

# IDN @ LKNIC

## IDN Implementation, Policies and Issues



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# IDN History in Sri Lanka

- ICANN Identified the requirement of IDN
- Proposed deployment plan
  - IDN Fast track for the countries which need IDN urgently
- Sri Lanka selected IDN fast track Implementation
  - ICTA played the main role
  - They formed an IDN Task force with LKNIC, TRC, Department of Official languages ISPs in Late 2008

# IDN History ...

- The Task force proposed 2 IDN ccTLDs .ලංකා and .இலங்கை
  - 2 Domains were officially published at the e-Asia conference in 2<sup>nd</sup> December 2009
- **March 2010** - IDN strings were accepted ICANN as valid IDN strings
- **14<sup>th</sup> May 2010** – IDN delegation request were submitted to IANA





# IDN History ...



- LKNIC officially launched IDN domain registration in **28<sup>th</sup> June 2010** at the **LKNIC 20<sup>th</sup> Anniversary** registering රජය.ලංකා / அரசு  
▪ .இலங்கை
- **July 2010** - Zones were signed with NSEC Algorithm
- **August 18<sup>th</sup> 2010** - root servers were configured with .ලංකා and .இலங்கை

# Our Achievements



- Sri Lanka is the **First country** with **2 IDN ccTLDs**
  - Currently only 15 IDN ccTLDs are delegated at the root zone
- We have enabled **DNSSEC** in IDN ccTLD as well
- Online domain request mechanism



# Policies of Registering IDN domains in LKNIC

- Sunrise Period (till **31<sup>st</sup> Dec 2010**)
  - Existing .lk domain name registrants to register the respective Sinhala and Tamil domain names
  - Such registrations will be free of charge, and will expire concurrently with the .lk domain name
  - The Sinhala and Tamil strings should be derivable from the existing .lk domain name by transliteration or pronunciation.
  - Example
    - **www.holiday.lk** → වෙඩි.හොලිඩේ .ලංකා
  - Only one Sinhala and one Tamil domain name may be registered for each .lk registration, even if multiple transliterations, etc. are possible



# Registrations after the Sunrise Period

2011 January

- Each domain name registration may comprise one name in English, Sinhala and Tamil in the .lk, .ලංකා and .இலங்கை domains, or sub-domains thereof, respectively
- Registrations shall be made on a first-come first-served basis



# Restrictions and Limitations

- All Sinhala and Tamil domain names must be valid Unicode sequence
  - Only modifiers will NOT be considered as a valid domain name
  - Spell check is NOT applied
- Domain names should consist only of
  - Sinhala (for .ලංකා) **OR** Tamil (for .இலங்கை) characters,
  - Digits 0-9
  - Letters a-z
  - hyphen-minus and zero-width joiner/non-joiner characters

Not allowing Tamil and Sinhala Letters in one domain name



# Restrictions and Limitations...

- Following domain names will not be registered
  - Names that may be obscene or offensive to any accepted religion, race, culture or tradition of Sri Lanka.
  - Names which may indicate the name of the country or the government (without specific authorisation), or may in any other way mislead the public

# Restrictions and Limitations ...

- Following domain names will not be registered

Tamil OM

Tamil AU length mark

Tamil Digits Zero - Nine

Tamil Sign Anuswara

Tamil numbers Ten, Hundred, Thousand

Tamil Symbols: Day, Month, Year, Debit, Credit, Rupee and Number signs.

Sinhala letters iluyanna and iluuyanna

Sinhala letter sanyaka jayanna

Sinhala vowel signs gayanukitta and diga gayanukitta

Sinhala punctuation kunddaliya

Proposed Sinhala numerals

# ZWJ/ZWNJ

- ZWJ combinations are Allowed but the Applicants are warned
  - Due to the zwj Issue, the browsers(IDNA2003) interprets a domain with a zwj in its label differently
  - i.e

- රාජ්‍ය → xn--c0c2cb5dxa631z

- රාජ්‍ය → xn--c0c2cb5dxa

රාජ්‍ය → රා + 0DA2+0DCA +200D +0DBA

රාජ්‍ය → රා + 0DA2+0DCA + 0DBA

*Zero Width Joiner*



# Observations / Suggestions

- Defining domain names
  - As acronyms are commonly use to identify institutes etc. IDN with English labels are used
    - The Information and Communication Technology Agency of Sri Lanka is well known with acronym ICTA
    - It users icta.lk and suggested **icta.ලංකා** and **icta.இலங்கை**
- Suggesting Labels for www
  - WWW – வேலை, தளம்
    - www.nic.lk → வேலை.இணைப்புகள்.லங்கை

# Issues

- Motivation is less → 1% of the .lk domains currently registered under IDN ccTLD
- Less Awareness of the Internet community
  - Technical
  - Marketing
- Issues with defining IDN domains
  - Institutions are commonly known by their English abbreviations and their domains are also use abbreviations
    - APTLD, BIT ([www.bit.lk](http://www.bit.lk)), ICTA ([www.icta.k](http://www.icta.k))

Thank You!

