

Universal Acceptance in Europe

A Change Management Perspective



Building an Inclusive Digital Future for Every Language, Every Script, Every User

ICANN 86 NextGen Presentation:

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WHAT IS UNIVERSAL ACCEPTANCE?

The Principle

Every valid domain name and email address, regardless of language, script, or length, must work seamlessly across all Internet-enabled systems, applications, and devices.



Multilingual Domain Names

IDNs in Arabic, Chinese, Cyrillic, Greek & more



Internationalized Email (EAI)

Mailboxes in native scripts



New gTLDs & Long TLDs

.london .engineering
.भारत .中国 — all accepted

Why It Matters Now

- 1,200+ active gTLDs exist — most systems still reject many of them
- 60+ IDN country-code TLDs delegated, representing 37 languages
- English is only ~57% of online content — and falling
- UA is an ICANN Strategic Priority for FY2026–2030

Beyond ASCII: Building for All Europeans

UA-compliant systems ensure full acceptance of email addresses in all valid Unicode scripts, including non-Latin characters and domains.



LEGACY SYSTEM Not UA-compliant

Only ASCII characters (a-z, A-Z, 0-9, . _ -) are supported in email addresses.

user@例え.jp

Invalid characters detected. Please only use standard letters, numbers, and symbols.

user@Universitätbonn

Invalid characters detected. Please only use standard letters, numbers, and symbols.

UA-READY SYSTEM Unicode-aware & Future-proof

Full support for valid email addresses using all Unicode characters and internationalized domains.

user@例え.jp ✓

✓ Email address accepted.

user@Universitätbonn ✓

✓ Email address accepted.

24

Official EU
Languages

60+

Regional &
Minority Languages

€200M+

EU invested in
digital multilingualism
(last decade)

2030

EU Digital Decade
Digital Language
Equality Target

Digital Sovereignty

EU must own infrastructure & identities in its own languages — not depend on ASCII-only systems.

Cross-Border Services

Single Digital Market requires forms, portals & email to accept all valid European addresses.

Minority & Regional Languages

Catalan, Welsh, Basque, Sorbian users face silent exclusion when systems reject diacritics.

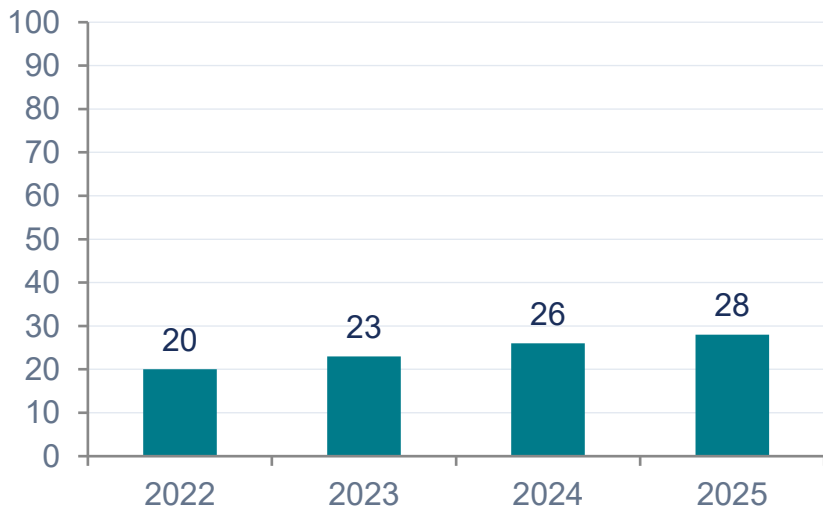
EU Digital Decade 2030

European Language Equality initiative targets full digital language equality — UA is the missing layer.

THE CORE PROBLEM: AN ADOPTION GAP, NOT A TECHNOLOGY GAP

The technology exists. The standards are published. Yet most Internet systems worldwide still fail to accept all valid domain names and email addresses.

EAI-Ready Mail Servers: Slow Progress



Source: ICANN EAI Survey Tool 2022–2025

Why the Gap Persists



Legacy validation logic

Code patterns hardcoded for ASCII-only inputs are rarely revisited



'Good enough' mindset

Majority-Latin-script users feel no friction — no demand signals



Competing IT priorities

UA not in KPIs; deprioritised vs. features with measurable business return

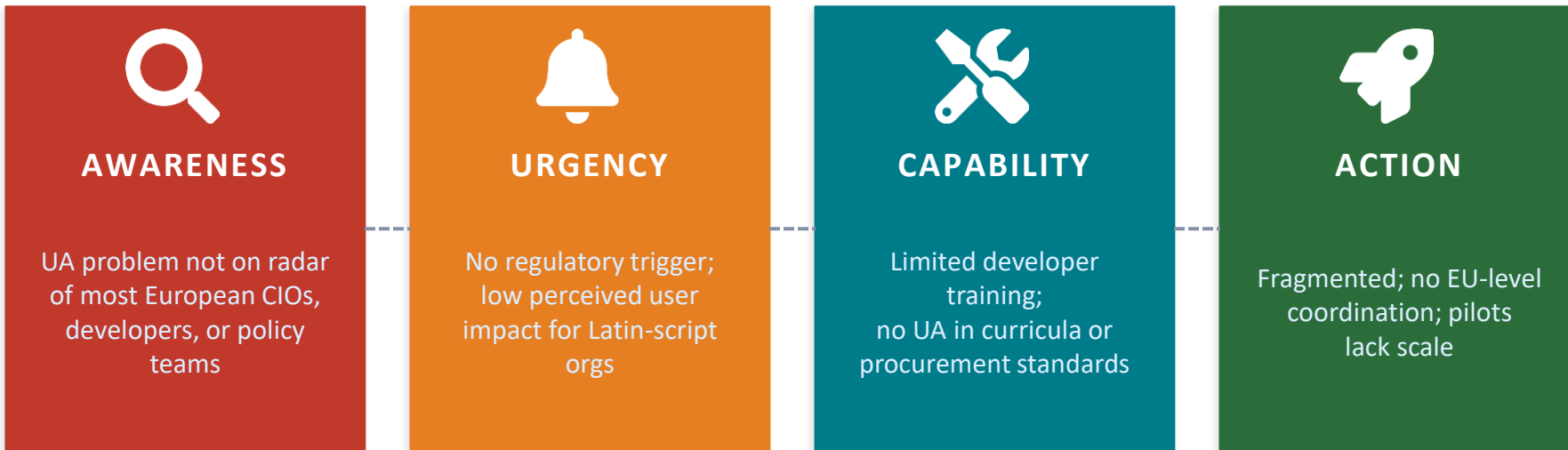


Invisible user harm

Affected users abandon silently rather than reporting errors

UA THROUGH A CHANGE MANAGEMENT LENS

UA adoption mirrors enterprise-wide digital transformation and requires a similar structured approach to change management.



Change Management Diagnosis: Most European organizations remain caught between awareness and urgency. What is missing is a clear policy mandate, similar to the role GDPR played in advancing data protection.

STAKEHOLDER MAP: WHO NEEDS TO ACT?



Governments & Regulators

Barriers: No regulatory pressure on UA; excluded from digital agendas

Lever: Embed UA in EU Digital Single Market regulation; link to Digital Decade targets



Private Sector & Tech Industry

Barriers: ROI unclear; technical debt; vendor lock-in to ASCII-only stacks

Lever: UA procurement clauses; certification schemes; developer toolkits



Civil Society & Academia

Barriers: Low awareness; no advocacy coalitions; UA absent from CS curricula

Lever: ICANN UA Curriculum Program; local UA Day events



Internet Infrastructure Operators

Barriers: Inconsistent EAI support across registrars, registries, DNS providers

Lever: ICANN UA Roadmap for Registries/Registrars; EAI Self-Certification Guide

EUROPE'S OWN PLAYBOOK: HOW THE EU ACCESSIBILITY ACT DRIVES DIGITAL INCLUSION

The EU Accessibility Act, effective from June 2025, demonstrates how coordinated regulation can scale digital inclusion across Europe. Universal Acceptance now needs a similar policy framework.

✓ EU Accessibility Act — What Worked

Clear legal obligation

Mandatory accessibility requirements for products & digital services across 27 member states from June 2025

Broad sectoral scope

Applies to banking, e-commerce, transport, telecoms, e-books — not just government portals

Market access lever

Non-compliant products cannot be sold in the EU — turns compliance into competitive necessity

Standards-driven

Links to EN 301 549 standard; removes ambiguity about what compliance means technically

SME transition time

5-year implementation runway (2020–2025) gave organisations time to plan & adapt

✗ UA Today — What's Missing

No legal obligation

UA is a voluntary best practice — organisations can ignore it without penalty

Excluded from sector scope

DSA, DMA, Digital Decade, EAA — none explicitly require UA compliance

No market access lever

Non-UA-ready systems face zero commercial consequences in the EU today

No harmonised standard

No EU equivalent of EN 301 549 for UA — ambiguity slows adoption

No transition roadmap

Without a deadline or mandate, organisations have no urgency to plan

Key Insight: The EAA shows Europe can mandate digital inclusion through market access rules and technical standards. A 'UA-Readiness Directive' or an amendment to the Digital Decade Policy Programme could replicate this model for Universal Acceptance.

WHAT THE DATA TELLS US: EUROPE'S UA OPPORTUNITY

88%

of European ccTLDs already support IDNs — highest rate globally (vs. 87% Asia, 68% Americas)

Supply is there. Demand & UA-readiness must follow.

1.2%

of all domain names worldwide are IDNs — despite 88% ccTLD support in Europe alone

A stark supply-demand gap: infrastructure ready, systems not.

39%

average acceptance rate for IDN email addresses across e-commerce platforms tested globally (Radix 2024)

Most online stores still cannot process a non-Latin mailbox.

2.5/5

End-user IDN awareness score given by European ccTLD registries themselves, highlighting a critical knowledge gap.

Even registries acknowledge: users don't know what's possible.

The data reveals a 'ready but not used' paradox: Europe has the highest IDN infrastructure support in the world, yet system-level UA gaps mean users cannot reliably exercise that right. Closing this gap is Europe's to lead.

SOLVING THE UA ADOPTION CHALLENGE: KOTTER'S 8-STEP MODEL APPLIED TO EUROPE

Kotter's proven framework for large-scale change aligns closely with the UA adoption journey and highlights where Europe needs to take action.

PHASE 1 — BUILD THE CONDITIONS FOR CHANGE

1 CREATE URGENCY

Quantify UA exclusion across EU e-gov portals; publish a European UA Readiness Index annually

2 BUILD COALITION

Form European UA Coalition: EU Commission + ICANN + EURid + national NICs + civil society

3 FORM THE VISION

Define 'UA-Ready Europe 2030': 100% of EU public digital services UA-compliant by 2030

4 COMMUNICATE WIDELY

EU-level awareness campaign; UA in Digital Compass reporting; CIO briefings in all 27 member states

PHASE 2 — EXECUTE & SUSTAIN THE CHANGE

5 REMOVE BARRIERS

Embed UA in EU procurement criteria; fund open-source UA testing tools; update developer curricula

6 GENERATE EARLY WINS

Pilot UA compliance in 5 member state portals by 2027; publish results as EU proof of concept

7 SUSTAIN MOMENTUM

Expand to private sector via EAA-style DSA amendment; annual UA Day with EU institutional backing

8 ANCHOR IN CULTURE

UA compliance becomes CE-mark equivalent for digital services; embedded in EU digital skills passport

From Technical Issue to Strategic Inclusion



A digital inclusion strategy — 24 official EU languages deserve full Internet access



A multilingual internet enabler — UA is the infrastructure layer beneath language equality



A governance challenge — technical readiness requires policy mandate and stakeholder alignment



A competitive advantage — UA-ready organisations can serve the next billion Internet users

Europe proved with GDPR that it can lead digital governance at global scale. Now is the time to do the same for a truly inclusive, multilingual Internet.

Thank you

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