

## **Joint GNSO/ccNSO IDN Working Group Meeting**

**Sao Paulo**

**7 December 2006**

**Attendees: GNSO IDN working group**

**Bruce Tonkin** –Acting Chair in the absence of Ram Mohan, Chair of the GNSO IDN Working group

Sophia Bekele, Avri Doria, Jon Bing – Nominating Committee appointees to the GNSO Council, Tony Holmes, Greg Ruth – GNSO Council ISPCP representatives, June Seo, Cary Karp (remote participation) GNSO Council gTLD Registry constituency representatives, Marilyn Cade, Alistair Dixon - GNSO Council CBUC representatives, Norbert Klein, Mawaki Chango - GNSO Council NCUC representatives.

**ccNSO IDN working group**

Jonathan Shen, Hiro Hotta, Ming-Cheng Liang, Ian Chang, Slobodan Markovic, Hong Xue.

**Observer:**

Subranarian Subbiah - i-DNS.net

**ICANN Staff**

Denise Michel - Vice President, Policy Development, Olof Nordling Manager - Policy Development Coordination, Tina Dam - IDN Program Director, Donna Austen - ccNSO Policy Officer, Glen de Saint G ry - GNSO Secretariat

**Presentations: GNSO IDN work – Bruce Tonkin**

<http://gns0.icann.org/correspondence/tonkin-idn-sp-07dec06.pdf>

**IDN Discussions in ccNSO – Hiro Hotta**

<http://gns0.icann.org/correspondence/hotta-idn-sp-07dec06.pdf>

**NOTE**

The following is the output of transcribing from an audio recording of the joint GNSO IDN Working group and ccNSO IDN working group during the ICANN Sao Paulo

meetings on 7 December 2006. Although the transcription is largely accurate, in some cases it is incomplete or inaccurate due to inaudible passages or transcription errors. It is posted as an aid to understanding the proceedings at the meeting, but should not be treated as an authoritative record.

**The audio** is also available at: <http://gns0-audio.icann.org/IDN-20061207.mp3>

Bruce Tonkin: Okay, let's get started. Since I think most people are here now, and have at least had a few mouthfuls of food to wake up. My name's Bruce Tonkin. I'm currently the acting chair of the GNSO's IDN working group.

**Glen de Saint-Géry:** This session will be recorded.

Bruce Tonkin: If the operator can hear this, please start audio recording, please.

The purpose of this meeting is really just to exchange information between what the ccNSO is thinking about with respect to IDN policies and what the GNSO is doing with respect to IDN policies. It's probably best if we all introduce each other and then I give a brief presentation on some of the things we've been thinking about within the GNSO.

Can I just do a bit of a poll? Who attended the IDN workshop yesterday? Who was there at the IDN workshop? ----- Okay, so pretty much everybody. What I don't want to do is to repeat material that's already been covered. Tina has presented what's going on in the IDN laboratory tests, and I've given a general view of what we're doing with new gTLDs.

I invite the chair of the ccNSO working group, Ming-Cheng Liang, if you'd like to say some words?

Ming-Cheng Liang: Good morning, everyone. I chair the ccNSO working group on IDN that has just been formed, and we actually had a pretty good discussion the day before yesterday, I think, on these IDN issues. At yesterday's meeting, I think we looked up some issues that may be of interest to us. And hopefully we can work with GNSO in order to get all this done quickly. Thank you.

Bruce Tonkin: Valuable to have that - we just go around the table then and introduce ourselves, perhaps starting with Jon.

Jon Bing: Good morning everybody. My name is Jon Bing, and I'm incoming member of the GNSO. Thank you.

S. Subbiah: My name is Subbiah. I'm here in an observer capacity. I'm with the company called i-DNS.net and you may be getting tired of hearing this, but most people know that I had something to do with coming up with IDN many years ago. And I helped coined the term IDN. Thank you.

Donna Austin: Donna Austin ccNSO policy support.

Tony Holmes: Good morning. Tony Holmes, ISPCP.

Avri Doria: Good morning. Avri Doria, a NomCom appointee to the GNSO.

Sophia Bekele: Sophia Bekele, NomCom appointee to GNSO, IDN working group.

Tina Dam: Tina Dam, ICANN staff.

Norbert Klein: Norbert Klein from the Non-Commercial Users Constituency in the GNSO Council.

Slobodan Markovich: My name is Slobodan Markovich. I'm from Serbia. And I'm a member of the ccNSO IDN committee.

Olof Nordling: My name is Olof Nordling, ICANN staff.

Greg Ruth: Greg Ruth, ISPCP.

June Seo: I'm June Seo. I'm with the Registry Constituency at GNSO Council. I'm so glad to see many folks from Asia, especially recalling the IDN discussions we had several years back.

I'm glad to see (Sang) and Subbiah here. So I would like to have very good and fruitful working session from now on. Thank you.

Glen de Saint Gery: Glen de Saint Gery GNSO Secretariat.

Marilyn Cade: I'm Marilyn Cade. I'm a member of the working group from the business constituency.

Denise Michel: Denise Michel, Vice President of Policy, ICANN.

Mawaki Chango: Good morning. Mawaki Chango from the non-commercial user group.

Alistair Dixon: Alistair Dixon at the business constituency and on the IDN working group.

JonathanShen: Jonathan Shen from the Hong Kong .hk ccTLD Registry. I'm a member of the ccNSO-IDN working group.

Hiro Hotta: Hiro Hotta from .jp ccTLD. I'm a member of ccNSO council and (the IDN working group).

Ian Chang: Ian Chang, (TW-NIC) also a member of ccNSO-IDN working group. Thank you.

Bruce Tonkin: Okay. Thank you all. So just to give some more data on some of the things we've been talking about within the GNSO-IDN working group. The purpose of our working group as I mentioned yesterday is really to identify policy issues and if there are policy issues identified that we haven't already got covered in other work that we're doing, we would then use a policy development process to examine those.

The membership of our group is open to any member of the GNSO constituency. And as you can see, this is quite a lot of people.

Also -- I thank you Tina -- who do we have on the conference line? Do we have Cary Karp?

Cary Karp: Yeah, I'm here.

Bruce Tonkin: Thank you, Cary. Do we have anyone else on the call? Okay. So welcome Cary. Cary is from the registry constituency and is also a member of the President's IDN Advisory Committee, I think.

So, just very quickly, some of the issues that were raised earlier this week. We also had a meeting on Sunday, where we as a working group went through some of the issues. And I just have listed some to raise the discussion really. So far we've been talking about words that look confusingly similar, probably from a visual perspective. There's

also the issue raised whether we should be considering issues of transliterations between top-level domain strings.

There was also a desire expressed that we don't delay the introduction of new gTLDs until there's a decision made to introduce IDN to the top level. And this is very much a timing issue because the new gTLD policy is not yet complete. It's probably not going to be complete until, I would say, mid next year. Then the staff would need to develop a process and procedures to introduce them. So reality is that, I don't see any actual new gTLD being created until probably 2008. The real question is, will technical work on IDN's be sufficiently advanced at that stage that the community feels comfortable adding IDN strings in that time frame?

There's also been some discussion about whether aliasing should be supported and using DNAMES is one of the technical approaches to that. There's obviously ways you can do aliasing otherwise as well. But I think this is desired by some gTLD operators that feel that they may well have an IDN version of their domain - that I guess provides some semantic equivalent to what their current gTLD name is and the concept is that every registration at the gTLD would be also potentially available in the corresponding IDN string.

There's been some discussions whether the scripts at the second and lower level should match the script at the top level. So certainly there is a concept that the script within a level should be from the same script so we're not mixing scripts within a single level. The question is, should we extend that across multiple levels? So if you have a script at the top level using a particular character set, should that also match at the second level? Of course the issue here is with jurisdiction because

once you get to the lower levels, you're starting to talk about corporate networks and individual networks, and it's probably going to be pretty hard to enforce what they do. But maybe, at the ICANN level we could perhaps consider the first and second level and have some rules around that.

There's also been discussions raised about Whois and, certainly, there are a number of different ways of implementing Whois to support IDN based domains. If you look at Whois for the second level domains, there is certainly a number of different approaches being used out there in the industry. There hasn't been too many complaints about it yet, probably because I think, the intellectual law enforcement interests haven't really struck too many problems yet and we're not really hearing from that community that Whois is a problem but I'm sure we will in the next few years, as we now have Internet browsers that support these strings and their use, no doubt, will start to grow.

The other thing that's been raised is that political entities, and I'm using this word very generally, may have responsibilities for particular scripts or for languages that use those scripts. They may feel that they want to have a say or an influence on what a particular string is at the top level and how to use it.

Then there's also the issue that not all scripts will be supported by the Unicode standard or the subset of Unicode that would be allowed in the IETF standard. So for IDNs, there could be some communities that feel left out because they can't get the top level domain they want because it is not supported technically.

And there is the question how to handle names of countries, dependencies and other areas of particular geopolitical interest. Just to give a bit of feedback from within our community, we have interest in creating dot Berlin and dot NYC, NYC standing there for New York City. Those are a couple of examples using Latin script. But you get the sense that potentially similar examples could occur using IDN scripts. The question is, will the community expect there to be special rules around creating names like that that obviously would be of interest to the people that live in the city of Berlin? Another issue is that there's more than one city named Berlin. The world knows one in Germany, but there are some other Berlin cities spread around the world. And NYC, while it might mean something to some people that live in New York City, meaning New York City, I'm sure that that set of letters probably names other things in different parts of the world.

Another concept that we've heard about is that there is some work on updating the IDN protocol or standard. The comment made in our group, was that there are already a couple of million IDNs in the second level for gTLD. So if we change the standard, we will have to phase that in somehow because existing registrants will be affected.

So these are some of the areas where we would be looking to collaborate with both the ccNSO and the GAC and, I guess the security and stability committee in some circumstances too.

But on a very high level, you could imagine if you look at the set of all possible strings that would be allowed by the Unicode standards, there will be some restrictions on what actual strings would be allowed and some of those restrictions might be technical or they might be because a string is visually confusingly similar to another string and so on.

If you then get down to a string that passes that test, then there's probably another test which is: "Does the string have some geopolitical significance?". There should be some collaboration between the GAC and ccNSO on how to allocate some of those geopolitical strings or maybe all of them. If there are strings not covered by the ccNSO or the GAC, but have geopolitical significance, how would we handle them within the GNSO? Our default position is that we would have an objection process, so that an affected community could object to a particular string and then would need to move into some form of dispute resolution process to deal with that.

That's some of the thoughts we have had. Now, I'm interested in hearing from perhaps Ming-Cheng or any of the ccNSO members on some of the thoughts that you have had about what the next steps are for your community.

Ming-Cheng Liang: Probably, I would ask Hotta-san to help in this presentation.

Hiro Hotta: Thank you, Bruce. As Dr. Liang said the ccNSO has just formed the IDN working group and the content of the discussion the day before yesterday was sharing of status and sharing of issues. So I don't think we could have developed the issues list in full, but the most important 80% of issues were discussed. So I'd rather just list it up. This is the discussion ccNSO members had about IDN-TLDs and policy items to consider. Some of them are listed here. Maybe the same aspects apply to ccTLDs and gTLDs even if there are many distinctions, and while we haven't developed a distinction here on what is an internationalized ccTLD, it doesn't mean that a ccTLD is not well defined.

What is a ccTLD - or what is a cc? We've just taken the definition from the ISO 3166 to the Internet world, for ccTLDs. So, there is nothing in the definition of the cc on what is a country or something like that. GAC may play a role in defining an IDN-ccTLD string. This means that for the ccTLD registry, for example, can we define the ccTLD string by ourselves? Or can we define the ccTLD string with the consultation with GNSO? Maybe not. GAC should play a role in defining IDN ccTLD string because as I said in the previous point, the ccTLD definition depends on the other world, not on us. So GAC may play a role. Language community - we talked a lot about the language community concept and some said that we should consult with their language community. But some questioned what is a language community? There's no result yet. In the first round of allocation of IDN- TLDs, would there be one IDN- TLD per ccTLD or one gTLD, that's another question.

First, the ccTLD string as I said, refers to ISO 3166. What string and script should be used for the IDN- ccTLD. Should it be an official language? Some countries don't even have a definition of their languages, we know. And a very much used language may not be an official language in some countries. So the official language concept won't work.

And a second issue is, for example, whether a Greek version of .au, to be used for Greek community in Australia would be allowed or not? If we allow all combinations of scripts times all country codes, it is a huge base. And how many characters would a country name be. People may say that the official version of their country name for the IDN- ccTLD is a good idea. But some countries have long names, which

won't fit into the 63 ASCII characters allowed and they should avoid to have similar-looking strings to other TLDs. Maybe this is one of the discussion points between gs and ccs.

And the IDN-ccTLD is defined by who? If you ask the language community, is it definable or can it be defined by other entities such as GAC or United Nations? To rely on the ISO I assume may not be an option as I heard that when they were asked to define the non-ASCII version of country codes, they declined. This is the background on definition of IDN-ccTLDs.

And who will be the IDN-ccTLD manager? This is another big issue. If the existing ccTLD manager should be the IDN version manager or not - who decides? Could it be a process which is identical to the IDN-gTLDs' relationship to existing ASCII gTLDs? This means that the IDN version of .jp is an area of .jp. How will communication go with GAC, GNSO and others?

Inside the ccNSO we've just created the working group, so we are defining the issues and we are trying to make a discussion paper in a few months, I hope, and meet with other entities like GAC or GNSO in Lisbon to discuss about the issues listed in the discussion paper.  
Thank you.

Bruce Tonkin: Thank you, Hiro. It's very helpful to get a sense of your thinking. As you mentioned it's very similar to the problems where we're considering not just the countries but also with generic TLDs there are similar issues. Do you have a sense of where the idea is that there would be some limitation on the number of strings a ccTLD could use in an IDN format? In other words, you mentioned that some countries

had multiple languages or multiple scripts. Would you say that they would have multiple versions of their name?

Hiro Hotta: I think that the consideration of the official language in the first place is that because the official languages by country would be limited whatever it is. That may be a good starting point and maybe for most country that would be just one. In a country that has lots of different languages or different scripts the strings could be limited to official languages or somehow limited in number. Actually, in the discussion we had, it's an idea that we need to be able to limit the amount of possible IDNs so that it will not burden the IANA operation, initially at least, and so make it the easier way to go. And one string is the first choice for most countries.

Bruce Tonkin: When using a script to represent a country name, in a generic top level domain sense, some of the names may represent generic words. Maybe someone decides they want .football to be a top level domain to all football activities around the world. And let's say .football is rendered in, say, the Chinese language script, is that something that would be seen as something the ccNSO would have an opinion on or a view on where a word like "football" was translated using another script? Is that being discussed at all?

Ming-Cheng Liang: I think this comes back to a question that the IDN itself may have a very localised effect, as people may say that if you translate football into Chinese characters, it will make sense only to this local group. And so, while we have no conclusion on that, my personal view is that if this is will have a localised effect in some sense and if this is a type of gTLD they would be different like "football" in Chinese and "basketball"

in Korean, whatever, and should be treated as separate TLDs. I think this may be something to consider.

Bruce Tonkin: Yeah. I think certainly within the gTLDs, the current view is that it is a separate gTLD. It's possible that somebody that operates .football may apply to have .football in another script, but it's not a guarantee to get it. I don't know whether football is even played in China, but it could be that the local football playing community in China creates a TLD that could be quite separate from the community that has .football in English.

Olof Nordling: Just another example. In many western European languages the word for football sounds more or less like "football". But - the Chinese situation wouldn't be very different from using the Italian word for football which is "calcio." "Calcio" would mean football to Italians, while it wouldn't necessarily mean anything for a Polish guy. The semantic meaning is the same, though, like in the Chinese example. So, there's no major difference or fundamental difference between mapping a concept into another script and into another language.

Bruce Tonkin: Okay. We'll open that to anybody else that wants to make a comment.

Sophia Bekele: Hello. My name is Sophia. I just have two comments to your presentation. One is when you talked about who designs the ccTLD and it looks like there will be work to define the ccTLD community. I like to hear further about that what you mean with that. And second, when I heard about the language script, I think you mentioned that the language could change the community. It's also something that you say you were going to try and define. I was thinking that UNESCO is the body that deals with culture - mostly with the cultures of nations.

They also have a language community. I'm just wondering if there is any collaboration with this body and any insight that that group may give. I've met various people at the United Nations headquarters in Africa that always deal with language issues. Recently there was a big language conference in Addis Abeba. So I'm just wondering to what extent would that relate to what you were saying here?

Cary Karp: Bruce, can I respond to that?

Bruce Tonkin: Yes. Go ahead please, Cary.

Cary Karp: I'm about to leave for a flight to Paris to meet with the body at UNESCO that addresses the cultural issues, and I'll be with them for the next three days. During the course of many meetings of this sort, we've discussed exactly the issues that are coming up here. And although time certainly doesn't permit reviewing the status of all of this, I think it is fair to note that UNESCO perception of what ought to be done with IDN and the perception being reflected in the current group are at a significant distance from each other.

Sophia Bekele: Thank you, Cary. Does that mean that it does have any significant impact?

Cary Karp: IDN has a very significant impact. But UNESCO is in a situation where they need to be very sensitive to the issues that their member states have legislation about. And language planning is an issue that is regarded as a sovereign right and mapping that into this unruly, unmanageable global instrument that the DNS provides is a very, very significant challenge and the UNESCO response to it is to approach it with extreme caution because they cannot be drawn into any aspect of

this debate that may put them in a situation where some member states interest are not being reflected in UNESCO's corporate action.

Sophia Bekele: So bottom line, Cary, is - can you use their framework? Could there be a collaboration with this body?

Cary Karp: Well, the answer to that question is that there are several of us who are doing everything that we possibly can to make UNESCO feel comfortable with putting its quite significant authority at the disposal of the IDN initiative. So at this point, the positive result is that the dialogue is under way but the outcome of discussions such as the one that we're conducting right now is actually quite significant in terms of what the next step is going to be in establishing liaisons with UNESCO. Actually, establishing liaisons is not the right word. ICANN has its liaison with UNESCO. And my contact with UNESCO goes to the International Council of Museums, which is a .museum sponsor. We have this beautiful situation where there is a TLD very close to the UNESCO frame of reference, and we are doing what we can to use that TLD in support of UNESCO's own, what are called, medium-term strategic objectives. On that list is the issue of equal access to the Internet by all in their own languages, where there is a profoundly important issue of multilingual content of the Internet and then the associated issue of identifying that content in a manner that reflects its language. But at this point, I don't think we're adequately separating those two issues from our side.

Sophia Bekele: Thank you, Cary, and good luck with the meeting. Do you have any comments? Do you have comments on who defines the ccTLD?

Cary Karp: Well by definition the ccTLD codes are defined by the ISO maintenance agency -- the 3166 Maintenance Agency. And what we're talking about, I suspect, is how other scripts and other languages correlate to these codes and not how they will be entered as ISO-3166 codes. We're talking about some parallel mechanism. And indeed, I have to admit I take some pleasure in noting that the key issues of significant concerns to the gTLDs and the key issues of significant concern to the ccTLDs are remarkably similar if not to say outright identical.

Sophia Bekele: Thank you.

Bruce Tonkin: Okay. Anyone else wants to comment?

Marilyn Cade: Thank you. It's Marilyn Cade. I guess it's not a comment so much as a question to all of us, given the time frame that we need to meet and the importance of having ongoing interaction, and maybe this is best taken up by Ram and by the two co-chair - by the two chairs of the ccNSO and the GNSO working group or the joint working group. But we probably need to begin to develop a straw calendar of interactions that can take us from now through Lisbon and maybe even beyond. There are so many other intervening meetings as well that if we don't do that, maybe even starting to draft it out a little bit while we're here so we can all get commitments. We need to - and I hesitate to say this, but I will. I previously did chair a taskforce at ICANN, where we did meet two hours a week, twice a week because of the need to really invest a huge amount of time on a topic. I'm not suggesting that's the schedule we may face on this, but I think we may need to have a rigorous and energetic schedule.

Bruce Tonkin: The schedule topic raises another question for me and perhaps Ming-Cheng or Hiro Hotta could answer, what is the expectation in your community on when IDN should be introduced? Do you have an expectation that it's something that happens in 2007 or 2008 or 2009? Is there any kind of feeling that people want it to happen soon or people are happy to wait?

Ming-Cheng Liang: I think I can ask people because this is something we will discuss in ccNSO, but my feeling is , at least for Asian countries, that we already did a lot on IDN and provide IDN in second level. So, in a sense, people are getting used to that, and from my point of view we can start somewhere without too much trouble, knowing that IDN brings complicated problems that cause a lot of issues. So if we can start somewhere and make it simple, just using the IDN organization spectrum to make it easier to use Internet for local people, it might be very beneficial to ask. And so I think we would like to have something as soon as possible as a first version, which may be limited, but it could be a good start.

Hiro Hotta: Yes, it's true. As Dr. Liang said, the ccNSO is investigating this. Outside the meetings, I talked with some people and maybe they want to have it in one year. One year means some time in 2008.

Alistair Dixon: A question I have is when is it going to be technically possible to deliver IDN TLDs? We're testing at the moment and I'm just wondering when that system is going to be at a point where we are confident that we are able to roll out something that's relevant and stable.

Bruce Tonkin: Perhaps I could respond. What's not clear to me is the decision making process on that and my view at the moment is that I'd rather keep the

GNSO policy as a generic policy about introducing TLDs and not directly make a decision on the technical basis of whether it's technically okay or not. I think that's for other people, maybe the security and stability committee or the President's Advisory Committee, but I guess three questions need answering. The first question would be to answer Alistair's question is the "when" question. When do you think it might be possible? And secondly, how do you see that decision making happening? I assume the Board will ultimately have to make that decision, but what do you think the steps are?

Tina Dam: So, let's talk about "how", first, because "when" is a much more difficult question to answer. The way that looks right now to me on "how is this going to happen", what's the process for it, I think have a lot to do with getting the protocol revision done. The protocol revision is going to show us which characters can be used. Until that is done, at least personally I would not recommend implementing internationalized top level labels because we risk choosing strings that later will not be usable. I think that would be a really bad way to proceed. That work is within the IETF right now and the different suggestions are under discussion. I don't have a good estimate in terms of time for when that is done, but I know that the people that are working on it are working really hard in making that successful.

The other half on the technical side that needs to be finalized is the technical tests. The laboratory tests are almost there, we're just waiting for some public feedback and comments on whether the test design should be changed and add any more software perhaps. Laboratory test will be done within the next month, and the report will come out shortly after that. Then we're moving towards a much broader set of testing, which will take some months further down the road on that.

Then what happens at the end of those two things being done? I think the Board needs to make a decision that - or take a resolution that says, we are now at a point in time where we're certain and sure that if you introduced internationalized top level labels or the equivalent of that in the root, then it will work from a technical standpoint. That's how I see it, two parallel tracks, protocol, technical tests and then you end up there. Now that doesn't mean that you can just go ahead and insert these labels because then it depends on where the policies or the development of the policies, how they have proceeded meanwhile. If we want to do this as fast as possible without breaking anything, then we need all of those three things to run in parallel.

Everybody's been asking me this week when will this be there, and I really can't give any better estimate on time. I think it's something that we need to work on, to be a little bit better at making some guesses on that. But I also think that there are large parts of the community, who right now are working on something that we do not know the results of yet. So if I were to make a guess on a specific quarter of the year or something like that, then I would be in deep trouble because if some of the testing, for example, shows issues then perhaps additional technical work needs to be done, and I would hate to have been in a position where we kind of made a promise and couldn't meet that expectation.

Bruce Tonkin: One thing that troubles me is on the protocol revision side. I think you mentioned it to me yesterday that you'll look for some algorithmic approach potentially to limit the strings because it strikes me that that is a very difficult thing to do. And I wonder whether rather than saying you've got the entire Unicode set and then we're using some subset of

that, that we might be better off starting with the subset of characters that we perhaps have some experience with. Certainly, if I look in the Asian region where they have already been doing a lot of work with IDNs at the second level using those characters, you would think it's already a lot of experience there and maybe that at the top level, you might say that if there is significant operational experience using character strings at the second level, in some cases since several years, maybe you say okay this should be allowed to go forward at the top level, rather than trying to tackle the entire Unicode set and deal with it that way.

Cary Karp: Can I comment on that?

Bruce Tonkin: Yeah, go ahead, Cary.

Cary Karp: It is the latitude that the protocol currently provides that made the Paypal scandal possible. What's currently being determined is whether there is any way algorithmically to improve the situation were similar incidences could now happen. Now, it is rapidly becoming apparent that there is no way to do this algorithmically.

Bruce Tonkin: Okay.

Cary Karp: And the consequences of that insight are daunting in terms of the amount of work that will then need to be done. So everybody is just hoping and hoping increasingly in the realization that it may be a vain hope that there is indeed some combination of Unicode character properties that can be operated on in a manner that will meaningfully limit the available repertoire compared to what we currently have. But again, if there is no such mechanism, then we will need to harness all

the collective expertise about language requirement and language expression in the very focused DNS context that we are all able to elicit.

Bruce Tonkin: Okay. Any other comments on that?

Mawaki Chango: It's Mawaki. I don't have any comments currently on this, but I would like to jump back to the substance of the two presentations. Cary replied to a question by referring to their contact with UNESCO. But I'm still to be clear about how all this will advance the work. What is the synergy? I think he is currently acting as member of the president's advisory committee on IDN. I mean in what capacity is he talking with the UNESCO people?

Cary Karp: I have been working with UNESCO since the early 1970s on issues relevant to the maintenance of cultural heritage. My current activity relates to .museum and the development of an IDN and other internationalized attributes of the Internet in that context. The fact that I'm also on the president's advisory committee in ICANN certainly makes it easier for me to facilitate liaison and contact, but my activity within the UNESCO family is completely independent of my activity in ICANN.

Mawaki Chango: Okay, okay. That's understood. But I was wondering if there's any communication channel so that these resources are potentially available for the GAC discussion on the country codes IDN. The other question is that I'm hoping that there'll be some collaboration, whether formal or informal, so that the GAC could benefit from that information.

Cary Karp: Mawaki, you may not have noticed this, but UNESCO does maintain a presence in this context. They are very often present at ICANN meetings. I don't know if there's anybody there at this time because I'm not there myself to see them. But Tina can probably comment a little bit more about the level of direct liaison that ICANN maintains with UNESCO.

Bruce Tonkin: Do you want to comment on this, Tina?

Tina Dam: Cary, can you say that again? You want me to comment a little bit more about how UNESCO is...

Cary Karp: You simply mention the role of Liz Longworth and her team has played in the ongoing discussion of IDN in the specific ICANN context that might help put a little bit of perspective on all of this. And my context with UNESCO dates back decades before any notion of ICANN or IDN was in anybody's mind.

Tina Dam: Right, right. So, at some of the previous IDN workshops, we've had UNESCO participate specifically related to their expertise when it comes to languages, documentation of languages and so forth. They also have run some parallel workshops at UNESCO, looking at items like that. It doesn't directly relate to internationalized domain names, but certainly has something to do with internationalization of the Internet. It's certainly something that we would like to see happening a lot more and I think they have a level of expertise at UNESCO that could certainly be used in this context here.

Mawaki Chango: Okay.

Cary Karp: UNESCO has formally requested that its member states establish alliances specifically for the internationalization of top level domains.

Mawaki Chango: I'm referring to the discussion within the governmental advisory committee about the languages, official or not. The TLD codes, whether cc or g, are code names, if you will. We've lived with .com and ccTLDs in ASCII characters, so I don't know if the debate within the GAC is about if it would be possible to represent all the languages in a ccTLD. But I think it makes sense to stick to the official languages because it's just about the TLD first. It's not necessarily about the applications or the content. We are talking about the codes to the URL on the Internet. That's why I'm saying they are codes. They don't necessarily have to represent all the languages spoken in the country, and they can't actually. In my own country, there are dozens of languages, and not all of them are written, actually.

In South Africa, for example, there are 11 official languages. I'm guessing that if they have chosen those languages as official, they probably have the name of South Africa in those languages, so they can choose the codes for IDN ccTLDs of their country in those languages. So I don't know if it's an ongoing debate or if you feel like it's resolved in depth that it will be enough to use the official language to represent the ccTLD in IDN.

Ming-Cheng Liang: Yeah. I think that the official languages is one possible way to follow, but I think the idea is that we try to limit the number of IDNs for current ccTLDs, and how are we going to do it? Maybe it's acceptable and actually I think we'd like the GAC views on who can choose on such matters. I don't think there is consensus here because we are

mixing the issues. We may say the official language is one possible option, but it's not necessarily the only option.

Alistair Dixon: Can I provide a counter argument because in my own country, we have quite significant minority communities that do not use English as their first language and we're talking about 10% of the population. It seems to me that restricting it to just the official language would potentially restrict both community interaction and society. I think this is a quite important aspect that needs to be considered. For example, the Chinese-speaking community in New Zealand is significant, but Chinese is not an official language in New Zealand. They communicate primarily in Chinese and I think it's important that they are able to use that language within New Zealand if they need to. Now that may require a cc that is actually Chinese rather than English.

Ming-Cheng Liang: Yeah. I think when we say the official language I think it has to be discussed in other words, but let me give my opinion on that. We try to see if we can take it in stages with a first stage maybe only open for one official language in an IDN ccTLD with one chosen string. Eventually, if it is possible, then in the long term we should have many IDN strings in many different languages representing the ccTLD. But when you get there or how it's going to be done, that will be a process we need to refine - but I would think that will be a later stage because we can't get into this problem as of this time. So in the discussion we have been talking about how we can prioritize our IDNs. We know it's a complicated process and needs to be prioritized and such a problem should have low priority. We will have a solution but it may come at a later stage when networks and capabilities are larger, then it might be possible, but not for the first round.

Mawaki Chango: I have another question, but Tina has to leave and I had a question for you. Are you available?

Tina Dam: Do you want me to just give my quick comment? Then I do have to leave because I need to go give a presentation at the public forum about our status report. Okay. So just quickly on official languages, I think that's a really hard definition to make, and I think it's very different in different regions of the world. And I - if Cary was on the phone, I'm sure he would or maybe he has - he would have said that Swedish, for example, does not have official status in Sweden. There are other examples like that, so I think it's important not to get too tightly associated with something that is not clearly defined, and I think it makes it difficult to use that.

Mawaki Chango: I'm just not clear about the DNAME and NS records. I met one of your colleagues, Jacob in Grenada one month ago. We were just discussing about this informally and it seems that one of these, I think probably it was NS record was tested previously and it was working. And then what we are doing right now in the current phase is testing the other one - so that would be the DNAME and see if it's working as well and then make the selection or the choice of one of them.

Tina Dam: Okay. So that's wrong. We had previously talked about testing both NS records and the DNAME record. Those are two types of resource records that can be used in the DNS. NS records are how ccTLDs are put into the root zone right now, so any TLDs that exist are being used by NS records. DNAME has not, as a resource record, been used at the top level label. It was an idea that was brought up, I think, in Vancouver at the end of 2005, and the initial discussions were about testing both NS records and DNAME from a technical standpoint on

how the DNS would respond to having internationalized top level labels inserted via both of those two resource records. It was then discovered that the root zone operators are not all running software that can handle DNAME. DNAME has been taken up by one of the IETF's working groups to see how that actually impacts different protocols. Then there was a lot of discussion in the community around, do we really want to test something that we don't really know if we want to have. If we need to upgrade all of the software without knowing if we really want to use DNAME, would that be a waste of time? Can we convince the root zone operators to do that? And so forth. So in order not to delay things, we decided to move ahead with testing NS records. That is what's underway right now, and the test assigned that was posted the other day is for NS records. DNAME needs to be analyzed a little bit more. Now, I want to recommend that when you talk about something like DNAME in a policy setting, you really don't want to talk about DNAME as a technical resource record. You want to talk about whether you want to have a policy decision made on whether you want a functionality - aliasing - which means you have an existing ASCII TLD and you want to map an entire zone onto an internationalized TLD.

To talk about that methodology if you want to call it that, or policy as opposed to talking about "should it be DNAME" - you can achieve this aliasing functionality with NS records, too. If you don't want that and you want DNAME well then that's something that we can go back to the technical community with and find out. There will be other ways that that aliasing can work from a technical standpoint. So don't think about DNAME, just think about aliasing and is aliasing something you want to have.

Bruce Tonkin: And let me comment that to emphasize what Tina just said. Don't think that DNAME has anything to do with IDN either, because people that are not familiar with IDN issues may think it's an IDN issue, while it's not. So just think about current TLDs, and it's the same thing. If you wanted to alias .com to .biz, you could. And the question is, is that something you want to require or is it something that is an option or is that something that's available to the operator. It's not a question of IDN.

Cary Karp: Note also that aliasing can be done entirely externally to the DNS...

Bruce Tonkin: Absolutely.

Cary Karp: ...if the operators of .com and .biz agree to load the same zone.

Bruce Tonkin: Yeah, exactly. So it's not an IDN issue, you know.

Mawaki Chango: But it will be tested anyway..

Tina Dam: DNAME is not part of any test or any test plan.

Marilyn Cade: This is Marilyn. Before Tina leaves just want to make one comment. In my view, aliasing and making an assumption that we're going to alias entire zones has really significant political implications that have to be talked about as well.

Bruce Tonkin: Let me just distinguish that it's a big difference between requiring everybody to use aliasing when you create a new TLD versus allowing some of the options to do so. I'm still not clear that it's a policy decision we need to make.

Marilyn Cade: I understand that you might not be clear that it's a policy decision we need to make, but I am clear that it is a policy topic we need to discuss. I'm perfectly happy with that, but I think one of the benefits of having this discussion is to say we're in a picket, which are we going to use an axe or a machete to carve our way out of it because otherwise, the picket it's pretty impenetrable.

Bruce Tonkin: So I guess my overall comment on this in having heard the discussion, particularly in terms of expectations is, I think ICANN is going to be very careful here that this could drag on forever, and I think we have to try to set a timeline. Let's say the timeline is a year and work out what are the series of steps that have to happen over that year. Maybe it slips out by a few months, that's fine. But I don't think we have a never-ending process. And I think the same lesson we've learned on Whois. We can't talk about it forever. We've got to say, okay, we're going to have an objective to reach a result in a year's time. There are series of steps that we need to get there. And we need to make compromises along the way.

If the IDN protocol development means we can't do an algorithmic approach to it, then let's chose another approach, but we need to make those decisions at certain points along the way so that we might make a decision in three months' time: Is it possible to go down that path or not? And if it's not, let's try something else. But let's not say okay, it's a huge problem, let's spend another five years working on how to sub-divide the Unicode character set.

So, well I'd like to thank everybody for coming.

Mawaki: Yeah. Just to finish my intervention when asking the question to Tina because she was leaving. Just to come back to the presentation, my last observation is that the question is complex about the choice of the language because it's at national level as well as international level. But it's also true that we don't need to be rigid in this approach. We don't even need to have a definite list of IDN ccTLDs to begin with. So, for example, if you have a country name like Germany and you have Allemagne, the same country name in French, and in Dutch maybe, and in German itself. Of course the Germans can decide to have what country codes they want based on their language. If the English speaking or French-speaking people don't request to have Germany or Allemagne as a country code we don't need to stop the process. When there is a need and a community out there who needs to use that string, then there will be discussion to define it. So we need to be flexible in this.

Cary Karp: Can I just point out that Allemagne is not an IDN issue. We are looking at local identifiers, alternative scripts that evoke languages other than English, which don't necessarily involve the inclusion of what are called IDN characters at all. So please let's be careful about separating the issues.

Mawaki Chango: Yeah, I agree with you, Cary. It happens not to be IDN issue because there's no accent in the word Allemagne in French, but I could have taken another example where you have accented characters.

Cary Karp: Tina said that I could comment on the situation in Sweden which I can. So six languages in Sweden have official standing, they are recognized by law and they convey right to their Swedish communities. Swedish itself is not one of those languages. Of those languages, of

course, we work to request an alternate country designation, we wouldn't be invoking IDN at all for any of those representations. And one of the languages is not written with the Latin script at all. So even in a country with a population of 9 million, there's this whole stream of issues, some of which are IDN concerns, others are not IDN concerns, all of which are legitimately TLD policy concerns. It would really great if we could stratify these issues and address them separately, rather than constantly running around, leading from one very legitimate perspective into another equally legitimate but unrelated perspective.

Olof Nordling: A very quick comment. The official languages of Sweden are recognized as official in Swedish, which makes Swedish the meta-official language.

Cary Karp: The Swedish government produces documentation about this in each and every one of these languages. The Swedish government is probably alone on the planet in official documentation in Yiddish, for example. It's not alone in any of the others because those other languages cross national boundaries where the other countries also forward legal status to those languages. It's a complex issue, and there's no way we're going to be able to generalize and say how we opt to treat the notion of an equivalent to a cc label. It differs by region to region, country to country and within individual countries. It can be an enormously contentious issue. With this reason by the way, legislation is being considered that will, at long last, sometime during the course of 2007 or 2008, designate Swedish as the official language in Sweden.

Bruce Tonkin: Okay. Thank you for that interesting deliberation on Swedish politics. I do want to kind of bring this session to a close because I'm conscious that we have a public forum and we allocated an hour. And I hope this will be the first of a number of joint meetings. I think Marilyn's comment that we need a timeline and scheduling meetings is important. And I think what we might want to do is work with the staff to try and project a target date of deployment, using technical terms, so let's say it happens to be January 2008, and work out all the steps. And we keep that overall timeline up-to-date because obviously that timeline might change. But unless we have an objective to reach, it will go on forever. So that's kind of a general comment. Perhaps I'll just offer the opportunity for Ming-Cheng Liang to say any final words before we close.

Ming-Cheng Liang: Yeah. I think a timeline for this will be good. I think we are working with our group to get a timeline and maybe will consult with many and see if we can have agreement.

Bruce Tonkin: Okay. Well, thank you everybody for attending.

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