INTERNATIONALIZED DOMAIN NAME (IDN) POLICY

VERSION 1.0

1. Internationalized Domain Names (IDN)

In order to use IDN characters in domain names, the IDN characters (which are essentially Unicode code points) need to first be converted to the ASCII format of domain names (Letter Digits Hyphen – referred as LDH). This process requires the use of an algorithm (ASCII-Compatible-Encoding) to convert Unicode characters to an ACE format called "Punycode" (RFC 5890). Punycode carries the prefix format of xn--. The Registry implements IDNA 2008 standard for IDN supports.

2. Language Table

All registered internationalized domain name must be associated with one language tag. For each language, a language table is required to define and state the permissible code points. The Registry will support Chinese, Japanese and Korean Characters for the initial implementation. The Chinese Domain Name Consortium (CDNC) has developed a complex table that handles Chinese Variant characters and is published by CNNIC and TWNIC. This table is the de facto language table for any registry that intends to register a Chinese IDN. The Registry will be utilizing the following language tables:

- .CN Chinese Table Version 4.0 provided by CNNIC on 2005-03-31
- .TW Chinese Table Version 4.0.1 provided by TWNIC on 2009-07-15
- .JP Japanese Table Version 1.2 provided by JPRS on 2005-08-30
- -.KR Korean Table Version 1.0 provided KRNIC on 2004-03-25

3. Character Variants (RFC3743)

A character-by-character substitution without consideration of language context may create variants that result in confusion and misunderstanding. In Latin the most obvious example is that every letter has both an upper case and a lower case variant. The variety of representing a single character with different writing or strokes that carries the same interpretation defines the variant issue.

While there are different types of variants, a character variant is the most significant type that needs to be addressed. Character Variant Solutions are defined by the language table and included into the system to help improve the end-user experience.

For Chinese IDN registrations, all variants of the IDN will be required to be registered as a package. By blocking all the possible character variants from registration by third party, the IDN domain remains uniquely owned by the registrant without the need to register names in various character variant forms.

4. Language Tag Support

The language tag will provide the language associated with the IDN registration. The language tag will determine which mapping table to apply. A language tag for Chinese IDN is 'CHN', Japanese is 'JPN' and Korean is 'KOR'.

5. Domain Name Management

Although a full language package is reserved after the registration of an IDN name, all management of the domain can only be done using the original form that was registered. The Registry does not support management of domain using the variants, nor does it accept variants as host names.

6. IDN Conversion Tool (According to RFC 5890 - 5893)

A Java based IDN Conversion tool can be used to convert an IDN name from native characters to the Punycode version. This tool can be used to conduct a reverse conversion from Punycode to native. Registrars will be able to use this tool to convert native names to XN—(Punycode) before sending a request to the registry through EPP.