

# Internationalized Domain Names

## *Latest Developments*



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# Agenda

- IDNs availability and progress
- Revised IDN ccTLD Draft Implementation Plan
  - Documentation of Responsibility
  - Financial Model
  - IDN Tables and Variants
  - Contention Prevention and Solutions
- IDN gTLDs
  - # of characters in a gTLD string
- IDN Technical Focus
  - Why technical standards are necessary
  - IDNA protocol revision status

# IDNs so far...

- IDNs have existed as second level since 2003
  - under web protocol standards (revision - IETF)
  - some email clients (standard underway - IETF)
- We also need IDN TLDs
  - http://例子.測試
  - IDN .test TLDs since Sept 2005

**Domain Availability Today** →

ASCII domain names (a, b,...,z), (0,1,...,9), (-)	domainname.TLD icann.org
IDN second level	例子.TLD -under various existing TLDs
IDN TLDs	例子.測試

**Future Addition** →

# IDN TLD Processes

## Implementation of Country-code IDN TLDs – Fast Track

- implementation of recommended policy from IDNC WG
- to introduce a limited number of IDN ccTLDs
- non-Latin scripts only, matching ISO3166 list
- meaningful strings in local languages and scripts

## Country-code IDN TLDs – Long Term

- Full policy that caters for all
- Follows the full ccNSO Policy Development Process

## New Generic TLDs

- New ongoing policy for new gTLDs
- Includes internationalized domains
- Focus on non-ASCII squatting & confusingly similarity solutions

# Revised IDN ccTLD

## Fast Track Draft Implementation Plan

- Revision 2.0
- Released for public comments
  - until 6 April 2009
- Specific attention on:
  - Documentation of Responsibility
  - Financial Considerations
  - IDN Tables and Variant Management
  - Preventing Contention

# Proposed Details on: Documentation of Responsibility

- Standard arrangement (DoR) between prospective IDN ccTLD operators and ICANN
- Draft DoR posted for public comments, based on:
  - the existing ccTLD Framework
  - compliance with provisions for technical aspects
    - IDNA protocol
    - IDN Guidelines
  - received comment of previous Draft Plan
  - Broad variety for and against a required contract
- A separate paper on DoR specifics for public comments

# Financial Model

- Received comments so far are split between
  - cost-recovery (like gTLD Program)
  - no fees or voluntary fees (like existing ccTLDs)
- ICANN standpoint:
  - new situation different from existing TLDs
  - requires some cost-recovery from the IDN TLD managers
- ICANN will release a paper with proposed cost and fee details shortly.

# Proposed Details on: IDN Tables & Variant Management

- IDN Tables inform users and reduce confusion
  - based on a language, script, or sets thereof
  - a registry can use more than one table
- Proposal to urge coordination across language communities when developing tables
- Variant TLD strings: delegated or blocked
  - Due to linguistic usage of scripts within country/territory
  - Matching current second level policies and procedures
  - RFI reply analysis shows @7 variant strings for allocation

# Preventing Contention

- Prevention of contention between
  - Fast Track requested IDN ccTLD strings
  - Existing TLD strings
  - Proposed strings in new gTLD applications
- Proposed rule for “existing TLDs”:
  - A gTLD application approved by the ICANN Board
  - A validated IDN ccTLD string
    - any other later application for the same string will be denied
    - Validated = meaningfulness confirmed, technical check passed
  - if contention: new gTLD application is placed on hold, the IDN ccTLD request prevails (if passing validation)
  - if both parties w/government assent, both applications on hold until contention is resolved

# Fast Track Process, looking forward

- Reaching collaboration on outstanding issues
  - DoR
  - Financial Model
  - IDN Tables and Variants Management
  - Contention Solutions
- Enabling finalization of the Implementation Plan
  - ICANN Board approval
    - ***requested for ICANN Board consideration at Seoul ICANN Meeting, 25-30 October 2009***
  - Implementation of the process
  - Launch Fast Track Process
  - Allocate IDN ccTLDs
- Experience gained is input to the IDN ccTLD PDP

# IDN gTLDs



- Part of ongoing program for new gTLDs
- Main changes relating to IDNs in the Guidebook:
  - Technical string criteria, which will continue to evolve as the protocol revision in progressing
  - # of characters, in particular for CJK community
    - While it is understood that parts of the community have expressed a need for 1 and 2-char TLD strings, it was not possible to find a sound way of implementing this need
    - Requested feedback from community to set criteria
    - Much appreciated, ideas have been received that will continue to be worked upon

# Why technical standards are necessary

- The term "protocol" designates a technical standard
  - Core set of protocols determine Internet functionality
  - The DNS is based on one of the most fundamental protocols
- The IDNA protocol is different, it is
  - entirely external to DNS, functions at application layer
  - basic DNS operation not changed by IDN introduction
  - experience shows multiple application implementations
  - security problems, warning users => different experience
  - Different applications different responses
    - Blog-post with more details:  
<http://blog.icann.org/2008/11/compliance-with-idn-technical-requirements/#comments>

# IDNA protocol (IETF)



- Non-compliance with the IDNA protocol
  - Hurts all IDN registries, not just the non-compliant
  - Applications providers will see further security problems
  - IDNA protocol exists but is under revision
    - Unicode version independent
    - Fixing right-to-left script problems
    - Adding characters that previously were not available
    - Ongoing discussion about mappings
- ICANN standpoint:
  - the preference is that the protocol revision is completed, however if indications show that this is not possible then we will proceed with the existing version of the protocol (potentially with additional precautions for the TLD strings to ensure future compatibility).

**多謝 -- Thank you**

<http://icann.org/topics/idn>

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