Moderator: So I would appreciate it we just get on with it.

The next presentation is an expected presentation, Chris announced it, it's on the program. It's an update by CNNIC and I have Tanya (sp) Ling from CNNIC to give us a presentation (unintelligible 00:00:25) as well. The lunch was good by the way, thank you.

Mr. Ling: Yeah, thank you all here, come back from the lunch. Hope this is a wake up presentation here.

Actually it's just a brief update of CNNIC and what they have done recently.

Two parts – one about our recent activities. The second part is about our IDN ccTLD preparedness.

We held our first domain name industry convention in June of this year. Actually, I'd like to share with you some data, just released at this domain name industry convention.

It is said that there are about 100,000 employees in this industry in China and that the total market volume is around 4 billion RMB.

You can see from this chart (unintelligible 01:41) Theresa, Tina Dem (sp?), also invited there to attend the meeting.

And during this meeting, (unintelligible 01:51) signed an agreement with ISC. We agreed to participate in the (unintelligible 01:59) development. OK?

And this August we hosted the APTLD Beijing meeting. I'm sure a lot of our colleagues have been there. This is quite a successful meeting. I'm sure everybody have a very good time over there.

This is actually a picture taken there, some of our colleagues visited (unintelligible 02:33) office.

And then shortly after the APTLD Beijing meeting, Sydney held the APTLD 28th Open Policy Meeting. And also signed the cooperation agreement with APNIC on the development and the promotion of IPv6. Actually, CNNIC has a detailed plan – our national plan actually – on the promotion of IPv6.

OK, let's come to the significant part about our IDN ccTLD preparedness.

We just released a public test on the dot China; actually we carried out this test this April. One of the questions for the Internet users, "Would you like to use dot China?" According to the feedback, there are around 95% indicated that they would like to use dot China as its IDN ccTLD.

OK, this is the second chart. It's about the DNS server availability public test. According to the test result, around 81.2% DNS servers is now IDN available but still there are around 18% failed the test. It looks like they have to be patched in a very short time.

OK. This chart shows there are 9 nodes for dot CN office all over the world. Among them, 9 of them are domestic nodes, the back end. And 3 overseas nodes – one is in Korea which is hosted by KISA. And the second one is hosted in (unintelligible 04:51). A third one is hosted by Newstar.

We uploaded our main service in this June; we just purchased new equipment and got a new configuration off our domain name servers which could make that IDN available.

OK. According to the test and according to the preparation, looks like we're fully ready for the launch of IDN ccTLDs. Actually, we participated in the IDN ccTLD fast track test – system test – and it turns out the result is quite good.

Still there are some issues on variants. In our Chinese opinion, there is a point I would like to point out. In Chinese opinion that to simplify the Chinese and the traditional Chinese is sort of like the upper case and the lower case of ASCII words in our language. Which means if you just block one of them, that's would deprive some part of Chinese users of the right to use that same meaningful words, the same strings.

So our proposal and, in fact, it's one of our practices, is that just delegate Chinese string and its variants to the same IDN ccTLD manager. And on the IDN ccTLD manager side, we will, through registration policy, and if our registrants register just one of the names, it will be given at the same time a name of the variants strings. And these two names will be bonded together on the policy side.

So politically said, this is just a one registry entry only. So we proposed this proposal to ICANN and hopefully this could be adopted as the variants management.

OK? That's pretty much what I'm going to say. And thank you and any questions?

No? No? Looks like everybody is not awake from their lunch! Thank you.

Moderator: Thank you very much. I think let's move on straight to the next presentation by Wolfgang on the European Summer School. Just make a short

presentation and then we'll get on with the session on the agenda which is sharing resources session.

Wolfgang: Thank you very much for giving me the opportunity to speak a little bit about the European Summer School. The reason why I do it here again and again is also because I got a lot of support from the ccTLD registries for that and this is also a way to say thank you for the ccTLD registries who are involved and help to make this happen.

The background is that there is no – at the University level – there is no Internet governance curricula available. So that means if a student wants to study Internet governance he has a problem what to do. And we discovered this in the working group on Internet governance in the United Nations.

We saw some exceptions – there are some courses in Harvard, Oxford and Atlanta Tech Europe – it's difficult to study it in all the other universities around the globe. You will have difficulties to find a place where you can get all the knowledge which is needed to follow ICANN meetings to IGF and all the other issues related to Internet governance.

So that means within the context of the World Summit on the Information Society and the stablemen of GigaNet, the Global Internet Governance Academic Network, we created also the Summer School in Internet Governance and had in Meissen in Germany a pilot project successfully in 2007. And we continue now, we have already the second one in 2008, the third one in 2009 and the fourth one will take place in 2010.

Meanwhile, the concept has spread around the globe. We had our first South American Summer School in 2009. This year because the globe has two summers, one in the north, one in the south, so and we had it in March and we will have a second south summer school in March in 2010 in Sao Paolo. So that means in Latin America we go to different places.

We had the first Arabic Summer School in Cairo last year, end of June, and will have a second Arabic Summer School probably in Tunisia in 2010.

And I use also the opportunity to be here in Seoul to discuss with various partners why not to start an Asian version of the Summer School. And I hope this will happen in then 2010 or 2011.

So we had a very good 2009 Summer School and this is the faculty and if you look at the names, the well known names. And one of the success elements of the Summer School is that we have hired faculty members who are really doing the real things in ICANN and IGF and in other Internet Governance bodies like Avri Doria, (unintelligible 11:28) gives a lecture about IP address management. Milton Mueller, Bill (unintelligible 11:33), Janet Hoffman are

there. Jon Bing, the lawyer from Oslo was a GNSO Council member and gives the lecture about the legal dimension. Olga Cavalli who is now the Vice Chair of the DNSO Council gives a lecture of Internet Governance and Development.

And then we have a huge section also on ccTLD management and last year we Giovanni from dot EU. We have Stefan Wetzel from DENIG (sp?). Simon from dot NO (sp?). Phillip Harbenze (sp?) from dot Info and (unintelligible 12:05) who plans to have dot Berlin. And also (unintelligible 12:09) who spoke about dot BR.

So I think this is really a place where you get in 48 hours, so a full week, relative good overview about theoretical elements but also very practical policy elements like the role governments. We had Bernard (unintelligible 12:28), Michael Niebel (sp?) from the European Commission and Marcus Kumar (sp?) as Governmental speaker there.

And also the very practical things, you know, how to manage IP addresses and domain names.

So the good thing is that we have a very good response. We had in 2009, 115 applications from around the globe for the 25 places we had. And so you see they are coming from everywhere – from Africa, Asia, Europe, and South America.

The fellows you cannot read their names but if you are interested, then you can get it.

What is the light motif of the summer school? We have two mottos. One is Training to Internet Governance Leaders, not Users, of Tomorrow. I'm sorry, it has to be Leaders here.

Leaders of tomorrow. And indeed, fellows of the Summer School are now already members of the GAC like (unintelligible 13:21) from Bulgaria or the guy from Saudi Arabia who was a fellow of our Summer School. They are on the GNSO Council. The ILAC and also the multi-stakeholder advisory group from the Internet Governance Forum.

And the second slogan is, "Learning in a Multi-stakeholder Environment." That means fellows coming not only from universities but they are also coming from positions in government and the private sectors, ccTLD registries and NGOs, and invite you also to send young people from your registry to come and to use this opportunity also to have, to create a lot of contacts.

For instance, for the first time last year, (unintelligible 14:05) from the Czech Republic, Ulrich (sp?) did send a person and I think it was a very useful visit as she reported back.

And so that means this is a good opportunity really to train your own people and to bring them better into this international context.

And this is then, let's say, the final slide.

I want to say thank you to all our supporters, in particular to DENIC who helped from the very early day to make this happen. To RIPE NCC, to SIDN and Unninet (sp) the two silver sponsors. And then also to all the others who help us to make this happen.

And we have also this so-called fellowship program because a lot of students cannot afford to participate and so we have invited some ccTLD registries to help us with, to finance one or two students and to enable that.

For instance Chris Disspain from auda supports always two students from Asia. Last year we had the ccTLD manager from Mongolia who was in the course there and it was very helpful and a big eye opener for her.

And so we are looking really for key persons which then can be brought to the Summer School with the help of certain ccTLD registries and other ethnic. And nic.at and others have helped us to fill the 25 slots we have available for the Summer School.

And if you have any questions, send us an email or go to the website and I thank you very much that I got this five minutes. And hope to see people from your communities soon next year in Meissen or in Sao Paolo or elsewhere. Thank you.

Moderator: Wolfgang, thank you very much. I don't know if there's a question or two? Let us really quickly take if there are any questions? No it doesn't look like it. Thank you very much Wolfgang.

We will move to the next session. Now, if I may ask the speakers or the presenters rather, to come forward. Leslie. Where's Henri? There's Henri. And Peter. Oh William is coming, not Peter. Because I haven't seen Peter sitting here. William will be making a presentation on behalf of CentOS.

Just a brief background on this session, how it came about. We had in the ccNSO working group that Lesley Cowley was chairing. I think it was effectively was closed in Sydney? Call to participation working group, looking at trying to improve participation of ccTLDs in the ccNSO and

basically trying to encourage ccTLDs also not only just to be members but to be visible, to make a contribution.

One of the recommendations that stood out from that working group, one of the recommendations that was sent to that working group, was that we need a decision where ccTLDs would present about what resources they could share with others.

It is an important topic, particularly for developing ccTLDs or TLDs in the developing world. I come from Africa so I know that it is – such a decision becomes very, very beneficial to a couple of ccTLDs in our region.

The question was what resources in particular could be shared. And that could be helpful to ccTLD development.

Some of the areas that have come up, obviously and they are covered here in any case.

Excuse me. Not just the sharing of our registration stems which we so much cover, you know, we know what options we have in open source registries that could be shared, but to look at resources broadly, in terms of policy, is there anybody who could have some things to share when it comes to policy. Because we are all running ccTLDs eventually, our policies overlap to some level and it would be pointless for me to try and draft all of that policies from scratch when dot NO has some policies that basically suit me and I just need to tweak them for 20%.

So what kind of policies could be shared? What's on research that could be shared?

We had an interesting session here on marketing with dot MX and dot PH presenting some interesting stuff, you know, on what they've done in terms of the others. And I think I will learn more, at least from the methodology point of view, from them. And then the issues of security again, you know, we see a steady increase in DNS SEC implementation and adoption.

I believe many ccTLDs have a bit of question on where is DNS SEC going? How is best implemented?

Who among those who have played a leading role in DNS SEC implementation is willing to share something?

So it's basically a topic that covers that. And issues of dispute resolution.

So without any further ado, I have my three presenters here. I will take them, unless I'm wrong, who do we have first?

So we will have William, the communications manager of CENTR, to make a presentation on behalf of CENTR, William.

William: Well welcome. I think this is my first presentation ever at the ccNSO so hello everybody, I am William, colleague of Peter. Normally Peter is sitting in front and I'm somewhere in the back and walking out, escaping from time to time to see other interesting meetings.

The presentation about sharing resources and sharing marketing resources, it's, well I was thinking this morning, I should have done my presentation before that because it's actually what you have been doing this morning, showing what's going on and what different registries do.

I will just explain how we started to think within CENTR, a couple of months, let's say a year ago maximum, what can we do about marketing and how can we help our members.

If you do this as a second person, second presentation of your organization, of course you don't have to present it anymore, so CENTR you all know by now.

Continuing, the discussion this morning, before starting to look into marketing and what we were doing, I really would like to read you the different definitions that I have found just in five minutes on Google, because it's important to step out of the idea of OK, we talk about marketing, we talk about just campaigns and just some nice leaflets.

There is more and there is more to discuss. I don't go further in this topic but it's just interesting to know that, OK, it's more than just that and if you talk about it like we have seen also this morning, it's important to realize that.

The second thing, it also came this morning in one or two presentations, we work in the domain name business, we all know what they are, but don't ask your mom or your friends, because if they asked me what are you doing for living, and I sort of explain, after two sentences I get the "Well, oh that's interesting and where did you go on holiday?" So they just don't know and we can't forget that we're working in an industry with some kind of hidden, well hidden tool, hidden product.

So sharing resources between registries. In the field of marketing, how can we help them as CENTR, as regional organization? Well I would say let's start just doing what we're used to doing, what we do the best – bring the people together, inform about different marketing campaigns of different members, facilitate the information sharing, collect the information.

Just look around and say – I think like Gabby that also for this – looking OK, dot PH is doing a campaign, dot SC is doing a campaign – let's invite these people to a meeting and let's present what they are doing.

That's why we started to put marketing teams on the agenda of our meetings. One of the workshops we have at CENTR is the administrative workshop. I think I have to say it was Gabby's little baby when she was still working at CENTR and, well I'm now responsible for, well, the upbringing and I think the workshop is still doing well and says hello to you.

But we started to put topics on the agenda but the part marketing became bigger, bigger and bigger and the problem is you mix it up with marketing, with marketing people and non-marketing people, so you end up with half of the agenda people are saying, "Well, it's interesting to look at but it's not really useful for us."

So then we started thinking – well, not we because the people in the meeting room started to give suggestions – why not bring just the marketing people together? Once or two times I think we, I know we did it one time, we had a meeting just before the summer in Amsterdam and it was kindly hosted by dot NL and we have another meeting next week in Stockholm, hosted by dot SC, just to bring the people that are working in marketing that see marketing as their more or less daily business or daily task. Let them sit around the table discuss and exchange ideas.

So what do we do at that workshop?

Sharing of ideas. Sharing of best practices. Sharing of experiences.

That is the same as we did this morning. And I think everybody walks out with some ideas. Will pick something up and will say, "OK, if we discuss back at home some campaigns, some marketing or some other stuff, maybe I will think about and will discuss it with my colleagues."

Other things we do at the meeting – we also, and probably we will present at one of the next meetings – we think about OK, can we work together on kind of tools to create awareness on the ccTLDs as a product.

And we are working on the setting up of a marketing repository.

I think maybe that last point is what really fits in the idea of sharing or is close to the idea of sharing the resources, sharing the knowledge of what you are doing. Because you can't really share like you, you share a software package, you can't just copy and paste a campaign, but what you are planning is to set up a marketing repository. A kind of database where members can consult,

that members can consult when they are putting together their own campaigns, when they are starting to think about their marketing initiatives.

How will this be? This will not be the collection of all of the presentations we had on marketing the last ten years or at CENTR. No. We are trying to streamline that in one page info sheets for every initiative. Where you have just on one page what's the campaign about, what are the tools that are used, what's the evaluation given by the registry itself, would they do it again, wouldn't they do it, would they change it. An assessment of the tools they used. For example, they had an online or a TV commercial but would they do that again or not. The costs. Also some information about did they use an agency, who, what agency did they use, who was the contact. And, of course important, the contact person at the registry so if you say, "Ok, that's interesting and maybe we would like to do something similar," you have the contact person that you can ask, "Can you help me? Do you have some tips, some things that you have to look at?"

The thing we are now working on is the requirements for the repository. I mean, we have to find out how we can make all of the information that we are collecting and start to collect, easily accessible and bring it somewhere on our member's part of the website, in a structured and a well structured way. So that the different initiatives are tagged, categorized, that if you say, "OK, I want to do something on an online campaign," that you can just look in the database and get some examples from, "OK, these are the kinds of initiatives taken by your colleagues."

So this should be more or less the end result. We plan to go live by the end of this year so there is a lot of work to do. And well, a lot of things to discuss at our meetings next week. So I'm looking forward to it.

That was my presentation. I don't know if there were any questions?

Margarita?

Margarita: Thank you. I think it's a very good idea to gather people in charge of marketing and commercial things and at the meeting that you show for November, is only for the people that belong to the organizations that are in CENTR or maybe we can participate from outside for example?

William: Normally our workshop meetings are for CENTR members only.

But I have to add – normally the, well in general, we put all presentations that are given at our meetings – are publicly available. Except if the member asks – sometimes members give a presentation, these are our plans for the next year but please don't put it on your website because we don't want the whole world to get the news already.

Moderator:	Thank you very much William. Our next presenter is here so. But before I go to the next presentation, I didn't hear you mention the (unintelligible 30:37) with the original TLDs. That's one person that we should.
William:	You mean among the regional organizations or within CENTR?
Moderator:	No, within the regional organizations.
William:	Well we are planning to set up a survey and some information. Well I didn't mention it because well I just kept myself to the topic marketing so…
Moderator:	Thank you William. Henri? You're almost, almost ready; I will give it to you then straight away.
Henri:	Good afternoon everybody, my name is Henri Phillip; I am from (unintelligible 31:30) registry. Before I start, I need to ask, somebody put a paper cup here and there is written, "Short planet," I don't know if that was on purpose or if it is just some sign of some decision about short resources.
	No one knows? OK.
	I would like to show you the, actually there's three quite concrete and specific areas that all registry is sharing some resources or is offering to share some resources with the others. They are all from a technical side because I expected that some of my colleagues will cover the others. So this will be more about the technical how to really save money, how to share some resources on the technical operations and the things related to that.
	So the three areas are identified and there are more than those three but I just picked those three.
	The registration system and Rick in the beginning speech, in the opening speech mentioned that something that is widely presented, mainly on the tech day usually, there are also some possibilities – how to save money in the day to day registry operations – like and I am specifically thinking about the DNS system. And also all the registries do some research and development and some of the outputs are important.
	We as dot CZ also use of course all of the others, so I would like to show you what we are doing, what we are working on. And what we are happy to share.
	For those that usually attend the tech day, this will be probably a little bit boring and some others also own registration systems so I will be just brief on this one slide.

We at CZInc, three or four years ago, started development of a registration system which is called Fred. And because we are in the situation that we needed some registration system, we wanted to change from old one to new one and we had nothing at the time so we decided to develop a new one. And we were thinking about the others that would be in the same situation so we licensed it under a general public license so that it's free, open source and we offer this registration system for other registries that do not have their own or that are looking for some other possibilities.

What we do, we usually support those registries on mailing lists and also sometimes we offer some limited training in our facilities and sometimes if we are asked to, we can also fly to the destinations where the registries will be placed in, and we are doing training there.

So the registry of course is used for dot CZ but we have also implementation in Angola, Tanzania and other two countries, Costa Rica and Albania are working to deploy it and it will be deployed shortly.

So that's something we are offering for sharing but it's of course not just one way process because those people who are adopting your systems found some bugs because every software has bugs and are sending us feedback and that's also very valuable for us.

If you would like to know more information about Fred, look at Fred.NIC.CZ and there is, you can download it and test it.

So that's one area we are quite successful in the cooperation and both sides are quite happy with that.

Another thing we are doing for sharing resources is the DNS system deployment. There are two areas that we are working in. First, some of the small registries in countries that are not very rich or have just a few registrations, have problems to deploy some reasonable DNS system and they are looking for some options for some host that would absorb their DNS operations.

So for example, we are hosting, doing secondary's for Tanzania, Angola. We used to do secondary for dot ME before it was transferred to Afilias.

And I'm just telling it to you as an open offer. If you are a small registry and you cannot afford to do your own DNS system, just let us know and we would be happy to help you with some of the nodes.

But we also cooperate with the developed registries, with the registries that have enough resources to do their own DNS system and such an example is our cooperation with Chile with dot CL.

We exchange service or better say, both parties, both service, in all countries, we build intel system and then gave access to the other ones. So that was the easy way how to deploy DNS node in Chile. We used (unintelligible 36:59) technique for that. And we didn't spend much money and I think we both are happy, right Margarita? Yeah.

It was pretty smooth cooperation, people in Chile were very professional so that's how we very cheaply actually did our (unintelligible 37:17) in Chile and it was, it saved a lot of money for us.

And the last area I would like to talk about and I have some demonstration, is the R&D, the research and development we do. As you know, some of the larger registries mainly have enough resources and they have some surplus and they are usually looking how to invest those money in something that makes sense and that could be beneficial for the Internet, for the others.

And we do the same so we created a department called CZ.NIC Labs and we employ a few people that do some projects that should be beneficial for the local community but also generally for the good of the Internet.

I would like to show you just these three examples of such projects.

One of them is DNSSEC FireFox plug in. Why we did it actually, the main problem how to communicate DNSSEC for the end users is that it's invisible. If you are explaining the DNSSEC and they get the feeling they understand it but now they see that they cannot see it, they have no chance to see what the domain is assigned, or a sign whether it is broken or not. So we decided to – they also cannot check their data system is supporting DNSSEC like the ISP provider – so we decided to prepare a plug in to FireFox that shows you that some domain is assigned – if you installed a plug in and you go to some DNSSEC assigned domain, it will show you a key. If it's properly assigned, that there's no problem, it shows you a green key. If there is some problem – it may for example happen that the secure domain is referring to some unsecured one – then the key is red. And if there is no DNSSEC at all then the key disappears.

So that's very easy, everybody understands that if he or she sees a green key that everything is OK and it's happy. And that's the way how to spread some basic knowledge about DNSSEC to the users.

You can download this – it's an alpha version now – but you can download it from our webpage at lab.nic.cz and if everything would work, I would like to try to show you the live demonstration.

That's usually a problem. I don't like doing live demonstration. And of course, I cannot move my browser on the screen. OK. And as usual I'm having technical problems; I cannot somehow move my browser to the next screen. I will try it later maybe.

And another thing that we do is the DNS sector tester. It's actually a tool that would be helpful for one quite important thing. All of – or many of the users of the Internet are connected by some GSO devices – by some small routers – they are pretty cheap. And the way they deal with DNS is usually very problematic and that can be especially a problem when in DNSSEC deployment because if you, for example, are moving (unintelligible 41:46) as close as possible to your computer, to your application for example you want to install DNSSEC over to your computer – you will find that because of the wrong implementation of DNSSEC, either net or resolving, in those devices you can go to problems that DNSSEC assigned zones will not be available or something like that. And we wanted to identify those devices, to create a database of those devices, so therefore we wrote an application which you can download from the pages www.dnssec/tester.CZ. And this application is able to test your device and tell you whether this device is good, whether it supports DNSSEC correctly or at least can be somehow tweaked to support DNSSEC. And also all these applications can report if you want to, to all central database so we can collect information about those devices and also speak to the vendors and ask them to in their future firmware upgrades to include the DNSSEC functionality or at least to fix some problems.

This application is on the pages, if you look at it, it's in Czech and English, the information pages and the download page. However, it can be translated to any other languages and can be under any other domain and design you want to. So it's not just it has to look like this.

So that's also something that we are offering to the others to share.

I will not try to play with it online because I'm sure it will not work.

So the last thing we are doing and this is really just a short example because it's not DNS related, is that we are doing another project related to the Internet, good of Internet, and one of them is the routing grammar. It's some technical thing. I don't know how many of you are familiar with routing. But this routing grammar is more general to than just for DNS; however we use it for example for (unintelligible 44:07) DNS clouds. So it can also be very handy for the DNS registries. But very happy from this too, the internal exchange points, because they use it as a root service. For example Czech1.CZ or (unintelligible 44:27) based in London. And that's also something we are offering but it's probably more, go beyond the DNS community. And you can look at it at (unintelligible 44:36) .CZ.

So I'm sorry I couldn't show you the live application but if you are interested, come to me and if I will switch off the projector, I'm sure it will work so, thank you very much for the opportunity to present and that's all.

Moderator: Thank you Henri. In the interest of time, I think we are a bit struggling with the time; can I take a question, just a single question at least? For Henri?

There's no question, then we'll proceed to Lesley.

Lesley: I can save you some time. I haven't got any demonstrations or slides.

I'd just like to cover briefly why Nominet's involved in this. I'm Lesley. For those of you that don't know me, I'm the CEO of Nominet which is the dot UK registry.

And I'd like to just briefly explain why Nominet's involved in this session. Why I'm involved in this session. Give you some ideas about resources that maybe we could share and also say I think we could be a lot better at this.

OK?

So why Nominet's involved. We're not involved because there's a grand plot to make everyone like Nominet. I'm not sure that many of you would like to be like Nominet at times. But basically we are involved because what we think we're here for is to make a positive difference.

To make a positive difference to people in the UK and UK Internet users. But also to help shape and make a positive difference to the development of the Internet. And as part of that, we're here to learn, just as many of you are here to learn as well.

I got involved because as (unintelligible 46:34) said earlier, I chaired the participation working group and as part of that task, we did a survey asking you what you wanted from the ccNSO, what would give you the most value for traveling all of these miles and spending all of these hours in the ccNSO.

And of course there's vital policy work but one of the other points that you made is that you are looking for information from other registries. Looking for ideas and getting up to date with latest developments.

And so this is where the idea of shared resources came from.

So in terms of resources, well, there's lots of things that we already share of course. It will be very familiar that Nominet produces a domain name industry report, as do a couple of other people in this room. And you can get

those on the Nominet website and we produce them each year looking at UK statistics and worldwide statistics.

We also publish, as many of you do too, monthly registrations about growth of register, service turnaround times, etc.

And we do quite a bit of technical sharing too.

And we also share quite a bit about the dispute service that we offer.

Hopefully those are quite familiar shared resources, I think in this community.

But there are other resources too that possibly we could benefit from sharing. Information about how you deal with customers, how you deal with registrars, how you deal with registrants. Looking at policy development processes for example, how does yours compare with mine? What could we learn from each other?

Looking at communication – we've talked today about marketing, which is great – but there's also a lot about communication – what's the best practice in terms of communicating with the end users or with registrars, if you have them of course.

Nominet as an organization has grown very quickly, like many of you in this room, over the years. And so that's meant we've had to put in procedures and processes for dealing with staff. There's now 120 Nominet staff.

And I know I've shared with some of you our staff manual for example. And it's much easier to crib from somebody else's, to knick the good bits and leave the bad bits from somebody else's manual, than it is to write one of those from scratch, I assure you.

We also do a best practice challenge awards scheme. Now some people have shamelessly copied that – Chris – but there is some learning from running an awards scheme. How do you organize something like that? How do you get the local Internet community involved? That we're happy to share.

We've also set up a charitable foundation recently because we are profitable and we are a not-for-profit and we gift money to that foundation. And so we have some interesting experiences and resources that we could share from that work.

We're happy to share materials electronically, we also share materials by people coming to visit, or we can come and visit you of course. But a lot of the attraction is coming to see somebody like Nominet in operation and so we

regularly host visits. And if you are transiting through the UK or could really justify coming to the UK, we'd be more than happy to host a visit.

But my proposition today is that a lot of the sharing is linked to which meetings you attend and who you currently know within our community. And that's great if you've been around for a while and you get to know a lot of people. But if you're new to this community, that can be quite a challenge.

And my proposition is we ought to create some sort of resource area of the ccNSO website where one can put links to materials – hopefully not give Gabby too much more work – but actually where you can find materials where you can be directed to links.

And I'd also like to propose we could do some sort of resource dating service. Now bearing in mind my comments earlier about marketing materials, I need to be careful what I mean about a dating service.

And in that context I'm talking about the ccNSO and the regional organizations being better at getting people together. Pairing up people who have information with people who are seeking information. And I think as a community we could be much more proactive in achieving that.

Thank you.

Moderator: Thank you very much Lesley. The dating service is a good proposal.

Do we have any questions for Lesley? There's one from Mary from dot NG.

Mary: My name is Mary, I'm from dot DG. And thank you for the sharing. And just a quick one on visits.

Will it be the other way? Can we organize for Lesley to visit Nigeria and talk to our registrars?

Lesley: Yes, of course, but this is not some sort of tactic to get a grand world tour.

Mary: That would be at the cost of Nominet not…

Lesley: I knew there was a catch! Yes. If we can fit something in, I'd be happy to do that.

Moderator: Any further questions? No, we do not. Thank you Lesley.

I think you have touched on an important point and I think it also is an important that she wants to see is that we should try (unintelligible 53:02) for all of the shared resources we have or we want to share, want to update the

(unintelligible 53:07) that we submit them to the ccNSO secretariat so that there could be a repository or a web page where we could access that information. And then of course the dating service. Thank you.

Moderator: OK, last session. Lucky last! It's on DNSSEC in the root zone. Richard Lamb is going to present it and the projector works, that's always good. And so Richard, over to you.

Richard Lamb: All right, thank you. I'll try to keep this short. This was a presentation that we've giving, but I'm going to focus on what's important to you guys and kind of skip some of the deep technical geekie stuff out of this thing.

All right, so I'm the DNSSEC project program manager at ICANN and I'm going to describe some of the efforts and where we are, the status of signing the root with DNSSEC.

First of all, this is an effort that has been a joint effort and it's been very cooperative and actually very, very interesting. We're taking requirements that the Department of Commerce has laid down and VeriSign and ICANN have been working closely and intensely over the past few weeks, months, to get a signed root out by – and you may have heard this – by July 1 of next year.

Some of the things that we're really focusing on on this deployment, this system, is transparency. Everything that we're doing – the design, software is open source, the design of the system is all going to be published – actually in the next few weeks you'll see a lot of these documents published – for those of you that are interested in the details – including the specification documents. Hopefully people can use some of these documents for their implementations of DNSSEC.

Some of the documents sort of around DNSSEC are processes, practices and procedures documents. DNSSEC has a lot of similarities with certification authorities – SSL certs – and so we've borrowed and leveraged a lot of the work that's already done there.

And so basically that means to convince the public to trust you, you publish exactly how your processes and practices work and so this is part of the requirement. You get audited once a year on that to make sure you are doing what you said you were going to do. And so this is a way to build trust.

OK, as I said, it's going to be audited. We'll have a third party auditor, one of the big international accounting firms, do this once a year.

There's a standard listed there. If you're familiar, again, with some of the SSL business, we're going to use something called SysTrust, WebTrust, but

it's a standard auditing regime. And again, we're looking to try to get as much kind of leverage from existing practices like this out there.

It's a high security system. High impact is a terminology that just happens to be inside some of these documents, these public documents from the National Bureau of Standards in DC.

High impact means it's a system where if it goes down people's financial situations – it affects revenue, it affects mission critical projects – so it's going to be treated with the utmost importance there.

Roles and responsibilities – and some of this may not be a surprise. One of the requirements was that we continue with the current model that we have. So ICANN as IANA functions operator would manage the handling of the keys that TLD operators would hand into the root. They would be submitted to us in very much, at least initially, submitted to us very much in the same way that NS record changes and things like that get submitted now.

We will also manage the root key. And I'll get into exactly how we do that in a moment.

So this doesn't change. We verify the requests and we send updates through DOC and it goes through the usual process.

Department of Commerce does what it has done before with NS records. It authorizes any changes to the root, including these records, these keys, that TLD operators will be handing us to put into the root zone file.

Also any time we generate a new root key, there will be an authorization from NTIA.

All right, and VeriSign as the publisher and root zone maintainer will actually be running the zone signing key, this is the secondary key that is used to sign the zone a couple of times a day. And so that's something that has to be near and close to the actual root zone file. And that will be their process.

There's an overall diagram, again, not too different. TLD operators and that's the DS records to us.

We will have soon an automated system as Kim and others have I'm sure talked about. I won't go into that.

The only difference here is since there are two keys in DNSSEC – there's the KSK, the root key and this zone signing key – they're split across two organizations. We have to be really careful. Even though that's not a private key, we have to be really careful how that's transported.

So in the bottom of that diagram you'll see that there's an exchange that we've carefully designed to make sure there's no impersonation. If somebody else claimed to be VeriSign and handed us a ZSK and we signed it, that could be disaster. We've effectively validated the wrong root. So there's a lot of engineering that goes there.

OK. Let's go through this quickly. We're going to make this thing really secure. We actually already have safes in place.

Seven tiers of security. No one person can get through all seven tiers of security. Two safes, one with the keys, one with credentials that allow you to use the keys. And in fact, it looks just like a safe deposit box; it's got ten little boxes and two keys there.

OK. I was saying initially we're trying follow some of the practices that are done in the SSL space and certification space. A lot of work there. It's one of the documents they had that publishes their practices and policies and procedures is something called, "The Certification Practice Statement," or CPS.

We've created a DPS. This would be a document – it certainly is not necessary for anyone – but if anyone is looking to deploy DNSSEC in a way that they want to garner more public trust in the system that they're offering, this is an excellent way to do this. There's a draft sample of this sort of document in the IATF right now. Great starting point, you know, this is a lot of legalize, a lot of real details, what happens if you have a disaster, these kinds of issues. So it's good, this work is going to feed into that or has been feeding into that and there will be at least a starting point for people who want to actually publish their practices.

We're going to publish the KSK, well, let me skip this.

All right, this is something that I wanted to make sure that you guys were aware of.

Oh, I'm just going to say it because I'm among friends! OK. There are some people that don't trust ICANN, don't trust VeriSign, don't trust U.S. Government, don't trust anyone, right? So how do you build a system that people are going to trust? Given you have many different player and entities in the system?

Well, what you do is you make the community part of that trust. And so what we have come up with – this is still all work in progress, we haven't picked any people yet or we haven't even decided which entities – but the CCNSO, GNSO, IAB, RIR, ISAC – the idea is that we will choose crypto officers from

these various entities who without their presence, we will not be able to use the root key.

So ICANN is sitting there with all of this equipment and we have all this, you know, cameras, an auditor, witnesses, all of this, but in order to make use of the key to sign the ZSK or to generate another KSK, we are going to pick – at this point the number is seven because that just happens to be what the hardware and the equipment does.

What? Yeah, we have lots of chairs. He's right, I didn't want to get into that but yeah, the facility build out for this thing is a real pain but we have two facilities being built out, one on the east coast, one on the west coast. And you have to have a big room so that everyone basically will be watching everyone else do – you know, no cards up their sleeves.

Unknown: I don't want to be picky but can I just point out to you that east coast, west coast isn't internationalized in any way, it's actually. I know that people on the east coast think that the west coast is something completely different and vice versa….

Richard Lamb: I'm sorry, yeah, I need to spend more time with you guys! Yeah, it's myopic but I'm trying!

So we haven't decided exactly, you know, how this is going to work or who's going to be selected from these. The idea is that by requiring people that are not VeriSign, not ICANN employees, not US government, to make use of this key, we've brought the community into the system.

This will also be true of a backup. We have this kind of absolute worst case scenario – all the hardware fails at the same time – backup of the key split up in nine different pieces, actually nine or ten different pieces. And so the same pool, we would draw from the same pool of people to hold various pieces of this in case there was a complete catastrophe and we had to create.

But anyway, I just thought that's interesting, it'll be coming down the pike.

Let's see. Auditing and transparency – yes, again – third party auditors, not us, coming in once a year and looking at our processes and signing off with a letter. Very typically you get an auditor to get in place to actually take some of the responsibility but you know, we'll have that letter published on our website.

We'll also have, if someone wants to do this, external witnesses that might want to attend these. They're called key ceremonies formally. That's just a term of art. And they're perfectly welcome to be there and watch the process as well.

OK. I'm going to skip over the details here. Yeah, big keys and yeah, OK, keys rolling once a quarter. Let's see, two to five years, we will roll the KSK, the root key.

The idea there – it's variable because rolling a key is really hard and if it's the root key, you know – we really want to do it only when we have to. Five years put there as upper boundaries.

Typically these crypto boxes have batteries that only last five years. Simple. So if you're going to have to replace the box, might as well roll the key.

All right. Validity periods – I don't want to get into this – this is kind of technical mumbo jumbo here.

All right. And as far as the bottom of the slide, there's this key signing request, this is how we exchange the keys between VeriSign and ICANN and it's really secured, it's encrypted five different ways. And even on top of that, after we've exchanged the key, we verify everything with a phone call, so there'll be a red phone somewhere. I need to find some red phones! But a red phone between the two entities – I'm not kidding – we'll find a red phone.

And then the two entities will read out the hash basically, you know, of the keys so that we're absolutely sure.

All right. And so, the other part – we published the root trust anchor, the KSK. That's going to be one of ICANN's jobs. We'll publish it in many different ways. Probably also in a newspaper and in print somewhere, but on a website to make it simple. It'll be in XML wrapped format so automated systems could pick it up if they want to.

We're also going to put it in the form of certificates. You know, and that's sometimes contentious because we're the Internet and we're not the ITU, we're not PKI, so, you know, but it's, we want to leverage again the existing tools that are out there.

I mean, it would really be nice if someone, even with a Windows machine, you know, clicks on a link with a key and this would pop up and they'd be able to see the contents of it and make sure that the private key and the public key actually – you know, one corresponds to the other. So there's hope there.

Something that spins out of this is that it's perfectly allowable then for third parties to also attest to the validity of that key signing key. So we publish this root key and we say, you know, "We think it's right." But we may have an external witness that's part of the ceremony. They can look at this and say, "You know, I also believe that was done right." And then so they can sign the

KSK with their key and it becomes a certificate then that they can, if they want, offer to their constituency and it could have a limited time frame. They could do however they want to do this and this could be published to their group and they could trust this other person instead if they, again, didn't trust us for some reason. Perfectly fine.

All right, so I'll go through this relatively quickly but we do have a plan for deploying this thing without breaking too many things.

We're going to do it a few root servers at a time. And that way if there are some systems out there and applications that cannot handle – and we've all heard of the possibility of that – cannot handle the larger packets that DNSSEC is going to stick in the root; we'll have a way to back out in case there's a serious problem.

One of the tricks we're going to do here – this will begin in January, OK – so July 1, deployed, root is signed. Oh yeah, but July 1 the root is deployed. In January we're going to start testing publicly. OK? So there will be testing.

And we're going to test in such a way that people don't immediately embrace this thing and start relying on it because if they do, it becomes harder for us to then pull the plug if there's a problem. So that's how we came up with that design.

So here's a quick timeline. December 1 we'll start – VeriSign and us, we'll start playing and doing some things. But January, you'll all see larger packet sizes. It won't affect anything, nothing will really be signed, things won't really work, but this is – we're expecting this to be – if something's going to break, it's going to break then. So that's the goal. And then July 1…

Unknown: (unintelligible 01:09:13)

Richard Lamb: Yes. Yes. Dummy and ones that cannot be validated. Because – maybe not so much here but there are lot of geeks out there that as soon as they see this thing, they're going to say, "Oh it's signed," and they're going to try to start using it. It's like, "no, no, no, it's not, it's not the final version," and we want to protect against that.

Currently we're looking for feedback from people. Both Department of Commerce, as well as us, ICANN and VeriSign, we're looking for how people think about this. I mean, is there may be a different way to deploy it? Maybe our designs aren't good? Like I said, in a few weeks, maybe in a week, you'll see more details of this full design and you can look at it and say whatever you want.

That's the team. This is definitely not a lone, not just a few people, these guys have all come together and I'd even say that we've all worked together very well. VeriSign has been very forthcoming in offering a lot of its cryptography expert staff that works in some of the SSL field that they have and some of these people you know like Jacob Schlichter is Mr. DiSE (sp?) and so these are also very trusted and very intelligent folk. Except the one named Lamb.

Anyway, that's it. I hope that wasn't too fast. But my main point is it's been a long road. I have to thank a lot of the people in here for that survey that you guys filled out regarding DNSSEC and Gabby for that.

This whole design, as it's described at the Department of Commerce, is in interim solution. As we move forward, it's very important to get information like the results of that survey as well as other efforts into the process so that we know how to improve the system. And I'd like to thank the NSO members that worked on that survey and answered that because that was very helpful.

If there are any questions?

Moderator: Thank you Richard. Any questions? Just a quick one Andre?

Gabby, could Andre have a microphone please? Gabby, Kim, Kim, Gabby, whichever.

Richard Lamb: Wonderful little plug in by the way. Your FireFox plug in.

Andre: Thank you. Thank you very much. Thank you for the presentation. I think the process for the root signing is excellent, I'm very happy with that. The only concern I have is, how quick can be the DS Record publication in the root zones from the time I'm sending to you to do the time that it's published in the root zone? And what (unintelligible 01:12:30) brings to the whole system, the NTIA, can it happen that NTIA can stop my DS record to be published or?

Richard Lamb: Well some of that I will defer to Kim as to how fast that can be processed. These things can be processed just like NS records. So like the processing of regular changes to the root zone, DOC has never not published something.

Moderator: But they can.

Richard Lamb: They can.

Moderator: Yes. OK. I know they haven't denied and I don't subscribe to the theory that they ever would but technically they can.

Richard Lamb: And you know, I mean, I don't personally – I mean, this is an opaque string – I don't see any issues here. But you asked a specific question about how quickly we could do this. I'm getting that question from many people, so can you say something about it?

Moderator: Kim?

Kim: One of the requirements for making any changes to the root zone as per the IANA contract is that the U.S. Government must authorize every change. We have no indication that that would change. That's something the community needs to take up with the U.S. Government. We're, as contractors, merely doing what we're told in that specific respect.

                   In terms of the normal processing time, I envisage that the IANA processing would be very brief so looking at historical trends in root zone management in recent years, once the DS key has been submitted to us or a request to remove a DS key, I'd imagine it would be to the U.S. Government within one business day from IANA's perspective.

                   Typically the U.S. Government takes about one business day to authorize a change, then it usually takes one or two business days for VeriSign to implement.

                   So, particularly given that unlike IANA's NS records, there's often some questioning about technical checks, values, I don't believe that will be the case with DS records. So it should be relatively straight through processing. But it would still be a number of business days from submission to…

Moderator: We're going to need to stop now because we need to rearrange the room. But we can take the conversation out with Kim and Richard.

                   Thank you very much. Thank you Kim for staying around for most of the last couple of days to answer numerous questions without notice.

                   Ladies and gentlemen, we've reached the end of the member's meeting. The council meeting is going to start at 4pm and it's going to start at 4pm sharp here because we have – a couple of us actually have to be elsewhere at 5pm for another meeting.

                   So the guys are going to rearrange the room really quickly. If you want to stay and watch the council meeting, that's entirely fine.

                   If you're counselors, could you please not go too far? 4pm start and there should be coffee outside, I believe.

                   And Gabby wants to say something about invitations.

Oh, if you've arranged, if you put your name down for tomorrow night's cc dinner, Gabby has the dinner tickets.

And don't forget to fill in the survey for today. Gabby will send out the URL's so that you can fill in the survey on whatever the name of the site is that the survey is on.

Thank you all very much. Council at 4pm.