# ICANN 75
## ANNUAL GENERAL
## KUALA LUMPUR

# Driving Local Change for Universal Acceptance (UA) Adoption Globally

ICANN75 | 20 September 2022

Universal Acceptance Steering Group (UASG)

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Universal Acceptance

# Session Overview

**1) Universal Acceptance (UA) Overview**

– Ajay Data, UASG Chair

**2) Current challenges in deploying UA-ready technology locally**

**3) The best way forward for the deployment of UA-ready technology at the local level in order to support global adoption**

– **Academia:** Nabil Benamar, Chair of UA Measurement Working Group (WG)

– **UA Ambassadors:** Abdalmonem Galila, Chair of UA Ambassadors WG

– **UA Local Initiatives (LI):**

- China, Zhong Rui

- Commonwealth of Independent States and Eastern Europe (CIS-EE), Maria Kolesnikova

- India, Sarika Gullyani

- Thailand, Anawin Pongsaboripat

**4) Seeking community input on how to make local outreach more effective**

# Universal Acceptance (UA)

To address UA, the Universal Acceptance Steering Group (UASG) was organized as a community initiative.

**Vision**
All domain names and email addresses work in all software applications.

**Impact**
Promote consumer choice, improve competition, and provide broader access to end users.

# Universal Acceptance and Categories Impacted

**UA: All domain names and email addresses work in all software applications.**

Domain Names (including Internationalized Domain Names):

- New short top-level ASCII domain names: example.sky
- New long top-level ASCII domain names: example.engineering
- Internationalized Domain Names (IDNs): คน.ไทย

Email Addresses (including Email Address Internationalization):

- ASCII@ASCII (new and long TLD): ekrem@misal.istanbul
- ASCII@IDN: marc@société.org
- Unicode@ASCII: 测试@example.com
- Unicode@IDN: अजय@डाटा.भारत
- Unicode@IDN; right-to-left scripts: ای-میل@مثال.موقع

Accept   Validate   Process   Store   Display

# UASG

- The Universal Acceptance Steering Group (UASG) was founded in February 2015 and was tasked with undertaking activities that effectively promote the Universal Acceptance of all valid domain names and email addresses.

- Main objectives:

    Raise awareness of the issue among relevant stakeholders.

    Help developers make their systems UA-ready by providing documentation and getting common standards, technology, and tools UA compliant.

    Encourage businesses and governments to ask their developers and suppliers to provide UA-ready solutions for the benefit of end users.

    Measure progress on UA-readiness.

# UASG Working Groups

| UASG WG | Role |
|---------|------|
| **Technology WG** | Oversees remediation work on standards, programming languages, tools, and development platforms. |
| **Email Address Internationalization (EAI) WG** | Oversees engagement with email software and service providers to make them EAI-ready. |
| **Measurements WG** | Identifies UA-readiness gaps in tools and technologies. |
| **Communications WG** | Develops communication strategy and oversees its execution in collaboration with other working groups. |
| **Local Initiatives WG** | Conducts national and regional UA awareness, training, and stakeholder engagements. |
| **UA Ambassadors** | Organizes training and outreach at national and regional levels. |

# Focus Areas for UA Adoption

- **Collaboration:** UA-readiness requires a considerable effort by all of us! It cannot be done in isolation; if my email server supports UA but yours does not, email in local languages will not work.

- **Remediation in Technology:** The UASG's focus is shifting from identifying the UA gaps in systems to providing solutions through submitting bug reports, engaging with big technology organizations and open-source communities, as well as conducting training.

- **Governments:** Focus on government policymakers for top-down UA adoption by requiring UA support in their procurement contracts. This will enable the protection of cultural values, create business, and increase career opportunities.

- **Academia:** Focus on academia for sustainable bottom-up UA adoption by including UA training in their curriculum.

# Academia Outreach

Nabil Benamar
Chair, UA Measurement Working Group (WG)

# Current Challenges in Academia

* The curricula in relevant technical programs do not cover background in internationalization (i18n) and technical topics specifically covering IDNs and EAI. For example:

  ➤ Electrical and Computer Engineering
  ➤ Computer Science
  ➤ Computer Networks
  ➤ Software Engineering
  ➤ Information Systems/Technologies

* Faculty and students are not aware of UA-related challenges and possible solutions.

* Lack of information and training allows students to continue to develop and deploy software that is not UA-ready.

# Current UASG Plans in Academia

* For a sustainable impact on UA adoption globally, three phases are planned:

  1. Identify topics and modules that cover UA-related materials.
     * Internationalization with Unicode, IDNs, EAI, using DNS tools for IDNs, etc.
  2. Develop relevant UA course materials.
     * Work with academics and practitioners to develop content for courses that is also linguistically diverse.
  3. Outreach to academia to train them on the materials and encourage them to integrate it into their programs.
     * First, work with a few IT-related programs to test the modules and then finalize the materials.
     * Second, work with global academic organizations to encourage adoption of curricular changes that incorporate UA in teaching programs.

# UA Ambassadors WG

Abdalmonem Galila
Chair of UA Ambassadors WG

# Universal Acceptance Ambassador Program

- The UASG Ambassador Program recruits industry leaders and UA experts who are committed to:
    1. Raising awareness around UA, IDNs, and EAI.
    2. Conducting trainings, workshops, and hackathons to support UA locally.

- **Current UA Ambassadors**
    o Cengiz Acartürk – Turkey
    o Malick Alassane – Benin
    o Harish Chowdhary – India
    o Aman Masjide – India
    o Vijay Shekhar Sharma - India
    o Sushanta Sinha – India
    o Mark Elkins – South Africa
    o Abdalmonem Galila – Egypt
    o Abdulkarim Ayopo Oloyede – Nigeria
    o Zhijiang Liu – China
    o Xiucheng Wu (Marvin Woo) – China
    o Yangyi Wu (Walter Wu) – China

# UA Ambassadors - Current Challenges

- COVID-19: Pros and cons for UA Ambassadors activities.

- Online sessions and trainings are not the best way to deliver the UA message.

- Insufficient awareness about:

  - The future need for IDNs and EAIs.
  - Benefits (ROI) of UA adoption from the view of different stakeholders and ideas behind the adoption.

- Communities do not have solid intentions to change or upgrade their systems to comply with UA-readiness.

- Not all APIs are UA-ready for software developers to be used (old releases or future releases).

# UA Ambassadors - Activities

Meaningful Access to the Internet in local languages with Universal Acceptance (UA)

Internet Governance and multilingual internet training program for Government of India officials

University of Dodoma , Graduation Project (Universally Accepted University Admission System)

UA Webinar with CITC Saudi Arabia : software developers, programmers, and system administrators/engineers

Creative Application of Chinese Domain Names, the fifth Forum

Technical/Policy: Universal Acceptance

UA & EAI Technical Capacity Building and EAI

# UA Ambassadors – The Best Way Forward

- Drive a landscape activity plan for each ambassador based on facts collected by each ambassador regarding their community.

- Find a way to strengthen the communication between ambassadors and their government community – maybe through GAC representatives.

- More awareness sessions about:

  - IDNs, EAI, and UA.

  - ROI of deploying UA.

- Hands-on or practical environments to showcase will be helpful (e.g., practicing EAI).

- Encourage local communities to modify their software APIs to be UA-ready and share.

- Short videos for UA Ambassadors to spread messaging before trainings.

- Encourage website owners to be UA certified (websites, mobile applications, etc.) Identifying the benefits behind this certification.

- More UA Ambassadors are needed to cover more areas.

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# UA Local Initiatives

# UA Local Initiative in China
## Led by Internet Society of China
Zhong Rui

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# China UA Local Initiative - Current Challenges

**Main issue: Which comes first? The egg or the chicken?**

* End user:
    * Usage pattern and habit
    * Education and awareness

* Internet service provider:
    * Market value
    * Products rebuild or transformation
    * Systematic process
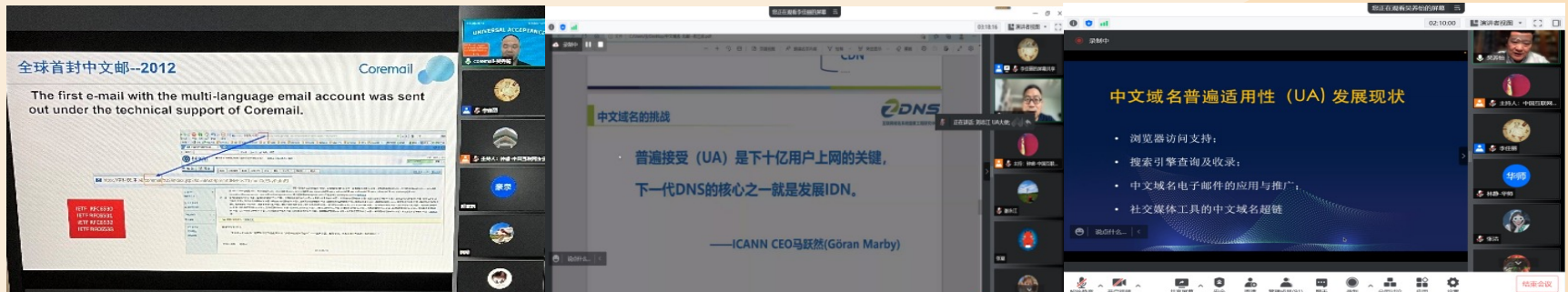
# China UA Local Initiative - Current Activities

**Outreach:**

* Policy:
    * Organized workshops to hear voices in the industry
    * "Promoting Chinese IDN Application" written into the 14th "<u>Five Year Plan on ICT Development</u>"
* Internet service providers:
    * Introduction and education
    * Progress follow-up

**Training:**

* Symposium: ISC members, university students
* Industry event: community members
* Mass media: social public

# China UA Local Initiative – The Best Way Forward

**Education:**

* Support the UA-Day related activities
* Set good samples and best practices
* Technical standards
* Regular promotion

**Special Action Plan:**

* Top-down movement
* Conduct regular UA testing

# UA Local Initiative in CIS-EE
(Armenia, Belarus, Georgia, Latvia, Russia, Serbia, Ukraine)
Led by the Coordination Center for TLD .RU/.РФ

Maria Kolesnikova

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# CIS-EE UA Local Initiative – Current Challenges

## IDNs

* Low demand for IDNs in the region, except in Russia (~700K IDN registrations)
* Display of IDNs as A-labels rather than U-labels (Facebook, VK, etc.)
* Linkification of IDN/EAI doesn't work properly, including URL copy-paste and percentage encoding issues (WhatsApp, Zoom, browsers, etc.)

## EAI

* Users are not able to register and use internationalized email addresses.
* Developers don't recognize EAI as a high-demand service. Too much effort for implementation in big corporate systems.
  Professional habits: e.g., use the same tools for all projects.
* System administrators are limited in setting up Level2 EAI* mail systems:
  - Popular mail cloud services do not support Level2 EAI
  - Popular open-source mail service software stack does not support EAI
  (Dovecot is not EAI Ready! - about 75% of installations).

  * Level1 (L1): if tool can only send to or receive from an EAI address
  * Level2 (L2): if tool can also create an EAI address

# CIS-EE UA Local Initiative - Current Activities

- PR and marketing efforts by registries and registrars to popularize IDNs.

- Request UA support by local governments and local software manufactures.

- Knowledge base for local technical community on IDN and EAI adoption aspects:
  - Developing and spreading guidelines on how to fix UA issues today.
  - Holding UA trainings and hackathons (theoretical and practical exercises).
  - Providing testing tools and updated list of UA-complaint software.
  - Initiating UA discussions at professional tech conferences.

- Learning course on UA/IDN/EAI for local students to form new professional habits.

- Advice for users on how to solve IDN/EAI issues they face today (publication of how-to instructions, FAQs, articles, posts, etc.)

# CIS-EE UA Local Initiative - The Best Way Forward

* IDN and EAI usage should become a trend/regular user experience.
* Accumulate, adapt for local technical community and share experiences in IDN/EAI adoption: guidelines, best practices, trainings, success stories.
* Outreach to local decision makers who can force UA implementation:
  - Government
  - Software manufacturers, cloud service providers
  - Academia and students
  - Other influencers

**Need help from ICANN and global technical community:**

- Global popularization of IDNs (including UA and EAI).

- Outreach global mail services (Google, Microsoft, etc.), social media platforms (FB).

- Outreach open-source projects maintainers Dovecot and Cyrus IMAP for L2 EAI (!)

- Developing comprehensive guidelines on how to adopt EAI standard in a software.

- Time to implement Unicode support in DNS?

# UA Local Initiative in India
## Led by The Federation of Indian Chambers of Commerce & Industry (FICCI)

Sarika Gulyani

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# India UA Local Initiative - Current Challenges

**Indian Multilingual Internet Landscape**

- India has ~825 million Internet users and an estimated ~450 million more will come online from the multilingual Internet space.
- There is huge market potential for a multilingual Internet and UA implementation.

**Challenges**

- The Indian multilingual Internet industry is still evolving.

- India is a country with 22 official languages and 1600+ dialects, making it a huge challenge in its own with a complex ecosystem.

- Further, the following challenges are faced by the local community:
  - Lack of awareness among industry regarding UA implementation and its benefits.
  - Need of technical skills among professionals.
  - Various regional groups working in silos.
  - Policy frameworks.
  - Adoption across various State Government Departments.

# India UA Local Initiative – Activities to Overcome Challenges



- UA technical training programs on:
    - EAI and its implementation
    - Capacity building and technical skill development for UA
- Multistakeholder engagement and raising awareness sessions
    - Fire Side Chat Session: UA - The Foundation of Multilingual Internet of India
    - Interactive Session with National Forensic Science University on UA
    - Bhashantara on UA the foundation of Multilingual and Inclusive Internet
    - FICCI-ILIA and India IGF Workshop on UA and Multilingual Internet
    - Pre-India IGF2021 on the Value of Multilingual Internet, Changing Landscape of Indic-Internet and Importance of UA
- Regular working group and multistakeholder meetings
- Regular social media promotion
- Case study development – Mera.Bharat
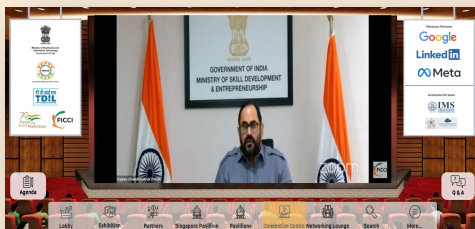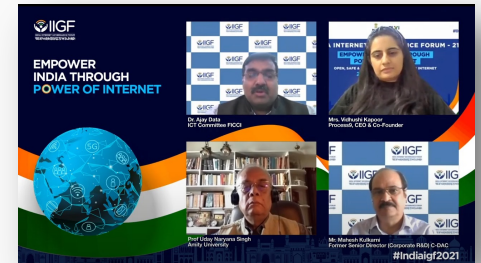
# Some Additional Initiatives in India

**Rajmail**
- Rajmail is a free email service for every citizen of Rajasthan from the Rajasthan State government. Under Digital India Mission, Government of Rajasthan took a lead and became the first state in the country to remove the language divide by offering a first of its kind linguistic email service made in India.

**DataMail**
- DataMail is made in India - world's first IDN compliant free email service developed with the vision to bridge the gap between English and non-English writing/reading population. DataMail enables users to communicate in their native language with their preferred language email address. The vernacular email service is available in 16 languages/22 Scripts.

**Policy Development**
- Various stakeholder groups for policy development have been established at the Ministry of Electronics and IT, Government of India.

**Multilingual Websites**
- Various departments at Government of India are developing multilingual websites.

# India UA Local Initiative – The Best Way Forward

Community Development and Collaboration

Establishing UA Day and Engaging Community

Capacity Building and Awareness Sessions

Technical Training Workshops (Multistakeholder Models)

Government Engagement – States Government Department

UA Report / Whitepaper in Local Languages

Global Collaboration

# UA Local Initiative in Thailand
## Led by Thai Network Information Center Foundation (THNIC)

Anawin Pongsaboripat

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# Thailand UA Local Initiative - Current Challenges

**1. Questions from prospect organizations for UA-readiness:**
  * Why do they need to make their systems UA-ready?
  * What benefits will they get?
    * Profit
    * Customers
    * Reputation
  * How to make their systems UA-ready? Is it hard? How many resources are needed?
  * They don't have the resources to implement it.

**2. Social media platforms are not UA-ready: FB, Line, etc.**
  * Showing xn— rather than local scripts

# Thailand UA Local Initiative - Current Activities

- Outreach and follow up with .th resellers to make them aware and plan for the UA-readiness sponsors.
- Outreach to universities to raise awareness, benefits, and the importance of IDNs and EAI to teachers, students, and stakeholders.
- Developing tools based on UASG "UA Python training" to check the UA-readiness of email, domain names, and TLDs.

# Thailand UA Local Initiative - The Best Way Forward

The best way to move forward for Thailand UA local Initiative:

* Developing UA-ready tools for easy implementation.

* Outreach and get support from influencers and/or powerful people in the following organizations:
    * Government
    * C-Level Management
    * IT Manager

* ICANN and community work together to get attention and support from global providers: FB, Line, etc.

# Community Input
How to make local outreach more effective

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## Get Involved!

Follow, share, like, and engage with the UASG on social media.

Use the UASG hashtag in relevant posts: #Internet4All

Twitter: @UASGTech

LinkedIn: https://www.linkedin.com/company/uasgtech/

Facebook: https://www.facebook.com/uasgtech/

Join the UA Discuss email alias: https://uasg.tech/subscribe

Report a problem if you find an application or webpage that is not UA-ready: https://uasg.tech/global-support-center/

For more information, visit https://uasg.tech or email info@uasg.tech.

# спасибо

# 谢谢

## GRACIAS

# THANK YOU

ありがとうございました **MERCI**

## DANKE धन्यवाद

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