the time. We witnessed it with .nl. Of course, there is also the advantage that it's regulated in the Netherlands. There is Dutch legislation applicable to the CC that also gives Dutch people more faith in whatever if something goes wrong, "I can reclaim what I paid," or something like that.

But that combination, I think, is valuable. But still, I think one day the failure of domains will be replaced by something better adopted and maybe [thought] up from the beginning for the use that we use domain names for now. But so far, there has been a lot of rumors, a lot of speculation, and it hasn't happened. I don't think, to be honest, it will happen in the next ten years.

OLAF KOLKMAN:

Before your retirement.

BIYI OLADIPO: Well, Roelof, we're in a very dynamic environment and the industry is actually moving quite fast. I don't know. Like Olaf said, maybe before your retirement we might see.

ROELOF MEIJER: Well the thing is that, if you look at fast-moving technical environments then the lifespan of most inventions is pretty short. I think the best example that proves the opposite is railways but, for the rest, things change, especially if they were originally designed for something else. Domain names were not [thought out] for the use that we use them for now. But still, I mean ...

OLAF KOLKMAN: Yeah, they have a fairly long lifespan in the Internet. I would actually use the printing press instead of the railways, but anyway.

ROELOF MEIJER: Printing press? You mean you still have a printed newspaper, Olaf?

OLAF KOLKMAN: Oh, yes.

BIYI OLADIPO: Before we get into the printing press, let's hear from Anil.

ANIL KUMAR JAIN: Thank you. In fact, this particular question I raised when I presented the [PPT], giving the changes in the economic landscape and [it has hit some] with social media. But I personally feel that all these social media platforms are one too many. It means that, whether we are giving news or we are giving photographs or videos, we are giving to the entire community which are connected with us.

> Whereas if you see the use of ccTLD or gTLDs, they are basically for websites and e-mails and they are still with the commercial use, whether it is websites or e-mail. Therefore, I personally feel right now there is no conflict. Yes, tomorrow, when new gTLD ... No, let us look at other part, also. As I said, ccTLD is growing at a rate of around 16/20%.

> We are also able to see that around 1,500 new gTLDs have applied and ICANN is working on it. With that, the future of gTLDs and ccTLDs is still very, very bright. People are adopting the TLDs. I personally feel that there is no conflict.

> In fact, in India, we see the adoption of Facebook is the second-largest in the world. Adoption of WhatsAPp is the largest in the world. Still, the growth of gTLD and ccTLD is very high. So, I personally feel that you have to keep the ccTLD and gTLD more relevant to the people.

> The data should be secured. They should feel that it is useful for promotion of their commerce, the commercial requirement as well as their legal requirement. I personally feel that when Roelof will be retiring we may not see the eclipse of ccTLDs or gTLDs. Still, they will be on the growth path and very relevant to the Internet world. Thank you.

BIYI OLADIPO:I hope there is no conspiracy to get Roelof to retire early. All right.Frederico, I saw your comment and you said, for URL-based
identification services, redirection services is still an option to keep
domain names as an [indirection] service under your control, which I
think is something that everyone has alluded to as we went on. All right.

Now, the next question came from [Abdullah Samil Aksham]. Sorry if I'm not pronouncing the name well but I think I'm trying. He says, "Are governments threats or opportunities to the future of ccTLDs?" I know that, over the last few years, there have been a few ccTLDs that have been taken over by governments which are now running them directly.

However, are these opportunities? This question is saying that these opportunities ... Or are they threats to the future of the ccTLD? Where do we start from? We start from Olaf, and then we'll go Roelof, Anil, and then Frederico. Olaf?

OLAD KOLKMAN: Yeah, I'm going to pass this one. I feel this is ... I don't have an answer. I don't often say that but ...

BIYI OLADIPO: So, let's have Roelof. Thanks, Roelof.

ROELOF MEIJER: So, I have to do my confession twice. I was just saying I was following the chat so I didn't hear your question. Okay, okay. The question is, are governments threats or opportunities **BIYI OLADIPO:** to the future of ccTLDs? Ha. Well, that's a ... I think they are both. So, it depends on ... Well, of **ROELOF MEIJER:** course it depends on the nature of your government and it depends very much, in essence, on the nature of your collaboration with your government. But, for instance, looking at it from the European perspective, there are CCs in Europe that are very heavily regulated, or sometimes even run by, the government. They are healthy but, in most cases, they are relatively small. Their market share is under 50% in many cases and it's because the regulation is aimed at fighting abuse starting from the idea that domain names are also a scarce good. So, they are successful and the government thinks that everything is under control but the Gs have the largest market share, and they're not regulated, and all the abuse is taking place there. So, it's also kind of a ... It looks safe but it's not safer than any other country where the CC is the largest unregulated and is not fighting any abuse. So, governments have a big influence if they regulate or if they intervene, and by lack of self-regulation ... So, they can make it and

they can break it. It's difficult to choose. They are not a guarantee for success but, if you have a good collaboration with your government, they can definitely contribute to the success of the CC.

BIYI OLADIPO: Thank you, Olaf. Anil?

ANIL KUMAR JAIN: Thank you. I personally feel that the government is a big opportunity for ccTLDs and IDN TLDs for growth, the reason being more than 50% of the GDP of any country is contributed by government and government can provide a platform where most of the department, whether it is federal state government or central government, adopt the ccTLD [and work it].

Second, about [inaudible] for adoption of Internet by the total community is required that we should have Internet in local languages because, most of the people, they understand local languages and they get it. So, government is very influential in developing the Internet content and the priorities/applications in local Internet.

I just give an example. We have more than 600,000 villages in the country and now government has put that around 100,000 villages should be digitized. In all those digital villages, government is providing now e-mail to every villager and that e-mail is done with the local content in local language. So, this is only possible with the intervention of the government. I personally feel, even with the new gTLDs which are coming, which may have a lot of geo-TLDs also covered in that particular group, government intervention and government influence will be quite useful. But at the same time, somebody can look whether government is controlling and regulating the entire development of ccTLD/gTLD.

I personally feel I agree with what other panelists are saying: it depends on government to government. As far as the Indian government is concerned, I also know that nearby governments in the Asia-Pacific regions are very, very liberal and they are for development of Internet, for development of ccTLD. I personally welcome the role of government in development of ccTLDs and gTLDs. Thank you.

FREDERICO NEVES: Definitely. Yep, definitely [inaudible].

BIYI OLADIPO: Yes, Frederico, any thoughts?

FREDERICO NEVES: Oh. So, definitely government is a good opportunity to grow a ccTLD but, depending on the country, it's obviously ... When you say "government," it's something very opaque because, in some cases, it's a very big thing.

> It could be the executive branch that is trying to push it in one direction or the other, or the legislative branch. It's tricky. But I think it's definitely

an opportunity and it's only a threat if you don't listen to your government, and especially if you don't listen to your customers, especially your local customers. If you don't have happy local customers, definitely, the government will be a threat to you.

BIYI OLADIPO: Thank you.

OLAF KOLKMAN: See, I'm tempted by Leonid, who says, "If you're silent, you speak," which might be misunderstood. So, look. This all depends on the policies, of course. If both your government and the ccTLDs want to be good stewards for the Internet and local Internet community then there are ... You can win. You can partner and you can win.

> If one of the two doesn't want to be a good steward for the Internet, or the local Internet community, or the customers, or what have you, then the conversation turns around and it becomes much more difficult.

> As Frederico says, one arm of the government might be completely not Internet-friendly and have policies that break things that are valuable to your customers. Another arm of the government might say, "We don't agree with the other arm, with the policy, and it's up to you to sort it all out," even though governments are supposed to talk with one voice, but you all know how well that works sometimes. So yeah, it depends, again, on the local circumstances.

BIYI OLADIPO: Thank you, Olaf. I also think that this is highly local, depending on where we're looking at it from, and I see a comment here by Bruce. Bruce Tonkin says, "While some governments work closely with their ccTLD registries, I think the shift may start to look at hosting companies, DNS operators, and registrars that operate services in their countries with respect to DNS abuse.

> For example, the current critical infrastructure legislation in Australia goes broader than just the .au registry operator but can also pick up gTLDs operating in Australia, for example .sydney and .melbourne, and large registrars with people and physical systems operating in Australia."

> So, that's what I see: depending on what the government is looking at and what's important to them, the operations of the ccTLD could be encouraged or could be hampered. Right. Thank you so much. We have a comment from Pablo.

> He says, "I believe that Anil's effort in promoting the adoption of IDNs both locally and regionally embodies the spirit and purpose of managing a ccTLD. Roelof's comments of remaining proactive and vigilant, and Frederico's recommendation to get involved and [inaudible] are excellent examples of best practices for any ccTLDs."

> Now, this goes a long way to say, even if you look at what the government, for the ccTLD to remain relevant for now and in the future, then there has to be a value that the ccTLD provides to the local



community and, of course, to the regional community. Thank you so much.

I have a question here from Stephen, and this is directed at Olaf. He says, "Olaf, I would like to explore your 'Death by a Thousand Cuts' idea. As you pointed out in your presentation, The US Government is, or at least was under the prior administration, attempting to ban TikTok from the US. And as you rightly pointed out, to do so involves enforced routing restrictions. My question is this: Would you consider proposed anti-trust efforts against the likes of Facebook, Google, and others, that will perhaps break them up, and efforts also underway in the EU and (possibly the US) to reign-in their data gathering in the interest of Internet users' privacy, to fit in your model, or are you really just focused on the network of networks? Thank you."

OLAF KOLKMAN: Well, the breaking up of companies is clearly something that takes place in a completely different regulatory field. It has happened before. It has happened to automobile companies. It has happened to telephone companies. It is a thing that has happened before. The reason why we developed/were looking at the Internet Impact Assessment toolkit is to actually understand whether that sort of proposal would make an impact on the Internet infrastructure.

> Well, in this case, I think it's clear—as you rightfully say—there is probably no way in that an anti-competition measure/regulation like breaking up a big company would impact the Internet, as such. It's

probably wise to peel off a couple of layers, there, if you think about building blocks and how others might be dependent on the building blocks that some of these companies provide.

So, there is some peeling and some thinking to do along those lines, if you look at it carefully, which might bring you to certain types of advice on implementation, and so on and so forth. But again, the critical properties are really about that core Internet technology.

I also said at the end of the presentation that we don't think that the Internet Assessment toolkit that we have now is sufficient. It's grape juice—it's not yet wine. So, one of the things that's we're sort of exploring is looking at goals that you could set for the Internet, like the ones that we use in the Internet Society are open, global, secure, and trustworthy.

And once you start to look at those objectives, then you can think about what enables those objectives. That's work that we're doing now. And then, you enter into a somewhat broader layer of the debate. You're not talking only about the true, technical infrastructure but also some of the processes and things around that that build on top of that. I still don't think that you will get all the way to a competitive behavior, although you never know. Trustworthiness. We haven't done that analysis yet. I hope that answers the question.

BIYI OLADIPO: Well, the question was asked by Stephen. Stephen, I hope that answered the question.



STEPHEN DEERHAKE: It does, thank you. Thank you, Olaf.

BIYI OLADIPO: All right, excellent. I have a question. During the presentation, Frederico, you did mention that there is a collaboration between the .br registry and the Internet Exchange Point. Now, I would like us to explore this ... I don't want to call it "bilateral." This multi-lateral relationship between a ccTLD, the Exchange Point, the ISPs, and the Network Operators within the environment. So, how do we harness this for the future of the ccTLDs? I'm of the opinion that there is a relationship that exists but the question is, what sort of relationships exists and how can this help one and the other? So, I'll start with Frederico and then go Anil, Roelof, and I'll end up with Olaf.

FREDERICO NEVES: Perhaps I was not clear in my presentation but we basically run those Exchange Points here in the country. We have 30-plus of them and we have, in the beginning, funded the operation of those exchanges with the money from the registry. But for the large ones, especially San Paulo, and Rio de Janeiro, and in, probably, still, this year, Fortaleza, for the ones that have reached at least one terabyte of traffic, for those ones, we are running them as a cost-recovery basis.

> So, members of the exchange pay for the ports on a cost-recovery basis. But most of the large exchanges in the world are not-for-profit

organizations. And so, basically, we are following this model, as well. But especially talking about this relationship of ccTLD and the exchange point here in our region, we have other experiences, as well, in Costa Rica and in other parts of the region.

But I think it's a cooperation and operation that could be very good, but not only in the sense of the strength of the network but, as I said, in trying to promote this independence of the operators in the region and to [restrain] the network as a whole with this. I don't know if I answered your ... Anyway, I just thought ... Yeah.

BIYI OLADIPO:Oh, yeah, you did address the issue. Thank you. Before I go to Anil, if you
want to make a comment or if you want to have a question, please, you
can raise up your hands and then we will call you to do that. Yes, Anil.

ANIL KUMAR JAIN: Thank you, Biyi, for giving me this opportunity. Let's see. National Internet Exchange of India is also a combination of Internet Exchange, ccTLD, and also the National Internet Registry, which provides Internet protocols/addresses to the country.

> Now, it is very interesting, the way we are also a trust, which is a noprofit, no-loss trust and we don't make any profit. Whatever money we get as a surplus, we invest in the development of Internet community and digital economy in the country.

Right now, we have nine Internet Exchanges spread over the country, all over the country. We were the first who started Internet Exchanges in 2003, way back. I'll just give you ... Very interesting how the cooperation between them is there. My board is having 17 board members, out of which ten are from the government and seven are from the private.

These private board members are basically ISPs, data centers, and content delivery networks who are members of [inaudible]. They are getting the information and putting on on a regular basis. And now, how the cooperation is happening. I'll just tell you most of the ISPs which are members with us are also registrars of ccTLDs with NIXI.

So, they are promoting and bundling the ccTLD with their broadband users on a regular basis. They are the people who suggest about the various security measures which ccTLDs should adopt. They are the people who also find the market for ccTLDs and also suggest the [correcting measures] which ccTLD takes along with the government.

So, it is a wonderful cooperation which is happening between private and government, between ISPs, the data centers, the content delivery networks, ccTLDs, and also the affiliates who are [over] members for IPv4 and IPv6. So, a wonderful cooperation and a [very neat] group which is operating in India. Thank you, Biyi, for this.

BIYI OLADIPO:

Thank you, Anil. Roelof?

ROELOF MEIJER:Yup. Thank you. Well I think, in general, for all larger parties involved in
the Internet sector in a country, it's important that they collaborate also
to get a good collaborative with the government. It's important that the
industry, as much as possible, has one voice, and not multiple voices all
saying something else and wanting something else.

So already, for that, it's good that you align and collaborate. I get the impression that Latin America is the best example of this with what Frederico just told us, and I know that Mexico ... That these institutions are even hosted together in the same place, which makes ... Although we all work in the Internet, it sounds like a contradiction, but we collaborate better if we are actually housed close together. But by the Netherlands is a bit different.

We have one of the largest Exchange Points in the world, AMS-IX, and they are as old as SIDN is or older, even, I think. So, we collaborate in research and in various other things but we are independent from each other, the same [inaudible], our educational network provider, also a very large global player. All of these have their own positions and that's good, I think. But we know where to find each other and, if necessary, it brings profits—not in a material sense but in a value sense. We collaborate well together.

BIYI OLADIPO:

Right, excellent. Thank you. Olaf, any thoughts?

OLAF KOLKMAN: As soon as I find the unmute button, yes. There is something that Frederico said in the beginning. If I recall well, he said something like, "We became involved because we were the neutral trusted party." That's something that is very important. It's something that we, the Internet Society, have seen. We're quite active with stimulating IXPs in the global scene.

> Something that is important is that management of IXPs are neutral parties. Otherwise, things don't come together. Sometimes, there is distrust against the state and you need somebody who is not a part of state to set it up. You need to be at least at arm's length. Sometimes, there is good collaboration.

> Again, different from place to place. What is very important is that a good IX will cluster entrepreneurs/networks in one place and, in the first place, build resiliency in the network traffic. Secondly, attract economic activity. Thirdly, reduces the amount of traffic out of countries, which is very important when transit is expensive, which is often the case in developing nations.

> So, having IXPs is an incredibly important piece to get people connected in your country and to create a local Internet scene. Again, it depends on the CC whether they're the trusted party and can take up that role, whether they sponsor or take other types of roles. That's really a local thing. I think it's very important for CCs to have complex

[richer] local community and the IXs are good places to get in touch with your people.

BIYI OLADIPO: All right. Thank you. Beautiful answers to this. This just shows the importance of relationship between the Exchange Points and the ccTLDs. I've always been of the opinion that both should reside together like Frederico had said earlier. The answers that we have gotten actually show that it is a very close relationship between them. Thank you.

One question that I'm going to ask is, we're discussing ccTLDs and the future. So my question is, so many CCs saw growth during this period, the pandemic period, that we're in. My question is, how sustainable is this going forward into the future? Yes, there has been growth.

Anil had given us some figures of tremendous growth in the .in and all the other registries that he manages. However, we experience that in .ng and I'm sure a lot of the other people also experience that. So the question is, can we sustain this? How would it be, post-COVID and going forward? Who is taking the first shot? Yes, Frederico. I saw Roelof smiling so, Roelof, you go next, and then we will see. We would hear from Anil and Olaf can give us an independent opinion.

FREDERICO NEVES:Definitely, we saw tremendous growth in 2020 and we grew more than
the previous three years together. And so, it was definitely very good for

EN

the operation. But unfortunately, we are concerned that the big number of, especially, small businesses that are closing will not renew domain names in the coming years. So, we have a very big concern that we will have difficult times ahead of us, especially because of the small businesses that are, basically, closing.

BIYI OLADIPO: Thank you. Olaf?

OLAF KOLKMAN: Yep. So, [Byron], by the way, [inaudible] helps, indeed. But some points. First of all, if I look at our growth in 2020, most of it was—our exceptional growth—driven by enterprises not yet selling online starting to sell online. Some of those, I think, will revert back to offline, but most of them will stay there. So, that's sustainable.

On the other hand, I said in my introduction, also, I think there is a [fair] chance that we will go into a recession, bigger or smaller. All the money we have spent now on keeping everything alive will, in the end, have to be paid, and that won't come by itself.

And there is enough proof that, if we have recessions, domain name sales slow down. There is less marketing, less new companies. There is less money. So, that will happen. I don't think it will bring everything back to pre-2020 but we guess that it will have an effect.

But in general, also, I think we have to take into account that, if your market doesn't grow but your growth increases, this will mean that you

EN

will reach saturation earlier. So, the steep growth is not sustainable in a country where you don't get more and more companies that go online, etc. Once that is done then your growth will slow down, just because you kind of overtook a few years, and there will be something like payback time.

So, in this sense, it will not be sustainable. But I'm not really afraid that many companies that started to sell their stuff online—be it restaurants, be it yoga classes—will all go back to offline. But some of them will, but I think that we are now used to it and the demand will stay, so the offer will stay, as well.

BIYI OLADIPO: All right, thank you. Anil?

ANIL KUMAR JAIN: I have a different view of what my fellow panelists have said. The growth which we are seeing during the pandemic, I personally feel, is a phenomenal growth because the digitization of countries started in 2015 with the program called "Digital India." But we were anticipating that the digitization will take decades to come to the level.

> But during the pandemic, we have seen an 80-years-plus illiterate woman talking on a Zoom to their loved ones, and discussing, and [undertaking] how you are you are, and what you people are doing, and all those things, which was unthinkable previously. A class-first or class-

second student is taking classes from their teacher online using a smartphone, which was really unthinkable.

And then, we have seen a lot of organizations have adopted work from home, and in fact their efficiency has gone up. Now, a lot of companies have already declared that the work-from-home is going to be a sustained, new method of working of the businesses and they expect a lot of cost-saving and improvement in their efficiency.

We expect in India that there is a potential of around 100 million ccTLDs. We are still around six million total ccTLD plus gTLD, so there is a big gap which we have to achieve and which we have to give. Another thing which I want to inform all panelists is that world economic management consultants have predicted a growth of 12% GDP in India, which is going to be the fastest growth in economy in the world.

Now, we had a contraction of around 27% during the pandemic. We are already positive in the first two or three months after lockdown and we are growing very, very fast. I hope that we will be back on the pre-COVID [period] maybe in the next three months.

So, virtually, in India—and this I can say in nearby countries, also, in Asia-Pacific, including China, including Sri Lanka, and all these countries—the growth is very promising. So, we feel that this is going to be sustained and now the era has come when we are converting over life to the digital life, and this will continue, and it is a bright future for all ccTLDs and gTLDs to come. Thank you. BIYI OLADIPO:All right, thank you. Olaf, just very quickly. We need to wrap this up
shortly. We [inaudible] time.

OLAF KOLKMAN: So, I was about to say this is not ... The market analysis of the ccTLD world, that is not exactly a topic that I am specialized in, but I do observe and I have to say I listened with great awe to what Anil just described, the phenomenal growth in India and the growth potential, and contrasting that to [Roelof's] story about an almost saturated Dutch market. Clearly, again, this seems to be a reoccurring theme. Clearly, different local circumstances ... That's the only observation that I have in this one.

BIYI OLADIPO: All right. Thank you so much, everyone. I think it has been an engaging session and the questions have been really, really interesting and stimulating. So, I'll hand over to Sean to close the meeting. Thank you.

SEAN COPELAND: Sure. Thank you so much, Biyi, for moderating today. And again, the questions that were coming in from people were really, really good. I'd also like to thank Olaf, Anil, Roelof, and Frederico for their presentations today. They were very engaging.

I'd also like to thank the incredible work done by our staff here at ICANN: Kimberly, Joke, Bart, Kathy, [Melissa], [Suzy], and any other person that I have forgotten. If you're interested in customer

experience, stakeholder cooperation, overlap with governments, IDN, and all these things, step up, be involved tomorrow morning at two o'clock UTC tomorrow. The IGCL is getting together. By all means, come up and join in. So, thank you so much, everyone, for your participation today. Good night.

BIYI OLADIPO: Thank you, Sean.

KIMBERLY CARLSON:

Stop the recording.

[END OF TRANSCRIPTION]