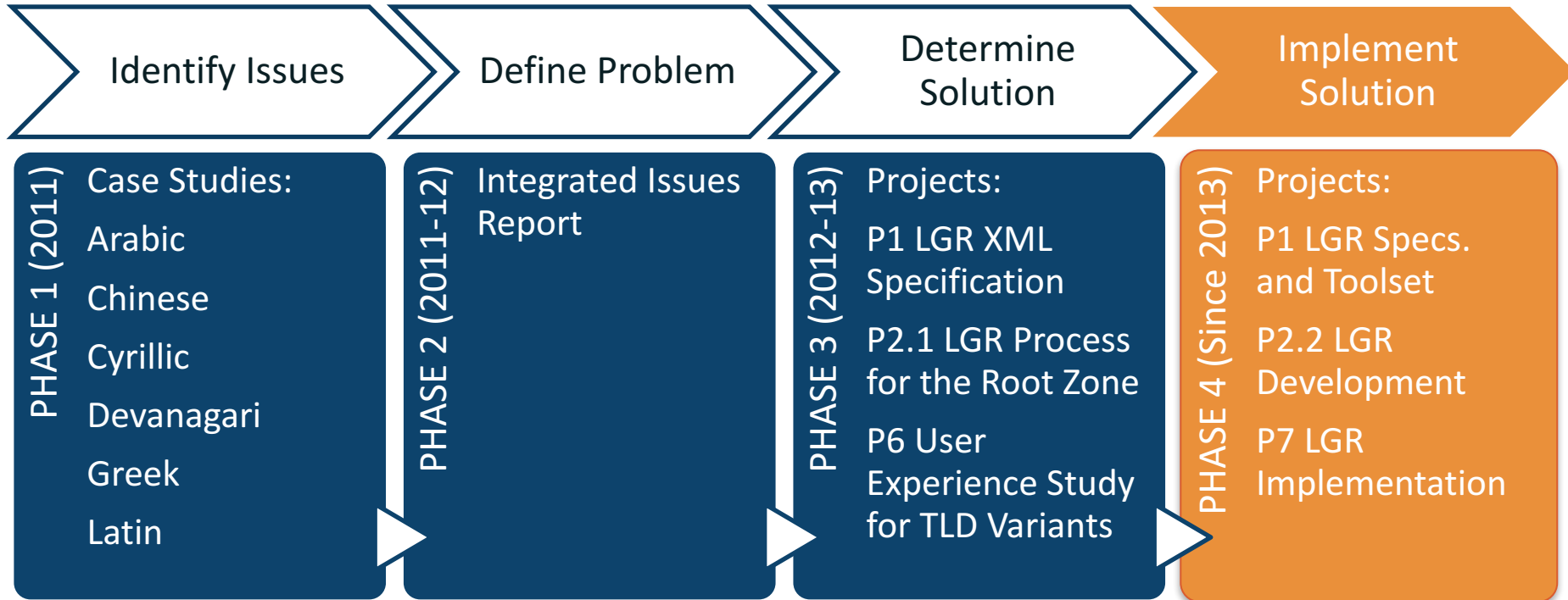# IDN Program Update to New gTLD Subsequent Procedures Sub Team – Track 4

Sarmad Hussain | Director, IDN Program | 9 February 2017
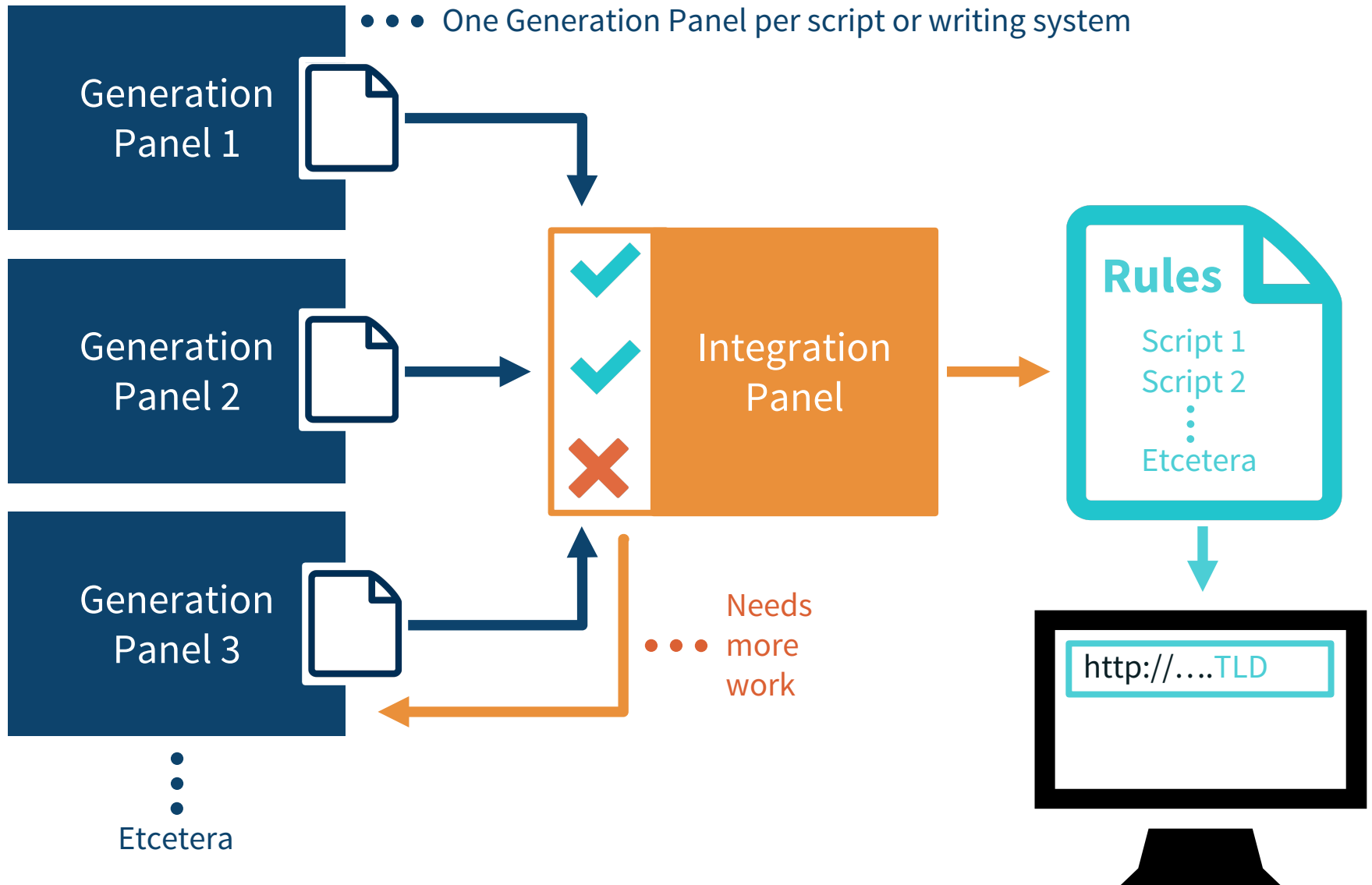
ICANN

Overview of Projects

- IDNs at Top Level

  - IDN TLD Program

    - Label Generation Rules (LGR)

    - LGR Toolset

    - IDN Variant TLD Implementation

  - IDN ccTLD Fast Track Process

- IDNs at Second Level for gTLDs

  - IDN Implementation Guidelines
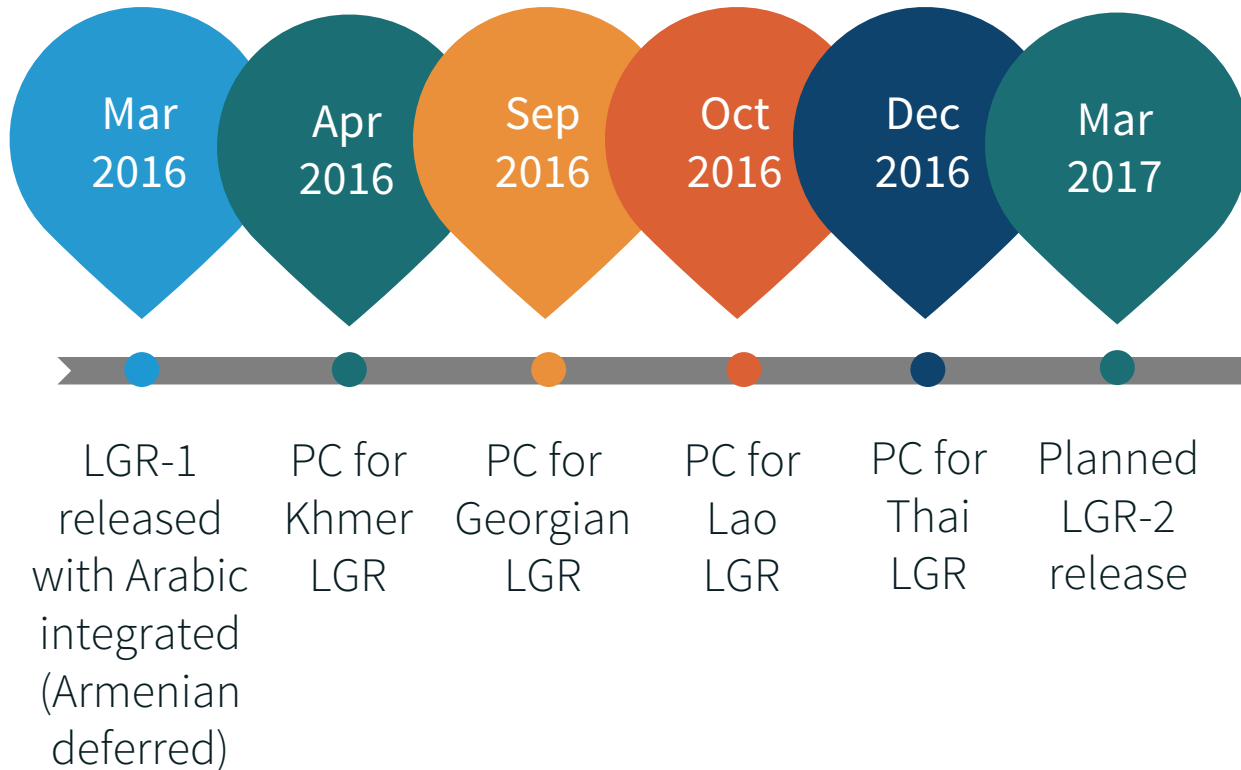
  - Reference Second Level LGRs

IDN TLD Program

Identify Issues	Define Problem	Determine Solution	Implement Solution
PHASE 1 (2011) Case Studies: Arabic, Chinese, Cyrillic, Devanagari, Greek, Latin	**PHASE 2 (2011-12)** Integrated Issues Report	**PHASE 3 (2012-13)** Projects: P1 LGR XML Specification; P2.1 LGR Process for the Root Zone; P6 User Experience Study for TLD Variants	**PHASE 4 (Since 2013)** Projects: P1 LGR Specs. and Toolset; P2.2 LGR Development; P7 LGR Implementation

Label Generation Rules (LGR) be developed by the relevant script community

Root Zone LGR Procedure

One Generation Panel per script or writing system

Generation Panel 1

Generation Panel 2

Generation Panel 3

Etcetera

Integration Panel

Needs more work

Rules

Script 1
Script 2
...
Etcetera

http://....TLD

Status of Root Zone Label Generation Rules (LGR)

Mar 2016 — LGR-1 released with Arabic integrated (Armenian deferred)

Apr 2016 — PC for Khmer LGR

Sep 2016 — PC for Georgian LGR

Oct 2016 — PC for Lao LGR

Dec 2016 — PC for Thai LGR

Mar 2017 — Planned LGR-2 release

Additional scripts will be incorporated in future versions of the RZ LGR

Status of Generation Panels
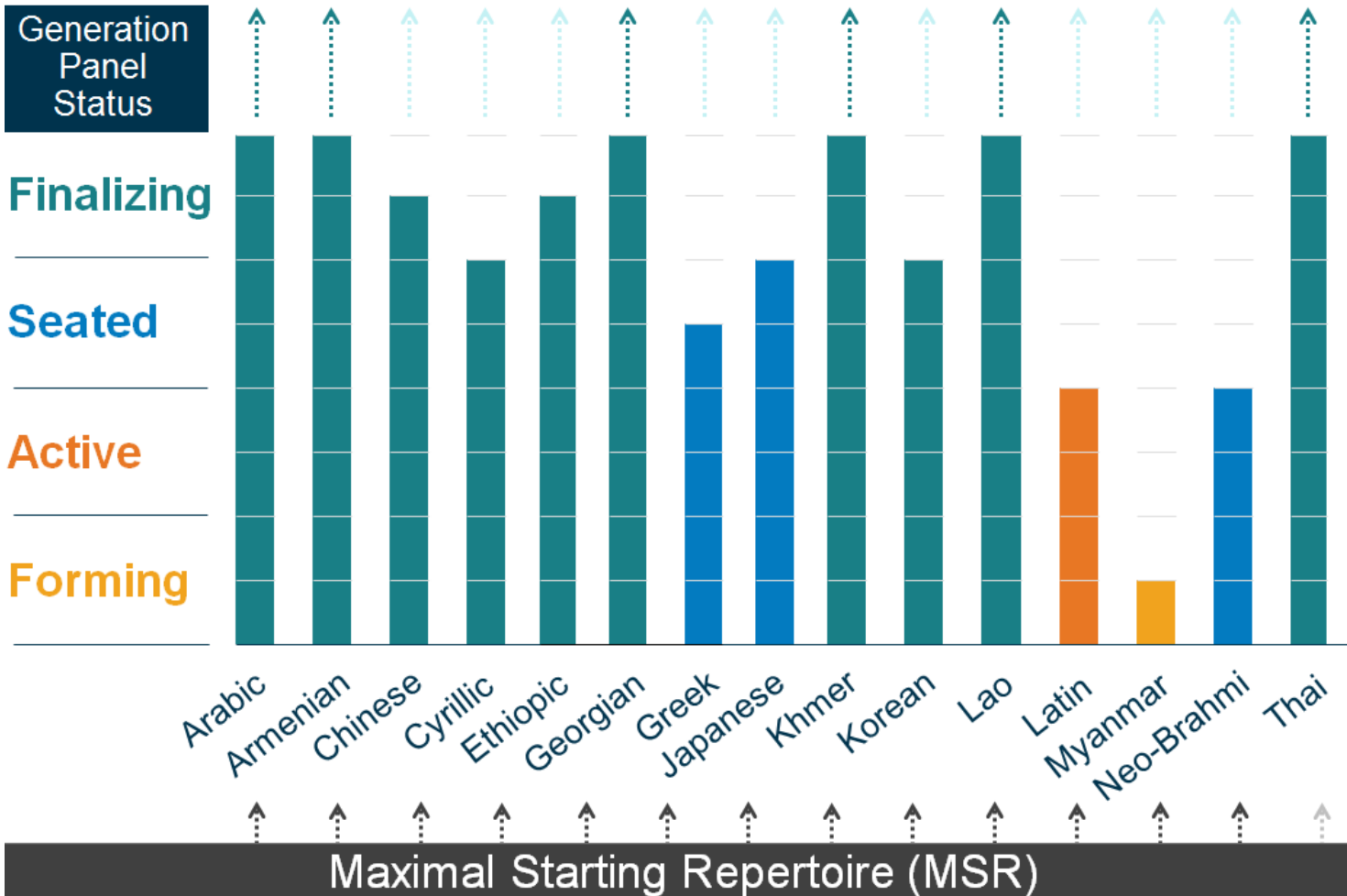
LGR Specification and Toolset (beta)

- Label Generation Rulesets (LGRs) used to generate domain name labels, as specified in RFC 7940

- LGR Toolset allows for the following:
  - Create a LGR
  - Use a LGR to validate a label and determine its variants
  - Manage LGRs, by comparing or combining them
  - Review possible impact of a new or a revised LGR on existing labels

- Online beta deployment
  - Visit https://lgrtool.icann.org/

- Open source package(s) release with BSD license
  - Released at github: lgr-core, lgr-django, munidata

- User guide available for further details

IDN Variant TLD Implementation

- Applications for IDN ccTLDs and new gTLDs indicate variant TLDs
  - Of the 116 new IDN gTLDs and 57 IDN ccTLDs applications
    - 69 new gTLDs and 10 ccTLDs identified variants
    - Limited to Arabic and Han/Chinese scripts
- ICANN Board resolved on 25 September 2010 that "no variants of gTLDs will be delegated through the New gTLD Program until appropriate variant management solutions are developed."
- Integrated Issues Report, IIR (2012) based on six scripts identified gaps
  - Issues identified
    - No definition of variant
    - No variant management mechanism
  - Solutions
    - Root zone LGR Procedure to define valid labels and their variants
    - In future, determine variant management mechanism

IDN Country Code Top-Level Domains

ccTLDs: 57 for 39*
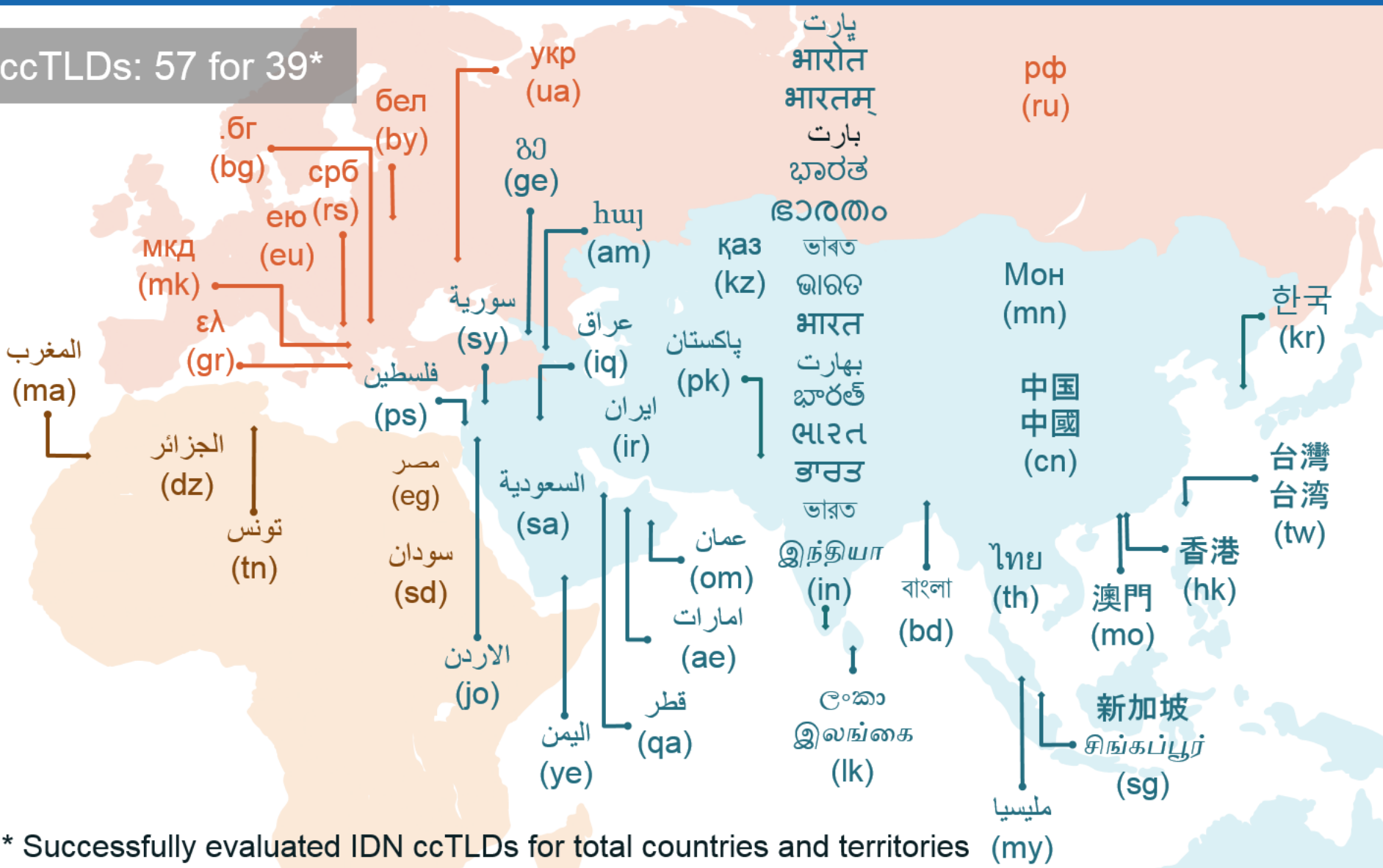
* Successfully evaluated IDN ccTLDs for total countries and territories

IDN ccTLD Fast Track Process

- Launched in late 2009
  - 57 IDN ccTLDs evaluated representing 39 countries/territories
  - 47 IDN ccTLDs delegated representing 37 countries/territories
  - Requests cover 21 scripts for 35 languages

- Currently under review
  - Public comment in Jan. 2015 raised issues with second similarity review process (EPSRP)
  - Board resolution in June 2015 for ccNSO to review EPSRP (with input from GAC and SSAC)
  - ccNSO formed EPSRP Working Group (WG)
  - Public comment in July 2016 by WG on revised EPSRP

IDN Implementation Guidelines

- ⊙ Purpose
  - o Guidelines for IDN registration policies and practices at the second level
  - o Designed to address end-user concerns, e.g., minimize user confusion

- ⊙ Relevance
  - o Contractually binding for registrars and registries
  - o Recommended for IDN ccTLDs

- ⊙ Status
  - o GNSO community requested for updating the guidelines
    - Previous version ([3.0](#)) updated in 2011
  - o Currently being reviewed and updated by IDNGWG

IDN Guidelines WG Members

	Name	Organization	SO/AC
1	Satish Babu	ISOC-TRV	**ALAC**
2	Wael Nasr	TLDVILLA LLC	**ALAC**
3	Mats Dufberg	IIS	**ccNSO**
4	Pablo Rodríguez	Puerto Rico TLD	**ccNSO**
5	Edmon Chung		**GNSO**
6	Christian Dawson	i2Coalition	**GNSO**
7	Chris Dillon		**GNSO**
8	Kal Feher	AusRegistry	**GNSO**
9	Dennis Tan	Verisign	**GNSO**
10	Jian Zhang	KNET	**GNSO**
11	Ram Mohan	Afilias	**SSAC**
12	Patrik Fältström (will only review)		**SSAC**

Summary of Items Covered by the Guidelines

1. Transition from IDNA2003 to IDNA2008
2. Terminology
3. Format of IDN Tables
4. Consistency of IDN Tables
5. User Acceptance
6. IDN Variant Labels
7. Similarity and Confusability of IDN Labels – cont.
8. Registration Data – TBD
9. EPP – TBD

Detailed text of the recommendations available at IDNGWG Wiki page:
https://community.icann.org/display/IDN/IDN+implementation+Guidelines

Reference Second Level LGRs

- GNSO council and members discussed issue of IDN tables in PDT and RSEP with BV-WG at ICANN 50 London
- To assist applicants and registry operators in the Pre-Delegation Testing (PDT) and Registry Services Evaluation Policy (RSEP) process, a project initiated to develop reference language tables
- [Public comment](#) on process for development and maintenance
- [Public comment](#) on guidelines for LGR development on Nov. 2015
- [Public comment](#) on reference second level LGRs and associated evaluation process published June 2016

Reference Second Level LGRs

- LGRs being developed and [published]() since Oct. 2016
- LGRs in the standard [RFC 7940]() format and its readable HTML view
  - Latin: Bosnian, Danish, English, Finnish, French, German, Hungarian, Icelandic, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Spanish, Swedish
  - Cyrillic: Belarusian, Bosnian, Bulgarian, Macedonian, Montenegrin, Russian, Serbian, Ukrainian
  - Mixed scripts: Korean, Japanese
  - Others: Chinese, Hebrew
- Additional process being developed for language and script communities to be able suggest reference LGRs

Thank You and Questions

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