Ron: Today's lunch was sponsored by an organization that I know quite well. Don't like them very much, but I know them quite well, Aus registry. And you know the deal. Usually the lunch sponsor gets to do a five-minute or ten-minute presentation on how wonderful they are. But because it's Aus registry we decided that you didn't need to know how wonderful they are.

And so Chris is going to, Chris Wright, who's the chief technical officer at Aus registry, is going to do a presentation on the internationalized domain names in the registry. Is that right?

Chris Wright: On policy.

Ron: Policy, on policy.

Chris Wright: Yes.

Ron: And then we'll swing into the next, into our next session. So, ladies and gentlemen, Chris Wright. There you go, Chris.

Chris Wright: Thank you, Ron. All right. So, I'm not sure how many people were at the ccNSO Tech Day on Monday in the room. This presentation is slightly different to that presentation. Well actually it's very different to that presentation, definitely doesn't go into as much technical detail.

What I'm going to do is show you a whole bunch of problems around IDNs that you need to think about or consider when you're looking at in either accepting IDNs in your existing ASCII zone or using your IDN ccTLD when you eventually get it.

There is lots of different solutions for all these problems. I don't necessarily go through any of the solutions here. I just want to point out all the things that you guys need to be thinking about when you look at your IDN implementation.

So, as Chris Splain just mentioned we are the .au registry. We are located in Melbourne and are an ICANN-accredited registrar. We're running the .au registry since 2002. We also provide registry systems or software for other ccTLDs who are enabled or who are looking at becoming enabled for IDNs. So, that's why we did our build. And that's why we've thought about a lot of these issues.

So, implementing the IDN representation of the ccTLD or implementing IDNs in an ASCII ccTLD, they all have a whole range of issues that you need to

consider during the design build and once you start operating your registry platform. And as I said this is not a technical presentation.

So, first we'll talk about a few different things, whether you're ready for IDNs, different levels of sophistications of implementations, IDN-specific policy requirements, internationalizing your whole registry platform, some other considerations and implications that you need to consider when you look at IDNs.

So, the IDN ccTLD fast track is just around the corner we hope. And IDN [inaudible 0:02:59.3] TLDs are coming. Some of you may also be looking at those. Have you thought about an IDN enabling your registry platform, because even though you guys can put in your applications and go and get the delegation for your IDN domain name, it's not just as simple as plugging into your existing registry platform and turning it on.

There are lots of other things that you guys are going to need to consider. So, IDN enabling registry platform or indeed building one from scratch, you could build a pretty naïve, very, very simple implementation where all you do is just accept the XN dash dash string in your existing ASCII registry system. That would actually work. There is nothing wrong with that.

Those domain names would then get published to your DNS. And everything would function, but not necessarily where you want to be. A very simple implementation would be if you accepted XN dash dash and you also requested a language tag to store with the names. Now that's actually one of the ICANN requirements or the ICANN IDN best practices that I'm pretty sure you have to agree to implement to get your ccTLD fast track or bye bye or whatever the word would be.

A simple implementation is where you would accept XN dash dash, request a language tag and you'd verify that the Unicode code points at that XN dash dash domain maps to is in a restricted set that applies to your language. And that's probably the most basic implementation that you can get away with in the ccTLD fast track.

They're the two main requirements that you need to meet. You need to have your language table. Publish it with IANA. And you need to collect that language tag and store it with your names. But is IE solution really what we want for our critical national infrastructure? Is that really what we're all about as ccTLD operators?

As responsible ccTLD managers, we've got a duty to minimize public registrant and registrar confusion, protect against phishing and other misdirection-style attacks, maintain our highest security and performance standards, implement policy-rich controls where relevant, protect the

reputation of our name space and as I'm ultimately manage that national asset in a way that a national asset should be managed.

So, considering all of those things I think that IE solution is the right way to go for most of the people here in the room. So, with that in mind some of the more important aspects that you guys need to consider with the responsible implementation of IDNs is looking at the specific policy you're going to need to develop, internationalizing your platform, blocking similar registrations which was one of the topics of the presentation on the tech day, bundles, the other topic from the tech day, variance of your IDN zone, contingency issue from this morning, effects in DNS, security considerations, performance problems, and how it affects the rest of your community of registrars, registrants and end-users and what the implications of all of these things will be on your registry and all the other interfaces that you provide.

So, we'll go through each one of these in a bit more detail. So, developing IDN-specific policy, the important thing is not to skip this step. It's not necessarily true that all your existing policies is just going to cut and paste and fit with your IDN ccTLD. There are some IDN-specific things that you need to consider as well.

So, iDNA only describes allowable Unicode code points abroad validity sort of rules for domain names, bigger rules for right-to-left strings and the fact that you need to use some Unicode functions, namely normalization form NFC.

What's left up to local policy are things like which code points that will make up your language or languages, what code points or sequence of code points you're going to consider to be variants of one another and what mappings if any you'll expect applications developers or registrars to apply before names are sent to you for registrations or before names are looked up in the DNS.

All of those things must be defined and technically enforced on your registry system without compromising the integrity of your registry system, but as we said on the ccTLD Tech Day none of this stuff is actually defined for you anyway. There is no cookbook to pick up and follow and say, "Answer these ten questions and this will help you define these things."

This is all pretty much left up to the imagination of the ccTLD operator to figure all this stuff out. So, I'm going to try to help you along a bit throughout this presentation and we'll see how we go.

Fully internationalizing your registry platform, something that often gets overlooked in a lot of IDN implementations that I've seen, there's no point offering domain names in a different language if the rest of your interfaces are still in English. There's no point in offering domain names in a different

language if I can't put my address in in that different language, or I can't put in my email address or my host names or any of the other fields that are involved in the registry in the different languages.

Why can't I have my domain password in Arabic? Why does it have to use ASCII characters? We've got a whole bunch of different interfaces to consider as well. If we allow people to enter all those details, address details, user names or whatever it might be in languages other than English we probably want them to display it on Whois and we probably want them working and functioning on registry Web sites.

If we developed invoices in accounting systems most people probably don't want to see their invoices in English mostly. They probably want to see their invoices in whatever language you're operating your registry system in. That being said though there's a whole bunch of potential issues that come with that.

Most registries have a variety of different employees from a vast amount of backgrounds. And not all employees will necessarily speak the languages that you're implementing. So, also other issues that come with those sort of things to do with DNS we'll step onto a little bit later on.

Blocking similar registrations, I won't talk too much on this because we talked a lot about it on the Tech Day. But basically - my slide has lost all its content… there we go - in ASCII domain names we do this implicitly.

Those four domain names up there are all exactly the same [Inaudible 0:09:22.3] domain names. And it's actually built into the DNS protocol the fact that they're all the same even though to a computer all those four names there are technically different. And in this case it's just the lower-case function that's used to map those together.

Once we move to IDNs there are more cases where blocking registrations may be required, for example, because of convention, visually confusion or historic reasons. In the past if I wanted to register the word café I wouldn't be able to use “E” with the accent because it's not allowed.

So, most people realize that when they type into a browser the word café that they don't have to put “E” with the accent in there. Now all of the sudden someone can type that. We probably need to consider those two versions of the name as the same.

There could be non-visual reasons. That's an example there where if I was speaking to someone and I spoke in Arabic and I said, "1,1,1,1," it wouldn't necessarily be clear to the person whether they meant to type that in as the Arabic 1 or the European 1.

Well, for technical reasons another Arabic example up there, this one's actually technically invalid because the protocol doesn't allow it anyway, but same visually characters made up of either single or multiple code points. And there are just some other reasons why we might need to block more than just lower case.

There's no single simple rule that we can apply here. With ASCII domain names it's just lower case. Go through on lower case on all the characters and we're done. But as soon as we move to IDNs you'll see lower casing doesn't help any of those three reasons. And you can't necessarily apply a single rule to any of those either.

Sometimes blocking isn't enough. If you go back to the café.com example, the registrant of café.com probably would also expect that café “E” with the accent was blocked, but they probably also expect that both versions to work.

So, a single domain name registration may need to result in multiple entries being placed in the DNS, and come back. We currently refer to this as bundling, at least in some of the - which I’m sure it does, but it could also be called variants or lots of other different things.

But if we find it wrong bundling can have serious side effects. If we look at, if we had in our system the Arabic 1 and the number 1 was similar, and we configured our system to go through and generate all the different variants or combinations in that bundle, just that small version of the name up there with eight different characters each with one variant, that's 256 different combinations, or 256 different pieces of information you'd have to store in your zone file.

And if that domain name had 32 characters in it, so half the allowed length, ignoring some punycode conversion problems, that domain would have up to 4.2 billion variants. One domain registration could result in 4.2 billion domain names having to be generated and stored in your database. It's really not what we want to do.

So, what we need to do is we need to be a bit more smart about it. We need to think about the context or the reason why the variant exists. And if we look at our example before, the only two combinations that actually make any sense, a bit of a repeat from Monday, that don't make any sense is the one with the full Arabic 1s or the one with the full European 1s.

It doesn't make sense that somebody would start typing in the Arabic 1 (cover off those combinations. Even if the domain name had 32 characters like we said before and there was 4.2 billion combinations, we're still actually only

concerned with the two combinations up there. So, the other 4.2 billion that are remaining we can ignore.

Some other considerations, when you're implementing bundling, potentially you may decide that in your policy you want to allow the registrants to turn particular parts of your bundle on and off. Or when I say “on or off” I mean have them in the DNS or don't have them in the DNS.

How are you going to implement that? There is no set standard EPP extensions if you guys are using EPP is the only way you’ll do that. So, you'll need to look at perhaps extending the protocol or modifying your Web interfaces or so forth.

What are the impacts of bundling on other services you might offer such as DNS SEC? What's the charging model? Should there be one? A bundle has a whole bunch more domain names with it. Should that cost more than a single domain name? I don't know. You guys need to think about that.

And what are the flow-in effects? Are you counting on reporting processes? So, when you report on the size of your name space is a bundled name that has four variations. Does that count as four or one registration when you say how many domains I've got in my name space? Interesting question.

Variants of your IDN zone, contentious issue from this morning. I think it will be clear from this slide my thoughts on the issue. But as an example if a fictitious person George registered a domain name for his café takeaway shop, he might register takeawaycafé, “E” with an accent above it. He may also reasonably expect to have the domain name takeawaycafe without E with the dash on it.

Implementing that should be simple, but it's important to consider that those generic zone files - sorry, pardon me. There are a few different ways you could implement that. People who do zone file generation as their method of publishing to the DNS, if they were using bind, for example, could use things like the dollar origin statement and implement that really easily.

People use dynamic updates or other methods might need to take a bit more care. And it does raise a whole bunch of new issues. If you're having multiple TLDs zone files for the same set of domain names about keeping them in sync and so forth.

Effects of IDNs on DNS…first of all, there are some obvious effects. If we allow bundles we increase the size of our zone file. So, as an example, if we had 100,000 names each with ten variants, that would be 1 million domains published in our zone file.

Now if each of those has two name servers that would be 2 million entries in our zone file. Now if there was no bundling and you only had 100,000 domain names each with two domain names, there would only be 200,000 entries in our zone file. So, that's a 900 percent increase in size of our zone file.

Now this is clearly a worst case. Every single domain name is not going to have bundles and may not necessarily have ten variants and so forth. But the point is is that it's something that you need to think about. And it's something that's going to be hard to predict.

Once you decide on which characters are going to be variants of other characters you don't know what words out there are going to be registered and so forth. So, you don't know what the effects are going to be on the increase in size of your zone file. They can be significant.

The biggest important part of all of this is if you run DNS internally it probably doesn't matter to you too much. But if you outsource your DNS, I do not know one DNS outsourcing provider yet that does not charge per entry. So, that one domain name that you have that generated 200,000 entries into your zone file, just cost your 200,000 times more than every other domain name costs you.

And that's probably going to be more than what you charge for the domain name to begin with. So, hopefully we can get some of the DNS providers on board and start getting them to understand how this works.

Managing larger zone files with traditional tools is not easy. Perhaps you've only got 10,000 names in your space at the moment and perhaps you're quite happy using text editors to edit your zone file for example. As soon as you start having to deal with zone files that hold millions of entries, using those traditional tools don't necessarily work as easy anymore.

So, you need to start to consider how else you're going to do that and what are the methods you're going to use for managing those zone files. Managing IDN zone files with traditional tools is not easy. What domain is that? I've got no idea.

Matching these back to domains that exist in your system which are probably going to be displayed and used in their user form or in their native forms, in the native character sets that they were registered in, in your zone file they're going to come out as XN dash dash, things like that.

So, if you look at your zone file and you find you have a problem with a particular domain or something like that correlating that back is not necessarily easy using current tools. It's a relatively easy algorithm and you

can spit that through punycode and get back what that domain name was, but not many domain name tools that exist these days actually know how to do that.

Zone generation techniques may need to be changed to meet service level targets. Most ccTLDs set service level targets. And all of the sudden now if one registration has to require 200, 300 entries to be put into the zone file that can have serious effects on meeting those service level targets. So, you need to think about how you're going to deal with those.

But there are some not so obvious effects of DNS as well. Well, maybe there are. If there are bundles how do you deal with DNS SEC? Well, we can use the same name servers we can't, in a bundle. So, for example we can make a rule that says, "All domains that are in a bundle will have the same name server records published for them as the parent domain or the core domain or the base domain or whatever you want to call it."

But we can't use the same DS record because the DS records for DNS SEC are tied back to the actual domain string itself. So, you need to find creative ways of dealing with that. Should I use D-name to implement bundles or should I use actual delegations? And there are pros and cons to each.

D-name is really easy for the registry and registrants to use. The registrant doesn't have to set up multiple zone files on their servers and so forth. But with D-names you can't have records at the actual domain name itself.

So, basically you can't have any decent version of email, at least in their current form. Perhaps there will be a move by the IETF to address this, but at the moment it's not possible to have email at the domain level using D-names. It probably defeats the purpose of the domain name.

Delegations are easy to understand and there's no loss of functionality. But now you need to rely on the registrant understanding the fact that they need to go and set up multiple zone files on their name servers and they have to keep all those things consistent and so forth. There are technical ways they can do that, but it's things that you have to be aware of.

There are also some security - sorry, last one on the slide there. I don't know why this does this. I don't like it. D-names in DNS SEC, if anyone can figure out how that, how to make that work, please let me know. I'm fairly sure it can't be done. But if anyone's got any ideas I'd love to talk to you about it.

So, some security considerations that you may not have thought of, so we're introducing a new concept here. And whenever you introduce a new concept you do introduce new attack factors. So, there is all of the sudden a new list

of ways that you can be attacked has now been introduced as soon as you turn on IDNs in your zone.

They are significantly different ASCII domain names. And they do require a different way of thinking when you deal with them. And even simple mistakes can cause big problems if you don't anticipate them, for example, punycode overloading.

So, you can create specially-formulated punycode strings that generate code points that don't actually exist in Unicode. Now depending on how you've coded your software your software may not be able to deal with that.

Now if you don't implement and handle those conditions there is going to be some sort of problem in your registry system at some point in time. As soon as somebody wants to be malicious or as soon as someone accidentally sends in a punycode string that they haven't checked properly, if you haven't implemented that punycode algorithm properly or you haven't checked for these things you're going to cause yourself problems.

Punycode-reverse engineering, sometimes what if I just create a Unicode string that for some reason based on the rules of punycode turns back into the XN dash dash version is actually somebody's trademark or root or offensive word?

All of the sudden now we've got two different strings that we need to apply our reserve list to and our offensive list check into. We've got to check both the user form and the DNS form or the domain names against our reserve lists. It's very important not to miss that step.

Variant overflow delivered or accidental, so if you configure your variant rules and you don't take into account context then someone can jump in there and put in a 59-character domain name that has a single variant for each character. And that's two to the power of 59 variants.

And I'm pretty sure if you don't handle that condition that will sit there in your registry for a long time being processed, probably eat up memory and crash your database server more than likely. That's what it did for us.

Phishing and other scams, so bundling variants, etc., we need to be aware of those. Everyone's talked about those, right? We don't need to do those. Supplementary characters, so these are the new characters added to the later versions of Unicode where they are numbers or the code points assigned to them greater than 16-bit, to the power of 16, or whatever it is.

LibIDN which is one of the most popular Java implementations of IDNs doesn't handle supplementary characters. So, anyone with implementation

based on libIDNs as soon as someone tries to send in a registration containing supplementary characters again will probably cause that registry to crash. Any Java 1.4 libraries that haven't been updated to use the new Java functionality in Java 1.5, or I'm sorry, even if you're using those libraries in Java 1.5 or 1.6, if they haven't been changed to use the new functions they also have a whole bunch of problems of supplementary characters.

Java 1.4 didn't know what supplementary characters were, and this causes a lot of issues. So, just a few of the new attack factors that you might have to consider with IDNs, and I'm no way saying that's the definitive list.

Performance impacts, not being naïve does have its downside. So, if we consider all this stuff and we go and build our system to check all those rules and implement those variants and that bundling and that blocking and fix all those security conditions and address all of those, all of the sudden all of our performance has gone out the window. Registering a domain name is no longer a streamline process.

What we need to do is, well, most of you probably have service level targets that you need to meet, if not SLAs if you are outsource registry providers with financial penalties if you don't meet them. So, you need to ensure you can do all of those checks still in a timely or within those rules that you agreed to be bound by.

All of these things have to be as streamlined as possible, especially in registries where you get large numbers, 5 million, 6 million domain name checks per day. That's a pretty significant transaction which now requires a pretty significant amount of work to be done to check the availability of each domain. So, it can be pretty tricky to get this right.

A lot of ASCII tricks that you could have used in the past to get this right are now invalidated. So, the byte size is no longer the string length. So, that throws that out the window. Byte equivalency is not the only case of equality anymore. So, that throws that out the window.

Lower casing is not the only pre-processing required for uniqueness checks anymore. So, that goes out the window. And all of the sudden functions that used to do domain check might have been implemented in 10 or 20 lines of code now go to thousands of lines of code. And that code needs to be implemented smart. So, make sure that we can deal with these performance levels.

Multi-zone registries where you have mixed IDN and non-IDN zones even incur, have to, they have to incur performance hit and then not IDN-enabled zones because when you receive a domain name string for that zone you don't

know until you look at the zone part of that domain name what zone it lies in. And that zone part may very well be an IDN form.

So, you have to treat every domain at least initially like it is an IDN until you find out that it's not. And then you can bypass all those IDN checks. But there's an overhead there for that. So, you need to consider that as well, especially when you mix your IDN ccTLD registry with your existing ASCII ccTLD registry.

Effects on registrars, registrants and end-users - I hate this - effects on end-users, the different ASCII domains they work differently. They're a little bit difficult to understand initially. People need to get their head around them.

Registrars have a harder job to do now. Somehow they have to interpret what the registrant is actually wanting, turn that something into something that's remotely protocol-valid, based on the protocol. Maybe there's some character mappings that need to take place, maybe not, and have to explain all this to the registrant.

They have to tell the registrant why you put this character in, but we changed it to this character before we sent it to the registry and why they did that and how they did that and what that's all about. What you need to look at is providing tools to your registrars to implement this functionality. What you don't want is all your registrars implementing in slightly different ways.

That's going to cause a whole bunch of confusion out there for your registrants. And it's not going to have the seamless experience that you're probably going to be aiming for.

We also want to ensure consistent messages for registrants and end-users. Published policies will need to be written that tell everybody about what's going on, etc., and so forth. And you probably want to embark on some pretty significant education campaigns as well.

Realistically EPP doesn't natively support IDNs. It is Unicode-enabled, but it doesn't really support IDNs. The ICANN guidelines at very minimum request a language tag supplied with each IDN name. And EPP gives us no way to do that. That tag is also required to do service optimizations.

Anyone trying to do an optimized or a streamline implementation of IDN is going to want that tag. They're not going to want to try and figure out the language themselves just by looking at the characters.

What form of domain name should I accept? And obviously I didn't fill in something on my presentation there. I'll just - do I accept the domain name

registration in DNS form, XN dash dash form? Do I accept it in user form? And that was meant to be example of an Arabic domain name there.

Do I accept it in both forms or either form? The IDN protocol recommends you should get both. But EPP doesn't allow this. I strongly recommend anyone who implements it get the user to send you both forms and cross-check.

There's a whole bunch of issues around case. Upper case and lower case versions of XN dash dash names are the same thing because that's built into the protocol. Yet we should really be case-preserving on those XN dash dash form versions. But if the registrant only gives us the Unicode version we have no way of knowing what case to put the XN dash dash version into our zone files.

User-friendly error messages are also important. We've introduced 1,000 new rules that need to be checked. No longer, beforehand we could get away with saying, "This is an invalid domain name." And the rules that are being checked are pretty simple, 63 characters in the label, no dash, dash in the third and fourth position and (inaudible) zero to nine. That was pretty much it.

All of the sudden now we've got thousands of new rules that we're checking. Sending back invalid domain name is not so much user-friendly anymore because which of those 1,000 rules cause that domain name to be invalid? And half the time now the domain name is invalid because of policy not because of technical rules anymore.

Management of bundles as we mentioned before…somebody needs to build that into EPP. It is the extensible provisioning protocol. So, it does have the ability to be extended to support these things. But it doesn't do it natively out of the box.

Implications for registry Web sites and other interfaces…all those things that we just said registrars have to do, well guess what? We've got to do it, too. We have human interfaces that expect input from humans typing on keyboards. So, if we define local mappings then we need to apply those local mappings to our interfaces too.

Mappings might come about for certain things. An example is the final form Sigma in Greek. Originally final form Sigma wasn't allowed in the new iDNA protocol. I believe it is allowed now. But when it wasn't allowed, when people were typing in domain names where the final form Sigma had to appear in the end of the domain that the only form of Sigma that was allowed was the lower case version of Sigma.

So, the way that it was suggested that that was supposed to be got around was that a local policy rule should be defined that says that final form Sigma should be mapped to lower case Sigma before a domain name is looked up.

Now somebody comes to a registrar's web site or comes to your web site and does a Whois, they're probably going to Whois the name with the final form Sigma on the end, not the lower case Sigma because they don't know that local policy rule. And it just doesn't make sense from their language perspective. The character that's meant to be there is the final form Sigma.

So, Whois interface has to know about that rule and it has to map that final form Sigma to the lower case Sigma to then go and look up the domain name in the database. Now I believe that one's now been resolved in the protocol anyway. But there are lots more examples like that. Finally that's the only one I could think of, but there are.

So, you do need to whatever local policies there are, whatever local mappings you're going to define, not only do you have to get them out there in public and known to everyone so that application implementers can implement those mappings and registrars can implement the mappings, you have to implement them yourself in your own Whois interfaces and Web sites.

Your Whois, should somebody be able to do a Whois on the XN dash dash form of a name? I don't know. I say yes. You might say no. It doesn't really matter. The point is you have to think about it and decide and implement whatever one it is that you decide.

You probably want to get Unicode in Whois response. What encoding should you use, ETF 8, ETF 16 or one of the other ISO standards? We chose ETF 8, but again, something you've got to think about. You guys can do whatever it is that you feel fit.

Your registry web site search and other lookup functions, so if I go to the search page on my registry web site, again if I type that final form Sigma in there I probably should find the domain name. So, all these functions - every interface to your registry where you, any slot where you can type in a domain name in your registry - search functions, check functions, delete, transfer, all those different functions, they're going to be touched by IDNs. And you're going to have to do some work on them.

Now you can choose not to and then just deal with these issues as I don't know help desk support issues or so forth, but probably not the way you want to go.

Registry EPP services…it probably also makes sense to make them multilingual. You probably want your error messages to be in the language

that the person was trying to register their name in. It's no point somebody going to a web site and trying to register a name in Arabic and getting this English error spat back at them saying, "Sorry, domain's not valid because it's got some characters that are not allowed by the protocol."

You probably want that error message to also be in the same language that the domain name is trying to be registered in and your accounting reporting interfaces as we said before, zone tools.

So, in summary doing it right is hard. But, in our opinion anyway it's necessary. Implementing IDNs in a policy-rich environment whilst maintaining the high standards of security performance and flexibility that as ccTLD operators we all strive for is difficult but important.

It's not impossible though. It can be done. Don't give in and take the easy way out because I'm pretty sure at least one of those issues will come and bite you in the long run if you do. And there is help out there if you need it.

There's organizations like ours that are more than happy to come in and help you guys out and talk you through the policy requirements, help you through your technical implementation or indeed outtake implementation is available.

So, that's it. That's where we're at. I'm happy to take any questions if there are any and, yes, go from there.

Ron: So, any questions for Chris or …? Wow, okay, Peter. I guess this back with the audio guy. Peter.

Peter: If we only had this presentation in the morning we probably could have skipped the contributions part since nobody would have any interest in it. Now I think this is a really very impressive list and it might be an idea for a community to turn it into some checklist or I mean, something that is practical of use for registries.

One question, when you mentioned about the Whois input being in the same script as the IDN ccTLD, I mean for the first time struck me that as a very ASCII-centric person apparently, I wouldn't be able to check who actually owns the domain and who to contact in case of any problem.

Chris: Yes, definitely.

Peter: Is that the general understanding that the Whois database would be filled into the corresponding script?

Chris: I mean, it's really, there's no policy from ICANN and there's no I guess, IETF standard that tells you what to do. So, each IDN TLD operator is going to be able to make their decision for themselves.

I would dare so hopefully most will do it in both, the XN dash dash form and the native language form. But we're not going to be able to do those conversions in our head from, if we see a bit of Greek on a piece of paper as the domain name. We want to see who owns it. We're not going to be in our head turn that to XN dash dash and look it up.

So, yes, if you get a domain name on a bit of paper it's probably going to be a real problem trying to type it in in Whois it. The way some registrars that offer IDNs at the moment have gotten around this is they have onscreen keyboards on their web site. So, when you go to Whois and you pick the language that's of the domain you're trying to look up, a keyboard will come up on their web site that contains the characters that are allowed to be registered there.

So, you could click on the characters something like Greek that might very well be possible. But I imagine with Arabic that will be very difficult if you didn't understand Arabic where most of the characters will end up joined together. And it will be very difficult to ascertain which character is which.

So, it's an interesting question and another thing that probably should go on that checklist to be considered.

Ron: Thank you. Any other questions? Okay. Well, in that case would you please join me in thanking Chris for lunch and the presentation. Okay. We're going to - thank you, Chris - we're going to go on now.

Would you just, Peter and Michael Silber here at, it's very [inaudible 0:36:45.9]. But, Sandra…we've got a couple of presentations on administrative matters. The first on is - hi - the first one is from - do I say Marconi?

Louis: Marconi.

Ron: Sandra Marconi from .p, Peru, which is Commercial Strategies in Latin American ccTLDs 2007 to 2009. And…Okay. So, I'll hand you over to Sandra.

Sandra Marconi: Hi. My name is Sandra Marconi. I come from Peru. The first question is maybe why it's brilliant to analyze marketing strategies in domains name market. But for much of you this is of use of legal question. But in Latin America is not so obviously.

But for the first, this presentation is based on the statistics report of domain names in Latin America made by the Latin American project. The first exploration of this data drove about more doubts than certainties. [Inaudible 0:38:44.7] we thought it important to share than here in order to strength and reach the base of what we hope will turn into a deeper research in the follow months.

It is essential to point out the work of Eric [Inaudible 0:39:02.6] in the recollection of this information which was previously) in existent or scattered. Some of these doubts are related to other ccTLD and I trust some of our colleagues here and Eric himself be able to help me answer that.

As you can see in the curve of the domains growth in Peru in 2007 into, between 2007 and 2008 we have fear breakpoint in our growth. Of course, these match with important change in policies and the launching of the second level domain. But in the history of the niche it means that first time that we do business in the domain we do marketing in the domain.

For many years in the ccTLD of Latin America the word" marketing" are like some taboo or prohibit for much person it's like against the institution admission. It's against to serve the local Internet community. But now the awareness of the necessity of our strategy in order to build up our markets are come out.

What is the reason because we think it's more relevant to analyze these issues today? Although the Internet access problems have not yet been resolved in our countries there is more consciousness that these are critical issue. The political are more, believe more in this issue and they have spent money in this access.

But we think that it's time to be more critical and less complacent and start working in issues about the use and the impact of the Internet. At least the process of the new top level domains demands more than ever that we are very clear about what our business, our work.

For a total of 50 countries that Project Latin America sent commercial survey and only 12 countries respond. About these 12 countries, that 30 percent report an up position related to marketing for countries. However, 50 percent have a domain marketing strategy.

Only 25 percent had agreement with registers, 30 percent use EPP, 100 percent sold their domains in a direct way throughout the Web, 90 percent had the portfolio management for renovations. Only 25 percent have a brand strategy. Only 25 percent carry it out customer satisfaction surveys. Only 25 percent did advertising in addition to their own web sites.

As you have seen that DVD, the commercial or marketing activity in Latin America are very limited. I, we think about obviously problem is the lack of economic resource. But it's a concept of issue, too. The first and most important question in any business is what needs are we satisfying? It's in this case is identification or identity, or both of them.

Do the lookout domains compete with the generic ones or are they complementary? We think this question is not clearly respond in our countries. In search of an answer it's important to also ask [inaudible 0:43:59.1] what for. What is the last objective of what we do?

It is the domain registration itself or the Internet [inaudible 0:44:10.1] in our countries. And is this how we measure this development? I choose three tables, three specific tables that I believe that shows three specific findings. It's more than conclusion. It's only ideas that we need to share with, to share here today.

The first one is if you can see or if you cannot see. In this column we have the total number of domains in 2007, 2008 and 2009 - this is less 20 countries selected because [inaudible 0:45:08.8] of the data - that there are countries like Venezuela and Peru and Costa Rica and Cuba that has a high growth in these years.

But the thing, the point is the ranking, the position, the relative position in these, in the American Latina to move. The difference, it's one or two positions. The, instead of 154 percent of growth Venezuela don't move in the ranking. I think, we think that there exists another distracter element to explain the dynamic of the domains is maybe obviously for you, but in the next slide we choose the principle economic indicators.

We have GDP in millions of dollars. We have population. We have GDP per person. And we make a correlation coefficient as you cannot see, but believe me the correlation is higher, very significant with obviously the number of domains.

But what it really means is this. Maybe we, the domain growth does not seem too far from what correspond to us a growth in economic variables. Maybe we don't do anything special. We only follow the position that we deserve because our population or our GDP is you see the ranking of these countries in these economic indicators you see the top five, the top six, are always the top five, the top six. It's no, never, no change, dramatically change.

At least we think if that economic structure of our countries explain the number of the quantity of the domains we have, what is, what explain the development of Internet? We select certain indicators. The number of IP in

numbers delegates the percentage of generic TLD versus cc TLD in each country, the number of sites index in Google per domain. And you can sort.

Argentina have more than one, 2 millions of domains, but have 55 sites per domain. And Bolivia have 1,344 sites per domain. But the most important is about the Internet users of 100 inhabitants and the index of human development, the United Nations.

All these indicators have very low correlation coefficients with that number of domains. Okay. Maybe you can think obviously, but I don't sure for all our countries are that obviously. This is especially important to be careful with saying that the amount of the domains is explained of the Internet development in a country. It's very, very dangerous this information. And it's very popular.

Really, it's all like I said at the beginning we don't have conclusions yet. We like to do with this data a very, very valuable data, maybe econometric analysis that we expect in the next months more deeper information. And maybe with your help and your insights, this is a good opportunity. Thank you.

Ron: Thank you very much. Indeed, Sandra, that was even though what we could see actually, you can see on the screen. Are there any questions? Roloff. Gabby, do we have a microphone? Sorry, Gabby. Roloff.

Roloff Mayo: Yes, Roloff Mayo from .nl. Thank you. Interesting research though I wonder if you will really be able to reach to a conclusion if you approach it from this way because if I understood you correctly you are only comparing the ccTLD domains per country, not total number of domains.

Sandra Marconi: No. I, we compare the both of them, the ccTLD and the generic TLD for per country.

Roloff Mayo: As a total.

Sandra Marconi: Yes, in some case. In these tables, no.

Roloff Mayo: Okay.

Sandra Marconi: But the results are not very different.

Roloff Mayo: For instance the U.S. they would be.

Sandra Marconi: The U.S.?

Roloff Mayo: For the United States.

Ron: The United States. They would be different.

Roloff Mayo: The U.S. is very small.

Sandra Marconi: Yes, yes, but the United States is not in Latin America.

Roloff Mayo: Thank you. My second point, but I'm sure you are aware because it's a very obvious point that when you start comparing then you have to make sure that there is at least a large similarity between naming policies of the different ccTLDs. Otherwise there might be a cause in the naming policy why the uptake is very small and it will have nothing to do with the economy or the population or whatever.

Sandra Marconi: Sorry. I can't understand…

Roloff Mayo: For instance if the naming policy says private individuals cannot have a ccTLD domain or companies can have only one if the domain is similar or identical to the registered name of the company.

Sandra Marconi: Yes. This is our reason because we took this 20 countries and no one other, you know. We've, this country have little similarity to, or not equal in policy that another of the region. It's very interesting because in this preliminary research, we think that change in policy and change in prices that is the most popular tools for development of domain name.

Maybe it's not that thing, because in our markets nobody knows about the domain. It's very, very…it's very unknown, the issue. And when we make change in the policy we can do promotions of this change. And maybe this promotion is that that can do that, the change in the growths under less restriction like you can, too.

Argentina is a better example. It's…the domain Argentina costs nothing. It's zero. But yeah, okay. They have the lot of domains in the American Latina. But they don't use all of them. In the other indicators the number of sites per domain, the number of IP numbers per domain they have no relation between the other countries.

Roloff Mayo: Okay. Well there's quite of bit of research on the price flexibility of domain names. So, that might help. Well, I would like to stay in touch with your results because we always have difficulties in explaining why we have so many domain names in the Netherlands. It's not because we have the largest or the fourth largest economy nor the fourth largest population, so...

Ron: Thanks, Roloff. Just a quick…

Roloff Mayo: Thank you.

Ron: We're going to, we are really tight for time, really, really tight for time. Eric, Joel, but really quick. Okay?

Eric: Two comments. First is about the Netherlands economy. I think the Netherlands' economy in any case is better than all the economies in Latin America. So, this is maybe your answer.

And second the studies is complex because we added each amount this tally of gTLD register ccTLD, also included ccTLD's income IP number delegate, IPP 6 number delegate prize and try to complete the style in the region. We have three years continually of this data if somebody needs we can talk to share.

Ron: Thanks, Eric. If you could just hand the microphone back for Joel and then we'll get Peter up.

Joel: Hi, quick question. How do you get, Marconi, the ratio of ccTLD to gTLD ratio per country? Where did that come from?

Sandra Marconi: Yes. The, I don't remember that, the source accepting, but Eric can tell you it's a web site that register this data.

Joel: Where posting that info, I presume?

Ron: Can we, sorry, we, okay we can take that offline. Ladies and gentlemen can you please thank Marconi for that presentation?

Now, Peter, we're ready for you. Edna, we're going to do your presentation after Peter, okay? So, traditionally at ccNSA meetings our Board representatives come along and have a chat. That's going to happen any minute now hopefully. It's Peter's machine is obviously stuck in a loop of some description.

[Inaudible - Background Chatter - 0:56:44.0]

Ron: You're on.

Peter: Good afternoon. And what a pleasure to catch up with most of you last night at the dinner. I think that's the best attended ccTLD dinner I've seen for a long time. So, well done.

And what was also nice about it was to have all the ICANN staff for all the various regional liaison offices. I thought that was an extra nice touch. So, well done to people for organizing that.

I came yesterday as the chairman with the CEO and answered all sorts of questions very formally. Today is intended to be this issue where this is just, you know, Peter, who used to be something there looking the same way you all are about issues.

What I did in the first couple of visits like this was doing a couple of slides showing you some of the activities of the Board and some of the things we were doing. It's an indication of how busy we are. And I think that I just have another chance to do that today. We really, really are incredibly busy. It's just mad.

From a corporate governance perspective it's, it's not good. We've got a Board really engaged in a huge amount of activities which is just itself not bad, but we seem to be structured to have to deal with these things in too great a detail.

We don't seem to be able to say to the community and staff, "Go away and sort out prices for solving this trademark dispute, in the new gTLDs." And then to come back in the files on another board that I was on I'd be able to say, "Well, staff, have you done that?" And they'd say, "Yes." And I'd say, "Have you done all the right things?" And they'd say, "Yes." And I'd say, "Have you asked all the right questions?"

You would ask director-level questions of the staff about the prices and the resourcing and the time and the constraints and the risks. And those of you who are on board you know the kind of thing. But what do we do is we somehow are expected by the community or feel that we have to. And I'm not quite sure why we end up hammered by the community about all aspects of the community about the way the trademark dispute is being solved.

So, we find we have to be as fully familiar with all of the issue on that as we are on registry/registrar separation on TLDs, geographic name protection in the TLDs and the ccNSA position. In every one of these issues we seem to have to understand to a level far greater than you would probably think.

So, I'm hoping to change that as putting my Chair's hat back on because I don't think that's sustainable. We don't want ICANN doing less things. We want it doing more things as the world gets bigger and more people come on and we have a few billion more years and a few hundred more countries and all that sort of stuff. We've got to have more issues and more things to do.

So, you know, I worry about continuing the same way. Anyway that's sort of a reaction for arriving late and having too much to do.

Ron: Is it, could it not just be a function of saying, “We're not going to get involved until, whenever ‘until’ is. And that might be different for different things. But we're just not going to get involved until,” you know, I mean…

Peter: Well, the traditional reason is that we're not a corporation. We're using a corporate model and so we have a Board of Directors because that's what a corporation has. And for a lot of things that's perfectly sensible. There's a big, there is a lot of big corporate stuff that needs to be done. We need to have staff and have offices and pay salaries and do things.

But a huge chunk of the role of the Board is to act as sort of the guardians of this public bottom-up prices. And the way that seems to carry out in effect is getting involved certainly much less than you do in the ccNSA position in relation on second level names and things. But it's still too deep into the, we still get too deep into the weeds.

Ron: Isn't there actually a complete disconnect there in the sense that we have a Board, because as you say it's a corporation with a level of responsibility that the law says they have, whilst at the same time expecting them to do something.

I mean, I'm not entirely sure that I do expect actually the Board to be the guardians, but nonetheless, I mean, isn't it about getting clear what the Board's there for? Because I'm not entirely sure that any of us and neither are you are entirely clear about what the Board is actually there for.

We know they're there for the legal stuff. We understand that. Of course they are. But we're not sure that anyone's clear what else they're there for, what they, their real purpose in the ICANN model, I mean.

Peter: Yes. Another factor in the background I think has always been this allegation of staff capture of the process. In the model itself there's a disconnect between - and let me point much more to gNSO than to this cNSO.

The staff that do the work that support the volunteers in the gNSO don't report to the head of the gNSO. The staff will report to the CEO. So, there's a disconnect between the big volunteer organization and the staff. And so the people who report to the Board are the staff. We don't actually get reports from the heads of the, like the head of our corporate division making a policy product in this division.

It doesn't actually have a reporting mechanism, an official one. There's lots of unofficial ones. So, I'm looking at changing or clarifying that in the next period if I can because that, just doesn't work too terribly well.

Ron: Roloff, did you have a question? Gabby's just coming with the microphone. If only we knew where it was…It's a disappearing microphone.

Peter: Okay. So, we need to make more resources available…

Ron: More mircrophones, more microphones.

Peter: Or did you spend it all on dinner last night? Yes, Roloff.

Roloff Mayo: Just two remarks and I wish we had or we would find some time to discuss it a bit more in depth because I think it's an interesting, but also an important subject.

One I think that it has to do with some flaws in the government structure of the organization, when you have a Board which is either selected or elected from supporting organizations. I think you incorporate into the government structure a kind of interference because there is this background.

And the background expects something from the Board member although most I think realize that a Board member is only responsible to the ICANN organization, in theory. So, I think that's one.

The other thing, and it's maybe more how we work the system, is that very often, and we heard it again this morning, we hear explanations that start with, "In order to satisfy the Board..."

Peter: Yes, we know that. And we go, "What? Who?"

Roloff Mayo: And so that means that we think this is an instruction or an opinion or something that the Board finds is important. So, we should talk to the Board and not to the person who is explaining it to us.

Peter: I'm sure that happens. And I know the Board is used often as a shield for these people to hide behind or it's used as a sword to frighten people. And some of that's inevitable as people try and do their work. But, you know…

Ron: Hilda, could you pass the mic – sorry, Gabby's got it.

Hilda: Thank you. I think actually what you're saying is right on what was also said in the joint support organization as the discussion that perhaps there needs to be a larger discussion on how ICANN is structured in order to scale because we are not in the same situation that we were years ago.

We have an organization and policy development processes and also the role of the Board that doesn't necessarily scale at the level we're working on now. I also think that there's a lot of frustration with the people thinking that there's

so many issues going on instead of perhaps being able to prioritize and focus on one thing and actually get some progress on it. We run around in circles in so many issues.

I would guess it's even worse for the Board that has to, or that doesn't have to necessarily, but is bothered about every single issue from the very beginning until the very end of it. So, I think that looking at some changes both in perhaps the government structure, but also in clarifying and limiting the role of the Board so that you are able to say that, perhaps you discuss it first. And then when you have a final recommendation you can come to us.

But you don't come to us and use us as a lobbying mechanism the entire way.

Peter: That sounds good from my perspective. I'm sorry I couldn't make that decision. And I'm going to look at the transcript of that. But the existence of that group is interesting. That's sort of a self-formed group that wasn't previously built into the structure that in fact, all of the elements of ICANN get together in that way.

I've thought, for example, of saying, "Well, why don't I have sort of a chairman's committee? Why am I not getting a, why am I not having a session with the chair of the ccNSA of the chair of the," you know, there's a lot of structures that you think might be the end of that.

And quite frankly once we decided towards the end of last year that we were going to be changing the CEO, a lot of the staff previous on hold. But the new CEO if we get one is likely to want to do a lot of this sort of stuff, as well.

Ron: Can I perhaps, given that we've been talking about that SESO session it might be appropriate just to give you very briefly the summary of, there will be a summary document. This is the draft, but the summary it actually goes to everything that you said. And I think it's important.

"Frustration and exhaustion, there's a huge volume of work and everyone struggles to get through it. There's a lack of visibility of the impact the volunteer input has on decision-making, particularly from the Board. The purpose, roles and responsibilities of volunteers, staff and Board are not clear.

"Levels of trust are low. The Board operates at such an operational level. The current processes is not scalable, particularly as the organization continues to grow and internationalize. "

Now, that's all the criticisms; now the possible solutions.

Peter: Let me just say I agree with all of those. If I had been there I would have been nodding away.

Ron: "Prioritization of the workload, better scoping of issues at the start of policy process, improving accessibility to issues by providing summaries, working together to clarify the purpose, roles and responsibilities, leaders acknowledging that building trust is part of their role, taking time to analyze the root cause of the frustration instead of just telling everybody you're frustrated.

"And improved contact between groups through issue-focused sessions and, a decision which we will be in the next few days - when we have time - be sending you a note on that we, that the chairs of the SOs and ACs request a regular meeting with the Board all together. And that will be the first time that has ever happened."

Peter: Yes, I agree. Again I would be saying yes. And I personally, I mean if we had, I said today when we have retreats to give that would take all the volunteers because the Board is all volunteered. None of us are paid either.

So, we've got all the volunteer effort going on the Board. So, let's be clear we're all on it, all of us together. We have all these volunteers working at the Board, all these volunteers working in the ccNSO and more so at the councils.

And yet we never get together and talk about these things. So, let's do that.

Ron: All right. Did you have anything else you wanted to say?

Peter: I actually, I was happy to hear from Mike Silber about how he had found the time on the Board. I can tell it's great to have it him. It was a shame to lose Demi in lots of ways because he's been around for such a long time and made a useful contribution.

One of these chaps who's - is Demi in the room? I say all this just as much if he were, he made a very useful contribution. He's a quieter chap than I am as some of you may have noticed. But together I think we make quite a good team. He's obviously much more technically competent and he's getting a lot of credit for in fact coming up with the Board level and selling the concept of the fast track for the ccIDNs.

And as a team we work together. So, that's a little bit of a shame. And also we were sort of the first of the cc directors. So, there's, but, you know, we'll have to turn. And it looks like you found, you know, a very useful director and Mike's already contributing. Again if he was here I would be saying this.

We've had a couple of meetings and we've had a retreat in Vienna. And he's bringing the ccTLD perspective. He's not representing the ccTLDs, but there are a lot of occasions when just some basic facts need to be shared with the Board. And someone who knows those and knows about the cc community and can just very quickly say, "Look, the Board has no authority in relation to the ccTLDs on that matter."

That just kills off the whole raft of false speculation and stuff that might, that sort of thing is just, very helpful.

Ron: Would you excuse me for one second? This is actually quite urgent. Are there any questions for Peter?

Peter: Well, let me share a couple of the things we talked about at breakfast for some of you that weren't there. There really is a problem with these, some of these issues about new ID and ccTLDs. Most of the Board thinks it's going to be really irresponsible and though some of them use stronger words to let ID and ccTLDs start up without a written contract. And that's going to be obligatory.

I've got to have, as far as the Board, most of the Board members they just can't understand how anybody could think that we're going to start a whole new operation and a whole new conditions with whole new markets and whole new technical and legal risks and go to someone who may or not already have another relationship in terms of an ssTLD, how anybody outside the organization could look in and say, "Yes, you're going to hand that responsibility, mutual responsibilities to somebody with no agreement?"

And so that I think sort of passes what Americans call a “red-faced test”. Could you stand up and explain that to someone outside the organization without blushing? So, there's a lot of pressure to get that.

Now mechanisms for doing that, in other words, need to be what we explore in this check box approach may well be the way. So, hopefully we can work through that. That's far more important than the money. I think there's a lot more understanding.

You know, most of the Board I think expects some payment. They can't understand how people can expect to get taken advantage of or get involved in a system that's cost these millions to develop without paying for it, but, there's a lot more flexibility about that. And if there can be some kind of time-payment process paid out of other revenue or something flexible along those lines. But you just need to know that I think that's not going to be easy.

Ron: Okay. Anything else? Well, thank you, Peter. And it's a shame that Michael's not around. But it's good that - we do need to keep doing this. It's really important, so...

Peter: And I guess I'll see all of the gal around. I understand that the Australians have done a fantastic job. All the rumors are there's going to be a very superb party.

Ron: I have no idea. I haven't anything to do with it. Thank you. Edna. Okay.

And lucky last is a presentation from Edna from Panama, I think that's right, on Policy Changes in .pa, Panama. And then we're going to close the members meeting and there will be coffee and we will move rapidly into the council meeting.

Yes, so off you go…once we get it up on the screen. There we are. Excellent.

Edna: Hello. I will speak about Policy Change on .pa, as this is our agenda. First a little background about us. Nick Panama was established on 1994 where the Facility of Technological University of Panama. Nic Panama is administered by the Technological University of Panama through their Panamanian academic network which has a national backbone covering most of the country.

What is our status? We are a small Nic. We have about 5,000 registrant domains. Citing last year we have been in a cleaning process releasing those domains that have not paid their renewals. Emulating our Olympic gold medal [inaudible 1:14:44.6] giving a couple of stand (inaudible) backs to take momentum and start with chains or policies.

The actions to promote the use of .pa is our improved portal liberalized policies, raise permission and advertising. Now, to your left the minimum requirement that we are asked to our solicitants and at your right will be the next minimal requirement starting on August this year.

To have a lift to the IDN servers, we only ask for the name of the DN servers and will not test. No test will be covered to primary server. The administrative, technical and billing contacts required to formalize this service at least to different people. The names may be generic. Emails may be generic. The cert level domains under .pa is the conduit.pa.ac.pa.

Next. The principle change is on their .com.pa. Now we only assess commercial entities, but starting on August we will be assess commercial entities and single person.

Since the beginning of this new policies in the event LAC NIC 12 we delegate the first domain name to a single person, Reuben Blade or single and other international. And now we delegate reubenblade.com.pa to him. The rates, this is our actual rates fits. But ergo, we have promotional rate.

Now we have an advisory council formed by private entities, government, civil society, economic and research community. This advisory council is formed by this entity. Interred is the Panama map. Government we have a secret diet for the presidency for governmental innovation, a national regulation of ecommerce and authority of public service.

On the civil society we have [inaudible 1:18:17.5] Panama section, Panama Technological Foundation and LAC TLD. For economic research community we have council of directors and [inaudible 1:18:30.5] Institute, Panama office.

Despite being a small Nic we strive to promote Internet use in our country throughout our participation in national bodies and international organizations. We participate in direct [inaudible 1:18:56.5] of Panama. We are Board members and we [inaudible 1:19:05.3] worship last year.

We coordinate with secret target of the president for government innovation, the coordination of .gov.pa domains. And we participate with senate seat on the [inaudible 1:19:29.6] Project Internet 2. We are member of the REG SID.

In international organizations we sign as a [inaudible 1:19:43.7] framework with ICANN on December 26. We are member of ccNSO. We are member of LAC TLD. On LAC NIC we have the must rise brilliant. We organize the LAC NIC 12 was a huge success last month on Panama. We were to on Alice Clara Project on Internet 2.

That's all. Thank you.

Ron: Are there - yes, thank you. Are there any questions for Edna? Well, in that case will you join me in thanking her?

Okay. So, we are going to need to set up for the council meeting. What I need you to do is if you're going to stick around for the council meeting that would be lovely, but they do need to set the room up. And they need the first two rows cleared so that they can set up.

We'll start the council meeting probably in about 15 minutes time. And that is officially the end of the Members Meeting in Sydney. Thank you for being here.

Oh, I'm sorry. Why do I always forget Kieran? It's so unfair of me. Can you indulge me for one minute, or rather indulge Kieran, for one minute?

Kieran: Is it on?

Ron: Can I have some sound on here, please? Sorry, Kieran. I'm just all over the place there. Ladies and gentlemen, him.

Kieran: Thank you. Hello. I just wanted to update you on remote participation and other things that I'm doing. So, if you remember last time we did the experiment, you were the guinea pigs of this Adobe Connect software. And you were very kind enough to say you though it was great.

So, we've extended it into the main room. You can see that huge box there. Last time we had about six laptops all wired and connected up. So, you all said it was great. So, we invested in building an all-in-one piece. And we got two of them and we put in the main room. So, thank you for that.

It sort of gave the push to expand it a bit more. But also at the same time we still, now you've had it for two meetings. I'd like any feedback that you have on it. I know it's a great improvement, but it's there's still got to be issues with it. So, if you say, "It's great, but -" I mean, or, "You could do this."

I think the scribe feed wasn't working this time as well. I don't know whether it was working up here or the scribe feed which we got working last time wasn't working this time which is one of those things.

And at the same time the other thing I really want to draw your attention to is a usability study that we're running for the ICANN web site. As long-suffering users of the ICANN web site we finally got around to running the usability study. There's, you can click on a link on the, every page on the ICANN site. It's a small, thin bar.

There's a quick online survey. We'll be interviewing other people and getting the sense of it. We wanted to find out how you use the ICANN web site, the issues you have with it, the things you think are good, the things you think are bad and the whole, the end of it will basically recreate the web site around what people want.

Now I know most of you probably just use the ccNSO web site. But, well, we're hoping, but we'll learn a lot from doing this and then hopefully that will feed through to the ccNSO web sites. If we end up with a style or an approach or taxonomy or something that works for everyone we'll then feed that through into the ccNSO's web site.

So, I please urge you to do that because this is the one chance probably for years that we're going to be able to properly look at the ICANN. And make a couple of changes.

So, with that thank you very much. And I'll see you again next meeting and tell you pretty much the same thing.

Ron: Thank, Kieran. Okay, everybody. That is it now. First two rows cleared, please.