TORONTO – Multi-Stakeholder Discussion: Legacy Internet
  Protocol (IP) Numbers In the Current Policy Environment
Wednesday, October 17, 2012 – 15:00 to 16:30
ICANN - Toronto, Canada

LOUIE LEE:	Hello everyone. Hi, welcome to this meeting, and we're not really actually starting yet, but I am just trying out the mic. The volume is being tested right now. Thank you very much, that sounds very good from here. How does it sound from back there? Sounds great. We are allowing for a little time to establish remote participation right now, especially being that the scheduling of this session came late in the whole ICANN scheduling scheme.
	For those of you remote, and I hope you can hear this. You should be able to when you're connected to the Adobe room. Your way of asking questions would be through the chat box, the chat module in your lower right corner. And perhaps one of you can confirm you just heard that? Yes. Thank you Niall and Martin Levy, and Barbara will monitor the chat room and relay your questions to the room.
BARBARA ROSEMAN:	What we're trying to get up now is just the agenda but I think the agenda, the five points which you'll see, they're on the ICANN schedule for this meeting. But we'll have them up in just a second.

LOUIE LEE:

So welcome everyone to this Multi-Stakeholder Discussion. The topic is Legacy IP Numbers in the Current Policy Environment. My name is Louie Lee. I'm the Chair of the ASO Address Council. My employer, for full disclosure, my employer is Equinix.

We do not hold a legacy IP space or any space that could be even considered as legacy IP space. I'm not sure if everybody even agrees exactly on what that term is. So we can go with that. But we do have resources from multiple registries. With me is Kathy Kleiman. She's the Internet Counsel with Fletcher, Heald & Hildreth in Arlington, Virginia, and she'll take over from here.

KATHY KLEIMAN:

Hi. It's a pleasure to have this meeting today. It was a request that we made in Prague and I'm so pleased that so many people have attended, particularly at such short notice. As Louie said, I am Kathy Kleiman. I'm Internet Counsel with Fletcher, Heald & Hildreth, and I've been involved in the ICANN process since before there was an ICANN, going back to the green papers and white papers, setting out the principles for the company that became ICANN.

My work in the ICANN arena often focuses on working with diverse groups to work on difficult problems, generally on the DNS side of the house. I'm a co-founder of the Non-Commercial Users Constituency, on behalf of ACM, the Association for Computing Machinery. And I was elected to the first Names Council; I've served on numerable task forces at ICANN, and recently completed my term as Vice-Chair of the WHOIS Review Team. So again, looking forward to the meeting today and I want to thank Louie for inviting me to co-moderate with him.

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[background conversation]

KATHY KLEIMAN: A quick note on rules of the road. We just wanted to talk about it because...

[break in audio]

KATHY KLEIMAN: ...policy development process here. It's a discussion and we're really pleased to have this discussion with a number of people, organizations, and companies around the table and on the phone and we'll definitely be trying to get questions. I don't think we'll need it, but ICANN has adopted its formal expected standards of behavior, standards for all meetings and the basic guidelines are basic respect and civility.

LOUIE LEE: Okay, at this point we would like to offer the participants in the room a chance to introduce themselves, and also the participants on the Adobe chat room, from remote. At this point, just introductions about who you are. We'll get to the concerns later on. And if I may just ask that we start right here.

PETER THIMMESCH: My name is Peter Thimmesch. I'm with Depository, based in Herndon, Virginia.

JEFF MEHLENBACHER: My name is Jeff Mehlenbacher. I'm with IPv4 Market Group; we're based out of Lewiston, New York.

BRENDEN KUERBIS: I'm Brenden Kuerbis. I'm at Syracuse University and the University of Toronto.

ADIEL AKPLOGAN: Adiel Akplogan, CEO of AfriNIC.

RAIMUNDO BECA: My name is Raimundo Beca. I am a former director of ICANN, and I'm a founder of [Teknic] and last year I was involved in the review of the ASO.

OGI MITEV: Hello, my name is Ogi Mitev. I'm part of the North American IPv6 Task Force, ISOC Colorado, NARALO and I work for ViaWest.

DMITRY BURKOV: Dmitry Burkov from RIPE NCC Executive Board

JACK HAZAN: Jack Hazan with Hilco Streambank.

GABE FRIED:	And Gabe Fried, also with Hilco Streambank. We are an intermediary.
OWEN DELONG:	Owen DeLong. I'm here representing myself as a legacy holder.
AKINORI MAEMURA:	Akinori Maemura, APNIC Executive Council, and also the JPNIC which is the National Internet Registry in Japan.
AXEL PAWLIK:	Axel Pawlik, RIPE NCC.
JOHN CURRAN:	John Curran, President and CEO of ARIN.
PAUL VIXIE:	Paul Vixie, ARIN Board of Trustees.
BILLY SYLVESTER:	Billy Sylvester, Depository.
WILFRIED WOEBER:	Wilfried Woeber, on the Address Council for the RIPE NCC service region, but for the moment I'm representing Vienna University as a legacy address holder.
ADAM GOSLING:	Adam Gosling, ISO Secretariat.

BARBARA ROSEMAN: Barbara Roseman, ICANN Policy Department.

LOUIE LEE: And I think that maybe for everybody in the room it might be nice to just read off the names that are in the Adobe chat.

BARBARA ROSEMAN: Okay, well there's actually some duplication of people who are here.

LOUIE LEE: Of course.

BARBARA ROSEMAN: We have Alain, A.P., Arturo Servin, [.servin], ESWEN, Charles Lee, Cheryl Langdon-Orr, and I'm trying to get it down further. Christopher Bleeker, Eric, Gordon Chillcot, Hollis, Kristina Rosette, a name that I can't pronounce, Marco, Martin Hannigan, Martin Levy, Metty Thomas, Nate Davis, Neil O'Reilly, Randy, Raul Echeberria, Ricardo Patera, S.W.H, and Selina Harrington.

LOUIE LEE: Excellent, thank you. So at this point we have some slides to show a brief history of IP addresses and legacy number issues. Now we understand that any history presented by anyone can easily be biased from our own viewpoint. So please be aware that should you see a

point that you disagree with we don't necessarily need to be arguing it, because it will come up in the concerns, I believe at some point.

KATHY KLEIMAN: The goal here is just to present, as neutrally as we can and we did try, why we're all here at the table, what brings us here. So if you could go to the next slide, Barbara? So the green ones are mine, the blue one is Louie's, so I'll start with just a brief history of legacy numbers. On March 19th of 1992, the National Science Foundation...and I'm going to read this because I know the text is small.

The National Science Foundation invited proposals for one or more network information services manager organizations to extend and coordinate directory and database service and information services for the NSFNET, and to provide registration services for non-military Internet networks. Network Solutions, Inc., otherwise known as NSI...affectionately known as NSI, began performing Internet registration functions for non-military domain name registrations and network numbers because they received the contract.

More specifically, NSI began to make IP number assignments to a number of organizations and companies. In doing so, NSI fulfilled its principle function, the principle function under a US Federal cooperative agreement, which is the principle purpose of the relationship is to transfer a thing of value to the recipient to carry out a public purpose. Which of course, IP addresses and numbers certainly do. Next slide please?

Just briefly continuing, once these numbers were distributed then you don't take them back, you don't reclaim them, they're out there. And the NSF/NSI cooperative agreement concluded, on December 1, 1997,

the source of this information is almost literally taken from the letter of the National Science Foundation's General Council, Lawrence Rudolph, dated August 30th, 2012, to a legacy number recipient who's redacted from the public copy.

But it's the paragraph, the first paragraph there...once legacy numbers were distributed there's no provision under the cooperative agreement, which would have authorized the awardee, NSI, to unilaterally reclaim the numbers. And once they're assigned, they're assigned. So kind of a quick summary slide, which would be the next one please. During the course of the NSF/NSI cooperative agreement, approximately 40% of all IPP 4 numbers were allocated to approximately 20,000 legacy number recipients, many of whom are still holding these blocks.

And I've shown you a picture of a table, there's lots of discussion here at ICANN about the multi-stakeholder table. So I'll posit that these legacy number owners deserve a chance to be stakeholders at the multi-stakeholder IP number policy making table, and that's the purpose of this discussion today, a candid discussion about this. And again, I appreciate everyone being here so that we can hold it. Louie?

LOUIE LEE: This one just describes the succession of registry function, a series of dates and events that happen from the 1980s through to the formations of the various RIRs, quite simply that. By the way, those in the Adobe chat, we all can see your chat, not just Barbara. In case you did not know that, I wanted to let you know that your speech is fairly public, thank you. Just a moment, okay that's the last slide...go ahead and close that off.

KATHY KLEIMAN: So now what we wanted to do was go around the table and if you want to participate in other tables, come up and join us here, find a microphone please. But we wanted to go around and talk about some of the concerns that legacy number holders have of not having a seat at the policy making table right now. Or ideas people have, concerns.

A discussion, kind of a candid discussion of legacy IP numbers in the current policy environment. If everyone could take up to two or three minutes each. Concerns, not solutions, because we don't have time right now to solve everything. But we have a tablet; we can at least put general concerns on the table and have a sense of what it is that people are concerned about that perhaps we should be discussing more in the policy-making environment.

LOUIE LEE: This is Louie Lee, and if I may ask if you can just bring your top key concern and we may end up going around again to follow up on further concerns, that would be excellent. And if your concern has already been brought up and you want to speak to it again that's fine too because you have your own perspective of that topic. So we may get a sense of how not just the depth, get the breadth of a topic, how that might be covered. And if we may start again with Peter?

PETER THIMMESCH: Hi. Our largest concern right now is that there's no competition for services to the legacy number holders that received these numbers between 1983 and 1997. The sole source for them to get services is in

their service region alone, and they're not allowed to shop for services to get the best in what would be equivalency of a registrar services for domain name holders.

KATHY KLEIMAN: Thank you. Jeff?

JEFF MEHLENBACHER: I think our primary concern, and it comes back from our clients...we're facilitators, brokers of IP transfers. The majority of our sellers, and we represent only the sellers, are legacy holders. The majority being /16s, which is 65,000 plus IPs. Their concern is that, as legacy holders, they have not signed any agreement, and yet at the same time current policies which would either permit them or stop them from transferring their resources are applied uniformly to other organizations that are under contract with ARIN, for instance, either a registry legacy services agreement to a registry services agreement.

But the legacy holders themselves are not and yet they must comply with policy, as must the buyer, prove and justify need, even though the buyer is expending sometimes substantial sums of money to acquire these unused assets. And they could be denied through this process. And for both parties, the seller and the buyer, if they are denied the asset remains unused, latent, dormant.

As it is in most instances, the legacy holder has expended administrative and legal and technical and business resources on a transaction and it's being stopped by a body that has no contractual authority over them.

And of course that's where the major argument comes, but that is what we hear repeatedly from our legacy clients.

LOUIE LEE: So if I may put that up here as "transfers under current policies" then that will jog our memory on what the topic is?

JEFF MEHLENBACHER: Correct, that legacy number resources are applied the same policy as those under contract.

LOUIE LEE: Thank you for waiting to make sure that I can hear you correctly. Please go on.

KATHY KLEIMAN: And feel free to say your name again for the remote participants. Thanks.

BRENDEN KUERBIS: Sure. I'm Brenden Kuerbis. I'm with the Internet Governance Project, and we recently released a study that was an empirical examination of the developing transfer market. And you can find that paper at our website, igp.org. So first I would start with kind of an observation that we had out of the paper, and that is that there really is a thriving and growing market for IPv4 address blocks.

And if I needed to express a concern, that would be transparency in the market. In conducting the research, it was very difficult to get this information. And transparency of the market is important because it

can send price signals for the efficient allocation of these resources. So that would be one thing.

LOUIE LEE: Transparency in the market then.

BARBARA ROSEMAN: There's a comment from the participants online. Randy Bush, I'm presuming, says folks should look at what the RIPE legacy community is doing in the RIPE region to reform the Internet community with legacy and NCC issued holders.

LOUIE LEE: Thank you for that input Randy. We'll go ahead and continue on around the room and take also questions from remote. Also, I'm sorry, did I say questions? I meant to bring up their topic from remote. Please Adiel?

ADIEL AKPLOGAN: Particularly I don't have any concern. I'm here to listen to what people are saying, or which concerns they have. I don't have any concerns.

LOUIE LEE: Thank you. Continuing on?

Raimundo Beca: I'm going to repeat the concerns I have been hearing for years, and mainly during the ASO review. This concern is not personal for myself, I'm not involved with that. But what I hear is the lack of accuracy of the

WHOIS end of the legacy space, and also all the risk related to the fact that there's no security for who owns this space or holds this space and all the bad use that can be made with the space and that the holder is not really identified.

KATHY KLEIMAN: WHOIS accuracy and security.

[background conversation]

LOUIE LEE: Okay I'll put it as accuracy of registration data and security, you mentioned.

KATHY KLEIMAN: Thank you Raimundo.

OGI MITEV: Hi, this is Ogi Mitev. My concerns are related to transfers, and you already have that on the list. So thank you very much.

KATHY KLEIMAN: Do you want to add your perspective on it?

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OGI MITEV: Yeah, I'm more looking at it from a perspective of a buyer and some of the risks that we have to take to acquire that v4 space to continue running business.

KATHY KLEIMAN: What kind of risks?

OGI MITEV: Some of them are related with the broker. Basically the interaction, the security, the financial risks, and there's a big list of risks but those are some that you can write down.

KATHY KLEIMAN: Thank you.

LOUIE LEE: I'll just add buyer risk to the transfer topic. And continuing on?

JACK HAZAN: Jack Hazan, and Gabe Fried with Hilco Streambank. We're actually newcomers to ICANN and we're going to listen to what everyone has to say before we chime in.

KATHY KLEIMAN: Do you want us to come back to you?

JACK HAZAN: Sure.

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LOUIE LEE: Alright, Owen then?

OWEN DELONG: Owen DeLong, individual legacy holder. I'm concerned with this bizarre perspective some legacy holders seem to have that they should somehow be exempt from the rules by which other address holders are governed, simply because they happen to get in early and receive their resources without signing a formal contract with the registration agency with which they were registered.

                        And somehow think that the implied contract of registration under which the resources were issued to them does not somehow have a successor relationship in the registry that they're now served by, or that they are not adequately served by that registry for some reason.

LOUIE LEE: How will I put this up? How about...

OWEN DELONG: Expectation of legacy holders?

LOUIE LEE: Okay.

OWEN DELONG: Seems reasonable.

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LOUIE LEE: Yeah, yeah. Okay. I'll go for expectation/exemption of legacy holders.

KATHY KLEIMAN: I'm really glad Louie's writing because my handwriting is terrible; it's much more legible this way.

LOUIE LEE: Well as we get further down it gets smaller and smaller too.

KATHY KLEIMAN: Great. Thank you.

LOUIE LEE: And maybe, if I may real quick, do we want the camera on this or is that not available?

[background conversation]

LOUIE LEE: Okay. Alright then, I'll take care of that. It's okay. Alright, moving on, I'm sorry. Please, go ahead.

AKINORI MAEMURA: Akinori Maemura. My question is rather for the registry who is taking care of the IP space. Yet my concern would be how to take care of the

legacy space holders. And I have two cases, one that's JPNIC and APNIC. In the JPNIC for the legacy holder the JPNIC has been successful to have the same agreement through almost all legacy space holders and the relationship is rather clear. So it is a good thing. In the case of APNIC it is not like the JPNIC case but they need to have some something remain to develop the relationships that would be there. That would be the big point to be addressed. Largely, how to take care of the legacy space holder is my concern. Thanks.

LOUIE LEE: Can I ask you to summarize that in a couple words for me, please?

AKINORI MAEMURA: Me?

OWEN DELONG: May I suggest legacy holder customer care?

AKINORI MAEMURA: Oh great. Thanks Owen.

LOUIE LEE: Okay, continuing on. Dmitry? Would you like to speak up?

AXEL PAWLIK: I can.

LOUIE LEE: Okay, go ahead.

AXEL PAWLIK: Axel Pawlik for the RIPE NCC. I would like to go back to Randy's comment, online, about the currently ongoing process of sorting this out. The legacy address holders, to the extent that they have not been members of the RIPE NCC also. Those legacy holders in the RIPE NCC community have led a fairly separate life over the last 20 years, and we are currently seeing a discussion, which is open, transparent and on the mailing list and at the RIPE meetings also, about the circumstances that we can improve the legacy holder customer care basically. Under which circumstances they could become members of the RIPE NCC possibly, or maybe not which services are available to them or maybe not. So this is a currently ongoing live discussion, and of course everybody is very welcome to chip in.

LOUIE LEE: May I characterize that as improving legacy holder participation in current systems, or something similar? Okay. Great. Continuing on? John Curran?

JOHN CURRAN: John here. I actually have no concerns expressed other than I'm glad we're having this session and I'm glad it has a high level of participation. These are important things to talk about and we should figure out how to move forward as necessary.

LOUIE LEE: We might list this as positive discussion. Not sure that's much of a concern, as you said, but it's been brought up. Alright?

PAUL VIXIE: Mine is already on the list. It's the WHOIS accuracy, so you can put a plus one next to that.

KATHY KLEIMAN: Do you want to expand on that from your perspective?

PAUL VIXIE: No, that's why I'm here.

LOUIE LEE: I hope I'm not writing...uh oh. No it's not me.

BILLY SYLVESTER: My main concerns are in the security and stability of the Internet, specifically around keeping IPv4 growing and also making sure that the existing system has survivability and controls and protections in place. To enable that to sustain potential problems in the future.

LOUIE LEE: Resiliency of the Internet infrastructure?

BILLY SYLVESTER: More about the legal organizations and legal structure versus the infrastructure.   Specifically   things   around   like   registry   escrow,

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contractual relationships chaining down from some authority. And having a clear understanding of sort of who's on first, who has responsibility for which pieces. Obviously there's a lot of propaganda out there in regards to legacy numbers, and we need to distill that down to the core facts.

LOUIE LEE: I appreciate you clarifying that. Thanks.

KATHY KLEIMAN: Could you tell, for everyone who's listening, could you tell us who you are?

BILLY SYLVESTER: Oh, sorry Billy Sylvester. I'm with Depository based out of Herndon, Virginia.

KATHY KLEIMAN: Thanks Billy.

LOUIE LEE: Resiliency of the legal infrastructure, legal structure.

MALE: Sorry, a quick comment. Remote participants are complaining that this is not being transcribed to the Adobe Connect.

MALE: I'm in the process of typing it up and once we've been around the table, which is one more person, I'll pass it to Barbara and ask her to put it on the remote participation screen, if that's okay. So we can't get the camera to point at the flip chart at the moment.

KATHY KLEIMAN: Great, thank you.

LOUIE LEE: Going back to Dmitry.

DMITRY BURKOV: Sorry, I was reminded in chat of this point. I can't agree with the term "WHOIS" data is accurate, because in the RIPE we use a registered database consistency, address data. Because we're using WHOIS, it's a mess as we already discussed today. Thank you.

[background conversation]

DMITRY BURKOV: Suggestion, please. If you mention to please don't use WHOIS because we use a database of registered data.

BARBARA ROSEMAN: I'm afraid it is the slang that a lot of people use, so you'll forgive us for coming in and using slightly different terminology.

DMITRY BURKOV: That's the wrong slang. We don't use this slang. And by some reason for me it's not acceptable.

KATHY KLEIMAN: Well actually, yes. I think there is another terminology we can use. We can talk about registry data accuracy and WHOIS, the protocol itself on port 43, is how you query that data. It's not in fact the data. So registry data accuracy is what Randy was suggesting in place of WHOIS. That's all.

LOUIE LEE: To be the most accurate way to describe what we want to achieve.

KATHY KLEIMAN: Right, yes.

LOUIE LEE: And going back. Oh wait, Wilfried, sorry.

WILFRIED WOEBER: Wilfried Woeber, Vienna University. I don't have any major issue in this ballpark at all because in my perception the existing infrastructure is working. The policy development process is working. The rest is just clerical issues that can easily be managed within the region and within the existing policy development framework.

My concern is a little bit more esoteric, you may like to call it. I do see the danger here that we are trying to input lines of thought from a different environment in to the IP address management environment, and that's not necessarily the right way to do. Just because you've got a hammer, not everything else is a nail.

And my personal opinion here is that everyone should just recognize and understand that whether it's provider independent address space, whether it's provider aggregated address space, whether it's legacy address space, whether it's a green one or a blue one or a pink one, these addresses are used on the homogeneous Internet. And I perceive that as very similar to just road traffic. Even if you had bought your car 30 years ago, you are supposed to be part of the system that is in place today.

And in some other discussions I used the example for awhile that in one of the smaller European countries, for quite a long time you were not required to have a driver's license. And eventually even those legacy people, they had to acquire a driver's license and that's it. The world moves on. Thank you.

LOUIE LEE: I appreciate that. Thank you. And Jack, would you like to go now or do you want to wait for the remote first?

JACK HAZAN: Sure, I'll say a couple words. Jack Hazan from Hilco Streambank. Obviously, as an intermediary we'd like to see the transfer market continue to evolve. It's obvious based on what we do. I'm impressed to

see how policy is discussed in an open forum over here, and kudos to all of you that you do get together and do this.

We've seen, in our experience, we've been doing transactions. A lot more so in the bankruptcy arena and we've seen the transfer policies evolving and for the most part could I say that they're perfect? They probably still need to continue to evolve, but we've been able to get transactions done consensually through ARIN, through their transfer policies. And we've gotten transactions done in APNIC as well. And we hope they continue to evolve to fit the needs of the Internet community.

LOUIE LEE: I'll characterize this as transfer...sorry, evolution of the transfer environment.

JACK HAZAN: Sure.

KATHY KLEIMAN: Now how about outside the table? Is there anyone who wants to come up to the microphones and share what you're thinking?

[background conversation]

KATHY KLEIMAN: You've got to come up to a mic, Barry. Come on. Thanks Barry. There's another handheld behind you. Wait, wait, wait.

BARRY SHEIN: I was just going to protest slightly...

LOUIE LEE: If I may ask just a moment so that we can do this and then I can listen to you without...I want to make sure we hear everything you say. Alright, go ahead.

BARRY SHEIN: Hi I'm Barry Shein, I'm President of the world. It never gets old. I just wanted to make more of an abstract comment, don't take this so much as an advocacy position. But I thought I would counter this rejection of legacy, because another term we have for legacy is grandfathering. And grandfathering is a deep and broad principle in any legal system, right?

And so to call it bizarre, or to talk about one instance of licenses, it's just shallow and it's just picking a few examples. Where in fact it's a powerful principle, grandfathering, throughout all of the law. Okay? And I think what has to be done is you have to sit down and you have to show some advantages to both sides and come to some agreement.

But if you're not under contract, you're not under contract. Okay? This is ruled by contracts, not by whether it's bizarre or some other moralistic argument. Okay? It's whether we can come to a contract that we can sit down and write on a piece of paper and everybody sign it and everybody live with. That's all. Simple as that.

LOUIE LEE: So if I may characterize that as grandfathering of contracts?

BARRY SHEIN: Legacy is grandfathering.

LOUIE LEE: Legacy is grandfathering.

BARRY SHEIN: Which is a sound legal principle. Would you agree with me Kathy?

KATHY KLEIMAN: A sound legal principle or a sad legal principle?

BARRY SHEIN: Sound legal principle.

KATHY KLEIMAN: Sound legal principle. Excellent. I...okay, now you've outed me. Yes I'm
                                        a lawyer and I like that term.

BARRY SHEIN: It's terminology, I'm not a lawyer. I'm President of the world.

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LOUIE LEE: Okay, we're offering for other audience members to bring up their top issue.

KATHY KLEIMAN: And please, take a look at the list. I know it's old technology but we've used this in other forums. Is there something that's missing? As you look up there at the issues, is there something big that's missing? If there is, feel free to speak again. Let's make sure we've got most of them out there.

BARBARA ROSEMAN: You should probably reiterate the list for those who are not able to see it just yet.

LOUIE LEE: Okay. Yeah, especially for those who can't see it. We have competition for services, or whether lack thereof. Legacy transfers under current policy, with an addition about the buyer risk. Transparency in the market. Accuracy and security of IP registry data, and that's plus two on that. Expectation/exemption of legacy holders. Customer care of legacy holders. Improving legacy holder participation in current system. Positive discussion. Resiliency of the legal structure. Evolution of the transfer environment. And legacy grandfathering. I hope that helps the remote participants. And at this point we can take top issues from remote.

BARBARA ROSEMAN: There is a question from remote, which is is there a clear divisor point or date between legacy and non-legacy IP space? So Kathy, would that be that 1992 date from your slides?

KATHY KLEIMAN: No, I think it would be the 1997 date.

LOUIE LEE: Perhaps a definition of legacy?

KATHY KLEIMAN: But it's a very good question.

LOUIE LEE: I'm not sure that would be the same...covers across regions.

BARBARA ROSEMAN: Right, Randy says in a comment that it varies by region. So it would depend on when each RIR was established in each region or when each RIR that had the addresses assigned to it by ARIN, I mean by IANA, began allocating?

LOUIE LEE: I actually would probably say it's when legal agreements were actually entered in to. The existence of RSAs, yes. And that was David Conrad.

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KATHY KLEIMAN: And what we can say also is that anything under the NSF/NSI agreement is clearly legacy and that there were agreements before that for numbers that are also classified as legacy.

BARBARA ROSEMAN: Raul adds that in the LACNIC region it is anything allocated before December of '97.

KATHY KLEIMAN: Thank you Raul. And we wish you were here. Anything else people want to add? Barry, I'm really glad you came up to the microphone, thank you.

LOUIE LEE: Oh, boy.

KATHY KLEIMAN: Okay. So now we've got concerns on the table and we wanted to pose some questions, and it's for discussion. We certainly don't the answer. There appear to be concerns, there appear to be policy issues that people would like to discuss together. Concerns that may have arisen because certain parties didn't participate or weren't included in certain policies, specifically legacy number owners/holders who seem to be outside of the current policy-making process. And I'll let you speak for yourselves. But what would a process look like, a process look like, that included all of us to look at the policies?

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LOUIE LEE: And so this might lead us in to looking at what are the next steps for each of these ways forward. We also have hands raised. Maybe we also go down the list of folks that want to speak in order. Let me get a writing utensil. And do we have somebody else that wants to speak after John that they already know already? Peter, right? And Owen. Okay. Go ahead John.

JOHN CURRAN: So we asked how to improve, we have a list of issues and we need to figure out how to improve on them. Some of them are issues that look to be handleable in existing mechanisms, meaning if you want to use the existing mechanisms then you can change policy on a regional or global basis. You can even change the structure of the system to some extent since that's specified in the ICANN global policy as well.

That doesn't address either issues that don't show up in any of the policies, including the global policy. Some of those items are contractual issues or legal issues. They don't show up in any regional or global policy so they're outside that scope. And then it also doesn't address if you don't want to use the existing system to change the existing system, you might need another process as well.

LOUIE LEE: Okay moving on?

KATHY KLEIMAN: Thank you.

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LOUIE LEE: Thank you very much. Peter?

PETER THIMMESCH: We at Depository wish as a next step to use ICANN as the forum for the discussion on how competition can be introduced for services to number block holders. Whether they be legacy or not, we want to provide services to number block holders. We believe our claim for legacy holders is by far the strongest. We believe they have a right to choose services from any company that meets their needs. We believe there should be an accreditation by ICANN, so that's why we're here. We believe ICANN, in the end, is the forum. So our belief is in next steps is to improve the discussion, to hone it and refine it, so it's specific to competition.

LOUIE LEE: Thank you Peter. Owen?

OWEN DELONG: So I'm hearing people express that they feel legacy holders can't participate in the current system, and I don't understand that because I've been participating in the current system as a legacy holder for more than a decade now and I've had no trouble doing so. Anybody that's not participating in the ARIN policy process is doing so by choice. It's open to anybody who wants to subscribe to a mailing list and participate. So what's the problem?

LOUIE LEE: Go ahead Barbara.

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BARBARA ROSEMAN: We have two comments from online. From Randy, we have the comment that is similar to what Owen was saying. In what part of policy-making are legacy holders prevented? We speak in RIR policy; those with the stomach may attend ICANN just as anyone else. And Arturo Servin says, "I disagree. ICANN is not the forum to discuss address allocation."

PETER THIMMESCH: Hold on, I want to respond to that. We're not talking about address allocation. We're talking about services. Address allocation is not on the table. We're not discussing that, we're not bringing that up. So we want to be clear these are for existing number block holders, they should have the right to get services from who they wish, that are not bound by agreements or limited by a region.

BARBARA ROSEMAN: And how would you define those services? Randy, at one point, said, "Registration services?"

PETER THIMMESCH: Registration, [in-adder], all the services that are provided right now and to include RPKI, other such things such as trust anchor. All those are services that are right now limited to only receiving them. So if you're a legacy holder you're required to only get your services, and can only get your services, and if you request the registry to no longer provide your services and remove you from their own database they say, "No, we

won't do that." So it's a monopoly. We're here talking about a monopoly and no competition.

BARBARA ROSEMAN: Neil O'Reilly says, "Policy for licensing drivers is determined under authority of legislature for which all citizens have a channel of participation. It is important to create a participative framework inclusive of legacy resource holders in which consensus policy can be formed. Neither legacy resource holders nor those currently offering registration services can be excluded from this. In addition, it is inappropriate for either camp, for want of a better word, to assert the primacy of its expectations to the disadvantage of the other camp. We're trying to address this in the RIPE region."

LOUIE LEE: Okay I see folks offering some sort of a movement forward. John?

JOHN CURRAN: I'd like to pick up on the comment of what is policy and what is the process or the venue for changing policy. We use policy, that word, in two different ways currently, as I understand it. A lot of what we talk about is address allocation or management policy, so allocation of who gets assignments, transfer policy, policies regarding what needs to be in the registry and published. All of it directly related to number resources. There's also a set of policies that define the structure of the Internet Registry System today, and that's the global ICP-2 policy.

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And while we say that's a policy and we say it's subject to being changed via the policy process set up by that same system, we recognize that some of that is number resource policy and some of it policy that defines the structure of the Internet Registry System. And I just want people to understand that even though we use the world "policy", those are actually two very different things.

Some people would only claim number resource policy as policy, and that the actual structure of the registry system, while me may call it a global policy is not really policy. It's much like ICANN structure; it's something you enshrine in documents.

KATHY KLEIMAN: Let me ask, for those who raised concerns here...a question's been raised. Why these concerns need a new forum or need an expanded forum? And why existing structures may or may not serve? So, if you have thoughts this is a good place to share them.

JEFF MEHLENBACHER: Jeff Mehlenbacher, IPv4 Market Group. I think the current policy framework, which the is number policy resource manual, has been very befitting and has worked extremely well for free allocations, not withstanding some people don't think it's about allocations. But it has been arbitrarily applied, where the transfer market is concerned, that legacy holders are part of the current policy umbrella. And therein lies the challenge, I think. When John mentions what's the forum? What's the appropriate forum to resolve some of these issues?

I'm not sure it's the current policy development environment because it has been asserted rather repeatedly that legacy holders are the same as everyone else. Legacy holders are the same as everyone else. Well, we heard here with legacy grandfathering that, at least in the opinion of many, it's not the same. There is no contract and therefore when a legacy holder wishes to sell their IPs to a buyer, be that an ISP, a telecom, cloud computing, what have you, that to have it rejected based on policy that they have been unilaterally assigned to is a problem.

So that has been what we have continuously heard back, and I do like what John said. I just don't think that today's methodology for developing policy is going to be conducive to having legacy holders heard. And it frightens people to think that legacy holders might be accepted or treated differently. And it does, and the very simple reason being if the buyer of legacy addresses does not have to justify their acquisition under current policy, suddenly the legacy blocks are at a premium. Aren't they?

They're worth more than a block that could be acquired that's under legacy registry services agreement or an RSA, a registry services agreement with ARIN, because the buyer's going to have to justify that acquisition. So my point is, and Owen I see you're ready, my point is that John raises something that's compelling. Is it the right forum?

I don't think it has been because every time we've gone down this path in the PPML I can tell you, and John please tell me if I'm wrong, it comes to a loggerhead. Nothing gets resolved and both sides brustle and say, "See you in court." It shouldn't have to be that way. There should be

able to be resolution through multi-stakeholder discussions and put policies in place which address all the constituents' needs.

LOUIE LEE: Okay, if I may let John respond to that and then we have remote and Owen.

JOHN CURRAN: I just want to be clear, because you asked the question directly. There are many legacy holders who participate in the policy development process, and we've seen the creation of a transfer policy in the ARIN region and then its change from transfer allowing one year based on need to two years, and then we saw an inter-RIR policy. So it's not unheard of that legacy holders participate and have those policies change. I do think, however, your point and the point that was made, I don't know who, those policies are being applied to all registrants in the ARIN region.

And as I've said, I actually believe ARIN was formed for that and that ICP-2 requires us to do that. That means implementing policies for the registry on all holders, whether they have a contract or not. Applying the policies to all registrants in the region, regardless of whether they have a contract or not, is something that we need to know as a community is okay or not okay. And answering that question would be very helpful to all of us.

LOUIE LEE: David, are you okay to let Barbara, Owen, and then you?

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DAVID CONRAD: Sure.

LOUIE LEE: Okay.

BARBARA ROSEMAN: Raul says that in the LACNIC region there is no...any legacy holder can maintain their information in their system and they don't need either to pay or sign anything. So there is no discrimination, they have full access to registration data services. And recognizing that that's not the case in all regions he says, but it seems that the concerns that are being listed don't represent the global situation. They are the concerns of some legacy holders.

LOUIE LEE: I'd say we're just opening the door here.

OWEN DELONG: So I'd actually like to take issue with Jeff's characterization of the application of policy on legacy holders as unilateral. It's not unilateral at all; it's being done by a consensus process of the community consisting of everybody who wishes to participate in that consensus process. If the legacy holders want to come and express their opinion they're certainly free and welcome to do so, even encouraged to do so.

And, as John pointed out, many of them do. Yes, some of the mailing list discussions devolve to, "See you in court." but we've had multiple

policy proposals put forward to remove restrictions on transfers, to reduce restrictions on transfers, etcetera. Some of them have succeeded, some of them have not.

Certainly, in my opinion, the transfer process is far more liberal than I would like to see it be, but that's the situation of a consensus-based policy development process. You don't always get what you want and so things are less restrictive than I'd like to see them and still more restrictive than Jeff would like to see them. But I think that that's proof that the process is working.

LOUIE LEE: Great. David?

DAVID CONRAD: So one thing that I would like to clarify...this is David Conrad.

LOUIE LEE: That's very clear now, thank you.

DAVID CONRAD: The discussions relating to PPML and activities within ARIN are relevant only to the North American region, the region in which ARIN provides services. There are four other regions and one of the issues is the disparity among the policies across the regions. I think that that, in and of itself, is an argument for a set of discussions beyond the scope of the existing RIR systems, which tend to silo their own discussions.

LOUIE LEE: I'm going to write this up. Disparity of policies across regions. Okay, go ahead Barbara.

BARBARA ROSEMAN: Randy Bush says, "All RIRs allow legacies to manage their registry data and [in-adder]. RPKI is a coming issue." So that's one of the things that's not covered.

LOUIE LEE: Kathy?

KATHY KLEIMAN: In this case I'm going to take off my hat as co-moderator and put on my hat as a representative of some legacy number holders. And the answer, I think, about the consensus process is that a consensus process affects and impacts those who are bound by that process.

                                    So on the domain name side, for example, registrars are bound by the consensus process that modifies their contract when those contracts come due. You can't unilaterally impose a new contract on a registrar, there's a system. And they're bound by the changes when their contract comes due, if they choose to renew that contract. You can't grandfather them in.

                                    And here you have legacy number holders who operate under a different set of rules; they're not bound by ARIN contracts, or any other RIRs. They exist per the chronology that we put up, they pre-exist the existing system. So to bind them by a consensus process that doesn't

impact their contract's agreements or legal rights is something coming in from outside.

And I think that's where the question is arising. Do we have a new group of stakeholders coming in with a different set of rights that need to be heard at a different stage to be determined what that is in the policy-making process?

LOUIE LEE: John, then Barbara.

JOHN CURRAN: The Internet Registry System doesn't start and end during the NSF period or the post-NSF period or the pre-NSF period. The Internet Registry System is defined in RFC 1174 when the Federal Networking Council and IEPG, Vin Cerf, wrote an RFC that said, "We're going to remove connected status and we're going to distribute this, and there will be Internet Registry System and it will have delegated pieces. And that Internet Registry System defines one database that has all the numbers in it."

That administration happened through IANA and SRI for awhile, and then under cooperative agreement by NSF to NSI through the InterNIC project. And after that cooperative agreement, but ARIN and the other RIRs and then was formalized in the process that NTIA undertook with the IANA function contract.

So we have a spectrum of time where this Internet number registry system has existed. In the final areas of that, there are contracts. In the

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earlier parts, there's not contracts but there was still participation in a single Internet Registry System. And so I do think there's a little more uncertainty than people might be describing here.

LOUIE LEE: Barbara?

BARBARA ROSEMAN: Arturo Servin says, "There are different policies because the needs are different. There's not the same market needs in USA than in Brazil and China."

LOUIE LEE: Okay, Peter?

PETER THIMMESCH: Thank you John, you bring up a really good point which is that there is not a single registry. When it comes to the accuracy of the registry data, the reality is there is no shared registry system. The IANA only manages 256 records, and unfortunately it's not very accurate. The 256 records it has I think has a 40% error rate of at least a data in each record. That is the IANA's sole responsibility, is 256 records.

After that, it then is broken up in to regions, and even within regions there is national Internet registries. And with even those there's sub-delegations. There is no shared registry system like there is with the Domain Name System, and we can't figure out why. There was with

InterNIC. There was a global shared registry system. It then was broken up in to multiple registries, and they have pointers at each other.

We're asking, as part of this process, as one of our largest questions is why doesn't IANA, through its "function" provide a shared thin registry system that then points at John's registrar or Axel's registrar so they then can manage the records so there is a single point that we can point to? There is no shared system, and I think John you'd agree, there is no single shared registry right now and that is unconscionable to me that the Internet, currently the most important part, is not something you can actually trace.

LOUIE LEE: Thank you Peter. Alright then. Last word from remote?

KATHY KLEIMAN: I hear people thinking loudly. Anybody else want to add?

LOUIE LEE: Okay we...oh sorry, go ahead.

JOHN CURRAN: Just a thought as to what you had said from a legal standpoint. I wonder if the forum was such that legacy holders were acknowledged to be different, in the absence of a contract with a Regional Internet Registry, than those that do have a contract. If they were permitted a forum such as a policy development proposal forum or the PPML, for that matter, that acknowledged that they were different at the outset

and invited to help shape policy moving forward instead of being, I guess, defined as already following under the existing policy, I think we'd have a different outcome than we presently have today.

LOUIE LEE: Adiel, go ahead. Thank you very much.

ADIEL AKPLOGAN: As I mentioned originally, I don't have any concerns with legacy space. In our region, the situation is totally different so we're not facing the same issue at all. But I think, listening to people, I think the key issue is what the difference is, really, that legacy space holders are defending. Because from our perspective as an RIR the resources are the same and the need basis allocation or the usability of the resources are the same.

What is different here is when you get the resources and how you get it, but at the end of the day they are common and public resources that are meant to allow Internet to be run as an inter-connected network. When we get in to that, the resources are the same resources. So I think that's probably what people who are complaining should try to clarify on the PPML because I think that's where the biggest issue is, to try to clarify what is the difference, really, beside of using IP address for inter-connecting network.

BILLY SYLVESTER: Billy Sylvester, the Depository. One thing that I wanted to point out was the fact that, often overlooked, legacy holders are a peer to the RIRs. In the general sense that IANA issued the RIR space and in many cases

these legacy holders were also issued space. And so the RIRs would have the same rights and responsibilities as legacy holder, but they're really peers.

So as we talk about the why can't we grandfather them or some of these other issues that we've talked about today, the fact is the RIRs received the space in the same fashion that the legacy holders received the space. And so from that perspective the legacy holders have an equal share and an equal opportunity to create their own policies. And that's really what we're here to talk about today, is how these legacy holders have the same rights as an RIR, and should be permitted to create their own policies. But there seems to be a lot of objections to control that to sort of diminish the rights that legacy holders are given.

LOUIE LEE: Okay, if I may just real quick to say that we're coming close to the end of our session time and I'm going to be closing the floor. So we have Kathy and John and this will be it.

KATHY KLEIMAN: And then briefly the last question, for which we don't have the answer.

LOUIE LEE: That's why we do need to close this discussion portion quickly.

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KATHY KLEIMAN: But just putting on the table...resources, rights, they may not be the same thing. That the resources may be shared, the rights may be different.

JOHN CURRAN: And I just wanted...this is John Curran. I just wanted to pick up on the legacy holder registry parody question that was just raised, or statement. The RIRs, whether we like it or not, have been enshrined in the ICANN system, including the global policy ICP-2. And so we've got responsibilities regarding how we make policy and our regions and how we operate that I don't know if they're shared. And so the question really is if we have a different set of rules for how all this works, getting that actually in paper so that's what it says would be very important.

LOUIE LEE: I'm so sorry.

KEVIN BLUMBERG: Three seconds?

LOUIE LEE: Three.

KEVIN BLUMBERG: Three. Very quickly. The one thing that...Kevin Blumberg, The Wire...

LOUIE LEE: Two.

KEVIN BLUMBERG: The one stakeholder that's missing...

LOUIE LEE: One.

KEVIN BLUMBERG: ...is the Internet Service Providers, at this table. The ones that use this data.

LOUIE LEE: Thank you. Are they missing? They're right here. Okay I'm not going to discuss this. Thank you. I appreciate all the comments from everyone and we do need to move on real quick. How do we proceed after this discussion? We have this list. We, to some extent, went down in more depth in to some of these topics. Definitely not going to solve any of this today, this week. So we want to hear what are your thoughts on moving on? No thoughts? Yes, Peter?

PETER THIMMESCH: I like the dialogue. It's a first for us. We've been asking for this for several years. We appreciate the fact that there's an openness to this, but we believe this does belong at ICANN and we believe that this should culminate in some type of definitive action, which is to review how the ASO can accommodate this. Whether they, the ASO, comes up with an answer or it's predicated by going to structure reform or other type discussions. I'd love to have discussion, we're open to discussions.

We just want to find out what the next step is in allowing or enabling that ability at this level.

LOUIE LEE: Kathy, do you want to respond to that and then David and see if we have any remote?

KATHY KLEIMAN: Yeah. Something that Peter said and something that John said, do these link now? Peter has some ideas for maybe some changes, John said that this should be put on paper so that people can look at it and think about it. Is that potentially a next step, is people who have some ideas should...? Maybe I mischaracterized, I apologize.

JOHN CURRAN: I just want to be clear. I said if there's a different structure than the one we're operating on, if that is the case, then it needs to be on paper. I don't know if that's the case and I worry about the comment made at the microphone that says the majority of users, a large number of users of this data, are the ISPs and they're not in this room and they're not at ICANN. A lot of them do show up as 15,000 members of the RIRs.

LOUIE LEE: And David's deferring, go ahead.

MALE: All I wanted to say is there's a lot of ISPs that are talking in the chat saying that they're participating and I don't know that we've recognized them.

LOUIE LEE: Thank you; I appreciate you pointing that out. So I actually think this was a wonderful first step. I think that it's absolutely critical, for perhaps the integrity of the Internet, that there be a continuing dialogue between the various parties that are involved here. It's been clear to me for a decade or so that the current structures that exist within the IP address management systems need to adjust to a new environment in which the original concepts behind the allocation paradigms and registration paradigms have fundamentally changed.

And if we are not able to adjust to that change, then someone else will probably step in and make the adjustments for us. So whether or not there's an ongoing discussion within ICANN, whether or not the various RIR communities can continue to adjust their policies to deal with the future, is less important to me than there actually being an ongoing non-acrimonious dialogue. So this, as I say, I think is a wonderful first step. I hope it continues. I hope there is a longer session made available to more individuals in Beijing and possibly Durban. And I commend you all for undertaking these steps. Thank you.

BARBARA ROSEMAN: And Randy says, "I do not see why I need ICANN to work on these issues. Talk about dysfunction, the RIRs are bad enough."

KATHY KLEIMAN: Our time is up, but for those who would like to continue the discussion on a voluntary basis; if you would come up I've got a list here and let's set up a list.

LOUIE LEE: Thank you very much. Okay, to be respectful of everybody's time I do need to close the session. And thank you for coming, especially on short notice. Thank you for those participating from remote. I know that this was hard and we'll see if when we do this again we improve on that also.

KATHY KLEIMAN: Thank you to everyone for attending and participating.

BARBARA ROSEMAN: Thank you, you can stop recording.

[End of Transcript]