

San Juan, 28 June 2007

GAC Communiqué

June 2007

I INTRODUCTION

The Governmental Advisory Committee of the Internet Corporation for Assigned Names and Numbers (ICANN) met in San Juan, during 24 June to 28 June 2007.

33 members and 1 observer participated in the meeting.

The GAC expresses warm thanks to the Puerto Rico Top Level Domain operator for hosting the meeting in San Juan.

II IDNs

In San Juan the GAC revisited the joint ccNSO-GAC *Issues Paper: selection of IDN ccTLDs associated with the ISO 3166-1 two letter codes* at the request of the ICANN Board to help clarify the issues related to the use of IDNs in the ccTLD space. The GAC also had face to face meetings with the ccNSO on the paper. The GAC has subsequently endorsed the Issues Paper which will be submitted to the Board at this meeting and is attached to this Communiqué.

The GAC recognizes that policy, administrative and technical challenges remain in the establishment of IDNs at the top level of the domain name system. The GAC recognizes that work on IDNs is ongoing in a range of other fora. The GAC reiterated that effective policy coordination will be necessary to advance the implementation of IDNs, including cooperation among communities with languages that use overlapping character sets.

Recognizing that a policy development process will be required to consider the questions raised in the issues paper, and understanding that this process may take up to two years; the GAC also acknowledged that it may be necessary to adopt a parallel process to enable a limited introduction of IDNs to begin addressing the need that currently exists in some territories. The modalities of the parallel process need to be carefully considered.

III WHOIS and new gTLDs

The GAC met with the GNSO Council and discussed the state of play of the work of the Whois working group. The GAC appreciates interaction on these issues intersessionally and recognizes that provisions of GAC principles have been considered. At the same

time the participation by GAC representatives in the working group intersessionally represents a challenge due to different working methods.

The Council provided an update on the PDP on new gTLDs. The GAC appreciates the work undertaken to reflect elements of the GAC Principles on new gTLDs in the latest report.

IV Draft ICANN procedure for handling WHOIS conflicts with privacy law

The GAC welcomes the opportunity to respond to the “draft ICANN Procedure for Handling WHOIS Conflicts with Privacy Law.” Since this draft procedure was produced in December 2006, the GAC has prepared its “Principles regarding gTLD WHOIS Services.” These principles provide the framework for dealing with potential conflicts.

We recognise the importance of effective conflict resolution mechanisms for the WHOIS regime, and we expect to see this as an integral part of the GNSO proposals for a future ICANN WHOIS regime.

We will provide formal advice on the conflict procedures based on the GAC WHOIS principles at the meeting in Los Angeles. The GAC recommends that the Board reviews the draft procedure in light of this substantive contribution.

In the interim, specific cases should be referred to the relevant national government for advice on the authority of the request for derogation from the ICANN gTLD WHOIS policy.

V SSAC briefing

A well attended meeting by the three communities (GAC, SSAC and ccTLDs) focused on two themes: Distributed Denial of Service (DDOS) attacks and the deployment of DNSSEC.

The SSAC briefing to the GAC and ccTLD operators offered an opportunity to discuss types of DDOS attacks including recent attacks on the infrastructure of a national state. It was noted that these types of attacks give rise to serious security concerns. GAC notes that some developing countries may require additional support and resources in order to improve their ability to resist such attacks. It was also noted that further reflection on possible policy responses should be continued. The effective cooperation between all actors in the event of such attacks is important.

The GAC welcomes the SSAC technical presentation on DNSSEC and wishes to discuss the topic in more depth, possibly at the next meeting.

VI IPv6 deployment and IPv4 exhaustion

The GAC members shared national experiences on the deployment of IPv6. These exchanges provided valuable information on how governments could engage in national activities in the transition from IPv4 to IPv6.

The NRO made a presentation on the depletion of IPv4 addresses and emphasized the need for governments to set an example by implementing IPv6 on the electronic delivery of their services such as email and websites. The GAC also took note of the NRO's recommendations for action by ICANN to support IPv6 deployment.

The GAC believes that the approaching exhaustion of IPv4 addresses and a smooth transition to IPv6 is a matter of increasing public policy importance and intends to closely follow the developments in this area in future meetings.

VII ICANN Board and GAC Cooperation

The GAC highly values the work of the ICANN Board-GAC Joint Working Group which strengthened cooperation with the Board. The GAC expresses its sincere appreciation to Alejandro Pisanty, Co-Chair of the group, for his tireless efforts and leadership. The GAC considers that the working group has attained its initial objectives and therefore proposed in conjunction with the Board to define the terms of reference for the work ahead. To that end the Chair and Vice Chairs of the GAC will carry out this work on the GAC's behalf.

The GAC considers the Rio de Janeiro Internet Governance Forum in November an important opportunity to engage in discussions related to WSIS follow up and Internet governance and to reach out and disseminate information about ICANN and its supporting organisations and advisory committees. The GAC stands ready to provide all necessary input to that end.

VIII Transparency and Accountability principles

The GAC had extensive discussions on transparency and accountability principles with the members of the Board and senior ICANN staff. Taking into account the importance governments attach to these issues, further GAC input to the Draft Management Operating Principles will be provided at the Los Angeles meeting.

IX Fellowship Program

The GAC strongly endorses the Fellowship Program and applauds its implementation. It offers assistance in disseminating the information about the program to government representatives through available channels of communication. The GAC proposes to implement a scheme that will utilise the experience within GAC to assist the development of those on the fellowship program. Given the potential benefit of long term membership for active participation the GAC considers that the program should seek to promote continuity of attendance of fellow members.

X Retiring Country Code Top-Level Domains

The GAC held discussions on the ICANN staff paper dated 5 December 2006 on retiring country codes and recognised that the retirement of a ccTLD will inevitably raise significant public policy issues. For this reason, the GAC will seek to work closely with ICANN in developing any policy proposals concerning procedures for retiring ccTLDs.

XI Other issues

The GAC would like to acknowledge the contribution of Pankaj Agrawala over the past two years, following his announcement that he will no longer serve as the GAC representative for India. Pankaj served as Vice Chair of the GAC, Chair of the GAC IDN Working Group and a member of the President's Advisory Committee for IDNs and has made a significant contribution to the GAC's work on IDNs.

Bill Graham from Canada was elected to serve as interim Vice Chair of the GAC.

The GAC warmly thanks all those among the ICANN community who have contributed to the dialogue with the GAC in San Juan.

The next GAC meeting will take place during the ICANN meeting in Los Angeles, USA, 27 October to 2 November 2007.

San Juan, 28 June 2007

ISSUES PAPER

Selection of IDN ccTLDs associated with the ISO 3166-1 two letter codes

Background: In the DNS, a ccTLD string (like .jp, .uk) has been defined to represent the name of a country, territory or area of geographical interest, and its subdivisions (hereinafter referred to as ‘territory’ or ‘territories’) as identified in ISO 31661, and is represented by 2 US-ASCII characters. This method of identification was adopted for use in the Internet through RFC 920, dated October 1984, and reaffirmed through RFC 1591, dated March 1994. All ccTLDs in use today are taken directly from the ISO 3166-1 list². or from the list of exceptionally reserved code elements defined by the ISO 3166 Maintenance Agency. There are two sources used by ISO to develop the 3166 list; the United Nations Terminology Bulletin Country Names or the Country and Region Codes for Statistical Use Of the UN Statistics Division.

The implementation of Internationalized Domain Name (IDN) ccTLDs introduces the (apparent) use of symbols outside the US-ASCII character set (for example characters in Cyrillic, Chinese, Arabic, and other scripts) for domain name strings. It has been generally accepted that the implementation of such proposed IDN ccTLDs must be in compliance with the IDNA protocol standards, RFC 3454, 3490, 3491, and 3492³. For more information on these standards see <http://www.icann.org/general/idnguidelines-22feb06.htm> and the references therein to RFCs 3454, 3490, 3491, and 3492.

To help clarify the issues related to the use of IDNs in the ccTLD space, the ICANN Board has asked the ccNSO and the GAC to produce an issues paper relating to the introduction and selection of IDN ccTLDs associated with the ISO 3166-1 two letter codes⁴.

In response the ccNSO and the GAC have formed a joint working group and have considered a non-exhaustive list of questions detailed below. Note that a number of the issues below are interrelated and the answer to one may potentially be dependant on the outcome of another.

To facilitate understanding and further discussion, the different questions are grouped in four clusters: 1) General, 2) Introduction, 3) Delegation and 4) Operation.

¹ <http://www.iso.org/iso/en/prods-services/iso3166ma/04background-on-iso-3166/what-is-iso3166.html>

² <http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html>

³ The IDNA protocol is currently undergoing revision, as such the mentioned RFC’s may be updated accordingly

⁴ ICANN Board resolution of 8 December 2006 at http://www.icann.org/minutes/resolutions-08dec06.htm#_Toc27198296

1. General issues regarding IDN ccTLDs

Which ‘territories’ are eligible for an IDN ccTLD?

The existence of IDNs as ccTLDs assumes a direct relationship between an IDN TLD string and a ‘territory’ as in ASCII ccTLDs.

- a) Should this relationship be maintained?
- b) If so, should the ‘territories’ which are potentially eligible for IDN ccTLDs be exactly the same as the ‘territories’ that are listed in the ISO-3166-1 list?
- c) If not, should another list be used or should another mechanism be developed?
- d) Should anything be done about ccTLDs already being used as gTLDs?

Should an IDN ccTLD string be “meaningful”?

An ASCII ccTLD string ‘represents’ the name of a ‘territory’ based on its entry into the ISO 3166-1 list.

- a) Is there an obligation to make the IDN ccTLD string 'meaningful' in its representation of the name of a ‘territory’? For example, whereas .uk is 'meaningful' because it is a commonly used abbreviation for United Kingdom, .au is not 'meaningful' because the commonly used abbreviations for Australia are Oz or Aus.
- b) If so, how is “meaningful” determined and by whom?

How many IDN ccTLDs per script per ‘territory’?

Apart from some exceptions, there is one single ASCII ccTLD per listed ‘territory’.

- a) Should there similarly be only a single IDN ccTLD for a given script for each ‘territory’ or can there be multiple IDN ccTLD strings? For example, should there be only one equivalent of .cn in Chinese script for China or .ru in Cyrillic for Russia?
- b) Could there be several IDN strings for a ‘territory’ in a script? If so, who would determine the number and what are the criteria?
- c) If an IDN ccTLD string is not applied for, for whatever reason, should an IDN ccTLD string that could be associated with a particular ‘territory’ be reserved or protected in some way?

How many scripts per ‘territory’?

- a) Can a ‘territory’ apply for more than one IDN ccTLD string in different scripts if more than one script is used to represent languages spoken in that location? For example in Japan more than one script is used to represent the Japanese language. In other words, should there be a limit on the number of scripts each territory can apply for?
- b) In what circumstances would it be appropriate to seek to introduce a limit on the number of scripts a ‘territory’ may choose to introduce for a ccTLD or any TLD with a national connection?
- c) Can a ‘territory’ apply for an IDN ccTLD string even if the script is not used in a language with any ‘official status’ in that ‘territory’? For example, if the Kanji script is accepted under the IDNA protocol, can Australia apply for a representation of Australia in that script even though neither the script nor any language deriving from it has any ‘official’ status in Australia?
- d) If ‘official status’ is required who will define it and who will determine it in each case?

Number of characters in the string?

Currently, ccTLD strings are limited to 2 US-ASCII characters and gTLDs to 3 or more. It is understood that abbreviations can be problematic for internationalized TLDs as abbreviations used in US-ASCII are not used on a global basis in all scripts. The underlying nature of IDN makes the actual string inserted in the DNS always longer than two characters when expressed in Unicode (due to the IDNA requirement to prefix internationalized labels with ‘xn—’). However, it is how the string appears in its non US-ASCII character set that is important. In this context:

- a) Should all IDN ccTLD strings be of a fixed length, for example by retaining the two-character limitation that applies to ASCII ccTLD labels, or can they be of variable length? If a variable string length is introduced for IDN ccTLDs, should it also be introduced for ASCII ccTLDs?
- b) Does moving outside the current 2 symbol limitation create any security, stability or integrity issues?
- c) Who determines the appropriate label used to represent a new IDN ccTLD string, and how are the set of characters used to represent this label selected?

Are there any ‘rights’ attached to a given script?

In purely technical terms, a script is a collection of symbols. However, each of those collections of symbols when put together in particular ways produce the ‘languages’ of groups of people sometimes defined by borders, although very often not. These groups are often referred to as language communities.

a) Should such groups (or their governments) have special rights regarding those scripts? For example, should the Korean language community be entitled to restrict the use of the Hangul script? If special rights exist what is the procedure to exert these rights and resolve conflicts?

b) Can anyone get acceptance of a script under the IDNA protocol or are there restrictions? For example, can a gTLD registry get the Kanji script accepted under the IDNA protocol? Should that use be vetted/approved by Japan? If yes, would the same requirement apply if a script is used in more than one 'territory'?

c) Should it be possible to adopt two or more 'versions' of a script with only minor differences for use under the IDNA protocol and are there issues or concerns should this occur?

2. Introduction of IDN ccTLDs

Should a list of IDN ccTLD strings be mandated?

In the US-ASCII case, ccTLD strings are currently primarily based on the ISO 3166-1 Alpha 2 list. If a similar mechanism were adopted for IDN ccTLDs, this could mean that every ISO 3166 entry would have an equivalent IDN ccTLD string(s) to represent it.

a) Is such a list necessary?

b) Who would develop such a list?

c) Should such a list be mandated?

d) If yes, by whom?

e) Who would develop the criteria and relevant policies for identifying IDN ccTLDs?

f) Under what policy or authority would the list be created?

g) If additional criteria and or policies are required, who is responsible for formulating that policy?

What precedence should be given to ccTLDs in the IDN implementation process?

Who selects the IDN ccTLD string in the absence of a mandated list?

If IDN ccTLD strings are not going to come from a mandated list then, how does an IDN ccTLD string become designated as the string for a particular 'territory'?

- a) What are the criteria and policies to determine who can submit a request for the designation of an IDN ccTLD?
- b) Who will develop the criteria and policies for determining the designation of an IDN ccTLD?
- c) How will such issues as competing requests (both domestic and international) be dealt with?
- d) What will happen if 2 'territories' are eligible for the same or confusingly similar strings for IDN ccTLD?

What coordination should exist between the different actors?

The deployment of IDN ccTLDs will require coordination among various actors, within territories and ICANN constituencies. Irrespective of the methodology employed, some coordination questions must be addressed, such as:

- a) Who are the appropriate actors?
- b) What are their roles?
- c) Do the GAC ccTLD principles need to be revised in the light of the introduction of IDN ccTLDs?

3. Delegation of IDN ccTLDs

Do existing ccTLD delegation policies apply to the delegation of IDN ccTLDs?
If not:

- a) Who can apply to have the IDN ccTLD delegated or to be the delegate for that ccTLD?
- b) Who decides on the delegation and in particular:
 - Are there specific reasons for deviating from the standard practice/guidelines that a zone should only be delegated with the

support of the local internet community, which includes the government?

- Is consent/involvement/knowledge of government required?
- Is consent/involvement/knowledge of incumbent ccTLD manager required?
- Is there any presumptive right of the ASCII ccTLD manager over a corresponding IDN ccTLD?

c) Who will formulate the policy for these processes?

d) Do existing US-ASCII ccTLD delegation policies for dealing with multiple applications, objections to applications or disputes apply to the same issues in the delegation of IDN ccTLDs? If not who will formulate the policies for these issues?

e) Taking into account all experiences ICANN has acquired - should there be an agreement between ICANN and the IDN ccTLD operator on the operation of the IDN ccTLD string?

4. Operation of IDN ccTLDs

Is the operation and management of an IDN ccTLD different to that of an existing US-ASCII ccTLD such that there are specific global technical requirements, in addition to the general IDN standards, needed for the operation of an IDN ccTLD? If so, how are those requirements developed and who would develop them?