# Devanagari Case Study Team Update



### Devanagari Case Study - Team

Dr. Govind (Case study co-ordinator)

Tulika Pandey

Mahesh Kulkarni

K. B. Narayanan

Dr. James Galvin

Amardeep Singh Chawla

Jitender Kumar

Rajiv Kumar



Shashi Bharadwaj

Prof. Pramod Pandey

Raiomond Doctor

Dr. Kalyan Kale

Prabhakar Kshotriya

Manish Dalal

Basanta Shrestha

Bal Krishna Bal

Satyendra Kumar Pandey

Neha Gupta

Akshat Joshi



# Structure of the Report

- Basic Postulates
- Overview of evolution of Devanagari
- Brief sketch of writing system of the language
- Issues pertaining to IDN Variants
- Extraneous issues
- Registry and Registrar Perspective
- Appendices



# Issues at large

- Language Vs Script
- Variants
- Issues related to Software behavior in relation to Display of Domains
- Whole script confusables
- The case of 02BC character in Devanagari



#### Variant Classification

Confusingly similar single character

घ	ម	
(U+0918)	(U+0927)	
म	भ	
(U+092E)	(U+092D)	



#### Variant Classification

 Confusingly similar composite characters

द्र	द्र	द्ग
(U+0926 +	(U+0926 +	(U+0926 +
U+094D +	U+094D +	U+094D +
U+0930 )	U+0928 )	U+0917 )



#### Miscellaneous Issues

Issues related to software behavior in relation to display of domains

- Rendering engine related issues
- Font related issues



#### Miscellaneous Issues

#### Whole script confusables

A case may be visualized where a complete string in Devanagari and Correspond to a complete string in another script, such the it could lead to spoofing.

मोरी (Devanāgarī script) भोरी (Gujarati script) [morī]



#### Miscellaneous Issues

Zero Width Joiner (ZWJ)

Zero Width Non-Joiner (ZWNJ)



# Thank You



# One World One Internet

# Questions

