TRANSCRIPTION OF MEETING BETWEEN TTCS AND ICANN REPRESENTATIVES

ICANN> Let's start with figuring out what we know about each other. I'm not very familiar with your organization, but I know as many computer and network societies. I've read a little bit of what you do. But I don't know what level of knowledge you have about what ICANN is, so do you want me to give a basic introduction, or do you think you know the basics?

LOCAL> OK.

ICANN> ICANN is a body that was formed in the mid- and late nineties. Because of the way the Internet grew, if you're old geeks, then you'll know it started with the DARPANET, it was part of a military contract, and the administration of the Internet, which is an important part of it. The Internet basically runs on two things. Internet: hundred-thousand, million networks, nobody really knows, everybody gives you numbers, but it's a… somebody's home to… network. I think so, most people don't count them.

So, it's millions of users and two things make it work is that everybody agrees to the protocols they use. We use HTTP, we use DNS, we all agree to what security handshakes we're using etc. And the other thing that makes it work is that we all agree to the identifiers that we use that are associated with those protocols. We're talking about routing protocols such as PGP. We're talking about IP addresses. We're talking about DNS, we're talking about the domain name system.

Now mid-nineteen nineties, the US government was still funding an organization called the Internet Assigned Numbers Authority. These were the guys that were registering all those identifiers because the chief thing about the identifiers is that they need to be registered somewhere so that they could be unique. Uniqueness is everything in identifier systems. You don't want two people having the same IP address, you don't want two people having the same email address, you don't want two people having the same domain name, or the Internet ceases to function in a reliable way. When you send me an email at John dot Crain at icann dot org, you want it to come to this John Crain at my icann dot org, not some other icann dot org and some other John Crain. They're fundamental principles of the Internet.

The Internet Assigned Numbers Authority was paid for under a DARPA contract, it was housed at a university complex, the ISI (Information Sciences Institute), which is based in California, Marina Del Ray. Everybody thinks we have these big beautiful offices with views of yachts, because it's a marina. I actually have a view of the yachts now if
I go like this (leaning), but most of us don't because we have only one floor because we've been expanding. When I came to ICANN, compared to where I came from (in a minute), we were in two or three offices and we had a view of a petrol station and MacDonald's, so it's not a big, glamorous organization.

The US government and a lot of people around the globe decided that having the US government pay for and manage the identifier system was probably not the thing we wanted. In that period in my life, I was director of an organization called the RIPE NCC, which, if any of you are familiar with LAC NIC, which is the IP address registry for this region, then the RIPE NCC was the first one of those regional Internet registries and it was in Europe. It was founded in 1992, and it was really the first registry to bring an area of the DNS administration outside the US government. So a lot of us got together, the US Department of Commerce, some people from State and some other organizations within the US

government decided they would column a white paper. Governments work with papers, so the first thing they is, 'here's a white paper', 'produce a white paper that says how we should manage these resources, this infrastructure. They don't look at it as Internet, it's a resource, it's infrastructure, how should we manage it. They went through a series of meetings around the globe and they came up with a green paper, which is the next stage. What that green paper said basically was let's form a non-profit organization that is bottom-up, community-driven, transparent and have that manage the IANA function. That body was ICANN.

Now, we were formed under a, what was called a Memorandum of Understanding or Agreement, formed a contractual agreement with the Department of Commerce, so we have agreements with the Department of Commerce. They didn't say, let's just turn this over to the non-profit world and let industry run it; they said let's watch how we do this, which is what you want, right? You don't want them just to say, ok let's throw it in a corner and let's see what happens. That MOU is coming close to closure end of this year. We as ICANN staff don't know what's next. We don't know if there is an extension of the MOU, we don't know if there is some other form of MOU, we don't know where that's going.

LOCAL> You'd still need to have one, or you'd pretty much, you'd want to?

ICANN> There's an issue, I mean if you manage data systems, which some of you may do, the way you manage data in a sensible manner is you have your administrative side of that. So this is specifically so with DNS. You have your database where all your information is and where people sit and type in changes and do change requests. And what you want for the output is some kind of publication method: the generation of a zone find in DNS world, and pushing out to the main servers.

In the middle you want an audit process. The Department of Commerce is the department that NTOA (the National… I don't actually even know what it stands for) is that audit body. Every time we make a change to the root zone, which is the central zone of the DNS, we do our processes, we do our own internal audits and then we send it to Department of Commerce and they basically look at it and say, ok you've got a process, are there any clerical errors in here? A typo in a DNS can be pretty fatal. It doesn't like dots in the wrong places, it doesn't like you doing the wrong letters in places. And then what they do is they pass it along to Verisign.

Verisign is still the people who publish the root zone. We manage all the changes in the root zone. We're also the people who manage the IP address form. So every IP address, at some point, is given out by the IANA or by ICANN. We give it to regional Internet registries, for example, to LATNIC, and they give it out to Internet service providers. Internet service providers assign them to machines. Every other identifier you can think of on the Internet, we probably register it. Autonomous system numbers, the port numbers that computers use, you all probably know that port 80 is for the web sites. There's a list of what every single port is for. That's what we do, we register those. We're the pen-pushers, the paper keepers of the Internet. That's what we do, we keep databases, we publish information.

The other thing that we do, which is in relation to the DNS, is what we call generic top-level domains, which are the things that aren't specific to a country: dot com, dot org, dot net, dot arpa, I come to the other ones a little later, dot mail, dot gopher (the original ones), there were originally seven of them. We have contractual agreements with the operators of those zones, so the people who maintain those databases, do those audits etc., and publish those zones. ICANN has a issue … called a forum, where as many people as we can get (that's partly why we're in the Caribbean is to let people know they can do this) is to give us input as to what the policy should be around domain names. We don't want the

staff making those policies, that's not our job. Our job is to make sure they get put in place and basically the administrative side of it.

Now when were formed, there was an issue with the Internet and specifically the naming system, in that there wasn't really much competition. If you wanted a dot org domain, you went to Verisign. If you wanted a dot net domain, you went to Verisign. If you wanted a dot come domain, you went to Verisign. It was just military, US military, governments, US government, edu, US edu, arpa infrastructure.

So, pretty much the three that were available to the public were all controlled by one organization. So, one of the roles of ICANN was to introduce competition. And there are multiple ways we did this. One of the things we did was said, Verisign you can no longer …

LOCAL> You mind if I just ask a question as you go? (Absolutely) Was there need for the competition, you thought it would've help the market, was it too much for Verisign themselves to handle? Why was it … done?

ICANN> The people who were involved in the green paper (I was one of them) didn't think it was right that one organization should have so much control over the naming structure, certainly a commercial organization, and that the consumer would benefit. The end-user would benefit from competition. Competition is generally a good thing. The Internet is not a regulated environment like telecommunications. We don't have an ITU, so it's very different. The things we decided to do, and I was actually at ICANN at that time and I was involved in the discussions, was we decided to separate the function of registry, people that hold the database, and registrar, which is the people that sell domain names.

Registrars didn't exist before 1999, 98-99. What that did was it created an agreement whereby Verisign would charge at set fees for the registry, which is about $6.25, and the registrar could charge what they wanted for the domain name in dot com, dot net, dot org. What we very quickly found was that the registrars over time either just charged that $6.25 or in some cases didn't charge anything, because what they do is they're selling services, they're selling services and they incorporate them into costs. So just by doing that, there were estimates out there, not by ICANN, but they wiped millions of dollars off the cost of …, some even said by over a billion dollars off the cost of domain names, which I think is good for the end-user. It's not good for the guy who had the monopoly, but that's not what we're there for.

The other thing we did was that we made an agreement with Verisign, with some help from the US government, that they would no longer stay in that monopoly situation on the registry side, so we had an agreement about three domain names: dot org would be re-bid and Verisign would not be allowed to re-bid, that they would be excluded from the bidding process.

LOCAL> Wasn't there a … for something like that? Who's holding the hammer?

ICANN> The US government. They're contractible to the US government. This was very much a carrot-and-stick, with more sticks from that side. This is true. So dot org now is with an institution called the Internet Society and they have a body called PIR, for Public Internet Registry, that won the bid for that. And one of the things that helped them win it was that they said they'd do good things with any profit, which includes pretty reasonable things: training, seminars, things that help people learn about Internet, which is probably better use of the profit, especially for dot org, that was initially designed to be for non-profit organizations. And of course, now that they've let people in on what

Verisign did, you can't turn it back, so now it's just generic, just like dot net was meant to be for network infrastructure, but now everybody has them. Dot com was meant to be dot commercial. The agreement on dot net was we'd re-bid it and Verisign could come in as an equal bidder. They actually won the bid as one of the long-term infrastructure suppliers, it wasn't surprised that that … re-bid. Dot com they got to keep, that was the agreement.

Then the next thing we did was, we said, well the other way to introduce competition was to add more TLDs. You've probably come across some of them: dot biz, dot info, you might not see dot museum so often or dot aero, but these are things that went for process within the ICANN community i.e. this forum, and helped us develop the initial test on how we're going to put more TLDs into the Internet, and what's the effect gonna be? Because you can't just add these things in and just say well we hope it's gonna work. We added seven initially…

LOCAL> Was part of the decision have to do with traffic management or to keep little pockets…?

ICANN> Not really, it really is about consumer use…

LOCAL> Branding or…?

ICANN> It's not really about branding. It's more about…

LOCAL> Recognition?

ICANN> Yeah, recognition. So dot museum was put forward by a museum, and I'd say a whole bunch of museums, who wanted to be able to put museums under their own TLD, for ease of use and recognition, so can go to one web site, I think it's NIC dot museum, and it lists all these museums.

Dot aero was put forward by the aeroplane industry, the air industry, and is used for airlines and it's also used for registering parts and the whereabouts of parts for aircrafts.

So there were very many, it was very much an experiment in what can you use domain names for. It's a distributed database, it's the biggest distributed database in the world, I think. People don't think about it that way, but that's exactly what it is. So we introduced seven, we sat back for a while and did some looking at what was the effects, and two years ago, we did another round and in this round, the stipulation was that every TLD would have a community of interest and there are about ten applicants, I think nine of them are, no eight of them are still in the running arena in the Internet already and a couple of them fell through because they were technically unsound.

What we did is we basically did an open process where they put in bids and then we put independent panels to review it. So you don't like to have staff reviewing this stuff, because we're in California, we moved …. So what we did is we got independent experts and some fairly well known experts to do this.

But that's pretty much what our role is. The opposite side to that role is that to function, we need info. We have a format where we have a board and we have what we call supporting organizations. One of those is the at-large supporting organization, which is meant to try and incorporate the thoughts and the interests of end-users, and Jacqui, who you all know, is a representative for the Caribbean on the at-large advisory council. We also have one for addressing under ASO, the Address Support Organization, one for generic names and one for country code names. The one for the generic names is really what ALAC began under, although it now stands for all areas and there are all kinds of

constituencies that have meetings under there, be it Internet service providers, intellectual property concerns, civil society, anything business, anything you can think of, we want input from.

We are considered to be a resource for the Internet. It's not something that's owned by something. The Internet isn't governed. This is a very strange concept when you talk to governments, so when I go into a meeting with your ministry or somebody else's ministry, and I say, well you give authority to six TLDs and we… we don't give our authority to anybody. We recognize, for example, who is managing a country code top level domain, and their authority comes from the people in that country, accepting that they do that, doesn't come from us. We don't have authority to run the Internet, unless people that are using it, be that the businesses, the end-users, actually partake and help us do that, define these policies. That's pretty much what ICANN is, it's an administrative body, but we have these areas where we have to make policies, as ICANN… forum. What we're looking for is to get as many people in there as possible and doesn't mean you have to come to our physical meeting. We have three of them in a year. They rotate in the five regions that we've assigned.

LOCAL> Do you also decide who doesn't get in? Isn't that having authority?

ICANN> Into the root?

LOCAL> We could decide to do dot tt, and unless you all are satisfied with the infrastructure, plan…

ICANN> Actually no, it doesn't quite work that way. Dot tt is a country code. Probably you should be aware that there is some discussion on where to place the management of that.

LOCAL> I shouldn't have said dot TT, I should have said anything else.

ICANN> Dot TT is a really good example. So, because it's a country code, the area you want to talk about authority or recognition is really within the country. Now if you come to ICANN and say I want to move this to Joe's Pizzas and he's going to run it on a laptop that he keeps in an old pizza box, if the entire country of Trinidad and the government, the business community all came together and said this is the best idea, this is pizza (laughter) yeah, I mean we're gonna turn around and say that this is a stupid idea, but if it's the one you like, it's not our problem. Now when it comes to adding new generics, there is the policies and the mechanisms for choosing those. The staff work preparing the documents, but they don't make the policies or the mechanisms; the community does.
We deliberately use independent review panels, so that it's not the staff, it's not ICANN, the secretariat making those decisions.

LOCAL> So a country must adopt this structure, that's what you are arguing (no). It has to evolve in their special way?

ICANN> Countries, they basically run it how the country wants to run it. What we can do is we can give it … ok, because we see every country. Our normal advice that we give to an administrator of a country code, our best advice we can give them is take part in the CC, the Country Code Naming Support Organization and talk to your peers. We actually do run a TLD, we run dot ins, I run one of the root servers, so we understand DNS, but we don't run country codes, so if you want to know about how to run your country code, there are hundreds of experts out there that are better suited to tell you how you should run that than we are. Now we can bring you into contact with them, we can speak on their behalf, so long as we know what's going on. But we always suggest, talk to your peers.

It's the same if your computer breaks down. You can go and pay some expensive people to fix it or

you could find your next-door neighbour who does computers and who's doing the same thing and say how do you do it? That's how the Internet works.

LOCAL> … Not referring to dot TT, because quite frankly I don't know enough of what's happening there, I'm coming to hear from you. But, you say the community decides who? What if who they initially decided is not doing the job the way it should be done? Who pulls them up?

ICANN> Hopefully the community within that country. Historically, the perspective on country codes (and TT falls into this category) John Postel, who run the IANA in the eighties decided that we needed to have competition in the DNS, I think we knew that, that's the same thing that we came across. The way he did it was he added, for every country that had a code, or every code in a specific list (it's called ISO-3166) and it's a list managed by the UN, and it defines countries and territories with three-letter and two-letter codes. It's based on the postal system. So you'll see things that you wouldn't consider to be a country having a country code and the reason is that they used to have to get post to these rocks, so they had a postal code and that's how it developed.

What's that document again?

ICANN> ISO-3166-1, from the … Dash 1 is the one we use for authority.

You can Google for that?

ICANN> Yeah, you can Google for it, you should find it. And if not, send one of us an email and we'll get it to you.
The way John decided to do that, John himself was the man who actually registered everything pretty much since the inception of registration systems until he passed away, unfortunately just before he managed to get ICANN running, because he was part of setting up ICANN. What he decided to do was populate the root zone with all of the codes, so what you have is you have these two hundred and forty or however many country codes in the root zone and for each one, he decided he'd go out and find a manager. Now, some of these places, many of these places, you gotta remember that this is the eighties, this is way before the Internet was, hadn't even heard of the Internet, what John did is he found somebody in the region who he knew because it was the Internet and everybody knew everybody because it wasn't that big and he asked them to manage it. So what you ended up with was a situation where people outside the country managed the zone. And as the Internet becomes a commercial environment, I mean three quarters of our economy rely on the Internet. Don't underestimate what would happen, this planet would be in big trouble. Economies would just be devastated by it, which is why governments are very interested in it, and rightly so.

So one of the things we're seeing and is a trend that we're gonna see more of is that government bodies look at these ccTLDs and say how is this managed. If they're not satisfied, sometimes they are, what they'll do is they'll write to ICANN and say we wanna move this from here to here. What we have to say is, that's not exactly how it works, and it's a whole process they have to go through and we're looking for community buy-in so basically what we are looking for is that: A. they've really thought about where they're putting this, that they've used their expertise in their country. The expertise in the country is your businesses, your ISPs, it's all the users of the Internet. Those are the people who have the expertise and technology. And we've gone for quite a few of these, some of them are hostile, where the current owner says no, we're not giving up difficult cases.

LOCAL> Do they have a choice if called upon?

ICANN> It depends on how far the government involved wants to go and the community wants to go. The issue is you never want to do that kind of re-delegation if you can avoid it, because there is a bunch of information, technical information relating to that TLD to the people underneath there, the registrations that affect the end-users that you really need when you take over the TLD. So you really want to try and smooth it over as much as you can. So, we've never done one where it's just you get this guy that's gets it moved next week. It's always been negotiations inside the country. If there's a fight inside the country, this ministry says it goes here, and this ministry says it goes there, which we see: not our problem. Come back when you've solved your internal issues. That's what we tell them, because ICANN doesn't want to get involved in internal wrangles. We want a stable Internet. Moving a ceased TLD every two months, people driving internal arguments is not a stable Internet All that does it is put force into the confusion, especially if that not … transactions, and lack of trust in the Internet.

The Internet, the other thing that it runs on, apart from the protocols and the identifiers, is the fact that people, to some extent, know what it's gonna do, and they trust it to do things. It shouldn't always do that, because there are a lot of security issues on the Internet. But, to some extent, you know that dot TT is gonna be there, you know that Google dot com, www.google.com, you know where it goes, right? And that's what you just want, so everything we do, everything we do, we have two things that we worry about: stability, security. That's pretty much the thing we worry about. Something's gonna change and we think it's gonna be really bad…

LOCAL> Security in the American sense of the word, or 'reliability' sense of the word?

ICANN> Security in the sense of, 'are those systems gonna be hacked', 'are the transactions between them gonna be hacked', that part of security, the stability in the sense 'is it gonna be there' and that a reliability issue. Security in the sense of 'are the systems going to be hacked'. Is this new protocol we are going to put into the DNS gonna fill it with holes, so that everyone can hack everyone machine, and if we know it's gonna happen, we're gonna raise flags. If it's something in a country region, we may not be able to stop it. If all the people who are invested in a country code want to go and use a different protocol behind that, it's not necessarily our role to turn around and say you can't. But we're not gonna say, hey that new version of IP that you're using, IP version 19, you might not wanna do that because, I know you're a student … at university is the cousin of the President and invented it, but you're not gonna be able to talk with the rest of the Internet.

So, this is the thing about the community model as well as it's not just ICANN staff per se, I can stand out necessarily. There are other people in the community that are all paying attention, out to people who look at the Internet…

LOCAL> This might be jumping the gun a little, but are we to have a happy transition here?

ICANN> We have not had a request for transition, to be very clear, there is no transition in progress. Until we get that request, as far as we're concerned, there is no transition in progress, but we're hearing rumours and discussions, we've talked to the people from the ministry, we're talked to the ISPs that they would like it to function like that.

LOCAL> Do you all carry a report that we can have access to that shows the performance of the country codes per capita and see how badly we're doing, if we're using it at all? I know, everywhere you look, you see dot co uk, there's UK everywhere but…

ICANN> TT isn't that widely used.

LOCAL> I mean, where do we stand in the world? You don't carry that…

ICANN> We don't, but other people do. United Nations funds all kinds of research, other bodies do to. We have very narrow technical role. Research isn't one of them.

LOCAL> But the data's all there, if you wanted to do a…

ICANN> Theoretically, depending on how they set up the zone here, you should be able to go and find that information out by yourself for TT. There are ways you can query that information fairly easily. Now, to go and query that for every single TLD in the world is pretty hard. So a lot of people, they go and they look at the online statistics, and it's just what people tell you. Every time you see a measurement of the Internet, and how big it is and how wonderful it is, take it with at least one bag of salt, not a grain, get an entire bag.

Because we did some of the early host measurements in Amsterdam where we would do DNS warps and publish data on how many hosts in each country were in the European region, and we had a big disclaimer: we don't actually think this is the number but we're measuring it in the same way every week, every month, so we were doing growth patterns. You can't count how many people are on the Internet. Statisticians don't do a map and they go and ask four people on the street what their favourite colour, and somehow they come out with red is the favourite colour on the entire planet. I don't know how they do that, I'm not a statistician, but there are lots of reports out there. We do know, for example, that dot com is the largest, we do know that dot de is the second (German), yes a country code is the second largest TLD in the world, it's not dot net or dot…

LOCAL> Any idea what might account for that? Is it nationalism, price, situation they have…?

ICANN> It's a mixture, actually. It's price, it's reasonable, that always counts if it's too expensive, people aren't…

LOCAL> Which is what I see as the problem here…

ICANN> That's what I've heard from one or two people. So price is always an issue; knowledge, actually knowing you can get it, so is marketing, is always an issue. Nationalism comes into it, you know, a bit of national pride…

LOCAL> It would be interesting to know if people who, Germans who live out of Germany would buy names with these, country codes out of that same central list…

ICANN> I think in the German case, that's true.

LOCAL> Nationalism got them into a lot of trouble (chuckling)…

ICANN> Well apparently, they've just done a lot of good marketing, and it just got the…

LOCAL> I'm captivated by that idea.

ICANN> Look how big Germany is. Look how much business is in Germany. They're also one of the biggest countries, and people in the US don't use dot US, very rarely. They use dot com, so if everybody used dot US, I guarantee that dot US would be the largest TLD, but they don't.

There has to be different reasons. For example, in the Canada and the US, you have companies that are operating in both countries, but sometimes its harder to move goods back and forth, so you get a lot of dot ca, which companies are using to say, we've got a presence in Canada. It's often just a sign of presence, you know, if you're doing business in one country or you're facing one country and you want people to know that, that's what you tend to use country codes for.

Some of them have been sold as having a different meaning than the country code. Tuvalu is the case of a small island in the middle of the Pacific, which is dot tv

LOCAL> Because even CC…

ICANN> Yeah, CC is the number one (cricket club). The other one is dot NU.

ICANN> But that has a lot to do, because when we were marketing the notion of getting a country code, we used dot cc, dot cc…

A lot of it is about marketing, but you have to be really careful when you market your country code as something other than your country code because you're diluting the value of that as a piece of national infrastructure, which is pretty much what it is. It's like your dialing code. If you can have your…, and this is happening in the telco world, with voice over IP. I dial from my laptop, voice over IP is not leaving this country, so…
If I was to dial from my laptop, technically, then, and I dialed you, you'd think I was in Long Beach, California, because my laptop's phone number is 1-562. Then that's diluting the meaning of area codes, and country codes. I don't know if that's a good thing or a bad thing, but if I was in a country and was running the country ccTLD, I probably wouldn't want that to happen. So I want TT to mean that this has something to do with Trinidad and Tobago, not necessarily that it's in there, but it has something to do with it.

Trinidad's not the only country in this situation. There were many, many ccTLDs that went outside the country and slowly they're moving back in. Most of them are very smooth transitions, and every now and then, we get one that's a little bit awkward. But we work through it. Eventually, they all end up coming back in. That's pretty much what we do.

The other things we do, of course, is we do publish the root zone, which is key to language structure. That's probably the one thing that gets us into more political discussion than anything, so all those changes that we make to…, they actually sit in the zone file. And because we administer that, they bring a fair amount of political turmoil with that job. So we get involved a lot in discussions on the smooth… I don't know if it's a business or if it's a political debate or what it is, it's called Internet Governance. Don't ask me what it is because I don't know, but whatever it is, we're right in the middle of that, and it's very interesting. So this whole debate about how should the Internet be governed, which is pretty much what formed ICANN, right?. That was a debate about how the Internet be administered.

LOCAL> Isn't it not more a case of how will it be allowed to be governed, because somebody hold the plug, the cord in their hand…

ICANN> Somebody has to administer the central databases. There's no way of getting around that. The issue is more around how are those changes approved, who has that power, just like you'll see if your ccTLD goes up for being moved, people will start fighting because they think they're the people

to do it. You get the same thing in the level above.

There's not really that much different between (I have to remember I'm being recorded otherwise I'd say something rude!) between a TLD and a root. The main difference between a TLD and a root is just the scope in which it's used. So the root has an affect all over the globe. So the political quagmire that we get in is of a global nature. So we do get into discussions with the United Nations, the ITU and various governments. People do want to know what we're doing.

LOCAL> Do you have cases (this is probably simple) where the transport of bridge packet material that couldn't pass through my waters, because, by law, people refusing to allow data flows through their …?

ICANN> You're talking about transportation of data as opposed to the identifier systems. Now, we did have some people filtering specific queries, people do that kind of thing. We know that people filter content on that basis. This is the Internet; everybody decides what they do with their network. So, if you want to run a network, and you want to run your own root zone in that network, that's up to you. You take the risks. So, people filter all the time. I filtrate my house, I filter spam. I filter ICMP queries.

LOCAL> Is this 'filter' as in censorship or…?

ICANN> Put per-hit censorship. You cannot do a ping query to my home router because I'm censoring you from doing that. Whether it's an ACL (access control list) in a router or some fancy technology that sits there and looks at the content or the URL that you go to, it's the same principle. You're just deciding what traffic goes through your router, your network. Nobody controls that, there is no central authority for that, so if you run a router in an ISP (Internet service provider) and you decide that it is in your best interest to filter everything that starts with, I don't know, let's use something that actually makes sense, ten dot zero, or ten. You know, if you said, I'm not accepting traffic from any network who says its IP address is ten dot something, that's your choice. And if any of you work with an ISP and are not doing that, I suggest you go home and do it right now, because private IP addresses should not be on the Internet.

Every operator of infrastructure has to take a look at the traffic that they're accepting and what they do with it, and make economical decisions based on it, economics, as in, processing power, as in bandwidth. I operate a piece of infrastructure that doesn't really have that luxury, and that's a root server. The DNS system, at the root level, at the very top has DNS servers, just like you have DNS servers for your web page, DNS servers at your ISP, for answering queries for your domain names, the very top has a series of what are 'in the zone', so technically written in the zone, thirteen systems to answer queries and I run one of those.

LOCAL> That's independent of ICANN?

ICANN> One of those is on the ICANN budget, the one that I run. The one I ran before that is on the RIPE NCC budget. There are twelve organizations running thirteen systems. I specifically say systems, and not servers because the way we use the technology… anyone ever heard of NE-casting. Nothing to do with podcasting, it's NE-casting. Ok, so you have a network, you have an IP address, right? Everybody has it, your home network has it, a IP address or a block of IP addresses. If you're service provider, which is a DNS service provider, which a root server is, if you have routable block of addresses, which means it's the size an ISP will listen to, and root servers of course have these, what you can do is you can build a completely new set of systems on a different side of the planet if you want, and announce the same autonomous system number and the same IP addresses from two places.

So this is no longer unique but their coordinates are exactly the same function. And root servers do that. There are thirteen systems, but these systems are located in more than a hundred locations. And you'll hear people say, all the root servers are in America. There are more actual physical systems answering DNS queries outside the US then there are inside.

LOCAL> Is that like cell towers, whoever sort of gets it…

ICANN> Yeah, similar, yeah pretty much, it's the routing, it's basically, yeah, sort of path routing, and there are things that you can do to enjoy shortest path by adding AS numbers, you can let them, perhaps, there are all kinds of tricks in BGP … But it's basically, you see one and only one, the closest one. This only works well and I would only advise it only if the protocol you're using are using mainly UDP, and not TCP. The difference between TCP and UDP packets is one is a session, so you talk from one computer to another and you fill a session, so you're constantly talking.

And UDP is fire and forget. DNS is UDP. You ask me a question, I send you an answer. I don't care if you got it. If you didn't get it, you ask again, I'll send you. That's UDP, that's how UDP works. So, with UDP, where you don't necessarily worry about going to exactly the same machine because it's fire and forget, you can do this so there are more than a hundred servers out there, even though in the root zone, you only see thirteen, there are hundreds of them, and it's growing every day. They're operated by twelve organizations. Most of those organizations are based in the US. Three of them aren't. There is one of them based in Amsterdam, The Netherlands. There's one based in Japan, in Kyoto. And there's one based in Stockholm, Sweden.

Initially, there were (let me see if I can remember, not mess this one up), I think there were initially eight, yeah there were initially eight and those were all in the USA. And what happened was that later they added five more. Three of them were placed outside the US, one of them went with Verisign, because we didn't know, they didn't know where to put it, and one of them stayed with the IANA. Outward stayed with the IANA, so that's why we basically took over the IANA function and part of that was to run one of the root servers.

One of the reasons I was hired to come and work at ICANN was that I had experience running four infrastructures…

LOCAL> Tell us what you did before you got there.

ICANN> I was the Director of Operations for the RIPE NCC, which is a regional Internet registry in Europe, and basically, one of the things that they do is they offer DNS infrastructure. So if you look at the country code top-level domains and you look at, what we call secondary DNS servers, you'll see a lot of them are actually ripe dot net, so they have a whole bunch of servers that get free service, ccTLDs, and they also run cape dot root via service dot net. They run the root server. And a lot of them have infrastructure for basically anything that they think is good for the community. And their version of community is the ISPs in their region. Of course, if you have a large region like that, what's good for that region is typically good for anybody. They run one of the root servers. And that was one of my responsibilities there, and at ICANN, it's also one of my responsibilities. And they're a lot of fun. They get attacked all the time, sometimes deliberately, sometimes not. Any attacks on the Internet of, everybody's heard of DDoS, distributed denial of service attack, they are getting worse, all the time. People are finding new ways of doing attack. You see attacks out there. I don't know what's the average bandwidth to somebody's home here, if you get DSL, it's what?

LOCAL> 30 kilobytes.

ICANN> Of DSL?

(laughter)

ICANN> Ok…

LOCAL> Well, it's tiered. The cheapest one is 256 kilobits one way, 128 up, but if you're willing to pay more, you can get more.

LOCAL> It's about eight thousand dollars a month…

ICANN> Yeah I know it's expensive here. I've just never heard of DSL at less than modem speeds.

(chuckles)

ICANN> It's perhaps the lowest I've ever heard.

LOCAL> Well I think the government and telecom authority specifies 128 kilobit as, anything above that, as broadband.

LOCAL> Yeah, yeah, 30 kilobits is not considered broadband.

LOCAL> 30 kilobytes, which is about 240 kilobits.

ICANN> Yeah, yeah ok, so it's still not… In the United States, where we've been doing DSL for many years, typically you can get a megabyte and above to their homes, that's fairly normal. Attacks that you see of DDoS can be in the gigabytes, so imagine if you run a system and somebody sends you a gigabyte of traffic, makes life interesting. So that's what root servers do, and one of the issues we deal with in stability, we have a committee called a Security Stability committee and they just published a paper on this very issue. One of the issues is that people allow data to leave their network. Everybody thinks about security as being data entering their network, but the big problem of Internet security is the data leaving people's networks.

So, if you are running an always-on modem, even if it's only 20 kilobytes, and you get hacked, somebody spoofs your IP address, so it's hard to trace and sends out ten packets. Now, if you're part of what we call a bot-net, which is, yeah, a zombie network, so if you're part of a five hundred thousand computer bot-net, and those exist, that's a lot of traffic you're sending somebody. And the issue is that you as a network may have secured traffic coming in, but you have not secured traffic going out and almost nobody does.

We have a paper on that out at the moment, so we have some advisory committees, within ICANN we have one that's on security and stability. Talk about domain name hijacking, you know when somebody steals your domain name and what to do about it. The next one is on extrusion, data leaving your network. And there's a, what we call a BCB, a best proven practice document from the ITF called the BCB-38, that describes the issues with DDoS and how preventing traffic leaving the network in a sensible manner is a good thing. For example, not only should you not be allowing ten dot something into your network, why would you be allowing it to leave your network? Now if you've got a legitimate reason, and there may be one, I cannot think of one, and I've played with the Internet a long while and I cannot think of a legitimate reason…

LOCAL> Because it couldn't be routed at all?

ICANN> Oh no no, people just, the problem is the default installation on much equipment allows it, and this is an argument we've been having with manufacturers for many years.

LOCAL> 10 anything, 192.168, and there's one in between…

ICANN> 172.221 if I remember. There's a…

LOCAL> Class A, B and C.

ICANN> Yeah, there's a class A, a class B and a class C.

Well aptly named, but they were for test purposes, they were for proprietary networks. There's an RFC called RFC-1918, they're all numbered, horrible documents, don't read them, but actually you should read them. The RFC-1918 defines ranges of address space for use in networks that will not directly talk to the Internet. So if you have private network, you're a business and you have a big network, and you're not going to talk to anything but your own networks, you have private connections, in theory, you can use these addresses, and that's what they're for.

And most routers, home routers, so if you get a DSL router and you get an IP address from your provider and it may be a public address or it may be a private, but on the inside, you probably did 192.168 or 10 as default. They're all set up like that. What that does is, that device is also what they call a NAT, a Network Address Translator, so it's meant to translate your private address space into the public one and attach a port number to it, so that it can find its way back. And if you don't do that, then what happens is your data goes out with that private address space.

And hackers, and people who run bot-nets, which are often criminal organizations rather than individuals, they just take advantage of that. So you see traffic out there with those addresses, so if you see it's your router, your home router, if you're running a firewall, even a software firewall and you see 192.168.something, super. Go get the RFC, filter them. Of course, if you see 127.0.0.1, don't filter that, that's you! (Laughter) don't filter that.

One of the things that we have is that, as a registration or registry for the IP addresses, all of those addresses 10, 192.168, etc. 127.0.0.1, are registered to the IANA, so when somebody gets attacked by some evil person on 127.0.0.1, an application talks to the stack and uses its home IP addresses, they phone us: You're hacking my machine! And then we have to explain to them what 127.0.0.1 is, or that it's somebody using a private address space and do you have more than one machine in your network, because sometimes there are attacking each other. We deal with all of that kind of thing; we're the helpdesk of the Internet. Does anybody have any questions, apart from the gentleman in the corner that has already asked his quota?

LOCAL> I'm the least technical person here!

ICANN> The fact that he said it makes me doubt it!

LOCAL> He's got more domain names than there are people in the room!

ICANN> Yeah?!

LOCAL> He's probably your biggest customer!

LOCAL> But I don't own a dot TT, and there's probably more that you need to tell us. But the question I want to ask is in what way can we help you achieve what you think we ought to do.

ICANN> Ok, so one of the things that we as an organization and the forum suffer from is that we need participation. We need participation from users, from ISPs and that's what we're doing here in the Caribbean. One of the things we've done is we've started a department…. You know everybody do departments very well because we all end up working together and stuff… We've hired, at the moment, five people. We're gonna hire more, and their role is to go out and talk to people and more importantly, then interfacing it back to ICANN. And one of the things we're doing here is, Jacob happens to be for this region and Canada, he's not from the Caribbean, he's from Canada, he's a Canuk. So he's Canadian and one of the things that we're trying to do is to convince people to at least follow and be aware of the process. In your case, there are two things… are those the prices?

LOCAL> Those are the prices.

LOCAL> That hasn't changed at all since 1995.

ICANN> That is probably based on what Verizon… (Lots of crosstalk)
There are two areas that I want you to think about, two zones, if you like, in a sense, I want you to think about. One is dot, the root and the global Internet, introduction of new TLDs, policies for getting and managing to protect, for example, dot com, dot info, dot museum, whatever generic you have, those are ICANN issues. I know our web site sucks, but still try and find things on it, and try and follow it.

LOCAL> What about cyber squatting and whitehouse.com?

LOCAL> Cyber squatting is more the domain name hijacking issue, right?

LOCAL> Or using abbreviations or misspelt names to that…

ICANN> OK, so what ICANN did for this was we set up something called a UDRP, we love acronyms, we're great at them: Uniform Dispute Resolution Policy. And what's it's done is that it's given a manner in which, it's not very good for end users, because it's a little bit expensive, but it's still a lot cheaper than going to court and it gives you a mechanism for saving these people in front of arbiters and saying this is my domain, they should have this, this should be my name. You don't have to have a trademark. Your proof is they are trying to tender you, so that they don't have a legitimate reason for using the domain name in the way they are and, in that case, you say, well protect our trademark, we wanna get this. In the majority of cases, the complaint is fixed because you need, it's, I think, it's like a thousand dollars or so. It's a lot of money, but it's way cheaper than court. So you need to think about it before you do it.

LOCAL> But, both sides have to agree to submit to the examination…

ICANN> No, no, there are only two sides that have to agree: one is the person complaining and the other is the registry. The registries in the generic TLDs, as a policy matter, don't have a choice. So this person has a right to reply, but he doesn't have the right to say, no, we're not going to UDRP. It's part of registration, it's part of registration.

LOCAL> But I remember years ago (sorry to distract you with this), I registered IATT (Inventors Association of Trinidad and Tobago), and because IATT is ATT's Internet something, I bought it online, dot com, seven pounds of paper sent to my brother's address in Florida demanding that I don't. I said no, let them sue me, I might get papers. And they left it at that.

ICANN> Well that choice at this moment, if they want to get that back from you, they would have to take you to court, to the UDRP, to prove that you were using this maliciously and had no right to it, which they can't.

LOCAL> No, no, it was if I was using it to spoof them and when (yeah) visitors (then they'd win), thinking that… yes. But if I had a legitimate reason in this little area where… and I call myself that, and I got it before you did…

ICANN> That's a whole rule of the UDRP. That's what they got approved is that you don't have…, and that the onus is on them as claimant to prove it, so if you have Orange as your company here, and there was a situation (I'm not going to talk about that one on microphone), we're having situations where large international organizations have lost. They put in a complaint and UDRP has just said, I'm sorry but this guy has a legitimate use, suck it up, sorry, you're not getting it back. So the UDRP actually works very well. Every time we talk to ccTLDs when they are going through the process of forming an organization, we always talk about, think about how you're gonna do dispute resolution. You don't have to have arbiters like we do, you could just say, it's the local corps. But you need someone neutral for doing that, so we introduced that.

LOCAL> We hire goons. (Laughter)

ICANN> Goons? Yeah, I wouldn't do that against AT&T, yeah that wouldn't be a good idea. So, you know, we get blamed for all of those. So, get involved in that because it affects you. I'm not asking you to go and spend your entire working life following it, but if you see there's … if you see there's a computer users' group like this, take part, as a group, try and get involved. Maybe designate one of you to try and follow specific topics, if you think there's a topic that might be of interest to you. And it's hard, because it's a lot, it's confusing. Jacob is your man if you can't find something and you need it, talk to him and he'll help you. There's also people in countries over here like Jacqui I'm sure would help you too.

LOCAL> In our immediate area, who has done such a good job that you can say well, fashion yourself after this?

ICANN> ccTLDs you mean? They're all slightly different. The problem is it's not a correct way of doing it. Guyana has just gone through a re-delegation and they left the… Re-delegation means moving from one administrator to another. They left it at the current administrator, brought in technical side from Puerto Rico where its technical side was managed and then said let's look at how we're going to do policy developments. In some way, the policy development around a zone, be that a TLD or the root zone, is much more important than the 'who's typing it in'. It's what rules are they following, so there they've set up a, or are in the process of setting up a panel, we just … of a day, of people from ISPs, businesses, there were some non-profit organizations, ministries, because government has something to say too of course, various ministries, including their research ministry people, and they're looking at what the policies are going to be. What you really don't want is where you have one organization that just completely controls and can go off and do what they want. What you want is a sustainable situation, and what you really want is stability and clarity for the end-user.

The person who is going to be registering domain names, you want them to be able to go to the web site, know what the policies are and know what their channels are if they don't like those policies. And one way of doing that is a panel. Some of these, for example, the Netherlands, they have a board, once or twice a year, they have big public meetings, open meetings. And that's what ICANN does, we have a board, three times a year, we have big open meetings. And the issue with ICANN meetings is that we are on a global scale, we have to rotate them around the globe. So if one comes close to you, once every two years, you're lucky. But apart from that, one in twenty thousand meetings, so there's nothing much you can really do about that. So that's why we've hired people like Jacob. So, the same issues that we have, TLDs have, certainly the country codes. So, if you see a core participation, and I'm not saying that there's not going to be one, but if you see one, or if you see things in the paper, talk to your ISP. They are more likely to get input than as an individual because governments like things they can see, so be it the ISP association, be it the computer association like some kind of big ISP thing here or other computer groups that's really big, join your forces and go and talk to the government and say, hey this is how we want policies, this is how we want to change it.

LOCAL> I think the only thing that everybody agrees on is we don't want the government involved in it. (Chuckles)

ICANN> I would say that's actually a bad thing because there's a role for government (you're talking of ours?!). Any government, there's always a role for government because things you do with a TLD just like… we have a government advisory committee. All these governments that come and advise us, but what they advise us on are issues that relate to public policy. You don't want your ccTLD to get me in trouble as they pass some policy that breaks some regulation or is bad on the public policy aspect. And that's the role of government. It's not necessarily managing the domain, but there is a role, you can't deny a role for government because if you try do that…

LOCAL> You're saying they should sit in around the table, not necessarily stand about…

ICANN> Yeah, yeah, you can't close out the government because if you do that, then they're gonna be suspicious, and you can't blame them.

LOCAL> At least in our political TT, I see them playing an enormous role because there is promotion…

ICANN> You'll be glad to know, so did they. Or maybe not.

LOCAL> They are difficult to access, not necessarily the political aspect of government, the bureaucratic part of it, I mean, to get them to… I recently … did something to them, and like I told the lady, I said, I was referring to tourism development, and they were called TIDCO before, I said look, TIDCO was a waste of time, one that required much more than a change of name to solve because now they're TDC or something. And it's the same lot of people, yes? And ten years have passed and they still just don't get it. Well, I see the dot TT as a vehicle which will bring people's attention to what we do, yeah? And certainly people that are governing or controlling or facilitating this, if they understand that, great things can happen to the service.

ICANN> Absolutely, we've had discussions with one of your ministries today, and we've been asked, if they can make time for the permanent secretary for tomorrow. And these same discussions are what happened in that… and we give them exactly answers. We've had the same discussions with the ISP associations. In Guyana, we went for the same thing, we talked to incumbent telecoms operators, we talked to the university, as the administrator and then we went a little bit further along, we talked to the

prime minister, we talked to, actually anybody who would listen to us, alright, and a few people who wouldn't. (chuckles) We like talking! We teach members that this isn't an ICANN issue, it's a Trinidad issue and we're here to answer questions and recommend people, throw ideas around, but it's your dot TT, it's yours.

LOCAL> One of the things I'm gonna do tonight is go and see how other people have gone about just what you suggest that we do…

ICANN> The good thing is that you're not the only people in this situation and some people have changed the situation, some people have decided not to change anything. But ICANN can't decide that for you. You can't decide that for the Trinidad and Tobago government, for the ISPs here or the current operator, for the users. It's something you have to decide, TT is a Trinidad and Tobago TLD.

LOCAL> Have you ever seen …, whoever controls it now, perhaps lock in that person to go about it a different way, not requiring a changeover.

ICANN> It's very hard to do a change about doing some serious change. And when I say serious change, I don't mean technical change, I mean, change in the way you think about the way you're going to operate your country code, because most of these haven't changed in years, and the world has changed, so as soon as you get into an environment where you say, well we're looking at changing who administers it or how it's administered. Either one of those questions, the other one comes up. So if you look at 'who', they're gonna bring up 'how'. If you look about 'how', they're also gonna bring up 'who'. And that's fine, that's perfectly natural, and yes, there are gonna be arguments, soon, eventually, people will come to a solution. It's not gonna happen tomorrow.

LOCAL> The same way a dispute resolution is done in the case of a name…

ICANN> There is no dispute resolution policy for TLDs. And for ccTLDs, we believe and John Postel was when he was at IANA, well, we're hands off. As soon as a fight starts, if there's not agreement in the country, we're not building the Internet, we're just administrators. We're not negotiators, we're not people who are going to sit there and jerk which one, that's something you have to do in the country. And sometimes it's very amiable, I've not spoken to anybody today that makes me think it won't be a fairly, as they go, a fairly simple thing, if it's decided to be done. And sometimes they're not.

DAT: Can you clarify what exactly is the situation with dot TT because I think, as far as we understand it, the dot TT domain is run by TTNIC, which is a private company, and there are two board of directors: Dr. Patrick Hosein and George, and the government has taken control of the .gov.tt domain, and it's running, I believe they're running their own system for that, registering it and so forth. And it's been debated and argued what is going to happen to the dot TT domain. (incomprehensible) There's been discussion going on between university, the government…

ICANN> You actually know more than we do, if I can borrow whichever laptop is connected, I can show you what we know about dot TT.

LOCAL> I can tell you some of the very early history of it.

ICANN> I have other sources, but this is what we "officially" know, and we hear rumours, but, you know, rumours are rumours, you know, we hear lot of.... Yeah, I know, it's really offensive, that TLD probably is. I've also heard people tell me, it's not, we hear a lot of hearsay, so let's have look at what TT. Let's go down to T. So when you look at the ccTLD, we have the university (that's old, very old!)

No it's not! This is today's situation, whether it's correct or not, as far as we're concerned, this is who's running it.

LOCAL> Patrick now lives in San Diego and has lived (I know) there for the last six or seven years.

LOCAL> When actually he came back for a while and left together with…

ICANN> This is the information , the WHOIS information relating to the root zone, so this is the information that, one of the things we do when we're traveling around here of course is, although we don't get too involved, we are sort of listening and trying to figure out ourselves what's going on. Because as far as this tells us, the university is the organization responsible, Patrick at the university is doing the administrative side of things and Felix… in Puerto Rico is running the technical infrastructure. Now, everything we've heard in our meetings suggests that that's incorrect. How do you visit a WHOIS problem that's across the board, how do you update information?

LOCAL> He's out of the country, but he's still the guy that…

LOCAL> When it first migrated from Puerto Rico, it was kind of passed around for someone to manage it. And no one really wanted to do it, so (I can't blame them for that). In fact, they came and asked me if I wanted to do that and I said no. Patrick and Faizal Hosein did…

ICANN> This is what Patrick Hosein said. But that is the official IANA WHOIS database on who is supposed to be running this.

LOCAL> Patrick used to be a member of staff at UWI, until he went back to…

LOCAL> But we know he's in San Jose.

LOCAL> But he would be doing that by virtue of being a member of staff, or he's the person who assumes responsibility…

ICANN> There are no contracts involved because this is all…

LOCAL> Dr. Patrick Hosein got the job, so to speak, before ICANN…

ICANN> All of…, one of the things we are seeing, and we're not in any way going to instigate this, or go out and say this must happen, is that people are trying to clarify the situation, and what's you're seeing, I think in Trinidad, is that people are looking at this as they should and just like you reacted and saying, that's alright, but it's the people in Trinidad that have to tell us what is right.

ICANN> We have a problem. TT has a problem. Because now we've got to figure out who has the authority here to ask us to make changes.

LOCAL> But let's say Patrick gets bounced down by a car tomorrow?

ICANN> Well which means you'll be out of a name (laughter).

LOCAL> Now, now you're being recorded (laughter).

ICANN> Well as you can see, this hasn't changed since 2003, which is after I got here, but Patrick

would've been with the university and would have indicated this. This is basically the information you want to have changed. As far as we are concerned, we have contacts, we have an organization - that's the organization responsible, what we call a sponsoring organization, we have the administrative and the technical contacts.

LOCAL> Well I could be wrong, but I don't think UWI is really that directly involved at all…

LOCAL> No, what had happened is, first, Puerto Rico used to manage all of the things the things for this region. We got our connection to the Internet in September 1995. Patrick had just come back from MIT and was very much into the Internet so he kind of started playing around with it and they were looking for someone to run the TT domain. No one was interested, they came to TIDCO and asked me if I want to do it, but I said I didn't have the resources. So he started to do it. The technical part of it ran on a SPARC station up on Campus (Engineering) and it was Patrick, Faizal Mohammed and George Gobin who were involved. They kind of were the board, I think Faizal is still at UWI, but he dropped out for some reason.

LOCAL> He was the original person.

LOCAL> Yeah, in fact Patrick and Faizal set up TSTT's infrastructure the first time it was set up. But Patrick had returned to the States. That was a long time ago. I think Patrick went to Erickson. When last I was in San Diego he was still at Erickson that was two years ago. I don't know where he is now.

ICANN> Free telephones not a bad place to be (jokingly). So this is one of your neighbors (referring to a screen shot) that used to look pretty much identical, the University of Puerto Rico. They just went through a Re-delegation. They've moved everything down to the islands. This is of today, and that's what we like to see. We like to see things of today, we even changed some of there Secondaries for them, got them three Secondaries and they've just gone through this whole thing of "we need to find where this is…" and they've just gone through it, so you can get through it .

LOCAL> So could you talk to TTNIC, I think you could talk to Ken Bagaloo about this or something, am I correct?

ICANN>We don't have a relationship with TTNIC, no.

LOCAL> Ok.

ICANN>We are happy to, but…

ICANN> And who is TTNIC?

LOCAL> The website for registration.

ICANN> Is it nic.tt? right? It's there website for registration…

ICANN> This is an identifier on the Internet (referring to screen shot) This could be Patrick or the University.

LOCAL> I think the server is no longer in Trinidad.

ICANN> It sounds like there is a lot of interest in this topic. So you need to let the people in this

country know that there is interest in this topic. It's great to talk about it with us because we can give you input etc. But we're not the people to change it. The people to change it aren't sitting around this table. I don't know if the Ministry is going to invite this organization, this informal group. You know, you can write to them and can quietly say we met with ICANN and please let us have an input.

LOCAL> But this is somebody's business, somebody's earning an income for this. I mean aren't there considerations that can be taken in this kind of situation?.

ICANN> The other question to ask is, "How can we best do this together?".

LOCAL> Yeah, we should speak to Patrick and George, Yes. It's the only logical starting point. My experiences with both of them and Faizal is that they are fairly reasonable, they got into this because no one else wanted to do it.

ICANN> The impression I got from everybody I've spoken to is exactly what you said. So I don't think that if there is an internal will in Trinidad and Tobago to clear this up. I don't think it's going to be that much of an issue. And I doubt you're going to see the same pricing structure on things because when you come up with the issue of we need to clear it up all those things are going to be raised.

LOCAL> Well I'm just thinking …let's say ok the, the price is too much. That's the big keep back from people … Let us put it in somebody's bedroom or somebody's house and hook up. I don't know some craziness like that. Does that make sense? Would ICANN say hey you can't do that? Because technically that's a stupid thing to do, it really shouldn't be on cheap servers…

ICANN> If you as an individual came and said that we'd probably just tell you, you should go talk to your shrink, talk to all the other people involved, because if we got a letter from the government saying that we think this person should run it in his bedroom, you guys sat there and everybody was telling us that, the way we do this is we run infrastructure in people's bedrooms. We would probably point out that this was not a very good thing to do and we'd hopefully convince you to do some sensible thing, but if you did want to… We're not going to be happy, yeah, because, you know it'll be bad, but it's …

LOCAL> Do the people that actually use it, that subscribe to them right now, have a say in all of this, or if it's works there say, and that's that?

ICANN> That's an internal issue. In some countries they do.

LOCAL> One of the interesting things about the database, is that 90% of the, of the addresses registered in there were Non-Trinidadian companies.

ICANN> Yes, because we see that that's big organizations protecting their trademark.

LOCAL> There were very few last time (local company registrations), They closed it (the wild card Who is/ Name Search) a couple of years ago.

ICANN> All of those issues are local policy issues with ".tt" that have to be figured out.

LOCAL> Well, the point that Patrick was trying to… the reason why he has not made any changes is because he's confused about who is actually going to run it, and therefore that's the reason why…

ICANN> That's, that's probably a smart move on his part, it's not, it doesn't move things along, but

from his point of view that's probably a smart thing to do. If you know something is in discussion and about to change through some process, you don't just go and change things. I mean that's not the answer you want, because you, you want some answer where every thing's cheaper and … Whether or not end users, as individuals, get their input, that depends on how the, the people involved do it, in the Netherlands they have open forums where anybody who has a domain name or doesn't have a domain name can walk in.

LOCAL> Does, does TTNIC have to pay Network Solutions a fee for running the Database or we're on our own?

ICANN> No.

LOCAL> I know the generic top-levels, everybody pays Network Solutions, I don't know…

ICANN> No, none of those people pay Network Solutions anymore. Network Solutions is a registrar these days. That's all they do.

LOCAL> Verisign?

ICANN>Verisign doesn't get paid anything for making changes. There are fees involved if you're a generic TLD operator, a registry with part of the agreement. This is how we get our funding. The registrars and the registrees for the generic TLD's pay most of our funding.. Country Codes, it's up to them whether they want help or not.

LOCAL> Oh, so .tt doesn't? Probably some of the operating fees can go to ICANN or anything like that…

ICANN> Except for that , some CCLD's do that, because they want us to operate stably, some give us a flat pay, some give us nothing. We don't have agreements with any of these and we're entering into agreements with most of them. One of the things we're doing is… one of those groups we've talked about the CCNSO, which helps small organizations, come up with a framework , an, inner tranquility framework. How do we document who is responsible for what? And there are different ways of doing it. There are different documents that the CC's can use, and each one is going be adapted to the local area. We're pretty much happy with anything that clarifies the situation, because clarity of role is always good. Always good to know who's doing what. So, you know, if that includes a per domain fee, if that includes a flat fee, if that includes no fee, that's ok, but for some CCLD's they don't make any money. You as a CCLD if you were the administrator may come to us for service, once every two years, some of them do more stuff, some of them are way more involved and put more resources on us because they want us involved in other things. Sometimes, there's a chance they want to pay more, to contribute towards ICANN, but we're non-profit, so from CCLD's point of view - funding comes from elsewhere.

LOCAL> So, meanwhile what about the concerns from the other island territories about how they are administering their domain, their domains or their country codes?

ICANN> We'll be doing basically the same but mostly here on the island. I'm suppose to meet people.

LOCAL> it's not about concerns?

ICANN> Concerns will get raised if there are any, but we're not raising any concerns, I mean the whole discussion about .TT is not what we're here for. They just happen to be the concerns that we're hearing if your concerns was mainly the M.O.U. (Memorandum of Understanding) or concern was made mainly content, then that's what we'd be talking about, but we have nothing to do with content and that, so we won't have much to say, but we'll travel around to different islands trying to introduce Jacob to everybody trying to get people to know that we exist, because if you don't know that we exist you can't partake.

That I think is an important point. It's the participation aspect. So if there's no participation at the international level in ICANN, then there's no representation for a reactive organization.

LOCAL> I think people are just now becoming aware of the domain name system and the people who managing it and it's importance. Most people just assume it's there, it works

ICANN>Which is an indication of it's success

ICANN> It is, but the problem is that you want to ensure that it keeps working. If you become complacent, that's where things start caving in and you get problems. I mean, how many of you have actually heard of ICANN two weeks ago or…

LOCAL> A few.

ICANN> Oh that's more than any average, so, is that good or bad?

LOCAL> Laughter,,,, no body hear about you. I hear a lot of ICANN't hope…

ICANN> Yeah we hear a lot of that joke, ICANN / ICANN't. We were thinking about registering the domain name, but then somebody will probably sue us for it so…

LOCAL> I know that they used to have a magazine Ad saying you don't you have elevators until they don't work. So, I guess you're right, you'd like people to know about you.

ICANN> Yeah the thing that we want is, we want the users of those elevators to actually care about how they work. I think now of how elevators have worked, and if somebody were to decide that they work without cables and we'd just use gravity, I'd be worried about it, right so, you know really we just want to be able to be aware, see if there's interest get involved, I mean if you're not interested in that level then, you know there are a lot of people who want to be.

End of transcription