



Universal Acceptance

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# **Action Plan for Universal Acceptance of Domain Names and Email Addresses**

**FY21: July 2020 - June 2021**

Universal Acceptance Steering Group  
13 August 2020

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Universal Acceptance Steering Group

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## 1 Introduction

Universal Acceptance (UA) is when all domain names and all email addresses work in all software applications. The Universal Acceptance Steering Group (UASG) was formed in 2015 to advocate and enthuse the relevant stakeholders to make their applications UA Ready.

UASG will continue to:

1. Raise awareness of the issue among the relevant stakeholders
2. Help technology and email providers make their tools, systems and services UA Ready by providing documentation and training
3. Encourage businesses and governments to ask their developers and suppliers to provide UA Ready solutions for the benefit of end users
4. Measure progress on UA Readiness

This document provides a strategic and operating plan for the UASG from July 2020 till June 2021 (FY21).

## 2 Overview

The vision of the UASG is:

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

The Mission of the UASG is:

**To mobilize the software application developers to get their products UA Ready by providing encouragement, documentation, case studies, tools and measures to deliver the right user experience to the end user**

### 2.1 Geographic Scope

Work on UA requires both working with global and local stakeholders. Beyond reaching out to the global stakeholders, for FY21, UASG intends to continue to support the local stakeholders through existing initiatives in Commonwealth of Independent States and Eastern Europe (CIS-EE: Armenia, Belarus, Georgia, Latvia, Russia, Serbia and Ukraine) and India and support additional ones in China



and Thailand. UASG will also continue to consider other geographies where there's been local interest or where there is need to engage further. This includes working in Africa and North America.

## 2.2 Measures of Success

UASG will keep developing the two separate measures of success:

- Global indicators, and
- Progress with the stakeholders

UASG will continue to measure and publish UA Readiness annually.

### 2.2.1 Global Indicators

The current tentative list of indicators includes the following:

1. Extent of UA Ready support in technology, including Social Media, Content Management Systems, Programming Languages, etc.
2. Percentage of top websites (by geography/industry) that accept a wide range of example addresses, as a basic measure of UA Readiness.
3. Email related software and services supporting a wide range of example addresses.
4. Email deployments supporting a wide range of example addresses.

### 2.2.2 Progress with Stakeholders

The progress with stakeholders can be measured against the progress markers in Section 3.

## 2.3 Working Groups and Stakeholders

UASG has organized itself in working groups focused on different aspects of the work identified and addressing the various stakeholders in the community. The stakeholders and UASG working groups are identified here and discussed in more detail in subsequent sections.

### 2.3.1 Stakeholders

The UASG working groups will be working to reach out to a number of stakeholders (external to the UASG) to promote UA Readiness. These stakeholders will include the following:



1. **Technology Enablers** - Organizations producing relevant standards and best current practices and providers of software programming languages, tools and frameworks.
2. **Technology Developers** - Organizations and individuals developing and deploying online applications and services using the programming languages, tools and frameworks.
3. **Email Software and Service Providers**
  - a. **Email Software Providers** - Organizations and individuals providing the different applications, tools and utilities for the email ecosystem.
  - b. **Email Service Providers** - Organizations and individuals providing services for the email ecosystem.
4. **Email (and System) Administrators** - Organizations and individuals deploying and administering email related software and services.
5. **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.

The following section identifies UASG stakeholders, expected outcomes from UASG efforts with those stakeholders and measures to assess progress and achievement.

### 2.3.2 Working Groups

The UASG will continue to be organized into the following working groups (WGs). The global groups will work closely with the geographically focused group for local delivery.

#### 2.3.2.1 Global Working Groups

- A. **UA Technology WG**
- B. **UA Email Address Internationalization (EAI) WG**
- C. **UA Measurements WG**
- D. **UA Communications WG**

#### 2.3.2.2 Geographically Focused Working Groups

- E. **UA Local Initiatives WG**
- F. **UA Ambassadors WG**



The geographically focused local initiatives and Ambassadors will be supported in close collaboration with ICANN Global Stakeholder Engagement (GSE) team and local resources.

The working groups will have an explicit set of activities that they will address as part of their efforts. The accomplishment of these groups will be one of the measures of the success of this program. These groups will comprise of volunteers from the community, with oversight from the UASG leadership team, comprising of UASG elected chair and vice chairs, as per the [UASG charter](#).

### 3 Stakeholders

This section provides details of the stakeholders, the outcome aimed for them, and a sequence of how UASG would like to see progress and measures for success. Kindly note that the outcome and progress markers depict longer term-goals and how stakeholders may progress to achieve these goals. It is expected that the stakeholders will make progress on these during the current financial year.

#### 3.1 Technology Enablers

Technical community members from standards bodies (e.g., IETF, W3C, Unicode Consortium, etc.) as well as those who provide programming languages, tools and frameworks (open source or proprietary).

This stakeholder will be managed by the *Technology Working Group*.

##### 3.1.1 Outcomes

1. Relevant technology standards support all domain names and all email addresses.
2. Programming languages, tools and frameworks providers provide proper support to accept, validate, store, process and display domain names and email addresses.



### 3.1.2 Progress Markers (progress by Stakeholders)

1. Becoming familiar with UA issues and limitations in their own standards and technology.
2. Identifying areas that need to be reviewed for their standards and platforms and prioritizing them for remediation (gap analysis).
3. Reviewing and remediating their standards and platforms.
4. Publishing updated standards and libraries for use.
5. Presenting their work on UA Readiness at relevant fora.

### 3.1.3 Measures

1. Technical Standards
  - a. Technical standards and relevant gaps identified.
  - b. Remediation mechanism for addressing these gaps developed.
  - c. Engagement undertaken to address these gaps.
2. Frameworks, Libraries and Tools
  - a. Leading development technologies (Open Source and Proprietary) identified and prioritized for gap analysis to support UA.
  - b. Gap for UA Readiness for these technologies published.
  - c. Engagement undertaken for remediation of these technologies.
  - d. Technologies remediated to support UA.

## 3.2 Technology Developers

Those involved in developing software products and services, and their management, including local, regional and global organizations which provide software applications and services.

This stakeholder group will be managed by the *Local Initiatives Working Group* with input from the *Technology Working Group*.

### 3.2.1 Outcomes

1. Application developers know about UA and its benefits for end users.
2. They are actively developing software which is UA ready in an environment that includes UA Readiness in their architectural roadmaps.
3. They are also engaged in training peers on how to program for UA readiness.



### 3.2.2 Progress Markers (progress by Stakeholders)

1. Becoming aware of UA issues and UA documentation on how to address it.
2. Taking stock of existing inventory of applications for UA remediation.
3. Piloting UA readiness upgrades.
4. Including UA Readiness in procurement processes.
5. Updating methodology for technology development for UA readiness.
6. Designing, developing and testing application for UA readiness.
7. Publishing and presenting UA ready development and testing practices at relevant fora.

### 3.2.3 Measures

1. Training development and dissemination to technology developers (in conjunction with Ambassadors and Local Initiatives).
2. Remediation effort based on the mechanisms finalized.
3. Technology supporting UA (measure to be decided).

## 3.3 Email Software and Service Providers

Providers of open-source and proprietary email applications, tools and services, including ancillary tools and services e.g. for spam.

This stakeholder is managed by the *EAI Working Group*.

### 3.3.1 Outcomes

1. Email and related software and services are able to send to and receive from all email addresses (including EAI) and able to host such email addresses, as needed.
2. Email and related tools and services are accepting, validating, storing, processing and displaying internationalized email addresses.

### 3.3.2 Progress Markers (progress by Stakeholders)

1. Becoming aware of motivation, issues and documentation for addressing EAI.
2. Finding peers for interoperability testing.
3. Upgrading their email systems and services to be EAI Ready.
4. Publishing EAI ready practices at relevant fora.



### 3.3.3 Measures

1. EAI Readiness of email related software and services.
2. Estimation of market share of EAI supporting tools and services.

## 3.4 Email (and System) Administrators

Those involved in deploying, configuring and administering email related software and services in organizations.

This stakeholder is managed by the *Local Initiatives Working Group* with input from the *EAI Working Group*.

### 3.4.1 Outcomes

1. Email deployments are updated and configured to send and receive all email addresses including those in local languages and scripts.
2. Email deployments are supporting email addresses in local languages, as needed

### 3.4.2 Progress Markers (progress by Stakeholders)

1. Becoming aware of motivation, issues and documentation for UA.
2. Participating in training to understand the issues and solutions for EAI.
3. Finding peers for interoperability testing.
4. Upgrading email deployments to be EAI Ready.
5. Presenting EAI deployment practices at relevant fora.

### 3.4.3 Measures

1. Training development and dissemination to email administrators (in conjunction with Ambassadors and Local Initiatives).
2. Number of email servers on the Internet announcing EAI support.
3. Estimation of EAI addresses in use (measure to be investigated).

## 3.5 Government Policy Makers

Senior government officials in technology related ministries or departments, responsible for government technology procurement and e-government services development.



This stakeholder group is managed by the *Local initiatives and their collective Working Group*. The working group, which would comprise of chairs of all Local Initiatives, may support developing overall messaging, whereas each local initiative will undertake the outreach to the local government officials.

### 3.5.1 Outcomes

1. Policy makers understand the issues and need of UA and including these in relevant standards and government's procurement criteria.
2. They are requiring their e-government systems and services to be UA Ready.

### 3.5.2 Progress Markers (progress by Stakeholders)

1. Becoming aware of UA Issues, its need and relevant UA documentation, including procurement guidelines.
2. Assessing UA readiness of existing national accessibility standards.
3. Assessing UA readiness of e-Government systems and services.
4. Updating relevant standards to include UA readiness.
5. Developing procurement requirements for UA readiness.
6. Requiring UA support in procurement.
7. Developing and upgrading e-Gov systems and services to be UA ready.

### 3.5.3 Measures

1. Number of governments engaged.
2. Number of geographies using UA in their tendering clauses.

## 4 UASG Organization and Operations

UASG's working groups are comprised of volunteers from the community. They work towards determining scope and priority of work to address UA. This section provides the details of the working groups, what they are planning to do in FY21 and the expected budget for their work items in case where the work needs to be contracted based on the statements of work defined by the working groups. If the budget for a work item is not specified, it implies that either the explicit budget support is not needed to undertake the work item, or its budget is already covered in another work item. A reference to the [planning document presented](#) during [ICANN68](#) to the community is also provided in the last column.



As the project work by the various WGs is still evolving, the budget allocation is presented as a guideline, with all figures in US dollars. UASG leadership team, in consultation with the WG chairs, will continue to review it quarterly based on the progress of the work by the WGs during the year and may re-allocate funds as needed.

#### 4.1 Technology Working Group

The Technology working group will focus on remediation of standards and technology and developing technical training for this purpose. They focus on Technology Enablers and Technology Developers as the stakeholders.

##### 4.1.1 Tentative Budget

#	Task	Budget (USD)	Ref. from ICANN68
T1	Create UA Readiness Maturity Model	7,000	T3
T2	Review Programming Languages for UA Readiness	25,000	T9
T3	Develop remediation strategy and undertake remediation of technology prioritized	50,000	T10
T4	Prioritize and develop training materials	25,000	T13

##### 4.1.2 Composition

The Technology Working Group has the following suggested composition:

Expertise	Description
IETF standards	Experts fluent in IETF processes and familiar with WGs related to i18n generally and IDNA and EAI specifically.
Internationalization Standards	Experts fluent in internationalization standards, e.g. from W3C, Unicode, and other organizations
Developers using open source platforms	Expertise in open source languages and platforms, with experience in contributing to open source libraries.
Developers using proprietary platforms	Expertise in commercial programming languages and frameworks.



Training	Experienced technical training
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## 4.2 EAI Working Group

This EAI working group will focus on identification of relevant technology and its gap in supporting EAI, remediation of the technology and providing training materials for email software and service providers to promote EAI support and deployment.

### 4.2.1 Tentative Budget

#	Task	Budget (USD)	Ref. from ICANN68
E1	EAI Tools Evaluation	35,000	E2
E2	Keep an inventory of EAI tools and services	0	E3
E3	Get involved with standards fora (e.g. WHATWG)	5,000	E8
E4	Remediation EAI tools and services	35,000	E9
E5	Outreach to technical community at StackOverflow, Serverfault and GitHub with Q/A	15,000	E11

### 4.2.2 Composition

Expertise	Description
EAI Standards	Experienced in operations of relevant standards bodies like IETF and WHATSWG with understanding of the Email, certificate, EAI and other relevant standards and how they were derived
Email Software Provider - MTA & MUA	Experienced developer and operator of very large-scale email platforms - including MTAs and MUA as well as smaller, but still significant niche software and services
Anti-Abuse software developers	Expertise in the development and operation of anti-spam and associated technologies
Email Administrators	Expertise in maintaining email services



### 4.3 Measurement Working Group

This working group will plan, oversee and direct the gap analysis efforts of the UASG for various frameworks and technologies and report on progress on UA readiness.

#### 4.3.1 Tentative Budget

#	Task	Budget (USD)	Ref. from ICANN68
M1	Prepare and publish UA Readiness Annual Report	10,000	M2
M2	Gap analysis of various technologies, including Content Management Systems, Social Media Applications, Browsers, Ecommerce Platforms, Websites, etc.	100,000	M4

#### 4.3.2 Composition

Expertise	Description
Statistics	Experience with the development of technical measurements of achievement with some experience in the Internet measurement useful
Technology	Experience with the technology needed to make applications UA Ready

### 4.4 Communications Working Group

The Communications Working Group will develop communication strategy for the UASG and oversee its execution, in collaboration with other WGs.

#### 4.4.1 Tentative Budget

#	Task	Budget (USD)	Ref. from ICANN68
C1	Develop Comms plan	0	T1
C2	Develop comms for reaching out to Programming language library maintainers	0	T8
C3	Publish case studies with comms partner	25,000	C5
C4	Review and implementation UASG.tech website	5,000	C8
C5	Organize a strategic comms partner	25,000	C12
C6	Maintain social media presence of UASG	0	C17
C7	Translation of relevant reports and case studies	10,000	C20



#### 4.4.2 Composition

Expertise	Description
Marketing	Experience in marketing and public relations focused on the software development community.
Statistics	Experience with the development of technical measurements of achievement with some experience in the Internet measurement useful
Communications	Experience with Public Relations and media management efforts.
Community members	One community member for each geography who's interested in end user concerns and who understands local nuances.

#### 4.5 Local Initiatives Working Group

A local initiative will focus on a particular geography. It will be supported by ICANN's GSE teams, to the extent possible. The Local Initiatives working group will consist of chairs or each local initiative and their nominees.

##### 4.5.1 Tentative Budget

#	Task	Budget (USD)	Ref. from ICANN68
LI	Study UA challenges and solutions in local markets	20,000	E7
LI	Set up Local Initiatives	115,000	L1

##### 4.5.2 Composition

Expertise	Description
Professional Bodies	Representative from an IT Professional association such as a Computer Society or Open Source Society
Academia	From the IT Training Programs with experience with i18n



Government	Representatives from politicians and from senior public officials, ideally from a IT ministry or state ministries or departments offering e-Govt. services. Should also have knowledge of Procurement and Accessibility standards and community engagement.
Internet Industry	Managers from local Internet service providers - Registries, Registrars, ISPs, Hosting companies
IT Industry Media	Journalists with strong interests in IT news
Community	Individuals and organizations representing end-user communities in the context of internet usage
IT Industry	Senior IT Managers or CIOs or Systems Architects from public sector as well as private sector operators

#### 4.6 UASG Governance

The UASG Leadership team consists of an elected Chair and the three Vice-Chairs (as per the charter). The UASG Leadership team is responsible for the overall management of the UASG. It provides guidance, oversight and connections and will be supported by the UASG secretariat and ICANN org for operations of the initiative. The UASG Coordination Working Group consists of the UASG Chair and Vice-Chairs, and Chairs of each Working Group and Local Initiatives. It will also be supported by ICANN org. The UASG Coordination Working Group looks at the different cross-WG coordination matters and makes appropriate recommendations for the consideration of the UA Leadership team.

UASG leadership has based the budget on input from the working groups and estimates on how much funds such work may need. The leadership team has also assumed that the current COVID situation may improve towards the start of 2021 calendar year allowing for face to face interactions. The leadership team realizes



that the estimates and the COVID situation may change and plans to review and re-align the budget accordingly based on quarterly reviews.

UASG has spent considerable time and effort to set up its working groups in FY20. Developing working groups allows UASG to pace up its work by taking multiple tasks in parallel. The steering group is now reviewing its process to make it more efficient to be able to undertake more work.

UASG leadership has also recommended practicing the following Conflict of Interest (COI) statement for all the Statements of Work (SOW) issued by UASG:

*To help avoid any perceived or actual conflict of interest (COI), UASG leaders, UASG Ambassadors, members holding working group’s leadership positions in the UASG, and any organization(s) affiliated with individuals in these UASG roles, are prohibited from participating in the SOW. In addition, ICANN org COI applies.*

#### 4.6.1 Specific Budget for UASG Operations

#	Task	Budget (USD)	Ref. from ICANN68
A1	Registration of domain names for testing	2,000	T2
A2	Host UASG.tech website	5,000	C9
A3	Design and print comms materials	5,000	C11
A4	Support for engagement for global and regional IGFs, etc.	15,000	C14
A5	Manage a calendar of events for use by UASG	0	C16
A6	Support UA Ambassadors' outreach	30,000	A1

#### 4.7 Financial Summary

(all figures in US dollars)

Technology	\$107,000
EAI	\$90,000
Measurement	\$110,000
Communications	\$65,000



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Local Initiatives	\$135,000
Administration	\$57,000
<b>Total</b>	<b>\$564,000</b>