>>Keith Davidson: Good morning, everybody, and welcome. If you could take your seats, please.

Welcome a this session and this is a session about the IANA review and going forward and a discussion about the various constituencies want from IANA going forwards in the future.

I'm assuming that everybody here knows, firstly, what ICANN is. Does everyone know what ICANN is? Raise your hands if you do.

Does everybody know what IANA is?

Raise your hands.

Is there anyone who doesn't know what IANA is?

I think, then, I'll skip any of the boring introduction and get to the substance of what we're here to discuss.

You could say that the IANA database is roughly divided into four pieces, some would argue three pieces, some would argue four.
So we'll deal with the first section that could be one or two and that's the top level domains of the DNS. I would argue that there's the gTLD space, which is slightly different to the ccTLD space, probably mostly for governance purposes rather than from the administrative IANA aspect.

However, there are different policies that apply to gTLDs than ccTLDs and there's different policy development processes, so to me there's a distinction.

Then there is the area of the IP address allocation, both IPv4 and IPv6 and then there is another area that many of us don't know very much about and that's the protocol assignments, where a huge number of IETF databases and other databases are published as a storage record for various purposes.

I think there's about a thousand entries in the protocol assignments and a handful that are truthful bizarre, like there's one called the Special People Numbers Registry and it contains a list of numbers from 0 to 10, with 1 being accorded to John Postel and 2 to Joyce Renolds and so on. Why that should be there and what use it serves is beyond me, but undoubtedly it does. That's not an IETF administered database.

I think there are things like X.25 telephone protocol entries for the ITU, so it's an odd set of
functional databases that are added.

It occurs to me that through that different space of the TLDs and the IP addresses and protocol assignments, that there are different levels of policy aspects within and outside of ICANN that apply, but at the base, there is the IANA database, which is essentially a technical function.

Earlier this year, the US Government went through a process of -- a notice of information and received about 72 submissions regarding the future contract of IANA between the US Government and ICANN.

As a result of those 72 submissions, there has been the issuance of a further notice of information, the FNOI, just in the last couple of days, and it is essentially seeking to tease out some greater detail of some of the aspects raised this that first notice of information.

I think it's important to realise that for the first time since ICANN's inception and the first IANA contract, we're seeing the ability of the greater community to have some input into the future directions of IANA and perhaps we can tease out some details through the panel today.

The panel today includes our first speaker will be Venn to Harris from NTIA, the US Government department
that administered the contract with ICANN. We have apologies from Peter den, the chair of ICANN, who was due to be here, but won't make it to Singapore now until tomorrow and I'm not sure whether that's the ash problems between Australia and New Zealand or what.

Then we'll hear from Elise Gerich, who is engaged by IANA and administers the internal management of the database on a day-to-day basis.

So is the contractee, I guess, to the US Government.

Then Paul Wilson, from APNIC, will discuss mostly the Regional Internet Registries and the ASO's perspective on its needs and its future wants from IANA.

Then moving on to Jim Galvin, who will give us a gTLD perspective and if you would be so kind to, Jim, I know you're closely engaged with the IETF, but while not asking you to speak on behalf of it, if you could talk a little bit about the protocol assignments and anything that you perceive as being future need and so on, I would be most grateful.

Then finally, we'll have Debbie Monahan, the domain name commissioner for .nz, who could perhaps give us a bit of a slant from the ccTLD's perspective, so we'll cover the entire gambit of what's in the IANA database.

Firstly, can we switch to Vernita on-line. Welcome, Vernita.
>>Vernita Harris: Thank you, Keith.

Thank you for inviting me to participate in your Regional IGF meeting.

What I would like to do today is to walk you through our procurement process for the new IANA functions contract. So you stole my thunder, Keith. I think I don't really have much to say, as an introduction,.

>>Keith Davidson: Sorry.

>>Vernita Harris: No, I'm only kidding.

On the 25th, we issued a notice of inquiry on the IANA functions contract. It was the first time that we had ever requested comments from the community on this contract since 2000, since it was first bid.

We received over 80 comments from stakeholders around the world and probably some of those comments were from participants at your meeting today.

We believe that the stakeholders -- that there are so many stakeholders outside the US that it reinforces the global nature of the internet and the need for us at the NTIA that our role is a stewardship role in this area and must reflect the interest of stakeholders worldwide.

On June 14 of this year, we issued another further notice of inquiry. Comments will be due on or before July 29. The reason for this, while I was
reviewing the comments and putting together our procurement process, getting ready to enter into a procurement process, a process that's closed to the general public and it's only open to those who would bid on IANA services. I realised that I needed to go back out to the community and ask: did I get it right? Did NTIA get this right? Did we interpret your comments correctly?

The only way to do that was to issue a further notice of inquiry. So we delayed entering into our closed procurement process in favour of putting out another notice of inquiry, with a draft statement of work, that indicates that we were listening to you, to the community, but we also want to make sure we interpreted correctly your comments. So this draft is our interpretation of your comments.

What was very interesting, I received a lot of comments to questions that we didn't ask. We asked six questions, but in the general comments section, it was very clear that the community supports the multi-stakeholder model for internet governance.

Some comments came through that we should transition IANA's functions contract to ICANN. Some comments suggested that we should transition the IANA functions contract to a multi-stakeholder group. Even comments
suggesting submitting transitioning the contract to an independent organisation.

Some commentors said just do nothing, continue with the status quo.

There was even comments from ICANN, as well as others, NRO, to transition the IANA functions contract to a cooperative agreement. There were also comments to issue longer based terms for the contract.

For those of you who have seen my boss, Assistant Secretary Larry Strickling, he has stated in numerous speeches in the last year that NTIA is fully committed to the multi-stakeholder model of internet governance. We believe in that model, we support it and a lot of our policies are -- well, all of our internet policies are based on the multi-stakeholder model.

As far as transitioning the contract to -- we have no plans to transfer control of IANA functions contract to an outside entity. We intend to use the comments from the draft statement of work to enhance the performance of the IANA functions and the development of a new award for the new IANA functions contract.

We also found another interesting titbit. We were quite surprised that the entities that could most likely perform any of the functions did not support unbundling the core functions. If you read the draft statement of
work, we agreed with the commentors and that was overwhelming. So there is no change in the draft statement of work to separate the three core functions. We also agreed with commentors that .arpa was part of those three core functions and will remain bundled, but we will seek a public consultation next year to see how to transition the TLD from these services.

Also, interesting, the community ... responsible for the development and policies of the IANA functions contract and we have done so that as well in the background section of the draft statement of work.

We also agreed with commentor that is we were -- we didn't see a role, a need for us to expand our role and/or expand the IANA functions at all. So we wanted to make sure that was pretty clear.

What's probably the most interesting for ccTLD operators, in that a number of the commentors addressed that there should be some functional separation between the DNS policy making at ICANN or elsewhere and the actual execution of the tasks associated with the IANA functions, so we have included a provision in the new draft statement report that says there must be functional separation and that's in IANA functions contract should focus on technical operation of the function and not in policy development.
The comments also supported the framework interpretation of working group, as well as automating the group’s own process and developing ... and we support those initiatives as well and we made provisions in the draft statement of work to do so.

Complete transparency and the IANA functions process was another thing from the NOI, as well as development performance may trick and publishing those matrix monthly and development of the documentation in the languages and detailed and open financial reports for the IANA functions. So we have addressed these as well in the FNOI. We have proposed enhanced transportation, accountability through documentation processes, but this should be done with the collaboration of the community.

We did not agree with comments on service level agreements, because for service, our interpretation of service level agreements is that that would be subcontractors and we’re sure that’s what was intended when the community suggested service level agreements and we think we can address that issue through performance standards and metrics and not subcontractors.

Greater transparency throughout the management process. That means including reporting all management partners activities, that includes our partner VeriSign
as well as NTIA's role and we support that, so the draft statement has a requirement that the partners work together to develop a dashboard or that the community with track their requests from end to end.

Also, a process for ccTLDs to appeal management decisions was another major theme and we included a requirement in the new draft statement of work that the contract develop a complaint process.

Also, another theme that was ... didn't address it directly. At NTIA, we don't see a difference between gTLDs and ccTLDs men it comes to the technical process for implementing root zone changes. They are one and the same. We felt that should be stated very clearly, that the technical process for ccTLDs and gTLDs is the same, but the policy process is different.

So we also thought it was important and we agreed with the commentors that ccTLDs national sovereignty should be recognised and the contractor should respect those and match the legitimate governments and local internet communities and their national laws and any policy should interpret RFC 1591 and we have included that reference in the new draft statement of work.

One issue that we also included is the contractor should include documentation that demonstrates how proposed new gTLD strings have received support relevant
stakeholders and supported by the global public interest. So we're not asking the IANA functions contractor to develop new policy, we're just asking them to document the policy, document the process.

Another thing that was throughout, secure communications. The community wanted secure communications for when communicating with IANA functions contractor. They wanted to implement a secure notification system, periodic auditing of the security provisions.

So we agreed and we addressed these with a new section for auditing a new security section instead of being lumped together in one section, actually have a different section for security requirements.

We also have a separate section for performance requirements as well.

Going forward, we hope that the community will again submit comments on the draft statement of work. It's extremely important that the comments we received are clear, concise and have the language that communities would like to see. It's not the NTIA that the exact language would go in because, again, similar to the service level agreements, while we understand what the community wants, but also know the community doesn't want another subcontract under the IANA functions
contract, so we will try to address them in a way that recognising what the community is asking for, but also recognising that we do not want to expand our role, expand the IANA functions contract, so we are really just asking and stressing please provide ... because the draft statement of work will feed into the procurement process, which is a closed process that will begin probably early or late August.

Thank you.

>>Keith Davidson: Thank you very much, Vernita.

Are there any questions for Vernita while we have her on-line?

>>Richard Tindal: Vernita, I had just a quick question for you. You said that this new draft requirement for ICANN to show consensus support from relevant stakeholders, you said that you're not wishing to impose new processes on ICANN, but rather for them to document the existing processes.

Just to clarify, I take it from that you're saying that ICANN would decide who the relevant stakeholders would be, with respect to a particular delegation request? Did I understand you correctly on that?

>>Vernita Harris: ICANN will have developed a process for submitting new gTLDs into the root zone. So the contractor is only going to document that process.
They're not going to determine if the new string has met the requirements. That's not their job. Their job is to document what the process is. It's basically a checklist. That's how we see it. But also, if this language isn't clear, we also expect the community to come back and say: how is this going to be implemented in practice?

This is a draft statement of work of requirements for the contractor and they will come to us and say: we could do it this way, but we are unclear about this one thing. So if this provision isn't clear to the community, please tell us.

>>Richard Tindal: I think if I could just follow up quickly, I think in the context of the draft applicant guidebook, it is quite clear who relevant stakeholders are, so I was just trying to clarify if you were endeavouring to change that in some way, but what I hear today is, no, that ICANN will use its processes to determine who relevant stakeholders are and then should document that for you.

I'm happy with the response. But we will provide comments and we appreciate the opportunity to do that.

>>Vernita Harris: Thank you, Richard.

>>Keith Davidson: Any further questions?

If not, I'll just seek to summarise in as few as
words as poll and leaving out quite a bid.

It sounds to me, Vernita, like the contract is likely to stay with ICANN, but subject to perhaps some modifications, as was the original MOU that changed to the affirmation of commitments that the government is not perhaps so stringently adhering to, you know, the need to check and resolve everything, but leaving more freedom to the contracting party by giving them performance standards and so on to adhere to, so you'll be checking against the standards rather than every transaction.

It sounds to me like there's a clearing idea or concept around the separation of policy and procedure and putting those in their proper baskets and so the future looks reasonably robust, following a line of increasing slight independence from US G.

Would that be a fair summary, Vernita?

>>Vernita Harris: "yes" and "no". So this is a particular process and -- I hear lots of feedback.

>>Keith Davidson: Yes, we have lots of feedback.

Now we are right.

Sorry, Vernita, no, it's gone strange on us.

We have a problem there, Vernita, and we did have one more question.

I'll withdraw my summary and ask you to perhaps go
back on mute, Vernita. Feel free to interject during the panel discussions, but also realising that it's very late for you, close to midnight, I guess, we will understand if you need to leave at any time and get some sleep, because I think you're also packing your bags and coming to Singapore some time very soon, too.

>>Vernita Harris: I'm not coming to Singapore.

>>Keith Davidson: I think we should record our appreciation to Vernita, just in case she does disappear during the rest of the discussion, so thank you, Vernita.

APPLAUSE

>>Keith Davidson: If I could now move onto Elise to give us the IANA perspective. Thank you, Elise.

APPLAUSE

>>Elise Gerich: I'm from ICANN. I'm the Vice-President of IANA.

Just to follow up on some of the comments about ICANN and IANA, I thought it might be useful, maybe all of you in the room know this already, but ICANN has about 130 employees. The IANA department that manages the transactions has eight.

We're a very small part of ICANN and we have specific responsibilities to handle the transactions that we receive from you all and make sure that they get executed appropriately.
I did want to introduce some of the people in the IANA team. I’m right here.

Many of you know Kim Davies, he’s in the room today. Kim is one of our subject matter experts in ccTLDs and root zone management.

Kim is from Australia, so the other thing I wanted to know is the IANA team is very much of an international team.

The folks who handle the transactions themselves are led by Michelle cotton, who is an American, peril, who is from Taiwan, Amanda who is an American and naddia who is from bellla ruse. They are the folks who when you send in a request, who actually handle those transactions.

Kim, Leo and Barbara on the team. Leo is from the UK. Kim is from Australia. Barbara is from the US. They're subject matter experts in the various areas of protocol specifications, root zone and IP addresses and autonomous system numbers.

We have a really small specialised team and like we said, we handle mostly the transactions and make sure that they follow the process that has been established over the years, based on RFC 1591 as well as the policies that have come out of various organisations.

Keith mentioned that handling transactions for, say,
ccTLDs and gTLDs would be the same, which is true, so right now, what was introduced last year were some IDN ccTLDs, so there's a policy piece that was developed by the CCNSO and some other organisations and the implementation and the execution of adding those new IDNs into the root zone is similar, exactly the same, actually, the same process, as the existing ccTLDs.

We expect that the gTLDs will be exactly like that also. From an IANA perspective, handling requests don't see whether you're an IDN, a ccTLD or if you're a gTLD. Handling of those transactions all have the same set of requirements because they're all TLDs.

They just happen to have special characteristics that are developed, those characteristics are defined and developed by other organisations, other than the IANA transaction handling team.

So I just thought I would clarify that in case people had questions.

For the protocol parameters aspect of our work, we work very closely with the IAB and the IETF. With that organisation, we have an existing memorandum of understanding that gets renewed every year and those reports for the IETF are published on the IANA website and the ICANN website.

So we do submit monthly reports to them as to the
Handling of transactions that have to do with the protocol parameter space. That also includes all the registries, some of the more esoteric ones that most of us know nothing about, but many of them are really protocol specifications, like routing protocols, BGP registries, OSP registries.

Finally, we have the numbers area where we work very closely with the NRO, which is the executive group from the regional registries and the ASO, which have representatives from the NRO and the RIRs.

We follow them very closely as they come up with different policies and then we execute against some of their policies in the transaction handling space.

These are the primary groups that we interface with from an operational perspective. Obviously, Vernita spoken to the NTIA aspect an we also obviously have a relationship with VeriSign, because they have an operational responsibility through the NTIA also.

I don't know if there's anything more that you'd like me to say about IANA and what we do.

But I'll leave it at that and let you ask questions.

>>Keith Davidson: The obvious question is do you feel or are there aspects that you will be improving or seeking to improve? Not necessarily as a result of the contract, but as a result of day-to-day activities, like --
Elise Gerich: I can think of things. Actually, as the IANA team has been engaged -- well, I should say firstly, this is sort of my first anniversary at ICANN and IANA, so I joined in May last year and my first meeting was an ICANN meeting in June and so here I am almost a year later having one year under my belt.

We have been engaged this past year and it started before I joined, in what we call business excellence activity an EFQM process. During that period of time, we have had a concerted effort to document and internally publish all of our processes and to confirm them internally and have a review of those processes.

We have also been looking at establishing internal purposes, some key performance indicators for the various processes, for how we handle things, how long it takes, what we think are the key performance indicators for handling all these tasks.

That's one aspect of things we have done in the last year.

Another area where we've had a big step forward and in fact it will get announced at the iscan prettying, is that I'm sure you all have been hearing over again for years about automation of handling some of the root zone requests, so we will be announcing that we're on the cusp of success here, so I won't take the thunder from
that presentation that will happen I think in the CCNSO meeting, but we have had a very successful year at working with NTIA and VeriSign in coming to conclusion on the RZM, what we call the root zone management automation system.

We have done that.

We have also had some internal development efforts on automating some of the other not smaller tasks, but in transactional handling we have done most things very manually and if you want more details, Kim is one of the lead people for driving some of the programs that we've had that have automated and helped to streamline some of the manual processes that we have internally for handling things.

I don't know if that's answering your question, but we've had a very productive year and I think the team has done a great job.

>>Keith Davidson: Excellent. Thanks.

I think we'll try and work our way through the panel discussion with about 5 to 7 minutes per speaker, should allow plenty of time for questions at the end, but I think some of the questions may be answered as we work through the panel discussion.

Unless it's a burning issue, I suggest we hold them until the conclusion.
Thank you, very much and I think that helps to set the scene in terms of the contractor and the contractee giving us an update.

Now from the consumers of the IANA functions, I'll move firstly to Paul Wilson, to give us a perspective from the RIRs.

>>Paul Wilson: Thanks, Keith and I less as well.

I represent APNIC, which is one of the five Regional Internet Registries. We have been around for quite some years, 15 years or so. We are represented in our discussions with ICANN by a group called the NOR, which was formed basically for that purpose as a lightweight umbrella over the RIRs entering into the agreements, speaking on behalf of the RIRs as a single voice, et cetera.

The NRO has been around for a little while, since ICANN was started, one of its first tasks actually was to enter into an MOU with iscan to form the ASOs. This is acronym city, but within the ICANN structure, the NRO plays the ASO role in global policy formation, et cetera.

The RIRs, of course, rely on qua that and we always have done, for allocations of internet resources, IP addresses and associated numbers.

Of course, we shared the stage with Elise just
earlier this year in Miami, in February, when we received the final allocations of IPv4 address space from the IANA. So we have regular interaction with IANA and a strong level of reliance on IANA's services to us in allocating and registering the blocks of addresses that we receive, no longer IPv4, but still of course v6 and the AS numbers.

The NRO speaks on behalf of the RIRs quite regularly, all of these statements that we make formally are on the NRO website and some of the correspondences that we make you can find elsewhere, like on the ICANN website, and so we have a history of statements and positions that have been adopted in relation to ICANN and IANA, of course.

For instance, when the JPA mid-term review was under way, we made a response to that and our response, I think, is fairly relevant to this topic here, because at that stage, we saw ICANN as being on a path from dependence to independence, if you like, to having a greater accountability to the community.

We made general comments on ICANN's performance, but we specifically and deliberately didn't answer the 10 questions that were part of that review, because we felt that although they're good questions and thanks to the US Government for asking them, we felt that the answers
were for the community to receive.

That ICANN had grown up sufficiently, if you like, to be accountable to us on those questions, so we didn't enter into that level of detail and that was quite deliberate.

Coming on to the IANA renewal process, we did comment, of course, on the first NOI and our comments are public. We shared some views with ICANN before submitting the NOI comments and we made an open letter to Rob Beckstrom, to ICANN, to express what we were going to say and that letter is available on the NRO and ICANN website, but we are talking about our design to see concrete steps towards the end of the overseer role of IANA by the US Department of Communications, by the DOC.

We strongly believe that no government should have a special role in managing or supervising the IANA functions. We support ICANN performing the IANA function, but becoming more multilateral in its performance.

We suggested that ICANN, through its negotiations, should be advocating for a staged reduction of the level of DOC's oversight of the IANA. So possibly involving a transition from a contract to something like a cooperation agreement and then ultimately,
some kind of non-binding arrangement.

Just as the arrangements for ICANN themselves have evolved.

We reflected -- I mean, we have provided ICANN with advance notice of that, of our position quite deliberately and then that expressed that in our comments on the NOI.

Whether or not co-operative agreement is the appropriate term for the relationship that we were heading towards, I think the term itself may be subject to some interpretation and so forth, but the spirit of our contribution was definitely about following a similar path for IANA's oversight as has been followed for ICANN's.

We are specifically on the six or so questions in the NOI, we supported that function should be under a single entity. Also, that no additional functions should be added to that IANA contract. We didn't make comments on the .int issue which has come up since then.

We felt that IANA's accountability to and service for particular organisations and particularly in terms of where it gets its policy, where ICANN gets its policy from, should be recognised in that the specific organisations or communities to which IANA provides its services should be mentioned.
On the issues of performance metrics on changes to management of root zone requests and so forth, we were fairly general in expressing support for openness and transparency on performance metrics that reports should be made public.

Also, in general, that we have been satisfied, thanks very much, with the performance of IANA in general, but we'd also say implicitly in that that we have particular performance needs of IANA that aren't shared by others, that IANA is an aggregation of a number of very different functions, and so we think that our performance relationship and our performance agreements with IANA are really for us to determine bilaterally with the IANA rather than with other parties.

Finally, in terms of additional security issues, we supported third party review of security matters for the sake of security in general of the security of IANA's activities in general.

Moving on, then, to this further NOI, this has only come out recently and I can't comment for the NRO, it hasn't discussed or arrived on positions on the questions that have been asked.

I can suggest how I think the NRO might respond and I'll do that based on my own opinions and knowledge of
past discussions, but I just add that disclaimer that I'm not speaking for the NRO here.

The NTIA has mentioned that a cooperative agreement isn't the appropriate structure and if that's the case, then if that is literally the case, then that's agreed, but to repeat what I said before, we saw a series of steps taken with ICANN which did take it from the joint project agreement through to the affirmation of commitments and we're after something similar, in terms of the IANA oversight as well.

We're happy, I think, to see that IANA -- that NTIA favours the bundling of why that functions, which has worked well, very well so far and which is good for the sake of efficiency for sure.

Regarding.int, it seems like a TLD that needs to be managed in the same way as any other, but we wouldn't go any further on that question.

On the issue of other entities and what seems to be an associated question of IANA staff participating in policy discussions, we think that's actually a matter for the communities concerned. I would suggest that it's a matter for the communities concerned.

We have seen very productive and valuable and welcome contributions by IANA staff in various address policy matters and we don't see the need to prevent that
expertise from being given.

So I would question the need for an overall restriction of that type to be imposed as a blanket restriction on the IANA, from the US Government.

Again, maybe this is a principle of subsidiarity, but we see these issues as being better dealt with by the people who are most closely concerned.

The automation of IANA functions, again, this is a service issue that should be in response to the stakeholders concerned, the volume of transactions that the RIRs see with IANA in terms of requests is it doesn't, I think, require a great deal of automation, but we actually have -- but we have already, in another area, that is in the reverse DNS, we have actually already collaboratively and successfully automated some important functions there.

Again, it's something that we've been able to deal with without the need for this overriding, overarching control to be exerted.

Regarding service level agreements, we are critically reliant on IANA for services and some of us more than others, speaking for the RIRs, are very interested in having some form of service level commitments or service agreements or service expectations expressed.
We don't see why that would be out of bounds of our relationship, our particular bilateral relationship, with IANA. So we would suggest that SLAs, in some form or other and maybe again like cooperative agreement, the term SLA has a very specific meaning, I have personally don't understand the implication for subcontracting which Vernita mentioned before, but it's not that we want that particular -- that specific acronym to be there, but rather that service levels are important.

Likewise, the dashboard, nice idea, but ditto, it seems to be a level of detail.

Finally, the security director of IANA sounds fine. Again, it's a specific staffing and implementation of IANA's on an important, the important question of security overall.

I hope I haven't blown my time there, but that's it from me, for the time being. I'm happy to hear any questions or comments afterwards.

>>Keith Davidson: Thank you, Paul.

Certainly that indicates that there are at least significant aspects of diversity of need from an RIR perspective, compared to my CCNSO world, but thank you very much for that.

Moving on now to Jim Galvin.

Jim has a day job with Afilias which is a registry
provider to gTLDs and ccTLDs and also spends a fair bit of time in the IETF, so knows those aspects well.

Jim has a brief presentation for us and as I said earlier, if you can give us the gTLD perspective and then to whatever extent you feel possible from a personal perspective, an IETF view.

>>James Galvin: Just a gTLD's perspective about IANA. I put this in here, Afilias is a registry service provider and I want to point out just for relevance in this context, that we actually do, are the back-end service provider for two TLDs in this area, DotAsia of course, one of the hosts for this conference and presentations and of course we also host .in, you see as the country code down on the bottom there.

I wanted to start by saying that the IANA system is working. I feel like a lot of this process is all about what's wrong and what are the problems and, you know, there's always a lot of bashing that goes on at these kinds of things and I think it's important and relevant just to point out that we've had a lot of years of maturity and in working processes and developing them and I want to give credit where credit is due.

We do have quite a relationship with IANA, since we represent so many TLDs and it is fair to say that all of that really does work.
Not to say that there haven't been sum bumps along the way, but that happens with anything, so I don't think that we need to call those out specifically.

There are three main interactions, even though the slide says two broad categories, there is really three of interactions that we have with IANA that I want to call out.

We share these with ccTLDs and that's been pointed out before and even Elise started off by saying that ccTLDs and gTLDs, in terms of technical processes on the back end, they really are the same and they really should be the same.

But what happens here is when I say contact information changes, I point out there's one real difference between gTLDs and ccTLDs and that is with gTLDs, we have a contractual relationship with ICANN and so there's really any dispute about identity.

You or the of know who you're supposed to be working with and that's well defined.

It's my experience that that's not as well defined with some ccTLDs so that turns out to be an issue for IANA and it's unfortunate, but that's something that they deal with and it's my understanding that turns out to be a reason why many things take a long time sometimes, is trying to figure out who really is the
person you're supposed to be working with.

That's something that's worth calling out here.

I also call out DNSSEC changes because they are relatively new addition to what IANA has to do and this category of changes is important because they bring to bear a new characteristic on IANA work and that is there are time constraints or there could potentially be that go with DNSSEC changes.

If you're going to have keys, you're going to have signatures, you're going to have TTLs, I might need my key rolled over now, where now really is immediately. One would like to think they a worst case scenario, but nonetheless, it's a different constraint, that comes to bear on a set of changes that has never been present before.

It just worth calling it out as something to pay attention to going forward.

Again, the system is working and the question is what can we do to improve it.

I know that the further notice of inquiry was released earlier this week and you have all read it in full, so there's no concerns here.

As it turns out, I have read it, so this suggestion here, I was going to point out is included in the NOI. There is a general theme and NTIA took that on board and
it is part of the proposed statement of work, about needing more service level agreements and more attention to this and adding some metrics and some transparency in the public reporting of those metrics.

I think this is a good thing. Many people asked for it and they took that on board and they also pointed out that these things should be developed co-operatively. Obviously, it's not for IANA or ICANN to decide what those are all by itself, it's already been recognised that there are essentially three main groups of stakeholders that IANA has to work with, each of those groups are going to have different parameters, constraints about what they do and the transactions that have to occur. So it's appropriate that these groups should work with IANA together to develop what they want those metrics to be and then report on them.

It's also interesting that it is important to distinguish between what is and is not under IANA control. Obviously we want it to perform efficiently and effectively and to meet our needs as soon as we need our needs met as a community that has to take advantage of their services.

But some thing that is they do are not under their control. They have subject matter experts that have to do review external to them. There are communications
that have to happen with whoever the contact is for a particular transaction, through a party that's external to them and they just have to wait for that. They have no way to make those kinds of things happen.

The further notice of inquiry actually calls this out and points out quite carefully that in its framework, that IANA should develop its metrics and report on these things and report on those things that it does and what its controls are.

It makes that very important and careful distinction.

That's an obvious thing to do, but I think it's important to call that out.

So IANA cannot be accountable to third parties if it's dependent on those third parties. It has to let them do their job.

Keith also asked me to speak about the IETF and this is a convenient place to point out that the IETF is a very nice working example of how this whole process of service level agreements can work. These two links are here, the slides will be up on the website, so it's not like you can just copy them down now and look for them, but there is actually the agreement that the IETF has with IANA which specifies what it is that they want measured and how they want these things reported and,
fact, there is a page where they show by month what all of the statistics are for that particular month.

I don't know if this link is going to work, but let's give this a shot and see if that brings anything up.

Mostly want I want to page through it. That's my last slide. We'll see if this comes up and I'll show it to you on the screen.

This is a marvellous example of what you can do if you talk about what it is you want to measure. There is just pages and pages of graphs on this page, if it actually comes up here, which shows you how IANA performs with respect to what the IETF expects.

I think that's important and worth calling out.

All after these other groups should look to develop a similar kind of agreement with IANA and clearly, the technology exists and the desire to serve the communities exist, based on the fact that they provide this.

It won't try it.

Where is the reload button?

That's what I wanted to point out.

The other thing is Keith, you were making a comment about the IETF having a lot of interest or IANA having a lot of interesting registries and you were noticing
the X.25 registries and you thought those are ITU things, why are they in the IANA listing there? I'll point out that the reason for that is because IETF protocols do use X.25. There are IETF protocols over X.25 and there's X.25 over IETF protocols so what that X.25 is is a republication and it actually says that in the registry, that a IANA does not control this, it simply republishing certain X.25 parameters and types, so that they're easily accessible to the internet community as part of the use of the internet standards.

That's why those particular registries exist.

I cannot explain the special persons number registry, though, but I can tell you that I want one of those numbers and I would like to know how to apply, at least. Maybe you can speak to that issue.

>>Keith Davidson: I do notice that the number 0, which isn't perhaps the best number to have, is reserved. So perhaps if there's a nomination for Jim from the floor, we might be able to get his name there.

>>James Galvin: I'm a stand up guy, I don't think I can be a 0.

Anyway, that was my presentation.

My last slide was actually just to thank you and so thank you very much.

>>Keith Davidson: Thank you, Jim.
>>Elise Gerich: I wanted to thank both Paul and you for mentioning how you would like to have a public reporting of things and noticing that we do publish the IETF reports.

If you all have read the contract under which the ICANN operates the why that functions, there is a description of the data that we do supply to NTIA monthly. We do supply reports and they go to the NTIA and at this point in time, I think it's really great feedback to say that you would like to see that kind of informing published.

>>Keith Davidson: Thanks, Elise. Moving on to our last panelist, Deborah Monahan, from .nz, who will give us a bit of a look at the ccTLD perspective. Thank you, Debbie.

>>Deborah Monahan: The only person who calls me Deborah is my mother and that's when I'm in trouble.

So Debbie Monahan is now going to talk very briefly from the ccTLD perspective. Of course, traditionally, a ccTLD could be defined as the top level domain name of two characters respecting a country or territory name and derived from ISO3166 list.

This is changed, of course, recently with the implementation of IDN ccTLDs.

If you look at the current situation, there's 246
ASCII ccTLDs and already some 37 IDN ccTLDs contained in the IANA database. The number of registered names in each ccTLD varies from 0 to 14 million. There isn't really any standard ccTLD.

With many different models of operation, governance and control and even ownership of some of those organisations and indeed some that are actually run by individual.

These are wide range of views of how best to operate and meet the needs of the local internet community and that should always remain a key focus of a ccTLD operator.

Through ICANN, the country codename supporting organisation, the CCNSO has been established.

Less than half of the total number of ccTLDs have any formal relationship with ICANN or the CCNSO, but those who are engaged account for more than 90 per cent of the total domain name registered in the ccTLD space.

CcTLDs set their own policies, but there are times when general policies covering aspects of operation that affect all are required.

The IANA operations are an example of where those policies affect all ccTLD operators.

ICANN recognises the CCNSO as the policy development body for policies covering ccTLDs. The process for
developing policy within that is a long one, but there's never a reason for short circuiting and stopping an open process.

From the technical perspective, IANA has taken steps over recent years to improve the timeliness and service delivery.

We do consider there is scope for more process improvement to be made including providing secure IANA to customer communications and notification systems, provide a protocol to allow customers to develop systems to manage their interactions with IANA, provide an on-line database enabling tracing of current requests and also providing information on historical changes made.

Customers could also benefit from a clear list of automated checks that are undertaken by IANA and a test system so that they can check they meet them priority submitting their request.

Policy development and public occasion of policies is paramount to good, effective operation of a ccTLD and our view, it is also important for IANA.

There are a number of different entities and registries that interact with IANA as we've already heard about.

In our view, it is our view that the operation of
IANA in respect of each of these should be clearly defined to reflect the policies of that entity and not leave it open for IANA to create its own policy or processes on a case-by-case basis.

In .nz, we have separated our policy development from our technical registry function. The policy is developed in an open consultative manner to ensure it reflect the needs of the local internet community.

The registry then works to the policies developed and it is clear to all the scope of their operations as they cannot go outside of that scope.

It is a fully published policy framework.

The registry is also governed by a service level agreement setting out the performance expectations with results as to how they have performed published.

We consider the separation of policy and technical operations is also appropriate for the IANA functions and this formed the basis of the InternetNZ submission to NTIA on the previous, the first IANA NOI.

We joined in promoting separation of functions by switch.ch, though it is fair to say that not all ccTLD submissions made this distinction.

In our view, each entity in a relationship with IANA should be clearly defining their policies and binding IANA to operate within that framework.
There should be no provision for IANA or ICANN to develop their own policy.

In the case of any gap in the policy, the matter should be referred back to the appropriate policy entity to rectify.

The recent report of the CCNO. Is delegation working group identified that a number of ICANN decisions on delegations and redelegations undertaken over many years were made outside of the policy that exists at that time.

To us, this demonstrated the issues that can arise when one entity covers both the policy and technical operations and the two roles blur. Instead of using the gap in the policy framework to develop new clarified policy, the occasion is used instead to take new undocumented process steps or decisions with no clear cut criteria for the basis of that decision.

If IANA would be bound to the defining policies with a service level agreement with ican on behalf of the appropriate policy entity, it sets out their operating standards within those, it would help to ensure two things.

First, that IANA sets out the targets on which it expects root zone operations to be carried out including security, timeliness, reviews, et cetera.
Secondly, it also sets out the requirements of ICANN for policy development including that all policy be clear, consistent, timely, fair and accountable.

Clearly defined and published policies combined with clear performance standards would help give ccTLDs confidence that they were going to receive the level of service and consistency of service expected.

At this time, the CCNSO has formed a working group to provide a framework of interpretation for the delegation and redelegation of ccTLDs.

As part of that process, there will be the charts of input from any interested parties including government.

We consider the working group will help significantly to make the process of delegations and redelegations more transparent and will be a key step in defining the role of ICANN and that of why na in the process.

At InternetNZ, we consider IANA's role as of that a technical registry and as such, should not be involved in developing policy, though I will agree with the comments made be they do have a role in advising and giving their information expertise to those entities who are developing those policies.

The role of policy development should be the responsibility of the entities using IANA's services and
reflect the needs of the different groups, such as ccTLDs, gTLDs and RIRss.

The approach would ensure the policy framework reflected the needs of those it was required for and provide IANA with clear guidelines as to the scope of their responsibilities and operations.

We look forward to a future of increasing end pen department from the US Government for the IANA function, but firstly want to see IANA and ICANN separating technical and policy development processes in a maturing of policy development by the CCNSO that will provide a robust policy framework.

Thank you.

>>Keith Davidson: Thank you, Debbie. I guess as the chair of the former delegation, redelegation working group and the chair of the future or the current framework of interpretation working group, I can speak quite openly and freely about IANA staff involvement in those working groups.

It is inconceivable that the delegations redelegations working group could have completed its work in the manner that it did without IANA assistance and input. It was extremely valuable, but that's not part of a policy development process.

Likewise, with the framework of interpretation
working group, I see it as inconceivable that that group could reach a logical conclusion in the future without IANA input along the way, just to know and understand what has happened, why it happens and so on.

So I agree and that clear separation of input versus policy development is noted, but just to clarify that.

Thank you.

Now I would like to open the floor up for general discussion.

Are there any questions of any panelists? I'm not sure if Vernita is still on-line.

Chris Disspain. Can I ask a question of you before you ask a question of the panel. The ICANN -- I'll ask this question, because you have just been appointed to the ICANN board, but --

>>Chris Disspain: Thanks very much for reminding me.

>>Keith Davidson: But it was a question that I was going to put to the chair of ICANN. And that is that ICANN itself put in a submission on the NOI, largely seeking the ability to manage the IANA function on its own and of course that was an ICANN staff and board proposition that wasn't tested in the broader ICANN community, so going forwards as a board member, if ICANN is to make such submissions in the future, do you think it reasonable that ICANN actually stipulates that that is
a board and staff position or that it has a process by which it can check with its own and broader community to endorse that particular issue.

>>Chris Disspain: I don't think, frankly, ICANN should be making submissions without community input, because it's not -- I mean, that's how ICANN should come to its conclusions.

    I have some thoughts about the future which I wanted to talk about, which may kind of also answer that question, but as a fundamental principle, I don't think they should be making submissions, especially not in this particular instance.

    I wanted to just talk about two things.

    One just to pick up on something that Debbie said -- to things. She used the word mature and CCNSO in the same sentence and I'm not entirely sure about that.

    But the other thing is that we need to be very careful how we characterise what the delegation redelegation working group said. These thing have a tendency to run away with themselves.

    I hear now people saying that the delegation redelegation working group found that IANA was creating policy or was making decisions -- I'm not saying you said this, but were making decisions against policy.

    That's actually not what it said.
What it said was that there were gaps, there were places where there was no policy and the board had a tendency to fill those gaps and there was no necessarily no -- not necessarily an intended criticism, because I think there was an acknowledgment that the board had to fill the gapings, because otherwise you wouldn't be able to do the job.

What I would like everybody is to do is think about the future. I'm picking up on what Paul said. I think we need to make a couple of assumptions, just for the sake of this discussion.

Let us assume that in February of next year or whatever, the IANA contract is given to ICANN for, let's say, three years.

That may have if that happens, a couple of extension terms on the end of it, but let's forget all about that and assume this contract goes to ICANN, perhaps amended in the way that the current document looks at for three years.

If you make that assumption, what I think we should be talking about is and then what? Because unless you believe that it should just continue being relet forever, then there needs to be a then what. What is the next thing? Is there a next thing?

I don't think it's any secret that there are
departments, there are divisions in the US Government mostly that mostly involve themselves with security, be it homeland security or foreign security, whose view is very strongly that IANA should at all times remain under the, quote, control of the US government and so that may always be the case for that reason.

But what we should be doing is trying to figure out what happens next, if indeed my assumption is correct.

>>Keith Davidson: Thank you, Chris.

Can I just comment a little bit further on the issue you raised relating to delegations and redelegations and that is that certainly the reports of the delegations redelegation working group wasn't seeming to attribute blame and certainly attributed no blame on IANA.

Perhaps it is recognising that the ccTLDs under ICANN's bylaws, have the sole opportunity to establish policies for the ccTLDs and by not having developed policies relating to delegations and redelegations, it is actually the ccTLDs themselves that are neglectful, at the end of the day.

I think it's simply been a matter that we have been too immature as a group to have actually confronted the issues untell now and now we are confronting them.

>>Chris Disspain: Absolutely. I just go one step further and say society is to blame.
>>Keith Davidson: Any further questions?

>>Aiz Bawaz: With due respect to each and everyone, thank you very much for this opportunity of civic engagement. Thank you very much also for ICANN coming back to Singapore, after such a great lapse of time.

My question is my perspective will be very much a distant perspective and the question is that if it's very hard to address ICANN and I can't. But we are very synonymous with I can't rather than ICANN.

The issue very much in mind here is a question of are you going beyond just what, you know, my learned friend just conveyed just now, what next. If he's asking what next and he's a member of the board.

We are even wondering more than that, in the sense that it seems that no white paper, no pre discussion, introduction, just one paragraph, so it is quite difficult to reconcile what really the agenda is all about.

A question of that, it is a question of rubber stamping, most of the time, over the decades, and this just should not be the business as usual, but can we migrate from that. The question is then lacking of innovation is so extensive. Can we be more realistic? The question is I address some, you know, I put a comment earlier in the session which should be this
session should be earlier, but anyway, my learned friend, Prof Ang, you know, in context, with regard to setting the scenes and that is what exactly it is.

So it seems to be rather moving with the motion, getting approval, getting it endorsed, will be the outcome, the expectation. Why are we not pursuing the question that what they are known and unknown and the in-betweens that we need to consider ...

Earlier, I mentioned, for example, I have been waiting for more than 10 years for an ICANN alternative by itself, that ICANN has a successful international body should create its own competitor, could create its own contender and not an unfriendly one, but a complementary one, where by we could more or less complement it.

So my issue here is very much if we look at the non cardinal factor and we look at just substitution with those, that is a matter of carrying forward, then I think we are not going to be in the new millennium with a new agenda, but with yesterday's agenda. How do you ensure that what you are covering is something that we are in need of, whether it is getting more complicated, more rules, more rules, and more deviation and more, you know, uncertainty and whatever not.

Can we try to -- because I look at it, most external
auditing and the question of that accountability, transparency, governments, it is all, I think it is very much way of doing it. So can we think of a more accountable way of, you know, humanistic organisation that we say, look, come on, let us look at ... and say, look, the public is not happy with it and the public don't care, because you don't care what they want to care about, the question is can we see a systemic reinvention of ICANN and not what I can't. This is basically, you know, the other thing is all academics that can be done without problems. I don't think that these people objected to anything that is progressively a plus factor, but we're looking at can we look at a we are perspective than what currently that we are doing all over again.

Thank you so much.

>>Keith Davidson: Thank you. I think that was probably more an observation than a question. I don't know if anyone on the panel wishes to tackle any aspect?

>>Cheryl Langdon-Orr: The answer is yes.

>>Keith Davidson: Involve yourself in ICANN and like those of us who are involved, seek to make changes that suit you or your community's views.

Any further questions? Any further observations? Any last discussion points?
Thank you. In that case, I'll thank my panelists very much and Vernita, you are still there, I see. Well done. It must be extraordinarily late.

Thank you panelists very much. You have contributed to my understanding of the topic considerably and thank you for that.

APPLAUSE

>>Komathi Ale: Thank you very much. Can I once again invite Mr Lim Choon Sai.

Mr Lim.

APPLAUSE

>>Komathi Ale: Thank you very much. Ladies and gentlemen, lunch will now be served at the Gallery East. Please target to get back at 2 pm. Thank you.