Asia and the Next Billion Internet Users

- 3 billion Internet users in the world

Pie chart:
- Asia 45.6%
- Europe 18.9%
- Lat Am / Carib. 10.5%
- North America 10.1%
- Africa 10.3%
- Middle East 3.7%
- Oceania / Australia 0.9%
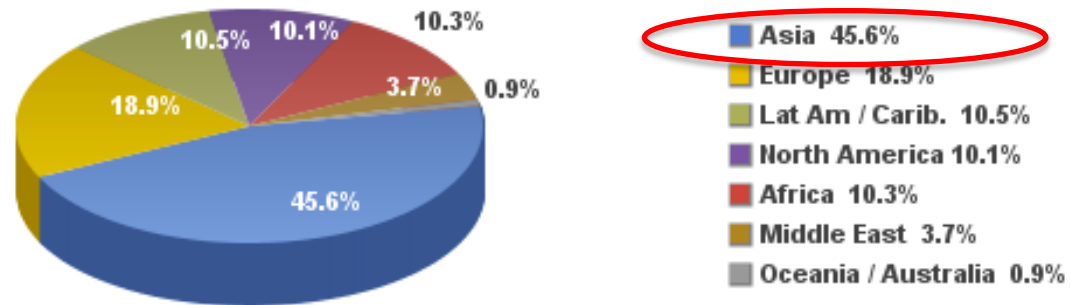
- Asia Internet penetration still low

Penetration Rate bar chart:
- North America — 86.9%
- Australia / Oceania — 72.1%
- Europe — 70.4%
- Latin America / Caribbean — 52.4%
- Middle East — 48.1%
- World, Avg. — 42.4%
- Asia — 34.8%
- Africa — 27.5%
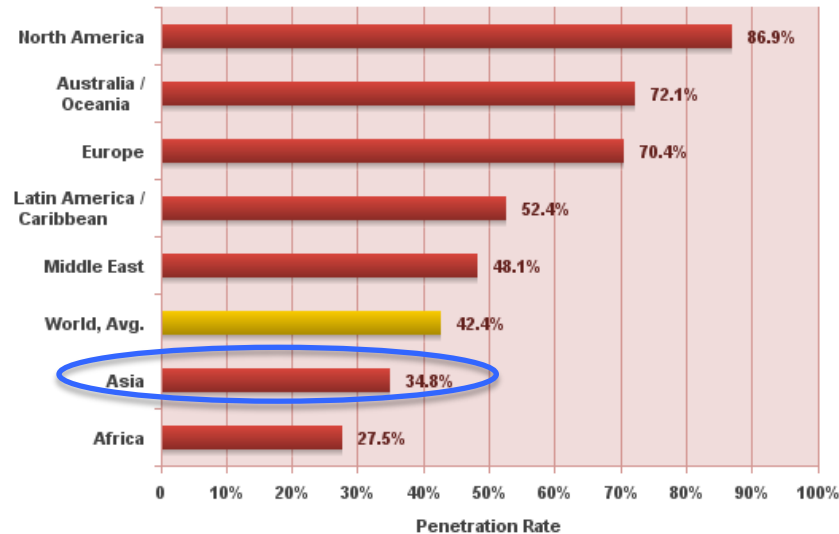
- Asia - majority of next billion people coming online

Source: www.internetworldstats.com; Euromonitor

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Context for IDN: A multilingual world with diverse writing systems/scripts

- ⊙ More than 7000 living languages in the world
  - ⊙ about 50% spoken in the Asia Pacific region
- ⊙ Numerous writing systems/scripts (fewer than languages)
  - ⊙ Examples: Han and Arabic
- ⊙ IDNs meant to serve the online needs of a world that is diverse in languages and script
- ⊙ IDNA Protocol developed by IETF in 2003
- ⊙ IDN TLDs introduced into the Root Zone
  - ⊙ IDN ccTLD in 2010
  - ⊙ IDN gTLD in 2013

Internationalized Domain Names (IDNs)

- IDN – Domain Names that can be represented in scripts, in addition to Latin, e.g. Chinese, Thai, Devanagari and Arabic

- IDNs enable opportunities for local communities to come online

ASCII and IDNs

www.cafe.com

ตัวอย่าง▪ไทย

Third Level Domain Second Level Domain Top Level Domain (TLD)

IDN Second Level Domain IDN Level Domain (TLD)

Syntax of ASCII TLD
Use only Letters [a-z]

Syntax of IDN TLD
U-Label, constrained by
the "letter" principle

What is a "letter" in a
script?
Are all "letters" unique in
a script?

Overview of IDN Program at ICANN

- ⊙ IDNs at Top Level
  - ○ IDN TLD Program
    - Label Generation Rules (LGR)
    - LGR Toolset
    - IDN Variant TLD Implementation
  - ○ IDN ccTLD Fast Track Process Implementation
- ⊙ IDNs at Second Level for gTLDs
  - ○ IDN Implementation Guidelines
  - ○ Reference Second Level LGRs
- ⊙ Community Outreach and Involvement

LGR Specification and Tool (P1)

LGR Development (P2.2)

IDN Variant TLD Implementation (P7)
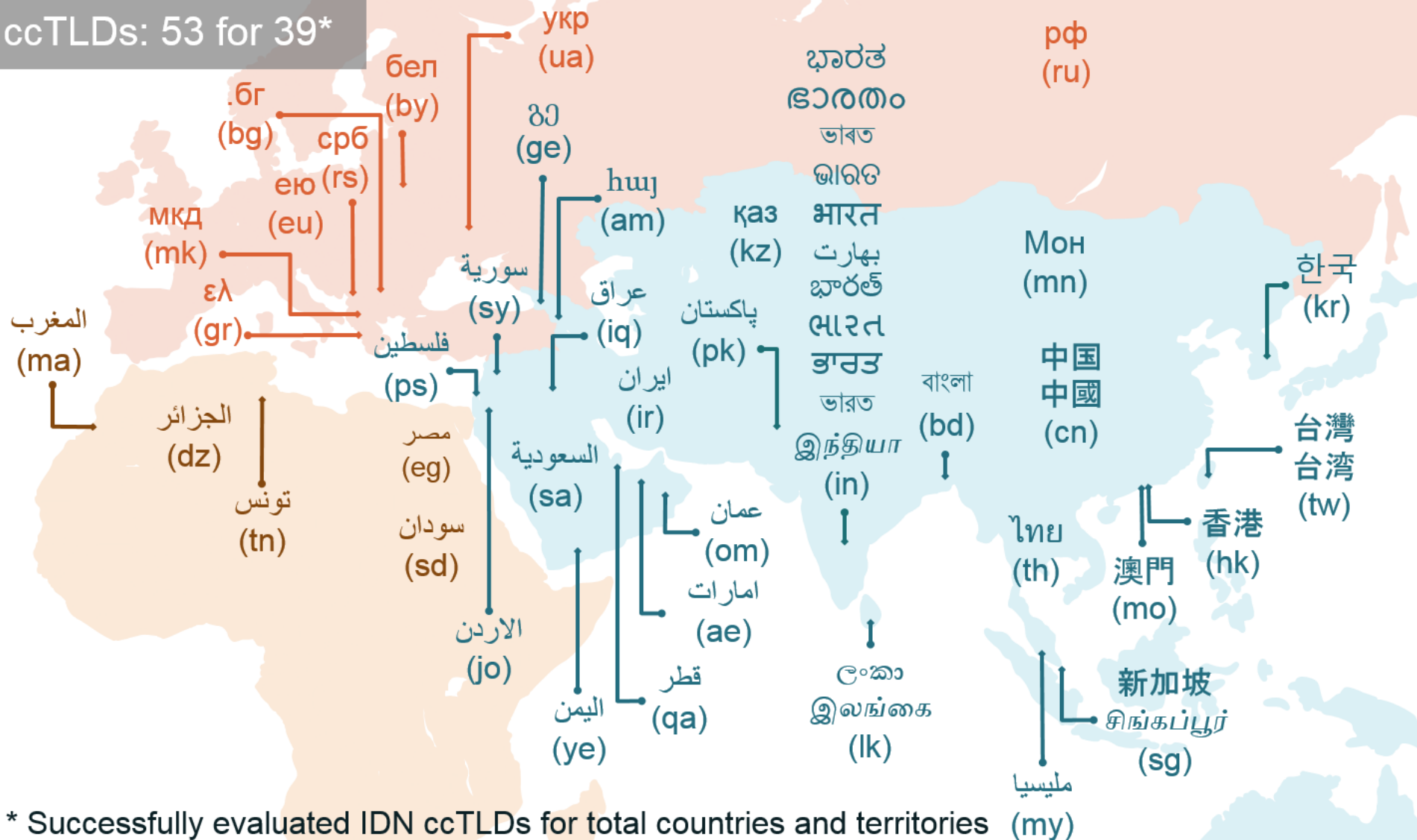
IDN ccTLD Fast Track

Reference Second Level LGRs (IDN Tables)

IDN Implementation Guidelines

Communications Plan Execution

IDN Country Code Top-Level Domains

ccTLDs: 53 for 39*

укр
(ua)

рф
(ru)

бел
(by)

.бг
(bg)

срб
(rs)

ею
(eu)

ვ
(ge)

� ᲑᲐᲠᲝᲗ
ᲑᲐᲠᲐᲗ�
ভাৰত
ভারত
भारत
بھارت
ಭಾರತ
ভারত
ভারত
இந்தியா
(in)

мкд
(mk)

ελ
(gr)

հայ
(am)

қаз
(kz)

Мон
(mn)

한국
(kr)

المغرب
(ma)

سورية
(sy)

فلسطين
(ps)

عراق
(iq)

پاکستان
(pk)

中国
中國
(cn)

台灣
台湾
(tw)

الجزائر
(dz)

مصر
(eg)

السعودية
(sa)

ایران
(ir)

بাংলা
(bd)

ไทย
(th)

香港
(hk)

تونس
(tn)

سودان
(sd)

عمان
(om)

澳門
(mo)

الاردن
(jo)

امارات
(ae)

ල0කා
இலங்கை
(lk)

新加坡
சிங்கப்பூர்
(sg)

اليمن
(ye)

قطر
(qa)

مليسيا
(my)

* Successfully evaluated IDN ccTLDs for total countries and territories

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IDN TLD Program: Label Generation Rules (LGR) for the Root Zone

- Need for community to determine valid and unique IDN Top Level Domains (TLDs)
- For each script or writing system, community to define:
  - Which code points are valid for use?
  - Are any of these code points variants of each other?
  - Are the any additional constraints on the labels?

Label Generation Rules (LGR)

- ⊙ Valid code points
- ⊙ Variants code points

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- ⊙ Label constraints
  - ⊙ Cannot mix ک and ك in a label

✓ کلکتہ

✓ کلکتہ

✗ کلکتہ

✗ کلکتہ

Root Zone LGR Development Status

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

Panel 1
Panel 2
⋮
Etcetera

http://....TLD
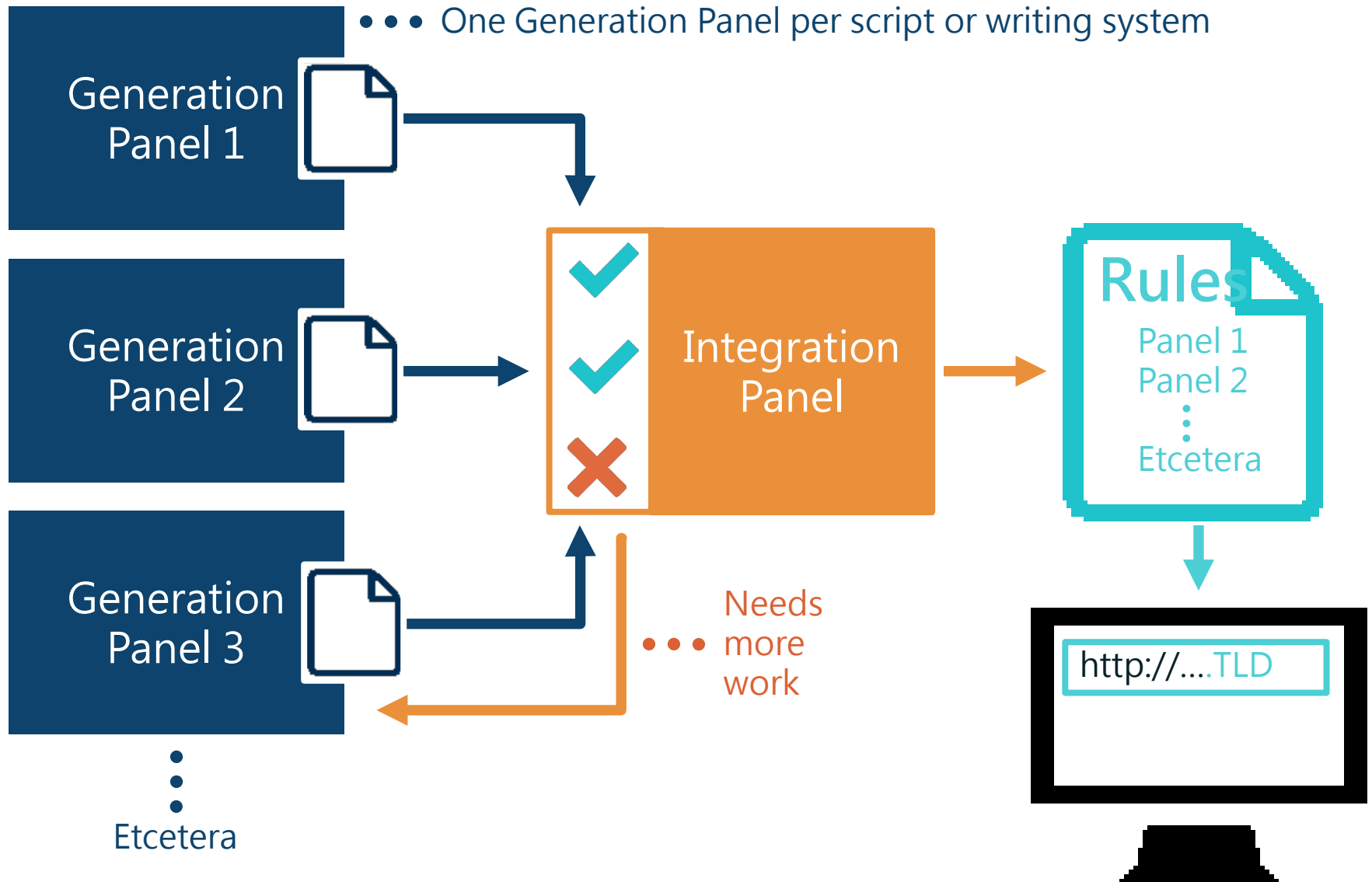
Coordination Challenges

- Some writing systems share same script, so need to coordinate for variant sets

  - Chinese, Japanese and Korean all use Han script

- Some writing systems have cross-script variant letters, so need to coordinate to identify them

  - Some letters among Khmer, Lao and Thai look similar

  - Some letters among Armenian, Cyrillic, Greek and Latin look the same as letters in other scripts in this set

How to get involved?

Volunteer

Volunteer for your script Generation Panel (GP)
To contribute expertise, contribute to the GP for your script. You can get involved by simply emailing your CV and a brief statement of interest to idntlds@icann.org

Review

Review work through public comments

Sign up for the IDN mailing list vip@icann.org (to sign up, visit https://mm.icann.org/listinfo/vip) and participated in the review of IDN work being done at ICANN through the public comments

Listen

Keep yourself updated
Attend regular IDN Program Update sessions at ICANN meetings and sign up on the IDN mailing list vip@icann.org to get updates on the IDN Program at ICANN

Engage with ICANN

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Thank You and Questions

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