



COORDINATION CENTER  
FOR TLD .RU/.PФ

# Universal Acceptance news and challenges

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cctld.ru | кц.рф



# Why do we talk about it?

Domain Name System (DNS) has changed over the past decade:

- More than 1,200 generic top-level domains (gTLDs) including domains that use non-Latin scripts and that are longer than three characters (e.g. .LONDON, .SPORT, .МОСКВА. .ДЕТИ)
- Internationalized country code top-level domains (ccTLDs) (e.g. .PФ)

Totally 156 IDN TLD:

Chinese script – 56, Arabic script – 33,  
Cyrillic script – 17 (9 ccTLDs, 8 gTLDs).

- TLD list is not static

# What is Universal Acceptance (UA)?

Universal Acceptance is cornerstone to a digitally inclusive Internet by ensuring all domain names and email addresses – in any language, script, or character length (e.g., .PФ, .PHOTOGRAPHY) – are accepted equally by all Internet-enabled applications, devices, and systems.



Accept



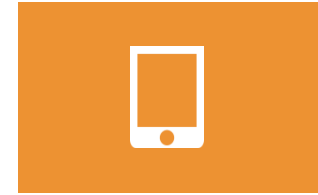
Validate



Store



Process



Display

Achieving UA ensures every person has the ability to navigate and communicate on the Internet using their chosen domain name and email address that best aligns with their interests, business, culture, language and script.

# Main Categories Affected by UA Readiness

## Domain Names

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

## Email Addresses

- ASCII@ASCII (new and long TLD): ekrem@misal.istanbul
- ASCII@IDN: marc@société.org
- Unicode@ASCII: 测试@example.com
- Unicode@IDN: маша@кц.pф
- Unicode@IDN; right-to-left scripts: عقوم . لاثم @ ليم – يا

## Relevant RFCs

<https://uasg.tech/wp-content/uploads/documents/UASG006-en-digital.pdf>

# Stakeholder groups Involved in UA

**Technology Enablers** - Organizations producing relevant standards and best current practices and providers of software programming languages, tools and frameworks.

**Technology Developers** - Organizations and individuals developing and deploying online applications and services using the programming languages, tools and frameworks.

## **Email Software and Service Providers**

- **Email Software Providers** - Organizations and individuals providing the different applications, tools and utilities for the email ecosystem.
- **Email Service Providers** - Organizations and individuals providing services for the email ecosystem.

**Email (and System) Administrators** - Organizations and individuals deploying and administering email related software and services.

**Government Policy Makers** - Government officials generating demand for UA Ready products and services by updating accessibility standards and procurement processes. Officials overseeing planning and deployment of e-government services for citizens.

# Stakeholder groups Involved in UA

**Developers** can support the next billion Internet users (many of which are non-English speaking) by ensuring that their systems are UA-ready.

**Governments** can better reach and serve their diverse constituents by being UA-ready.

**Businesses** that are UA-ready will be best positioned to reach growing global audiences and maximize revenue potential from the current Internet population, as well as the next billion.

**Help to support a multilingual and diverse Internet by ensuring your mail systems, corporate systems, and customer collaboration tools support Email Address Internationalization (EAI).**

*The Universal Acceptance of Internet domain names is a **\$9.8+ billion** opportunity (a conservative estimate).*

*More here: <https://uasg.tech/wp-content/uploads/2017/04/Unleashing-the-Power-of-All-Domains-White-Paper.pdf>*

# UA Readiness Report FY20



## UA Readiness in 2020

- At a Glance -



9.7%

of email servers are potentially configured to support email addresses in local languages and scripts.



11%

of the top 1000 websites globally support email addresses in Arabic and Chinese.



98.3%

of the top 1000 websites globally support email addresses with short top-level domains.

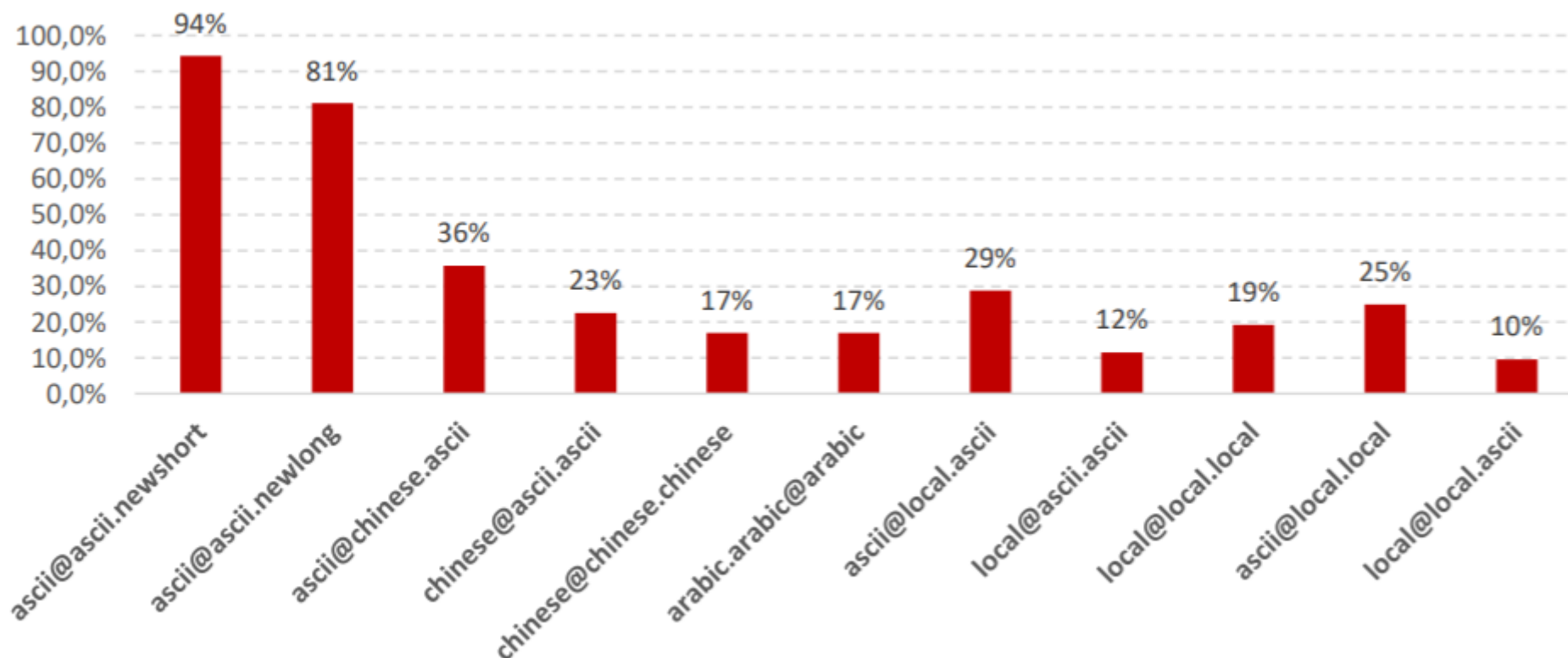


测试@普遍接受-测试.世界

مشرف@اختبار-سجل.مصر

όνομα@παράδειγμα.eu

# Evaluation of Web-sites for EAI Acceptance (Russia)



The full report: [https://cctld.ru/upload/iblock/7a3/UA\\_Report\\_2020.pdf](https://cctld.ru/upload/iblock/7a3/UA_Report_2020.pdf)



# EAI Ready Software

[Postfix](#) (SMTP) 3.0+

[Exim](#) (SMTP) 4.86+

[Courier](#) (IMAP, POP3, SMTP) 5.0.8+

[RoundCube](#) (Web-client IMAP, POP3, SMTP) 1.4.0+

[CommuniGate Pro](#) (SMTP, IMAP, POP3, Web) Beta

[Mutt](#) (console client IMAP, POP3, SMTP)

[Android Mail, Apple Mail](#) (clients for Android and iOS devices)

## Services:

Google Gmail (since 2014)

Microsoft Outlook

Почта.Рус (since 2016, XGEN platform, EAI mailboxes)

## Not EAI Ready:

Dovecot (IMAP, POP3)

Zimbra

Mozilla Thunderbird

Яндекс.Почта

Почта@Mail.Ru

\*Considerations for Naming Internationalized Email Mailboxes (UASG028)

<https://uasg.tech/wp-content/uploads/documents/UASG028-en-digital.pdf>

# UA Readiness Measurement

## **Acceptance of Email Addresses by Top 1000 Websites Globally 2020**

<https://uasg.tech/wp-content/uploads/documents/UASG027-en-digital.pdf>

## **Mail User Agents (MUA) EAI Readiness Testing 2020**

### **Webmail Services EAI Readiness Testing 2020**

(to be published soon at <https://uasg.tech/>)

## **UA Readiness of Browsers 2017 (new version in 2020)**

<https://uasg.tech/wp-content/uploads/documents/UASG016-en-digital.pdf>

## **UA Readiness of Programing Languages and Frameworks**

<https://uasg.tech/wp-content/uploads/documents/UASG018A-en-digital.pdf>

## **UA Readiness of Networking Command Line Tools**

<https://uasg.tech/wp-content/uploads/documents/UASG024-en-digital.pdf>

## **Universal Acceptance Readiness Framework**

<https://uasg.tech/wp-content/uploads/documents/UASG026-en-digital.pdf>

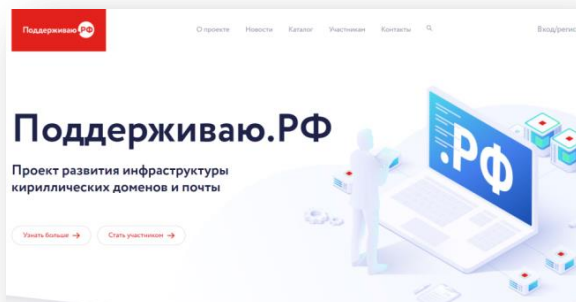
# UA Readiness at Local Level

**For Developers, System administrators, IT experts**

## Поддерживаю.РФ

UA/IDN ongoing project  
for developers and system  
administrators

- UA Documentation in Russian
- UA-Ready software list
- Bug Bounty Program
- Guidelines on IDN and EAI support in .РФ



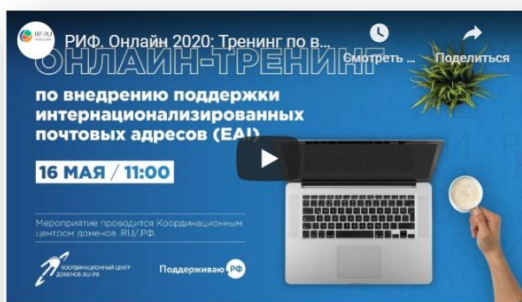
## Trainings

Overview of EAI  
implementation issues  
and how it works

+ **Live demo**

500+ views

**UA Readiness for  
Java-Developers**  
(planned for Nov'20)



## Hackathons

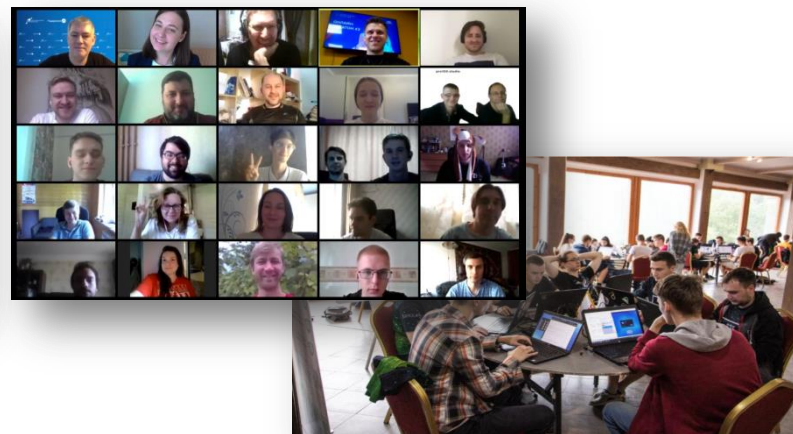
UA at online hackathon #2

**Digital Breakthrough**

13 professional developer teams  
(3-5 persons) solved UA issues  
**in 36 hours**

**CTF Summer School Hackathon**

8 student teams (5-7 persons)  
created UA-ready web-sites  
**in 15 hours**



# UA Readiness at Local Level

## UA Local Initiative in CIS and Eastern European countries

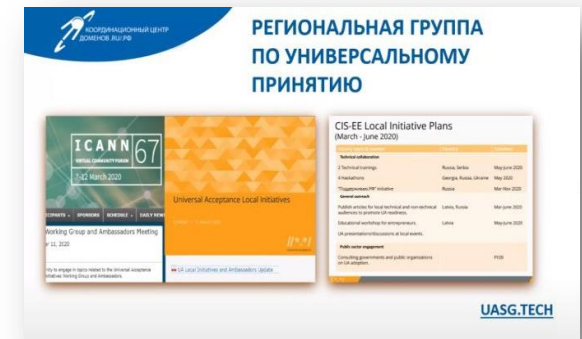
Regional WG set up in April 2019, approved by UASG in December 2019. Local experts from 7 countries: Armenia, Belarus, Georgia, Latvia, Russia, Serbia, Ukraine.

Russian WG has been formed in 2020.

Three Main Directions:

- Technical Collaboration
- Global Outreach
- Public Sector Engagement

**Join and Participate!**





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# Thank you!

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