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LESLEY COWLEY: Good morning, everybody. My name is Lesley Cowley. I'm the Chief Executive of Nominet to run the dot-uk registry. I'm also chair of the Country Code Supporting Organization of ICANN, the ccNSO. I'm very honored to open our workshop here today.

As the workshop is about sharing knowledge and cooperation, I thought I would tell you a short story about sharing knowledge. When I joined Nominet in 1999 as Operations Director, we had 200,000 domain names and for every single domain name, we used to print a Certificate of Registration that we would put in the post to the registrant. I had a lovely member of my team, Julie, whose job this was.

After about a year, Julie became very, very busy, so we gave Julie a bigger printer and she did more printing. After about another six months when domain registrations grew even more, we then had to buy Julie a machine that put the certificates into envelopes, and then they went into the post. So it put the stamps on the envelopes, too.

Then the volumes grew again, so we had to get Julie some help and we employed more staff to help Julie. But then when registrations grew to 2,000,000, Julie didn't stay on; and for the very first time, we went outside of Nominet and said we are not sure how to deal with this.

And the people we asked outside of Nominet said, "Why do you send paper? This is the Internet. You could send this electronically." And we did. And we saved a lot of money and we scrapped the machine and we kept Julie, because Julie is now doing another job for Nominet.

But my learning from that is if you forever look inwardly and try to solve your problems or your challenges, you are missing a huge opportunity. The opportunity to learn from others and to share (information). And in the ccNSO, that's very much what we try to do. We try to share resources. We try to share information and learning. That is particularly important when you are growing and developing your registry, but it's still incredibly important even when you are a very big and established registry.

I always learn something new each meeting I go to. That is why I particularly encourage and support the sharing of knowledge and resources and information at events like today. Collaboration and sharing information is such an important and essential part of evolving this industry on a regional level, on a global level, and at a local level.

And so with those thoughts and with that learning, I very much look forward to hearing from you all today and to learning from you all today as well. Thank you.

XIADONG LI: Thank you, Lesley, (inaudible). I did agree with Lesley. The information sharing is a key (inaudible) of the Internet. Yesterday when my colleague asked me – I said, "When does (inaudible) and when does (inaudible) for the customers?"

Maybe some of you know the history of China. When dot-cn added (inaudible) but the dot-cn name server was not run by the Chinese (inaudible). The dot-cn name server was in Germany. So (inaudible) run Chinese ccTLD name server for four years. In 1994, we moved the dot-cn name server back. We also have (Professor Qian) here. He's a pioneer for these matters.

So (inaudible) in the very beginning in China because the (inaudible) is not very good. So we have no facility and no infrastructure in that, so we have no capacity to run the name servers. I think it's a very good example, but up to now, there's also some similar matters in recent years. For each (inaudible), it's a very broad region. There's a lot of developing country that also have developed countries, so their knowledge, culture, and technical background is still different.

So how to share information and also share the knowledge, especially if we're sharing technical knowledge and shared technology? It's very, very important to narrow the gap between the developing Internet and also the developing (inaudible) this session to (inaudible) to discuss this.

I think it's a very good first step to start some information sharing, and also we can also discuss how to (inaudible) technical collaboration platform for all of the stakeholders for each (inaudible), how to bring high technologies from other regions into Asia-Pacific and also into the Asia-Pacific region itself – how to work together, how to share information, how to help each other is very, very important.

So today we invite some panelists to give some speeches. Allow me to introduce the panelists firstly, and then they'll give a speech one by one. Of course you can give some question and answer session.

Today, the panelists are from CDNC. There is a cochairman of CDNC. He's a Chinese (inaudible) Professor Hualin Qian and Professor Shian-Shyong Tseng.

Also, Professor Professor Shian-Shyong Tseng is also a former ICANN board member. Professor Professor Shian-Shyong Tseng is also the chairman of dot-tw.

We also have the chairman from APTLD, Jonathan Shea. And we have people from CNNIC. Jian Jin is not here because he has another meeting, but he'll join us later.

We have Andrey Kolesnikov from dot-ru, and we have Tran Minh Tan from VNNIC, and we have (inaudible), and we have (inaudible) from, and we have (inaudible) from NCC. We also have Feng Shuo from KNET (inaudible) in China. So I want to express my sincere thanks for the panelists to share their information.

Firstly, I want to invite Professor Hualin Qian and Shian-Shyong Tseng to give a speech about Chinese Domain Name Consortium development community collaboration. Please.

HUALIN QIAN: Good morning, everybody. I'm very happy to be here to talk with you. We both are the co-chairs of the CDNC, Chinese Domain Name Consortium. I'll just briefly introduce what is the CDNC, and then Professor Tseng will introduce in more detail about technical and policy issues related to CDNC (inaudible).

Chinese Domain Name Consortium was set up in Beijing in the year 2000 by CNNIC, TWNIC, HKNIC, and MONIC as an independent nonprofit organization. (inaudible) is responsible for the coordination and regulation of Chinese domain names, policies around the world. (inaudible) has been actively participating in and supporting the technical and the policy development for IDN at the top and second level, including the Chinese language (inaudible) table (inaudible). IDN guidelines, EAI standards. EAI means E-mail Address Internationalization.

Chinese has two written forms – simplified Chinese abbreviated as SC, which is used primarily in mainland China and Singapore; and the traditional Chinese abbreviated as TC which is used primarily in Taiwan, Hong Kong, and other Southeast Asian countries and the communities of Chinese origin in other countries.

For most users SC characters and TC characters are interQianeable and both are widely used by the Chinese language community (At Large). CDNC's own research indicates that Chinese users expect both versions of domain names to be held and used by the same (registrars). Collectively, CDNC has devised solutions to handle Chinese domain name variance, such as build a bundling of simplified Chinese and traditional Chinese domain names as defined by the JET in RFC 37.43. JET means Joint Engineering Team. Most of the members are Japan, Korean, and Chinese. Japanese, Chinese, Korean speaking languages. That was reworked for several years together and the last results is the RFC 37.43.

Later we also issued (inaudible) language standard in the RFC 47.13 in the year 2006, and delegating the post to any registrant to apply for either simplified or traditional Chinese domain names.

The members of CDNC, such as CNNIC, TWNIC, HKIRC, SGNIC, MONIC, and .Asia have over 13 years of experience in running CDN registration. Collectively, the members of CDNC operate more than one million Chinese domain names now with over a decade of operating experience. CDNC, (inaudible) solution is the best market proven practice for handling Chinese relevance in domain names.

CDNC is honored and delighted to note that its contribution to ICANN's IDN process and to Internet community have proved helpful. This conference is expected to promote communication between members of Asia-Pacific Internet community, and we'd like to take this opportunity to share experience with our AP regional members (inaudible). The AP region, the diversity of the different languages are most significant because we have different countries and they have different languages. So this meeting I think is helpful to everybody here. Thank you.

(SHIAN-SHYONG TSENG): Good morning, everyone. It's my great pleasure and honor to be here to introduce IDN development and deployment by CDNC. The CDNC meeting is held basically twice a year. As you can see, this slide shows the (inaudible) groups of the participants of different CDNC meetings.

Before talking about the Chinese domain name, firstly I would like to briefly introduce the Chinese character and coding. As mentioned by

Professor Qian, Chinese character has different written forms – the traditional Chinese character and the simplified Chinese character.

As you may know, GBK is the most popular encoding scheme for the simplified Chinese characters, used primarily in mainland China and Singapore. The Big5 is the most popular encoding scheme for the traditional Chinese character used mainly in Taiwan, Hong Kong, and Macau.

So as you can see, in this figure, the GBK character set is the proper subset of the Unicode CJK. And the CDNC variant table character set, including all of the (inaudible) code points is almost the same as the GBK character set and there are (19,469) (inaudible) code point belong to the Unicode BMP. And 52 of the (inaudible) code point belong to the Unicode Extension A. Of most importance, the CDNC kept a set of (inaudible) or of the characters in the character set of Big5.

So if we want to provide a Chinese domain name registration service, we have to decrease the Chinese character variant issues. The first issue is about the traditional Chinese character and the simplified Chinese character mapping. For each simplified Chinese character, it may have one or more cross (inaudible) traditional Chinese characters. As you can see, for this simplified Chinese character, (pie), it has the corresponding traditional Chinese character (pie).

The other issue is the Chinese character writing style. The Chinese character may have different writing styles. For example, as you can see the Chinese character (form) you can have the writing style (inaudible) put the radical on the left-hand side of the character. We also can put the radical on the top of the character.

So to deal with the variant issue, we proposed the CDNC variant table approach. I guess many of you may think the CDNC variant table is difficult to read and difficult to understand, but I think it is not true. Let me show the concept.

The concept behind the CDNC variant table is very easy. As you can see in this slide, the concept of the CDNC variant table, all of the varied (inaudible) including 19,520 (vertical point)s can be petitioned into thousands of joint subsets. It's called CV group.

It means each group – each subset – all of the (vertical point)s may be interQianeable. In each subset, there's one preferred variant simplified Chinese character such that the preferred variant, the (inaudible) preferred variant in simplified Chinese characters can be used to represent all of the (vertical point)s in that group.

For each group, there exists one or more preferred variant traditional Chinese character and all of the (vertical point)s in that group can be represented by one preferred variant traditional Chinese character. Therefore, after the petitioning – let me take the example.

This ten (vertical point) can be grouped together into four groups, and three groups contain three (vertical point)s and one group contains only one (vertical point).

Let me take a close look at the group. So as you can see, this (vertical point) is the preferred variant simplified Chinese character and this (vertical point) is (inaudible) preferred variant traditional Chinese character. Besides we also have the other character variant. It is the old Chinese character used to represent (inaudible).

Let me give another example. We have five (vertical point). After the petitioning, these five (vertical point) can be grouped together into one group. In this group, this character (inaudible) is so-called preferred variant in simplified Chinese character. In this case, we have two preferred variant traditional Chinese character, and another two character variants.

It means the simplified – the preferred variance simplified Chinese character has to meanings. If it is used to represent (hair), this simplified Chinese character can be replaced by this traditional Chinese character.

On the other hand, if this simplified Chinese character used to represent the developing (inaudible), this simplified Chinese character will be replaced by the traditional Chinese character (inaudible).

So to implement the idea – to implement the concept – of the variant table, we proposed the four column variant table. The first column is the (vertical point) and the second column is the preferred variant traditional Chinese character and the third column is the preferred variant simplified Chinese character and the fourth column is the character variant.

So according to the variant table, if the character string (inaudible) – so we can put a pair of traditional Chinese character string (inaudible) and the simplified Chinese character string into the (inaudible) file and reserve the other combination.

So many of you may wonder – worry about the possible (inaudible) of the possible combination of the other variant characters. But you don't have to worry about this issue. It is because it's about 60% of the groups

contain only one (vertical point) and the 28.8% of the groups contain only two (vertical points) and 9.96% contain three (vertical points). The groups containing more than three (vertical points) is less than 4%. So we can easily find the combination is limited.

Now let me briefly introduce a history of the development of the IDN by CDNC. The history of the development can be divided into three phases. The first phase is the pre-IDN phase. In each phase, we proposed that we made a statement for internationalized domain names and made a recommendation to ICANN and proposed the RFC 37.43 and the RFC 47.13, as well as we made a recommendation to ITF and proposed this IDN variant table.

The second phase is IDN ccTLD phase. In this phase, we made the suggestion of internationalizing ccTLD names and wrote a letter to ICANN and proposed the (inaudible) IDN ccTLD.

The last phase, right we're in the IDN gTLD phase. In this phase, we made a recommendation and wrote later to ICANN for (inaudible) and also asked for adoption of (paired dedication).

In the pre-IDN phase, we launched the IDN dot-tw and IDN dot-cn registration services, and the IDN ccTLD phase, we launched (inaudible), the Taiwan registration services.

This slide shows the statistics of the IDN registration in the IDN ccTLD phase. As you can see, 77% of the domains (inaudible) with variant form and 93% of the domain (inaudible) Taiwan with the variant form.

As you can see, there's also 12.2% of the DNS query to the top-level domain name (inaudible) is traditional Chinese character. And for the

(inaudible) Taiwan, there's 80% of users – 80% queries – are with the simplified Chinese character.

Now, as we know 70 of the 116 IDN new gTLDs (inaudible) are chinese new gTLDs. So we proposed technology for (inaudible) evaluation model for new code points. This model is (inaudible) in the collaboration process and we can easily coordinate all the language experts, domain name experts, or technology experts. We also can let experts remotely participate in the review process.

This slide shows the review process. As you can see, we have different levels of the review. The first level is the initial evaluation review and the extended evaluation review. These two reviews can be done on the web. After the review, we can have the panel approval review and the CDNC poll approval review.

So according to our technology facilitated system, we can easily monitor the progress. We can easily monitor the review process and the experts can easily enter their criteria, enter their comments, on each application.

We also have the examination summary review. We can easily exam the evaluation summary. The assistant administrator can easily enter, create, (all the data) the experts account.

Finally, I'll give a conclusion. After 12 years' effort, CDNC registration policy on handling traditional Chinese character and the simplified Chinese character equivalence is widely accepted. So we will continuously support technical and policy development of IDN for CDNC new gTLD emerging needs including the CDN service people

development and the experience sharing and the deployment and the use of CDN table as well as the amendment for new components. Thank you for your attention.

XIADONG LI: Thank you Professor Qiane and also Professor Tsang. CDNC is a very good example for the technical abbreviation. We focused on the Chinese domain issues for many years and (gave) a solution for ITF and also for ICANN. Also the Chinese variant issue is a big issue now for Chinese administrator for ICANN. (inaudible) variant issue project in ICANN (inaudible) issues. Also the Chinese variant issue is a big issue for the (inaudible) issues. So thank you again.

The next speaker is Jonathan Shea. He's the chairman of APTLD. If you have (inaudible) for the Asia-Pacific ccTLDs and also we have (inaudible) member from other top-level domain registration.

JONATHAN SHEA: Good morning, everyone. I'm really honored to be here this morning to share with you APTLD and our support for the development of Chinese domain names and our involvement in the process.

Firstly, I would like to thank CNNIC for hosting the ICANN meeting, which has been very successful and I'm sure attendees have been finding a lot of value from the various sessions and meetings in the past few days. I personally have also attended the ccNSO meeting in the past few days, and I congratulate Lesley and ccNSO on the various successful ccNSO sessions with (inaudible) in some of the major topics. This is really encouraging.

Personally I have been involved with CDNC. I've attended most of the CDNC meetings since 2005 and I have learned a lot from Professor Qian and Professor Tseng. Their expertise and knowledge have helped Hong Kong launch its own Chinese domain name service and the dot-hk (inaudible) IDN ccTLD.

So I want to take this opportunity to thank for the expert expertise and advice from our colleagues in the CDNC structure and the consortium.

Back to the topic. Who are we? APTLD is an association for the ccTLDs in the Asia-Pacific regions. We were formed in 1998, so it has been like 15 years since our formation and we were legally incorporated in 2003.

We have two major missions. The first mission is we want to help our fellow ccTLDs in the region to become the best practice registries on domain name administration. We have been doing this through sharing of knowledge and expertise, and therefore we are also developing many of the policy developments to ensure that we understand how the practice is moving and what are regarded as best practices in many of the aspects of the administration and management of a ccTLD registry.

Secondly, we are also a voice for the ccTLDs in the Asia-Pacific region on issues related to policy and technology development in the global arena on domain name administration.

How do we do that? Firstly, we are a consensus-building association. So on many of the issues, we get inputs and feedback from our members and we try to come up with consensus positions. We also coordinate and collaborate on a number of initiatives. In this region, we have a very special characteristic whereby we have a big diversity of culture and

languages. Therefore, this actually makes (inaudible) particularly important. We have to also pay due respect to the very different cultures with some of our members when it comes to discussions on policies.

Of course we pay a membership and we are funded by membership fee, and we thank our members for supporting the association for the past 15 years.

This map shows the region. We are actually adopting the division of countries within regions based on the ICANN model. As you can see, we have a big coverage covering a number of different regions within Asia-Pacific as well as the Middle East.

In terms of the number of members, we have 58 members. We also have associate members. We welcome anyone who has an interest in the domain name and involvement in the domain name industry to be our associate members.

In terms of (inaudible) IDN, there is no doubt that IDN has been a main focus in the Asia-Pacific region. We are also one of the advocates of IDN CCD fast-track process.

Actually, back in the early days, since 2002, APTLD have already had a resolution on helping and supporting the reimplementation of internationalized domain names. In particular, five years later, we have a position paper issue on the support of the top-level internationalized domain name.

In February of 2009, in a member's meeting, we have resolved that we would like to push for the IDN (ccTLD) fast-track process and would like

to give (assistance) to the Working Group in the development of the process. As you all know, in November of 2009, we actually had the process launched by ICANN.

But that is not the end of the story. The fast track is only the first major milestone in the history of the support of IDN for ccTLD. There is still a lot to be done after that.

For example, ccNSO has the IDN CCPPP record one and record two, and we have members. Our members have continued to contribute to the discussion and the drafting of related relevant policies and guidelines. Our members also take part in the Joint IDN Group (JIG), which is a joint group between the ccNSO and the GNSO. At this meeting in Beijing, they have also come to the point of finalizing a report on universal acceptance of IDN and other related issues.

We have also taken part of the VIP in the Variant Internet Project. Many of our members have been involved in the (inaudible), and we are glad to know that the three major projects have come to finalization and that the (inaudible) have also been issued. We are moving into the implementation phase in terms of (support of variance) for both ccTLD and the gTLDs.

In particular, back to Chinese domain name, APTLD has been very active and always fully support the expectation of the Chinese Internet community. In having both traditional and simplified Chinese characters supported with under the respective top-level domain names. We have good understanding through discussion with our members how important that is to the Chinese Internet users, and it's important that we have the steps in place to make sure that this group is supported

when it comes to registration of domain names, under whether it's the ASCII TLD or the Chinese character TLDS.

In particular, we like to point out that with IDN ccTLD, the concept of implementation of the parallel (positioning) process under (inaudible) and maybe some of the coming Chinese IDN ccTLD is actually one of the best examples of how community comes to solve problems, which are specific to a particular language or script. In this case, a language – Chinese language.

You may say Chinese is certainly not the most complicated language in terms of support of variance among all the different languages. Luckily, we are not the most complex. We are not the most simple, either. But through more than ten years of hard work and collaboration among the different communities, Chinese-speaking communities and Internet users, we have come to a workable, proven and operationally well-accepted mechanism to support both the traditional and the simplified Chinese.

We really think parallel (positioning) is a very good example of how that can be achieved. We had been also doing that for registration of Chinese domain names at the second level as well for more than ten years on the dot-cn, dot-tw, dot-hk, and also the other members of the CDNC.

Of course we would really like the other (constituencies) in ICANN to consider this achievement as something very usable and practical when it comes to Chinese domain name registration under maybe generic Chinese top-level domain names.

In regards to the new gTLDs, which is of course now the hot topic, what is the view of APTLD? What is our position? Generally we support innovations in the Internet industry and we (inaudible) and the implementation of the new gTLD as a major opportunity for innovation and creativity in the Internet industry, not only for the service providers but also for Internet users. So we really welcome and embrace this new development, and (inaudible) there are more opportunities than threats.

When we speak with our ccTLD members, not many of us think the new gTLD will really be a threat to the (cc). We really think the market is growing and we are complementary to one another. We take that as a very positive development. And we are also helping members looking for opportunities for themselves to how they can better service the needs of their local communities.

Therefore in our meetings, we also exchange (inaudible) latest development (inaudible) to the new gTLDs with our members. The landscape of the industry is changing quite rapidly. For instance, some of our ccTLD members are also in one way or another involved in the new gTLD. Some of the ccTLD registry are actually applying for new gTLD as well.

So the line between the cc and the g are actually getting really blurred. It's not that clear anymore. This actually exemplifies the evolution and development of the Internet ecosystem. Our (inaudible) is to ensure that on our platform, information can be shared, views can be discussed and exchanged amongst our members.

Also, with the coming launch of maybe the first batch of new gTLDs very soon, we are also getting ourselves ready in terms of membership structure. We really want to ensure that we can gain additional benefits for all our members with increased additional inputs and sharing of information.

Just a little bit for advertisement. We hold free meetings every year and our next meeting will be held in August in CN, in China. That is actually exactly the same place and time when the next APNIC meeting will be held. So you're welcome if you are interested to know more about what we are doing in the development of ccTLDs. You are most welcome to come to the meeting.

Also, if you are wondering how our membership system works and you want to be a member, you're most welcome to come to our website and have a look. It's a very simple application process there. So to end my presentation this morning, thank you very much.

XIADONG LI: Thank you, Jonathan. In the (inaudible) that we know about (inaudible). So I think today's (inaudible) to do the technical collaboration. We have another six presentations from different (sites). Because in today's time limitation, we only have one hour left, so I ask that every presenter can have 10 minutes. Maybe you can just get some input from (this room). Andrey, you can be the first one. I just postponed the presentation from CNNIC because Jian Jin had another engagement. Would you like to introduce yourself?

ANDREY KOLESNIKOV: I'm Andrey Kolesnikov, director of the Coordination Center for the domain .RU Also we run the largest IDN .RF for the Russian Federation. I'd like to share with you the model of the partnership between different holders of the different information and the different industries in a way so this partnership can bring a real value for the fighting with malware, spam, botnets and others that get on the Internet.

So we basically operate the terms, which everybody is pretty aware which is the malware deliver, phishing, spam, botnet controllers, fast flux. It's a questionable thing. We (inaudible) search engine spam because we believe a lot of marketing budgets are going down the tubes with the useless created websites created, especially to gain some traffic without adding any value to that.

Also our base for the calculations for this partnership is our registry data, which I will explain later how we deal with that.

So what do we have in our partnership? We have (inaudible) Yandex search engine. You're probably aware that the two countries on this planet where Google doesn't have a dominated position, I feel like it's China and it's Russia. So our Yandex search engine accounts for about 65-66% of the search traffic and there is no (tendency) that they will lose this ground.

We have in our partnerships, because (inaudible). And by the way, in Beijing, I saw a few outdoor advertising advertisements of the (inaudible). Well, I knew they operate in a worldwide manner, but I didn't know they advertised here.

We have Mail.ru, which is the largest e-mail platform – about 150 million e-mail addresses. By the way, Yandex and Mail.ru are the two largest European Internet companies. We have police of course. We have Group IB, which is a very active young company. We call them our Internet police. This is not police, of course, but these guys are taking the legal risks to actually execute the bad domain names, to regulate, (inaudible) and do other things. They do a lot of lab research for us.

We have a technical center of the Internet, which is our technical operations for our domain names and we have (inaudible). It's a few guys, actually, who's getting a lot of data from other (searches) around the world.

The base of our collaboration is (scientific) research. It's non-commercial and it's close. We're not open to everybody because there are some very sensitive issues I'll tell later.

So how do we work? We have the members, which I just listed. They feed a lot of data in our database. It's really big volumes of data. And we have a data (mediation) because everybody has different standards and formats of the data records. So we run the data (mediation), puts it in the database. We call it the bad domain directory.

Also in order to avoid sensitive question of privacy, we do not have direct access to our registry database, but we do (inaudible) the numbers, which represent the domain name registrants. We have a new thing called Technometrics. That's actually the spider – the Internet search engine – which collects data of the operating systems, kind of web servers, (inaudible) or content management systems and also a lot of other technical information.

We also studied some content analysis, because for the bad domains, we see the bad sides and we also try to get them (inaudible) content (inaudible) and no surprise. There are some patterns which can be used for our research.

Then we send it to (an authorized) organization. We have a list of like 100,000 bad domains. We have (an authorized organization), which is one of our partners – Group IB for example – and they deal with registrars. They're now building the backend IT system for the trouble ticket and tracking the records. They're the second check and the third check if the signal comes through that a bad domain name was executed.

From the point of view of the directory of the bad names, this is how it looks, actually. There is a member who sends the initial list of the bad domains. For example, Kaspersky Lab found a lot of .RU malware domains. They sent it to the directory. We request the (hash) of the domains from the registry data, and also based on the (hash), we also see what other domains of this registrant take these domains, send it back to the bad domain directory and send it back to the member.

So the member, based on its knowledge and its technology can check also other domain names. By the way, this scheme also works for the IP addresses. So this is a round circle and (inaudible) more data we gain, and because of the few members and the few data (inaudible), the results of this data check is pretty much accurate. So the final list of the bad domain names goes to the domain directory.

This is dated February this year. It's about 167,000 bad domain names in the .RU out of 4.5 million. I don't know if it's a big or small number. I

think for China standards, it's a high number. For us, it's just the beginning of our journey. There's a lot of details we should pay attention.

XIADONG LI: What's the percentage compared to the whole registration number?

JONATHAN SHEA: Excuse me?

XIADONG LI: What's the percentage for the domains and (inaudible)?

JONATHAN SHEA: This is a total number: 167,000. Out of it, malware, spam—

XIADONG LI: (inaudible) of .RU, right?

JONATHAN SHEA: Yeah, this is .RU. Yes, .RU. I should say this because of IDN, it's fewer (inaudible) domains on it.

XIADONG LI: So it's about 5 or 6%.

JONATHAN SHEA: Yeah, it's about 5% of the total. And I should say that our IDN is very clean. You know why? Because there is no e-mail. The only reason I believe is that because a lot of delivery mechanism of the bad malware, software and spam goes through (inaudible) thousand years old electronic mail system, which is completely not safe and not handling all that bad influence.

So out of this number – this is actually the check of the name servers. You can see the (inaudible). There are some empty – we call them the (latent). I don't know if there's a word in English, but they're not used yet. Not parked. They're not working. They're not delegated. The guys who's registering like 1,000 domain names and only 100 works and about 900 in the (latent) state – I don't know how to say in English – they're not used yet, but they're waiting to be activated.

This I call the bad, bad guys. Since we called it the scientific lab, we also research patterns. For example, there are – this is a (hash) account on the left. Just some numbers. And you can see our leader (inaudible) registrant has 4,420 domain names and all of them – 100% - for the (bad) use. This is what we call the aggregates –the one account, 100 domains, 200 domains and all of them exclusively registered to do the bad things on the Internet. This is a business for them, okay?

But this aggregates. They're really lazy. Those guys, they find a cheap way of doing the bad things. For example, I will register the 2,000 domain names under my one account, but now since we started to push the guys, we see the pattern that they spread from one account to two accounts, three accounts, four accounts. But since we already have a

track and some Technometrics data and previous patterns, we can (inaudible) track them deeper and deeper. So the system works.

The main question is, what do we do with them? For example, there is a big legislation problem in Russia in regards to spam, and the guys who are running the spam business out of Russia target Canada, U.S., Australia. They do it from the business in Russia, but they do collect their cash in Russia. That's what they do. So in our legislation, there's no real penalty for the spam delivery, and also it's really hard to collect proof of their behavior in the spam field.

So what do we do? This is a direct topic of today's meeting. We can share this data. It's no problem if there will be interested parties who really wants to exchange the data, and we can do it on a technical – we call it a scientific round. Also we have some experience that the authorized organizations – the organizations who's taking the legal risks actually on execution of these domain names, it's a very important part of the cycle because usually registrars state they don't want to take the legal risk. They may terminate the domain name and just say, okay, (inaudible) delegation, but we don't want to carry the legal risk. We may do it by mistake or whatever. So we have this Group IB who's taking care of it. It's a very important part of it.

We move now to the IT backend to automate all this process and gain some statistics out of it in the work form so we can see live what's going on. Also I think one of the missing parts of this schema is that we would like to have some information to share it from the browsers, because of blacklists and (inaudible) like run by Mozilla and Opera and other browsers, and I think it will be available to add this stage in our schema.

That's it. I should say also if we're going to discuss the IDN issue, because yesterday I was really upset about IDN TLDs, so we may talk about this today also I believe. Thank you.

XIADONG LI: Thank you, Andrei. It's a very, very good presentation. We have another five presentations, so I can give this room one comment if you have a comment for Andrei's presentation. Does someone have a comment? Okay. I'll give the microphone to (inaudible). I'll try to make sure my pronunciation is okay.

UNIDENTIFIED FEMALE: Good morning, everyone. Thank you very much for giving me a chance to speak about Vietnamese IDNs. So what is a Vietnamese IDN? Vietnamese IDNs is second-level domains and the .VN. We are (inaudible), so at the moment, we are not allowed to apply for ccTLD IDN, so we developed Vietnamese IDNs and a .VN.

Let me describe something about Vietnamese language. I think it's much more simple than the Chinese than Mr. Tseng described earlier. For Vietnamese language, most characters are as English characters. We have some special Vietnamese characters. For example, we have "uh" and "ah". From D we have "da", from E we have "ae", and some (inaudible).

You can see here, for example, (inaudible) it means "autumn." With the (inaudible) it means animals. With the (inaudible). With the rising (inaudible) means our head. So very many different meanings with different accents in the same characters.

If you look at the (milestone) of Vietnamese IDN, you can see (inaudible) in Vietnamese IDN quite early. We started working on it from 2001, and from 2007 we opened the public registries (inaudible) for our community. But in some early years, Vietnamese IDN did not draw the interest from community.

From 2007 until 2010, for over three years, there were only 3,050 registered domains. The main reason for that? We have our (inaudible) for Vietnamese IDNs. The first one is the Vietnamese characters are Latin based, so it is easy to understand words with the mark or accents. For example, here's the name of a university my husband works for. (inaudible) without the accent. If we have the accent, it's (inaudible). But without the mark and accents, we fully understand (inaudible).

The second difficulty is the difficulty of user when they type the words in a browser. If I'm continuously typing the words, then the accents of the letter will (collide) with the accent of the (inaudible).

For example, we have two words (inaudible). If the user typing (inaudible), then space and (inaudible), then they'll turn back to (inaudible). Then press "control" then (inaudible). Then the words, then domain (inaudible). But if the user is typing in the browser continuously, then they become the wrong worlds. That's difficult.

So people didn't want the Vietnamese IDN. So how to do that? We really want to promote the Vietnamese on the Internet. It's not for the profit, the money, but you would like to promote Vietnamese on the Internet.

So we have a plan for that. Two main things is we decided to do free registration and free services and (inaudible) upgraded to (inaudible). They believe in the future of Vietnamese IDN, so they worked with us.

Here's our (staff) for Vietnamese IDN to be real. We would like to (inaudible) the registrations. After that, even (inaudible) free services for the users. Then after that, we would like to refine the registrants and make the Vietnamese IDNs actually live on the Internet.

Here are the (inaudible) services for Vietnamese IDN. At the moment, you have three kinds of services. (inaudible). If the user has (inaudible) website with ACII domain name, we redirect the Vietnamese IDN to (inaudible) and what template we provide for them free hosting with (inaudible) template, and DNS hosting services with the (professional) users. They don't want a web template. Then we will let them do the DNS hosting.

Here are some Vietnamese IDNs. After launching the free registrations, we had a really booming period. For the first week, we have over 100,000. For the first month, we had 160,000. Currently, we have over 800,000 – nearly 900,000 – Vietnamese IDNs. But we do see that many of them (inaudible) domain, they just register without services.

At the moment, about (inaudible) of domain names actually have services. We have a plan to deal with this issue. Maybe from the next June or July, we will start the process to revise our users. (inaudible) the users with (inaudible) services and the users (inaudible) to Vietnamese domain name will stay in the system and the other will be withdrawn to free for other registers. (inaudible) the PDP IDN (inaudible) ICANN. We also have a plan to apply for the full IDN ccTLD.

Let me introduce to you some websites with Vietnamese IDNs. This one means Good Market (inaudible). The current owner of this one, they have to buy the .VN from another (inaudible). Here's my site, my website. The (inaudible) without any money, without any purchase, the user can have domain names and can have their own website. It's my website. I introduce about the beach and the small town where my mother lived when my mother was living. You can see her house is near this mountain. That's my slide. Thank you for letting me speak about Vietnamese IDN here.

XIADONG LI: Thank you. Very good information. (inaudible) introduce the strings of .JP.

ATSUSHI ENDO: Good morning, everyone. This is Atsushi Endo from JPRS, Japan Registry Services. First, thank you (inaudible) and other CNNIC for having a chance to share the .JP registry escrow experience. I have to say that folks in this room maybe are not familiar with what is data escrow. Today I'm not going to show you what is the data escrow thing. Thanks to the NCC group sitting there.

On the mandate tech session with ccNSO, they gave a very good presentation about data escrow and the requirements for the new gTLD data escrow. Please refer to that material that you can easily find at the Beijing ICANN website. Let's move on to the presentation.

Before going into the registry data escrow thing, I'd like to give you a brief history of .JP Management. In (1986), .JP was delegated to

Professor (inaudible), and after that in the mid-90s, Japanese Internet community established the JPNIC, Japan Network Information Center, to manage the .JP ccTLD and also IP allocations. JPNIC now has a responsibility for the IP allocation in Japan.

(inaudible) .JP management site in the year 2000, JPNIC decided to establish 100% private company running the domain name related business. It's Japan Registry Services. In 2002, the transition process was completed and JPRS has a ccTLD sponsorship agreement with ICANN and we are now doing the registry data escrow based on this agreement with ICANN. So this is an important thing for us.

This is the framework. We have a very good communication with the global community going in this kind of ICANN meeting or (inaudible) other technical areas, policy areas, operational things and also have a good cooperation with the local community. (inaudible) and ICANN and the Japanese government who asked us to be (inaudible) manager and JPNIC. This registry data escrow framework is seen as an extension of this slide, JP Management.

I'll show you afterwards. Next is a brief history of .JP registry data escrow. In 2002, we (inaudible). JP registry operator, and the same moment, temporary registry data escrow started. It's between JPRS and JPNIC.

JPNIC had two (parts). It's escrow agent and also it's (inaudible) things. But this is very temporary things. In 2004, we decided to move (inaudible) three-party joint operation model, and we (recruited) the third-party escrow agent. In July/August of 2008, we entered into the

three-party model into operation. It's a 5-year contract, so we renewed the contract in 2009 and we're now in the second term.

This is the framework. ICANN and JPRS has a contract, and registry (inaudible) and escrow agent has a (inaudible) contract and the government endorsed its escrow agent.

The next slide is characteristics of JP data escrow. We are very proud of that. We are one of the earliest (inaudible) having a full (inaudible) registry data escrow. Data escrow is very important. It's prepared for the registry or register transition. So it's an important thing.

What is the role of three party? First, JPNIC as the auditor. It's whole overseeing the process and also including the responsibility of handing over the data to the (inaudible) registry, and JPRS sending the registration data to the escrow agent and the escrow agent doing storing the data.

As I mentioned before, three-party joint (inaudible) model, it's in the ccTLD agreement. You can find it easily on the ICANN website, this URL.

Regarding the purpose of this workshop, it's information sharing. Compared to the importance of the data escrow, unfortunately we are limited information sharing in this field, data escrow.

We believe that more than pays for ccTLD as Japanese case. The reason why most of ccTLD has to build a strong relationship with (inaudible) Internet community including governments, and we believe that (inaudible) registry data escrow in ccTLDs.

And we have more than nine years' experience. One thing is, these days, new gTLDs are a very big issue in domain name area. Last month, ICANN published the criteria for registry (inaudible) escrow and that's a very similar model to the JP experience. That's ICANN and new gTLD registries and also accredited registry data escrow agent model. It's a three-party model.

We means JPRS and escrow agent. We can provide the same level as the new gTLD registry data escrow agent. We believe that. Thanks. That's all. Thank you very much, everyone.

XIADONG LI: Very good. (inaudible) Japan may be (inaudible) data escrow.

ATSUSHI ENDO: (inaudible)

XIADONG LI: Good. The next presentation is from NCC. Tony?

TONY SANDERS: Could the AV guys put the feed through Port 1 for me, please? Thank you. My name is Tony Sanders. I'm head of IT for NCC group. Firstly, I'd like to thank CNNIC and this community on behalf of my colleague, David Kipling, and myself and NCC, my company, for inviting us here today to speak with you.

We've got two very different topics that we're going to slide together. I'm going to talk about privacy law and data escrow, and then we have a

very short slot from my colleague, David, who's going to give you a very brief insight into how we can actually verify the data in an escrow data deposit from a registry.

Privacy law data protection legislation and escrow. I'm certain that it's completely obvious to all of us in this room that the increasingly complex global use of electronic data, data proliferation and the novel ways that businesses are developing better ways to harness data value present a huge challenge to lawmakers attempting to develop and bring into force data protection and data privacy legislation that ensures some degree of compliance with fundamental data privacy principles.

Such principles and aims are not new to us. The seven key principles here are, in fact, OECD recommendations and these were published by the OECD 33 years ago, but they still lay the foundations of much of the national legislation that exists today and some of the draft legislation currently being proposed.

It's a huge subject, so what I'd like to do in this short session is share with you some key aspects from two topical pieces of legislation, one that's already on the statute book – the U.S. Patriot Act – and one that's expected to be become European law in 2014 or 2015, the European data protection regulations.

At NCC, we've looked at the key aspects of this data protection legislation as well as that of some other nations, and in order to assess the direction data protection legislation is going globally, what it might enforce in 1, 2, or 3 years from now and how that knowledge might inform us so that we can make good decisions about what we do as data processors, what types of infrastructures we should invest in and

where globally we should site those infrastructures. In other words, how can we future-proof our investments, at least from a privacy data protection perspective?

Very briefly, let me define a quick taxonomy for this presentation. Typically, most data protection legislation categorizes the parties involved as data subjects, easy (inaudible) and identifiable, natural person – usually the data itself which is personal in character. Personalizing, it can be linked to an individual, so address, date of birth, credit card, bank details, etc.

Data controller. This is the organization responsible for the actual acquisition, maintenance, and deletion of the data and then a data processor and organization responsible for the electronic processing. The data controller and data processor may or may not be one in the same organization.

Okay. Looking at the first of these two pieces of legislation I've chosen, the EU data protection regulations, important aspects of this EU initiative that have made many people sit up and take notice of, firstly, that these are going to be regulations, and unlike the current EU directives, EU regulations will be directly applicable to all EU member states without the need for national implementing legislation.

They're expected to come into force next year. Fines for serious data breach are absolutely colossal. Organizations with (over) 250 employees will be required to appoint a data protection officer. There's also a principle called the Right to Be Forgotten Principle which gives data subjects the right to demand that organizations actually erase data about them, and the organizations will have to comply with those

demands unless they can prove there are legitimate grounds on which the data may be – should be – retained.

There's also provisions to allow data subjects to move their data from one data controller, data processor, to another and the EU seems to be aiming this requirement specifically at cloud providers. The proposals also require that there must be a legitimate basis for transferring personal data to jurisdictions that are not recognized as having adequate data protection.

This stuff is all still in draft at the moment, still undergoing change review and it is going to flex, but this just gives you an idea – a flavor – of some of the things that this legislation is likely to bring into force.

There are also regulations that are probably going to make it essential for many organizations to monitor, review, and assess their data processing procedures in ways that they've not done so before, as well as undertake auditable data impact assessments and some big data EU organizations are already starting to de-risk now by changing systems so that they only collect data that the companies that collect them really need, rather than collect everything just because we can and just because it might become useful at one point in the future.

All of this is very, very far from trivial. There's an onerous set of commitments, not least is to the documentation to be maintained and implemented by data controllers and processors.

The EU regulations, proposals, at the moment also require that consent from a data subject is freely given, specific informed, and explicit and it seems likely, given there's some very strong feelings among EU

legislators that a tick-box is not going to be sufficient to indicate informed consent and it's proposed that the data controller has to bear the burden of proof under the law that informed consent has been given.

In contrast to the existing legislation, the proposed regulation now imposes some direct obligations on data processes who, historically, have always been able to deflect regulatory authorities firmly in the direction of data controllers for most compliance issues – not so in the future if these proposals become law.

The second piece of legislation, I've chosen to examine. The U.S. Patriot Act is already law of course. This legislation is controversial for a whole bunch of different reasons, different to (inaudible) the EU regulations.

The key controversy is around the fact that the Patriot Act can require that data stored by a company that conducts business in the U.S. transfer to U.S. territory that data for inspection by U.S. law enforcement agencies.

In the U.S., there's a U.S. legal framework. It's a legal doctrine called Extraterritorial Jurisdiction, and it's under this doctrine that these provisions are actually enacted. It applies only to data belonging to non-Americans living outside the U.S., because controversially, American citizens are excluded from these provisions by the U.S. Fourth Amendment.

The Patriot Act requests for data by U.S. law enforcement agencies not made public, but clearly such requests are associated with anti-terrorist and serious crime fighting.

These provisions, as I guess many of you know, have raised quite a lot of controversy outside the U.S. Microsoft U.K., for example, have said that they cannot, for one, guarantee EU data won't be transferred outside the U.S. under any circumstances. This is what's feeding some of the controversy around this act.

Just a couple of the many examples of the fallout from the act. Big U.K. company (inaudible) Systems withdraw plans to .Microsoft's cloud based services citing fears that critical national defense secrets could land in U.S. hands.

Dutch government has got concerns because the Dutch fingerprint and facial scan system for passports is processed by a company whose parent company conducts systematic business in the U.S.

I won't go through all of the rest of these concerns. I'll just flip now to what does this actually mean for NCC? How do these issues inform what NCC group does from a data escrow perspective?

Faced by such considerable uncertainty, controversy and no consensus across jurisdictions, there is only one strategy we can adopt and that's to remain flexible, mobile, and adaptable.

We've designed our infrastructure based on that need for flexibility. We actually have a data (interest) and data processing pod system that's self-contained and can be installed at low cost in virtually any country in the world. This is a schematic of the pod we are using for ICANN data escrow, and we've actually located or decided to locate these pods in North America, the EU, and China.

We don't have time to go through all of this today and describe these infrastructures, but if you'd like more information, we do have some brochures available at the back and our contact details will be coming up at the end of the presentation.

Have we got time to move on to David? Yeah? Okay.

XIADONG LI: You only have a couple of minutes left.

TONY SANDERS: Okay, fine.

DAVID KIPLING: Hi, everyone. What I'll just briefly try and go through is just the experiences with the new gTLD process on the data escrow side and just try and touch on the cooperation aspect, being involved in that.

What I'll do is just briefly go through with the new gTLD process. The aim is to have a consistent format, which is used for data escrow. So all the gTLD applicants have to escrow in a specific data format. There are two options that people have – an XML version and a CSV version. But one of the key aspects involved in the data escrow process is the actual verification by the data escrow agent that that data is valid.

So if I just skip through to emphasize this, I've just got a few slides which should show, with the structure which is defined by ICANN, you can again put in any data. So what ICANN have tried to do within the specification is then add a number of rules to help check the data's

actually valid within that deposit, so not only structurally, but actually the meaning of the content.

Moving onto the next example, what we've got here is an example of a domain record. What we've got is the invalid contact reference. So again, this passes the initial schema checks on the data. So what we want to try and do is also make sure that any linking records are also checked. So in this scenario, this could still be an invalid deposit because the contact which is referenced does not actually exist in the deposit as a contact record.

So what's happened within the specification is there's the extended verification processes. As you can see here, there are aspects such as looking at the number of objects contained within the deposit, lack of mention, looking at linking records. So if you refer to a contact reference and a domain record, that that contact record also exists.

One key aspect from this side is this is involved quite a lot of input from the community. It's been very much ourselves working with our customers as well as with ICANN to go through these extended verification steps, just to make them practical, to make sure in the real world, these can be applied.

One example on here is we've got the fully qualified domain name exists only as a domain name or an (NNDN) record. That's actually been removed following discussions from the community.

So it's been a really good process with the data escrow side just with the cooperation between the backend registry, operators, ourselves, the data escrow agent and also ICANN.

What I really want to do is just really pass onto you guys the IETF forum discussions. This is a very active area for people to give their feedback on the new gTLD process, so again, just looking at those verification rules.

There's also discussions on the forum around the requirements for ICANN is to generate an open source tool – so a tool that can be used by backend registry operators to make sure their deposits actually conform to the ICANN specification before that's passed through ourselves as the data escrow agent.

I think that's pretty much it from my side. Anything else?

TONY SANDERS: I hope that's given you a pretty good idea of the sorts of challenges we face and the expertise that we have. Those are our contact details. IF anybody wants any more information, please contact us and we'll get in touch with you. Thank you very much.

XIADONG LI: Thank you Tony and David. So we have two presentations left before Jian Jin (inaudible).

JIAN JIN: My name is Jian Jin and I work for CNNIC. I would like to give an introduction to our programs, mainly about what happened during the last two years. (inaudible) population. It's 564 million. The entire (inaudible), I think because a big (inaudible) users (inaudible) come out slowly.

(inaudible) deployment at the meetings, websites, and IP (inaudible) has had phenomenal rises during the last two years. Actually, (inaudible) came from our (inaudible). Our report is very low in (China). I think it's because of its accurate data based on neutral (inaudible).

About three years ago, we started a (inaudible) information. Now we keep WHOIS accuracy rate up to over 99%. And among the registered domain names, it has reached 7.5 million.

(inaudible) keep steady during the last four years. We have a good (inaudible) performance during the last three years. I think it's because of our Internet (inaudible) expansion and (inaudible). Last year, our recognized (inaudible) has reached six million.

(inaudible) Beijing. One is in our headquarters and the other is very close to here. The (inaudible) southwest of China. We have (inaudible) and 22 (inaudible).

To improve DNS query efficiency in China, we also have the root server operators to (inaudible). Now we have (inaudible). We also have a lot of collaboration with other registries in other regions, such as (inaudible) technical projects.

We still have our name servers based (inaudible) diversity. I think this is also a part of our tool for the new gTLD. This map will show the distribution of our (inaudible) name servers. Most of them are located in China mainland. We also direct our (inaudible).

As for the (inaudible) from this month, we started to send (inaudible) and expect to finish this (inaudible) end of this year. We started to test

it from three years ago and built a simulation system with real data. Also, we directed our (inaudible) managing system to (inaudible).

Lastly, we promote IPv6 deployment. We also launched a (inaudible) deploy your (inaudible). You can collect (inaudible) for IPv6 (inaudible) inter-operability.

As for our (inaudible), actually we have been improving our TLD (inaudible) operations (inaudible) also for upcoming new gTLD management operation. Actually, our (inaudible) has been separate as an independent business from .CN last year. We also released a registrar (inaudible) system to provide a (inaudible) service and interaction online.

To assure accurate registration data, we developed a user data verification system as an audit system. Now we are applying some new technologies such as face recognition to verify your user information. We collect (inaudible) database of public (inaudible) to verify it. I think in the near future we will use this operation support system to support a new gTLD operation.

(inaudible) is a bigger issue. We started to look for an anti (inaudible) solution very early and then we developed our own (inaudible) server (inaudible) based on (inaudible) technology. Now it has some development (inaudible) service online. It can handle one million DNS query with one (inaudible) portal.

Many members from national domain name security advised (inaudible). We used this to protect (inaudible) emergency piece. We also (inaudible). You can download the (inaudible) server.

We made a lot of effort to do technical (inaudible) IPv6 (inaudible). We have several (inaudible). I think some of them are likely to become actually – sorry.

Also, (inaudible) domestic standardation to promote service (inaudible) domain name (inaudible) and security. We are applying to (inaudible). We have passed initial evaluation and I will (inaudible). In the near future, we are going to provide a hosting service for (inaudible). After our evaluation, ourselves we decided to get (inaudible) project from ICANN. Now we are one of the operators. This will give us a chance to service some of you one day.

We also were selected as a (inaudible) from ICANN. Now we are calling for one (inaudible). If you are interested, you can access (inaudible) website.

Here's a picture from our workshop which was held in (inaudible) December. (inaudible) we discussed many ideas and experienced domain name (inaudible) and internal security. I hope we can have more communication and cooperation in the near future since we are more (inaudible). Thank you.

XIANDONG LI: Thank you. It's very, very fruitful information. So if you prefer to have a discussion with him, you can discuss it. (inaudible) for the floor.

Our last presentation is from KNET, Shopia.

SOPHIA FENG: First, thanks CNNIC for this great opportunity to speak here. We're running out of time, so I'm trying to make this 10-minute presentation to five minutes so I'm going to skip the first part which is just introduction.

So, who is KNET? First, we are founded and established by CNNIC as we are an important platform for science and technology industrialization in the fields of Internet fundamental services.

We are not established for very long, but our business has developed to three main product lines. One of the product lines right now is the (inaudible) DNS product line. Within (inaudible), we have three main services.

First would be the TLD backend technical services, and also (inaudible) gTLD consultant services. We also offer many DNS services, and we also have the DNS (inaudible).

Currently, we are the backend technical services provider for 23 new gTLD applications, and also the biggest in China at the moment. Among our new gTLDs, more than half of them are Chinese IDNs, so we really appreciate (CDS) dedication to solve the IDN Chinese technical issues and to push forward for the greater development.

KNET introduces the cloud services into the domain industry in 2010, and as a strategy solution to strengthen our Internet infrastructure building and core adding values for our crowd services is (inaudible) and our users can utilize such (inaudible) resources anytime based on the (inaudible) without worrying about the capacity and security of the domain infrastructure.

As we provide domain services, we would like to talk about what could be the strategy cooperations for the Asia-Pacific developing countries in (inaudible) domain industry.

First, for the interest of a data escrow, as Tony from NCC just described about privacy law issues – and that's a very interesting topic to have heard about – and also during our operation, we also noticed that our gTLD clients are particularly interested in privacy issues and also data protection issues as (inaudible) selecting the data escrow providers. So there could be a synergy there for KNET introducing the right data escrow services for our clients, which is also part of our core responsibility.

Also, (inaudible) synergy (inaudible) is introducing integrated domain name services concept, as we believe that the change happening to the (inaudible) at this moment, which imposed by the new gTLDs international domain name security issues and also by the technology part from the development of IPv6 and (inaudible) and cloud computing.

This development and transition happens on the Internet are the driving factors pushing enterprise domain name services to transfer from different perspectives which calls for more clear domain name service strategy to match with enterprise commercial strategy.

So enterprise domain name management is in the process of transforming to an integrated service model. That's what KNET has generated during our experiences and also successful stories and that we bring the industry technology know-hows and knowledge about the

local market and then we can provide – integrate – services, domain name services, for (inaudible) clients.

This would be an interesting point for the IDNs applied by the foreign entities that it could be an interesting exchange of know-hows in the future.

The last point would be for the new gTLDs. We (inaudible) strategy with each other is the full utilization of our DNS cloud service. As we establish DNS (inaudible) across China and also in America and Europe, we have full (coverage) of Chinese region, but not globally. As the launch of new gTLD set higher standards for the global coverage for the performance of DNS (inaudible), there could be a synergy in the future of exchanging notes or sharing notes. That would be potential cooperation over there. That would be it, thank you.

XIADONG LI: Thank you. I think it's one for discussion. I'm very happy that we had some experts in the transition talking about (inaudible) and data escrow, also IDN and (inaudible). That's a lot of topics on not only how to join the registry and how to get involved (inaudible).

I hope that we can lower down the barrier for the community members. If you have some further question for the panelists, we can just contact them to discuss further. Thank you all of the panelists for giving a wonderful presentation. Thank you.

UNIDENTIFIED MALE: Audio timestamp for Room 5BC. Meeting concludes 12:17 local Beijing time.