# The Challenge of Marketing IDN Email

**TLDCon 2016– Tbilisi, Georgia**
**8th September, 2016**

**Presented by:**
**Michaela Cruden**
**Director, Business Development - Europe**
**mcruden@afilias.info**

Afilias SM

# Disclaimer…

- I'm **NOT** an engineer – so no tough technical questions.
- I'm **NOT** Afilias' expert on this subject – but I'm happy to make a connection.
- And yes… I'm a native English speaker.

# Who is Afilias?

- In the domain business since 2001
  - based out of Ireland, US, Canada, and India.
- Prior to nTLDs, Afilias supported 17 TLDs with over 20 mil domains
  - i.e .info, .org, .in, .me
- Supported over 300 nTLD applications
  - 18 of which were IDN and includes Cyrillic .opr



















# A Brand New Internationalized World

ICANN and the community have been preparing for IDNs for years

- Extensive testing
- ccTLD Fast-track Program
- 116 active nTLD applications for IDNs
- Afilias supports 18

326 million domains registered in the world... Roughly 6.5 million are IDNs

- .PΦ largest IDN TLD at around 894k domains (August 2016)
- Chinese .中国/中國: 380k registrations in its first month in 2010... down to 270 000 in February 2013, but back up again to 353,000 (December 2015)
- The Chinese language does not have a “dot” character
- Korean .한국 (Hangul) domain dropped from 210 000 (December 2011) to 91 000 (December 2012)

Sources: reports from CNNIC, Verisign, EurID.

Afilias SM

## Why Internationalize Domain Names?

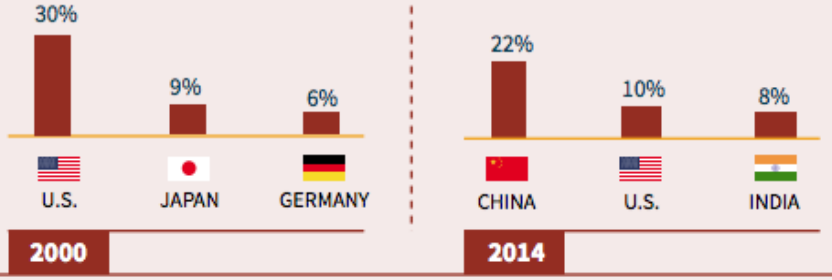
More and more people around the world, once unconnected, are online.


Internationalized Domain Names allow people around the world to access domain names in their local languages.

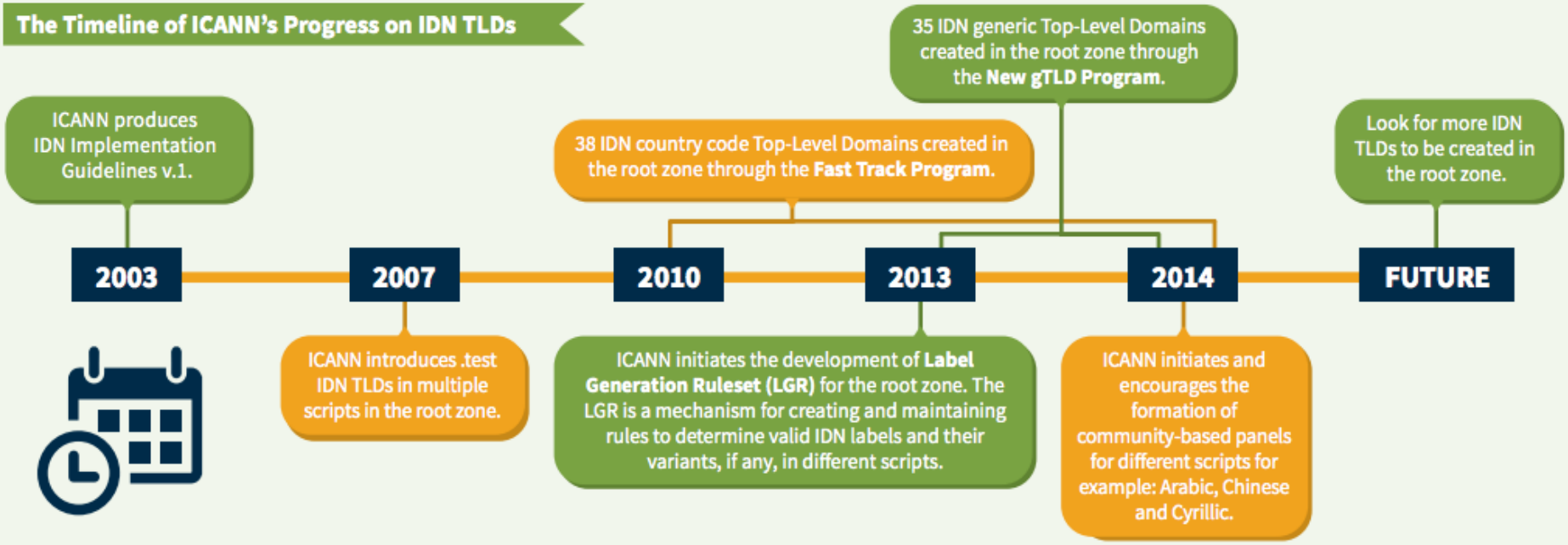
### Number of Internet Users Worldwide***

| 2000 | 2014 | 2020 |
|---|---|---|
| 413M | 2.9B | 5B expected |
| | | more language communities join |

### Top Three Countries by % of Total Global Internet Users***




## The Timeline of ICANN's Progress on IDN TLDs




Source: https://www.icann.org/sites/default/files/assets/idn-access-domain-names-03sep15-en.pdf

Afilias SM

# Afilias' IDN Experience

- 2006 – EAI working group at IETF is created and is co-chaired by Afilias' Joseph Yee.
- 2010 – Afilias/.JO registry collaborate and achieve an email between two completely internationalized email addresses in the Arabic language.
- 2012 - Afilias participates in and contributes to a global test of multilingual IDN email. Coremail announces first official EAI compliant email as a result!
- 2012 - nTLD round starts and Afilias supports 18 IDN applications – including our own Chinese .MOBI and backend for .ORG IDN variants.
- 2015 – ICANN supports/facilitates Universal Acceptance Steering Group community initiative – chaired by Afilias' Ram Mohan.

In short, and for the last 10 years, we've been working towards helping the Internet become a more favourable landscape for navigating in non-English languages.

# Marketing Challenges

**So… if we've been talking about this for so long then why is IDN email still largely unused?**

- Crucial technical, cultural, deployment obstacles
- Poor handling of UX
- Downstream capabilities
- Inconsistent/slow adoption of crucial players

Afilias SM

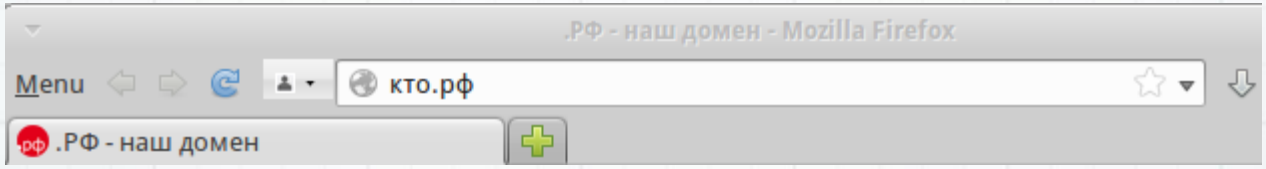
# Crucial Obstacles

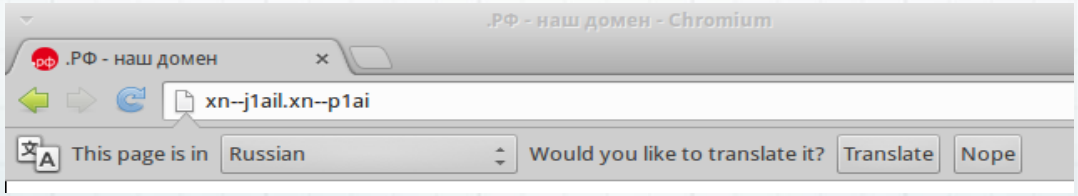
- Fragmentation – Mail client may be able to read IDN email message, but can't reply back.
- Usernames - Whilst the rules around domains are much clearer now… the rules around usernames are not.
- Cultural challenge – What a username looks like and the character included can be a subjective matter.
- Homoglyph concerns – Certain characters can look the same in different scripts, but they aren't. To the naked eye 'r' in ASCII looks the same as 'r' in Cyrillic. This raises security/stability concerns.
- Bi-directional algorithms – When domain/username have different script/direction confusion arises.

Afilias SM

# User Experience

Browsers were (kind of) fixed…. Sometimes you'll still see gibberish or the punycode version.

# Downstream capabilities

- Adoption challenges beyond just sending/receiving emails and browsers.
- We use email addresses as usernames for websites and apps… so think about webforms, websites, links, verification processes…
- IDNs can be problematic for portable devices – paradox of upgrading devices and losing IDN capabilities simultaneously. iOS and Androird are pretty good, but many apps still struggle.
- Some markets have just found ways to work around it – i.e. Prominance of WeChat in China.

Afilias SM

# Beyond the Domain World

Protocols for domain names has been a work in progress for years, but email is just the beginning:

- Only a few service providers support EAI
- On a global scale, Google is the only one (2014)
- For regional providers, it's hard to know and with what standards (again, fragmentation).
- Some countries score higher in terms of IDN readiness than others, but who should bear the burden of pushing generic mail clients to support EAI?

Afilias SM

# The IDN Catch 22

- **Poor user experience means low uptake**
- **Low uptake means low user awareness**
- **Low awareness means less incentive to fix UX**

*Not too dissimilar to DNSSEC & IPv6* - A noble cause with very minimal market demand.

- Invisible = no perceived value for users
- Someone has to pay for development and support
- ICANN demands nTLDs and Registrars to be DNSSEC compliant, but can you impose actual usage?

Afilias SM

# Bridging the Gap

At the global level we still very much in a phase of transition between old ASCII habits and adapting to IDN standards.

***So…. what do we do until we're all on the same page?***

We need to bridge the gap so that legacy systems and new systems can communicate despite functioning with different standards. The gateway between old/new is crucial in helping early adopters cope with the fear of mis-delivery.

Afilias has built a system with an additional server that's designed as a 'gateway' between two mail standards.

Afilias℠

# The Quest for Universal Acceptance

We are at stage in which the problem isn't the ability to pitch IDN email to the target market in isolation, BUT to convince those that aren't the target market to upgrade their system to be compliant as well…

This means:

- Reduce the operational obstacles – i.e define policy for core issues such as username parameters.
- Develop a concise strategy for information gathering/sharing – collect data and develop measures, materials, and standards.
- Identify collaborative opportunities in new communities – this is beyond just the tech world.

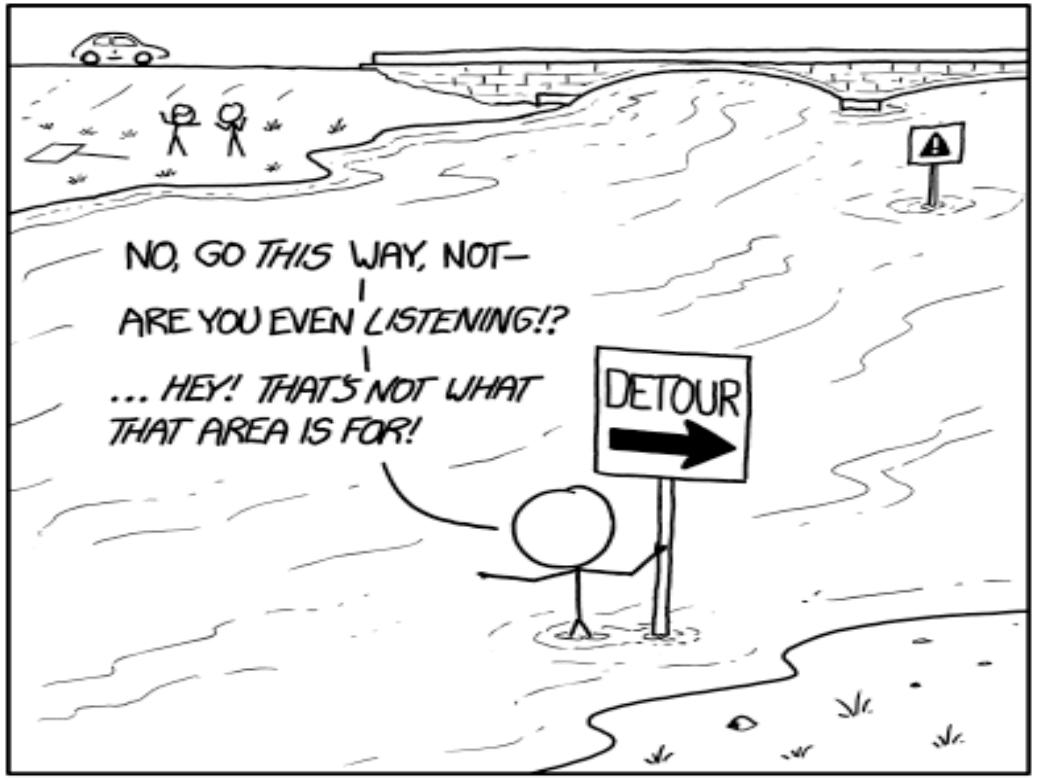
Source: https://uasg.tech - You can participate!!

Afilias SM

# Long story short…

The matter of IDNs and their streamlined usability is still **NOT** about **marketing** a product, but more so about trying to help people find a solution to a problem.

# Final Thought…. ☺




WATCHING THE UNICODE PEOPLE TRY TO GOVERN THE INFINITE CHAOS OF HUMAN LANGUAGE WITH CONSISTENT TECHNICAL STANDARDS IS LIKE WATCHING HIGHWAY ENGINEERS TRY TO STEER A RIVER USING TRAFFIC SIGNS.

Source: https://xkcd.com/1726/

Afilias SM

# Thank you!
# спасибо

Afilias SM