BUENOS AIRES – IETF Buenos Aires 2016
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CHRISTIAN O'FLAHERTY: Good morning. Hello, everyone. This is going to be a Spanish-speaking session, but there's simultaneous translation. So for those of you that do not understand Spanish, I encourage you to get the headphones that have [inaudible]. That's why we are a little bit delayed. We'll start in like five minutes. Get your headphones.

This will be a session in Spanish, so if you don't speak Spanish, please get your headphones. There will be closing remarks by the head in English, however.

Good morning. This will be a session in Spanish, as I was saying. The purpose of this session is to show the relevance of IETF, the need to disseminate it more widely in this region, and try to work all so that the 2016 meeting of the IETF in Buenos Aires has a lot of active involvement of the engineers in our region.

So we put together a panel with people experienced in the IETF. We want them to share their experiences and origins for us to explore the most suitable dissemination mechanisms to get more people in their mailing list, in the work groups, and to be active as from now.

Is the translation working? Would you please give a thumbs up? Thank you, sir. Thank you, gentlemen. I saw some funny faces and I thought, "Oh, they're not getting the message."

Before jumping onto the questions to the panelists, I'm going to ask a number of questions for those who are not yet active in the IETF. More panelists are joining us.

IETF, the Internet Engineering Task Force, that coordinates all the RFCs, the documents we work with, to define how applications use Internet, the protocols used by the hardware connected to it, and the things that need to be agreed for the Net to work properly.

The Internet Engineering Task Force produces documents agreed by the community, discussed through mailing lists mostly, and which are coordinated and organized by this group of engineers that is not a formal association. It's a group of engineers interested in working for the Internet. Members are involved as individuals and their propositions are individual via mailing lists, mostly.

Three meetings a year are held, and that is what we want to work on: the first meeting in Latin America of the IETF. This is the second meeting out of 95 in the Southern Hemisphere. The first one was in Australia in year 2000. So this is a milestone for the region and the IETF.

As I said, the purpose is to exchange experiences and get to know what things work and proved valuable for those who are active in the IETF because they are actively involved, and to discuss among the members of the group how we can get better involvement in the region.

We are quite interested in knowing what ideas you have, what things can be done to get more people involved and have successful meetings.

Carlos Martinez for [inaudible] is with us. He is an active participant. He's also very involved in dissemination activities. He works a lot in his meetings and in his actions to promote IETF in the region.

Gustavo Lozano from ICANN. IETF and ICANN have a lot of interaction. Many activities intersect, and that cooperation is reflected in the works of the two organizations and the actions of the employees in the IETF. Gustavo was quite active as a member of our region because he was working at Mexico. So we are very interested in his experiences at the beginning.

Demi Getschko. Carlos is from Uruguay, Gustavo from Mexico, Demi is from Brazil. He's a pioneer in the region and also in the IETF. He has valuable experiences as to the informal beginnings of IETF at the beginning of the '90s, and I believe that all this will prove very interesting.

NIC.br is also interested in the dissemination of IETF actions, the Brazil ccTLD, .br, and the manager committee of Brazil, where Demi is involved, is quite involved also in the IETF, and they are engaged in lots of actions that we can learn from and implement in other countries. So we would like to see what things you can use in your countries and what things we can achieve from other efforts of the countries to promote this.

NIC.br is quite generous. These books that we are sharing have been funded by NIC.br. You can get in touch with the NIC and ICANN people and agree what actions can be implemented in your own countries and the help you can get from these organizations.

From Argentina, Gustavo Mercado. He is with a university. He comes from the province of Mendoza by the Andes, but they are involved in activities throughout the country, mostly in the academia to disseminate IETF.

We will discuss the activities planned; if you are from Argentina, how you can cooperate; which ones are interesting to be implemented in your countries if you are not from Argentina; and Gustavo can tell us about the involvement of the researchers at the university groups that are already active in the IETF and are involved in work teams.

He is from the Diego Portales from Chile. He's working quite actively in the work groups, the origin, and his involvement up to now are quite relevant, and we will learn things that are important to be implemented in different countries as well.

These activities we're engaged in have been coordinated with the LACNOG that is called IETF-LAC, coordinated by Alvaro Retana. He is from Costa Rica. He lives in Costa Rica. He was working a lot in the dissemination of the IETF in the region.

He started chairing a work group. Now he is part of the leadership group of the IETF, and he is helping a lot in this dissemination effort.

He should be here now, moderating and coordinating, but he had to go.

The LAC IETF helps those interested in participating in the IETF. If you are interested or know professional engineer people who may be interested or you have research people that can benefit from the IETF, this group led by Alvaro is the best contact point.

There is a Spanish mailing list. It is easy to become part of that. It is a simpler way to join in this mailing list. This is IETF-LAC@LACNOG.org. It's open, in Spanish, informal. They call before their IETF meetings to set the agenda. It is a good thing to become part of that list and disseminate it if you want to be part of this.

We want this to be an interactive session, so apart from telling the panelists' experiences, if you have any propositions, proposals, or questions, there is a roving mic around. Feel free to ask, to give your opinion. And I would like to know what other things can be done, so please suggest if you have any suggestions.

I'm not going to make you bored more than I have. We would like to start talking about some cases and the first experiences, and the best way to start perhaps is by telling each of us how active you are in the IETF, why you are part of the working groups, and then tell us how you started.

Carlos, if you would like to take the floor.

CARLOS MARTINEZ: Thank you, Christian. I see many faces I know, but still I'll introduce myself. My name is Carlos Martinez. I'm LACNIC technology manager right now. Especially in my area of work, IETF is like the technology guidebook for many of the things we do, from registration operations to things such as the new registry information transport protocol.

Many of you must have been involved in WHOIS IP addresses, WHOIS200.something.something. You will be able to use a more modern and suitable interface that has just been standardized. This was completed a couple of weeks ago.

In my case, I feel this really close to me because it was the first time that I was involved from the first discussions to the closure with the standards produced.

The other area of interest, especially for LACNIC, is safe routing, what we are working. Those who have gone to LACNIC must have heard about this reliable database with registry and routing information so that routers can validate routes. This is a standardization process that is important and will become more and more important. We consider it valuable and we are part of it.

Going back to the beginning, such as Christian said, my beginnings – and I told this on Friday; I hope I don't make you bored – come from a frustration that I had 20 years ago when I was a student. Even when I worked at a telco in Uruguay, I was measuring lines for digital links according to ITU and a 1020 standard. Neither myself nor my heads had seen this standard before. There was a device where you set up M.1020, and it worked.

So I asked whether I could read the standard, and someone said, "No, because you have to buy the PDF. You have to pay for it." It's a really dark process in my eyes at that time.

Sometime after I started working with the Internet, and I asked something like that. "What's this thing about IP? Is it written somewhere?" My new boss said, "Yes. There is a text file you can download from an FTP." "And you don't have to pay for that?" "No. You can just download it," he said.

It was revealing. Years after, through some deceit, I managed to get my boss to pay the Dallas IETF. It was called the [inaudible] IETF. After that, there was a big pause. In 2010, I started with Maastricht IETF, and after that, I just lost a couple. I continue to see IETFs with great enthusiasm.

CHRISTIAN O'FLAHERTY: We will ask questions. You can interrupt any time. I will start by asking. You were saying about some work groups. For you to have an idea of the size of these work groups, even when there are over 1000 people in these work groups, in these two work groups, how many people are there?

CARLOS MARTINEZ: [inaudible] I would say it was between 30 and 40 people in discussions with different degrees of activities. There's a relatively small group of people discussing a lot. Then there's a long queue of people that is involved, but not as actively, whereas it was a bit smaller, perhaps, but

with a higher level of activity. Besides that, I can see that discussions are monopolized in a group, whereas it was a bit plainer, meaning that everybody was on equal footing and gave their opinion.

The purpose of this group is to make BGP cipher more reliable. That is why perhaps there's more interest in this group. But the number of people involved in the other group is more or less the same. I think it's a typical size. That's a typical size.

There are others that are huge and there are others that are small.

CHRISTIAN O'FLAHERTY: Is that something important when you disseminate IETF and you talk about it? There is some degree of fear, thinking that these thousands of engineers involved in IETF have much more knowledge and experience. Many people are involved and it's hard to join in.

CARLOS MARTINEZ: The truth is, when you go to the work group, the groups are small and people know each other. You start participating and sending e-mails, and you become known. That reputation that you build is what gets you in. 30-40 people. It's a group of people where you can easily identify each of them.

CHRISTIAN O'FLAHERTY: Let's go to Gustavo. As Gustavo says, he's in the United States because he works in ICANN, but he is from Mexico originally. Please tell us how you are participating, and tell us about your origins at the IETF.

GUSTAVO LOZANO: I am Gustavo Lozano. As Chris said, I work with ICANN. I am mostly involved in work groups involved in the EPP protocol because our contact with registries continues. I have some drafts in the work of our work group, and we're trying to make them standards, such as RFCs. We have been told that they have to be RFCs because at the end of the day, the community is using them.

About my origins in IETF, it's similar to what Carlos went through. I had just graduated from the university. I started working with NIC Mexico, the ccTLD operator for Mexico. I remember that my projects were basically upgrading structures, servers, and all.

My boss told me, "Read this book about items and goods." The book talked about RFCs a lot. So I started to download them from an FTP, started reading them, and it was my first exposure to RFCs, the product of the work of IETF.

Some months later, my boss told me, "Your project is doing well. Now you have to go to IETF to see what's going on with this DNS protocol, and we need to do it in the future." So I said, "I have so much work." I didn't like the idea of having to leave everything behind and go to IETF. I remember it was a meeting in London.

At the beginning, it was so frustrating, because I said, "Why so much discussion? Let's go to the conclusion and implement and stop it." At the end of the meeting, however, I realized that standards are some serious stuff, things that need to be reviewed from different

standpoints. In my eyes, IETF is the summation of many brains, of lots of history, of lots of experience, and those standards basically have that, that summation of experiences and knowledge of many generations.

That's my story.

CHRISTIAN O'FLAHERTY: Thank you, Gustavo. One difference between other regions and Latin America is that when they started, they had to come to the IETF, and there was nobody around them who was already active on the IETF. I believe that is a barrier, and it is going to be an important change, in my opinion, after the Buenos Aires meeting next year in Argentina and throughout the region.

When other people have already participated know the leads and know the mechanism, and the new engineer comes up who wants to work on some topic in some work group, if they have a colleague that has already had the experience, it's going to be a lot easier to take those first steps.

For them who were the pioneers in the region, those first steps were more risky. If we manage to disclose in this next month a lot of knowledge about the IETF, those engineers that are coming now in the lunch breaks will have talks related to IETF with people who are already experienced in the topic. I think we will see the effect of this next year.

We are now going to Diego. We're turning the floor to Diego, who is a recent acquisition to the IETF. It's interesting to see how he started.

Excuse me. Diego, can you tell us in which group you are part?

DIEGO: Good morning. I'm [inaudible]. I am currently working at the Diego Portales University, Chile. On this, started two years ago, IETF. I knew it from before. To me it was something far away. Investigating a protocol that [inaudible] was something important already, and the protocol was something that was done by people who were really far away who decided on things because they had to be like that.

I started wondering whether it could be different. One of my hobbies has been designing protocols with my own standard. With time, I started investigating, but I never had the chance or the resources to attend one of the meetings and participate directly and understand what it was all about, until my work as a researcher in the Internet of Things took me to contacting other researchers who were working on the area.

They told me, "I'm working for a company at the moment. Why don't you come help us with the protocol design?" "Hey. Can I do it?" "Yes. And we would need some membership to belong to somebody who's in there."

"Do I need to be a delegate of the company?" "No. You can come in person." So I started doing it. I started wondering at this group that was being created, which was a [inaudible] group, how I could

collaborate, what I could do, and how I could generate a contribution or something different.

I started working on a draft that year. Now we are in version 5. We're working on version 6 of the draft. We are about to embark on the standardization line, the final discussion, luckily.

And I'm working on a new draft now for another of the groups that's about to be created, [inaudible] in Prague. It's in a BoF at the moment, which is a previous meeting to the creation of the group.

This is my background. This is the excitement that I have, and this is what I have fun doing.

UNIDENTIFIED MALE: The things that IETF agrees upon, the documents have a lot of impact on the Internet, right?

DIEGO: It's just been agreed on HTTP/2, and we are all using it on our browsers. It has had an immediate impact. Some other things have taken some more time.

UNIDENTIFIED MALE: I wanted to ask you, what was the process like from the proposal to the final stage to give an idea of how simple it can be to make proposals in the IETF, and how as individuals and without much

support and without being a big company you can make proposals that move forward and end up being a document?

DIEGO: The process that led me to directing this proposal was my idea. It started from the result of the research that I conducted some time ago. The idea consisted of trying to have a distributed system. I stated this within the group. That's where you get partners who are interested in the area, in collaborating.

Although there are drafts which are made by individuals, which are totally valid, in general, the discussions that take place through the editor with the other authors are important.

We are four. Not so many, but the discussions are very rich, so as to go into a bigger debate through the group and through the meetings that we have every two weeks now. In the past, we used to have a weekly meeting. We used to have a frenzy, a crazy rhythm, which really speeded up the processes, which is something very positive, through the mailing list, which is one of the most important meeting spaces we have, and then individual [inaudible] conferences.

That's the most important thing [inaudible] receive to improve things and to find faults or problems and solutions, which we wouldn't have come upon individually.

UNIDENTIFIED MALE: Something you mentioned is that you are participating in something that may be a BoF.

The working groups are created and closed once they have completed their goal. When a working group is created, a charter is drafted. When the objectives are met, the groups are closed. The groups are all the time being opened and closed. Would you like to tell us what is a BoF?

DIEGO: One comment. You can do a re-charter in case there is a possibility to move forward. As the initial objectives have been completed, there is a possibility of to find new sides to the issues.

BoF. The first time I was told what it was – Birds of a Feather – it meant nothing to me. “You don’t know the term ‘Birds of a Feather’?” “No, I hadn’t thought of it. Why would it be called BoF?”

Then they explained to me that it comes from a poem and from a book. Finally, the idea was to get together people who had a common interest on some items that have a possible impact, and have an interest in the community.

After convincing a group of people that this is really working and convincing the IETF that it’s important to develop this, the groups are created. It happens with several of the groups. They will look at the agendas for the previous IETF meetings. This happens during the meetings, but in that decision, there is a lot of involvement of the people and the debates that occur and especially the clarity of the objectives that are set. Why is it that this is being done?

Without those important items, the BoF has been just an intention. The next IETF meeting is in Prague, end of July, and we can already see the agenda, the schedule. So you can look at the BoFs already. It's important to work on a group from the beginning, from the BoF, because at the beginning it's more informal, and those stakeholders are being sought.

So if you want to participate, it's a good point of access. Pay attention to the BoFs and look if there is something related to your experience in the BoFs so that you are present from the beginning of the working groups. That's going to make your participation much easier.

One clarification, some clarification that helped me work on the BoFs. The idea is that we start from the concept from the basis. We understand from what ideas we need to start developing. If we arrive at a group that has already been active for two or three years in one thing, we need to look at the history of two years of documents and their evolution.

It's really more complex to take that leap than to start on a group from scratch. Then you could move to other groups, of course.

CARLOS MARTINEZ: Let me take the opportunity to give an announcement. Here you have experts on different topics. So if there is one of these topics – Internet of Things, routing, DNS – that is related to what you do or what you do at your jobs or at your universities or organizations, take the

opportunity to contact the current experts to get more people involved.

CHRISTIAN O'FLAHERTY: We'll now go to the next panelist. I wanted to take the opportunity that we have with Demi, who is one of the pioneers in the region on topics of the Internet, but also pioneers on the IETF. I think that nobody has participated when he was there in the early '90s.

He has a lot of very good anecdotes and tapes that he may share with us.

DEMI GETSCHKO: Thank you, Christian. I believe that I can speak Portuguese to give you some other anecdotes. I will speak slowly.

TRANSLATOR: Well, the speaker is going to speak Portuguese, so the interpreter is going to do her best, although Portuguese is not her translation language.

Slowly. Please, can you tell him if he speaks slowly I will try to understand? Please tell him if he speaks slowly I will try to understand.

DEMI GETSCHKO: My involvement in IETF was small at the beginning of the '90s, '91, '92. I would say that it was very interesting and quite exciting to participate in a group that back then was a group of academics.

Several comments here to reinforce my first impression there. The other much important motivation was already mentioned here. At the IETF was an important difference in the way of working. In Brazil and other countries there was commitment in the collection of patrons, as was said here, not open but were paid for. They were quite complex, enclosed environments, by the companies interested in telecommunications.

The IETF was a totally different path, and open work where there was no representation. Each one was speaking on their own. Besides this, we could find all the idols that were involved in the networks and had created ARPA. Then they transferred to TCP/IP.

At that time, they were being expanded on the Internet. In Brazil, we had BITNET, and we then moved to Internet. But we were encompassing that process.

I'm going to make another comment in that area. As Christian said, we had the Brazilian Society of Computers. We had a project on IETF that was necessary because in some way, the academic community was adjusting because the Internet was an area of academics with the growing entrance of technical people. The interest and the academic pattern lost a bit of focus because the Internet, the IETF, was doing practical activities in the day-to-day, and the day-to-day practice was providing more results with academic life. So you have to publish or perish.

With that adjustment, people are recovered now. There is no divergence between a good academic work and a technical, practical

application. So I imagine that we have again a good match between academia and the IETF.

So we need to leverage this, as Christian said, the fact that Brazil has a policy from the decisions of the managing committee to allocate the exceeding resources on the registry to supporting Internet activities. Activities include books and statistics. We have lots of statistics in Brazil. Also they include stimulus toward the participation of the parties involved in IETF, fostering Brazilian involvement in the region.

I think this is important to have continuity in the process. We have two or three or four meetings. Those are activities to produce something. Participating in best practices, you need to participate heavily, not only in the meetings, but also in discussions. So scholarship that provides continuity will generate some type of results.

Speaking about the past, as Christian did, I started in ’91 in some discussion groups. List servers are patterns that managed discussion lists. There were no social networks back then. There were big wars, flame wars, on top of those discussion lists. There were software alternatives that were of interest back then.

Just to show how things evolved, the dynamics became stable slowly. There were different discussions on what would substitute IPv4. There were four or five proposals then, IP new generation – several proposals that were filtered. In ’98, everything was stabilized on IPv6 as an alternative.

There was a group led by an academic that was called Ross Callon. Ross Callon ran a group called TCP and UDP with the bigger addresses to overcome IPv4. That was the name of Birds of a Feather, BoF.

We got together to discuss that. He entered playing the trumpet, and then he came into the room, talking about TCP and UDP with a bigger address. The environment was quite informal. He was wearing sandals, the only one wearing. He came in a t-shirt one day with the name CCIRN – the Committee of Coordination of Intercontinental Research Networkers. CCIRN – that was in '95 in Honolulu. I had my T-shirt with IP, where it said, "IP Everywhere."

TRANSLATOR: He said that in Portuguese as well.

DEMI GETSCHKO: So IP was everywhere, even in T-shirts. It was like some kind of a joke. So it was that these things are engraved in our minds, and I strongly insist that people participate.

Some things have been lost. There was a lot of humor. On the first of April, we had so much fun. It was technical humor. He had to laugh at things that were so technical. I remember we had an RFC that had poetry, even paraphrasing Hamlet.

Another interesting way that I remember is the vermin Internet case, 38 or 39. It was [inaudible] and [inaudible] title was "There Lies in Internet." It was about the vermin, the worms, in the intestines. It was

like medical treatment, how to deal with gut worms, but actually was about the viruses in the web, the worms in the web.

Then there was thing about IANA about Roman numbers. Why do we use Arabic numbers if we can use Roman numbers? Even IANA called it RANA instead of IANA because they played on what the words IANA and Rome. That work is very old and was reviewed and rewritten, and Christian helped with the translation.

There's a chapter on Brazil, and that also got help from Brazil. Please, if you feel we can be useful in anything, just talk to our people. We're so happy and honored and satisfied. It's good to have this meeting in Latin America, this first time in the Southern Hemisphere in Argentina. Congratulations, Argentina. We want to have you all working with us.

CHRISTIAN O'FLAHERTY: I would like to thank NIC.br and CGI for this dissemination. They are the leaders in the region and IETF subjects, not just because of the number of years of experience, but because of the number of people and the contribution they're making to IETF.

Those who are interested in engaging in any activity, talk to Demi. As part of NIC.br, CGI, he has a number of activities associated to academia, universities, operator meetings. In all those, there is always a panel or a time to disseminate IETF. So in your countries and especially here in Argentina, let's all do the same things that NIC is doing.

Something NIC dealt into was that at the beginning, universities were quite active, and we can say that somehow drove IETF work. That was lost with time.

My question is, has it been lost in general, or is it that universities in the region have little participation? Or there are some universities that participate but the percentage is low?

DEMI GETSCHKO: The merit of the protocols, the TCP/IP standards over 30 years, have been stable. That is good for the Net, but not for the writers. But now we have a number of new proposals. Some will disappear. Some will survive.

But it's important to have this new breath of air, this open floor, this new [inaudible]. The academia was a bit rusty, and it's good to renovate the relationship between the academia and the IETF. The fact that there are proposals out there is very positive already.

So universities being more active. It's more associated to new subjects that have come up.

CHRISTIAN O'FLAHERTY: That is a great advantage because including teachers and researchers in the IETF needs to be easier in the region than included our businesses. The companies in our regions sometimes don't have so many resources. They say it's harder to convince business to make an effort and send people to the IETF.

But if there are subjects at the universities that researchers see are useful to their projects and they can get funding or associated to papers that will help them with their academic work, I believe it's a good opportunity.

As Demi said, these new subjects being discussed, if we can add universities and you help us identify research teams to tell them about work groups that may be associated to this, we will be much more effective. Let me invite you to pay attention to what these subjects are, these groups are, to see how we can help.

Hand in hand with this are the efforts from Mendoza. That's why we called Gustavo. Apart from the research teams, they are working with work teams in dissemination. They are quite active in that. Maybe they can tell us what they're doing and how they have gotten involved with the IETF. Gustavo takes the floor from Mendoza, from the National Technological University.

GUSTAVO MERCADO: I agree with my colleague about the involvement of the university in the IETF. I saw that sequence at the beginning of the year 2000 in 2004 when I first got involved when there were not so many news. The protocols were stable, so researchers then had to look for new things, were hardly involved in the IETF.

The numbers of the academic people from all over the world were reduced, especially from Latin America and Argentina. That is what I know the most.

As any researcher, their production is measured through publications. If the number of publications was reduced, we are far away. IETF meetings were held in faraway places. We could not consider a study trip, the trip to the IETF, and our universities would not fund this. That involvement was pretty hard.

We first started getting our group involved with IPv6. As Christian says, our first efforts were research – and study, actually, rather than research – implementation and also dissemination.

So we started a strong dissemination in my region of IPv6. With the IPv6 days, we put together the Argentinian IPv6 Task Force. We published IPv6 things in some national conferences. That is how we jumped into IP and IETF activities.

We went to some IETFs, Orlando, Berlin, but mostly with funding from ISOC, who paid for our trips. The university would pay for the accommodation and that sort of thing.

Lately, there has been some renovation of IETF to new subjects where researchers can pay more attention because they can get involved in some kind of production. They can base their investigation and research in these subjects.

I'm from Argentina. The focus has gone deeper in this type of research. Now we are working in the Internet of Things, and we are working in groups such as the [inaudible], now the [inaudible], a number of groups. Some of them have more active involvement. Some others are just part of the e-mail lists and read the news. That is another way of

getting involved: being part of the mailing list. Even when there is no significant contribution, you can read lists and look and apply things that you find there.

Let me tell you a story about our group and its involvement in the IETF. Everybody in the group tried them to go to meetings, not only IETF, but LACNIC, now ICANN. This individual a number of times applied for IETF meetings, and sometimes with money from the university or ISOC funding, which is very active in promoting the involvement of Argentinians of IETF.

They traveled and they got involved in IETF group, the [inaudible] group. It's the routing group for constrained networks.

This individual showed quite a proactive approach. It's a girl. She was asked to be secretary [inaudible]. She's a researcher. She participated as the secretary for one year, more or less. Then she retired – no, sorry. One of the chairmen retired and she was appointed chairwoman. She's the only Argentinian who is a chairperson with the IETF.

Because of her technical and personal qualities, as well as for her degree of involvement, you may think, "Well, I cannot get in touch with these people. They are so far away from me." But actually, it's a question of getting involved, of being proactive, of being collaborative. That is how you get things.

CHRISTIAN O'FLHAERTY: One of the issues in the region is that those people who start being active and known, it's hard to keep them in the region. [inaudible] is

now in Ericsson, Finland, and Gustavo is in the United States. If we run statistics, the people who speak Spanish in the IETF meetings – we have an interest in percentages – the problem is that when they write the country of origin, typically you find a developed country because they're working with businesses or organizations of the Northern Hemisphere.

The effect of that is that they cannot affect their colleagues, so to say, because when they become active and known, they leave the region, and that infectious effect is lost.

Let me highlight that we have many tools, many resources, to help people participate, even these scholarships. There's an ISOC funding, NIC.br funding programs. If you can identify people or groups that merit support, if they're from Brazil, you can tell them about the NIC.br scholarships. It's not a one-time event.

Continuity is sought so that they can start a regularity with IETF. ISOC efforts also cover this. They are mentored. They are sponsored economically. The goal is to look for people who merit support. Let us know when you find these people so we can help them.

Any questions? Anyone would like to say anything? A contribution, suggestion?

UNIDENTIFIED MALE: Let me go back to the guy from Venezuela. He is one of the examples of scholarships of ISOC. I am [inaudible]. I have been twice involved in the ISOC scholarship program. For Latin America, IETF seems a

strange thing, hard to understand. But as an engineer from this area, it is a valuable opportunity for us to get involved in the region, no matter what the language is, because every day there are significant moves forward to develop new standards for the future of the Internet, and people from Latin America should be involved.

Latin America will grow exponentially in the number of users of the Internet in the next few years, first reason. Second reason: we need to have women involved from the region who are engineering students. This involvement can be carried out through cooperation with small things. You can disseminate the knowledge with your group of interest in your region and area of work – for instance, IPv6, something we all in the region are involved with – and then to try to motivate people so that they won't feel bad at participating, or using the mailing list and encouraging others to do so.

The application for the ISOC subsidies was very interesting. You complete a profile in the web system. Then there is an evaluation and indicates that you approve. We ask you in what areas you want to get involved, what's your experience, and if you don't, what things you would like to learn.

I think that the process is quite educational the first time. Then it has to be like a re-learning so as to connect certain areas of IETF and project them to the region.

I think that it's the best way to make the best use of the meetings.

CHRISTIAN O'FLAHERTY: Thank you. Continuing with these activities, Carlos, would you like to tell the LACNIC plans in terms of dissemination and what you've already done?

CARLOS MARTINEZ: In our case in particular, we've participated from the beginning of the discussion about the possibility of bringing IETF. But then we didn't know it was going to be Argentina, but through our continent.

So LACNIC is committed to the success of the IETF in Buenos Aires, and that context we've tried to give the most outreach as possible. During the LACNIC events, we've enabled the space of the event to perform talks and tutorials – we call it different ways – so as to have as much outreach possible of the IETF events.

Now that we come closer to making IETF policy a reality, we'll for sure announce some additional plans for the promotion and support for members of our communities who attend the Buenos Aires IETF meeting.

In connection with that, if you would like to participate, if you're from a university, etc., any activity where we can disseminate the IETF, if it's Brazil with the Managing Committee, we have many different ways to collaborate.

We have this book. I would like to take the opportunity to take Demi, and on behalf of Demi, the whole Managing Committee, not only for having worked so much for the books but for having made the effort to bring all of the books in their suitcases to Argentina.

If there is nothing else, then we'll have a few more comments.

UNIDENTIFIED MALE: Yes, I have a comment for the outreach in Argentina. We are trying to promote the IETF meeting in Buenos Aires at the IT Congresses held in Argentina. The next one is going to be in the [inaudible] sessions, which is one of the biggest congresses of IT in Argentina.

We have prepared the IETF Day, one work day of the IETF in Argentina, preparing presentations. That's going to be one of the promotion tasks.

The other promotion task, especially referring to Internet of Things protocol. We have a track at the Argentina Symposium of Embedded Systems, which is going to be held in August in Buenos Aires, where we have prepared this sequence of presentations, tutorials on the Internet of Things, involving most of the researchers who do investigation on the Internet of Things, both from Argentina and from Chile.

We have Diego and also Brazil has some person from Germany giving a tutorial.

Of course, all the outreach we do from our universities to promote the IETF so that the presence of Argentinians will be massive.

As Demi said and as Gustavo said they will leave it at the universities we've confined the most useful resources to involve. At this moment, the IETF has a lot to contribute to them, too. So if you know about

other academic activities with universities, meetings with universities, or meetings of researchers, where we can go tell them about all this, please contact any of us and we will be really thankful.

Diego?

DIEGO: Just one more point of clarification. The first meeting, as I said before, everything is new. You go crazy about the number of groups, number of things. You want to go everywhere, and you end up knowing nothing, trying to find a turn of the screw to what you are listening to. It's not [inaudible] any point of view. Well, it's not that you start one track where they will discuss everything from scratch. Not at all. They will discuss things that have already been discussed on their mailing lists.

So the second time you go, you have a list of elements, and you have read much more, and you have prepared much more, with the time needed, not only to be at the groups, but also to be at all the meetings where you want to be, with the people that you want to discuss something with. Even discuss things outside the topic of your incumbents.

It was fantastic for me, for example, to find people who had been working on things that I hadn't even heard of if I hadn't been at IETF. I heard that the person developed a protocol that I had been using for a long time, and I didn't know why he had done it and what had motivated him. And I found him there at IETF.

UNIDENTIFIED MALE: I want to just congratulate ISOC because the mentors program related to what Diego is saying – the mentors program is for those who are new at IETF. There's a mentors program whereby a match is done between the new participant and somebody who shares the background or the interests so as to help them enter the work of the IETF.

I would have liked that to have existed when I started at IETF. I would have loved to be mentored on IETF. It's been a very rich experience to see how new people participate. This is a very good program to highlight. Thank you.

DEMI GETSCHKO: One final comment. I believe that supporting the IETF is supporting the basic concepts of the Internet and strengthening governance in this respect because it is an important breach that we want to maintain. It's not the old way of doing closed standards that are purchased. That is, it is an idea that was born with the Internet, and I think that supporting the IETF is supporting the Internet at its heart, at its core.

CHRISTIAN O'FLAHERTY: Thank you, Demi. Thank you to all the panelists. To conclude, we have the honor of having the chair of the IETF with us. So we will have a closing in English. If you need a headset to hear the translation into

Spanish, you can grab them. I will ask Jari Arkko to help us with the closing of the session.

JARI ARKKO: Now? Yes. It works. Great. I apologize for not speaking in Spanish or Portuguese. Actually, I seem to be coming to this area often enough that I would really love to be able to. I'm trying to make an effort, but somehow I'm missing the opportunity. I have lots of colleagues who are from Spain, for instance, and it would be possible for me to learn, but I just don't seem to find the time or opportunity.

Anyway, so I really wanted to go back to the topic, the IETF. Thank you for the panel, very interesting discussions and thoughts. I'm excited to be here this week. It's a lovely city, and I'm excited that the IETF is coming here next spring. Of course, there's many reasons why the IETF is coming. We realize that the attendance and interest in the region is growing, so that's a clear reason we like to go to the areas where the IETF people are, obviously.

But it's also more general [inaudible] idea, that the IETF needs to understand the ideas and problems around the Internet technology from all over, from different types of people. As an example, from different organizations, so not just manufacturers but also universities and operators and even regulators. We find that we, as the Internet becomes more and more important, we have to discuss with more and more people to understand what the requirements for the technology are and what the issues are.

So our whole community was sort of behind this, this idea that we need to be more diverse. But the diversity is of course not just about the types of organizations. It's also about people, gender, or about geographic locations. As noted, we are here, or will be here, for the first time in South America, and proud to be able to do that. It's matching the growing participation.

But it's of course not only about the meetings. We have multiple different types of ways that we work. We have meetings, but we also have most of our work happens over the mailing lists. What we would really like to do is actually to connect to the people, so it's not that the meetings are so important or it's a good opportunity for us to come and talk together, but the big payoff I think is in connecting to the people, the universities here, or the companies that are doing interesting things. What can we do with you? What can we do with them? What can we achieve together if we actually put our heads together and tackle some of the problems of the Internet?

Many of the things that we're trying to do in order to ensure this diversity of ideas and people is already discussed here. We also try to have, like our leader said, groups engage in different regions. Last year we went to LACNIC in Cancun with the IAB and IESG. I find – I mean our leadership group, people from the leadership groups, actually go to these types of events quite a lot, maybe more so in their own regions, for natural reasons. But I find that when I meet people from far away or from different backgrounds or working on slightly different industries than I am, then that's actually the most useful learning experience for both of us or everybody. When I meet my usual friends

in my neighborhood, then it's not so much about learning experience, even though that's also a lot of fun, obviously.

So with that, I just wish that we can all work together to figure out how we can better connect in this region and elsewhere, and hoping to see everybody working on these interesting topics we're dealing with – for instance, the very rapid evolution of the Internet technology, and on the web area, the IETF are working on security. What can we do, for instance, to tackle some of the worries around surveillance? We're working on the Internet of Things obviously quite a lot.

Lots of interesting topics. Yeah. Looking forward to next spring.

CHRISTIAN O'FLAHERTY: Thank you very much, Jari. Thank you to all the panelists. We are right on time. It's been an honor to have the IETF chair among us to have had this perspective. Panelists, thank you to you all.

[END OF TRANSCRIPTION]