

# Digital Identity and Trust Frameworks

by

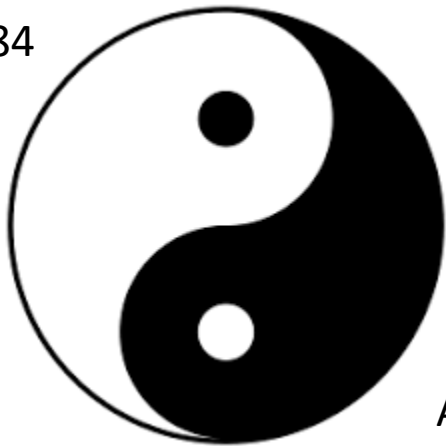
Michael Palage

# Important Foundation Documents

- The International Telecommunication Union (ITU) has published a Digital Identity Roadmap Guide, see [https://www.itu.int/en/ITU-D/ICT-Applications/Documents/Guides/Digital Identity Roadmap Guide-2018-E.pdf](https://www.itu.int/en/ITU-D/ICT-Applications/Documents/Guides/Digital%20Identity%20Roadmap%20Guide-2018-E.pdf)
- The Universal Postal Union (UPU) S68 a proposed standard on Postal Identity Management Trust Framework standard.
- Australian Digital Transformative Agency (DTA), see <https://www.dta.gov.au/our-projects/digital-identity>
- IGF 2018 - Day 2 - WS382 The Future of Digital Identity and Human Rights <https://www.intgovforum.org/multilingual/content/igf-2018-day-2-salle-vi-ws382-the-future-of-digital-identity-and-human-rights>
- InfoNetworks response to the UNOPS RFI in connection with blockchain, proposing a digital identity governance framework, see [https://www.infonetworks.global/papers/InfoNetworks UNOPS RFI submission.pdf](https://www.infonetworks.global/papers/InfoNetworks_UNOPS_RFI_submission.pdf)

# Competing Tensions in Digital Identity Trust Frameworks

Big Brother/1984



Anonymity

- The strength of any cybersecurity chain is determined by its weakest link
- Digital Identity and Trust Frameworks are often the weakest link

# Proposed Trust Frame Principles

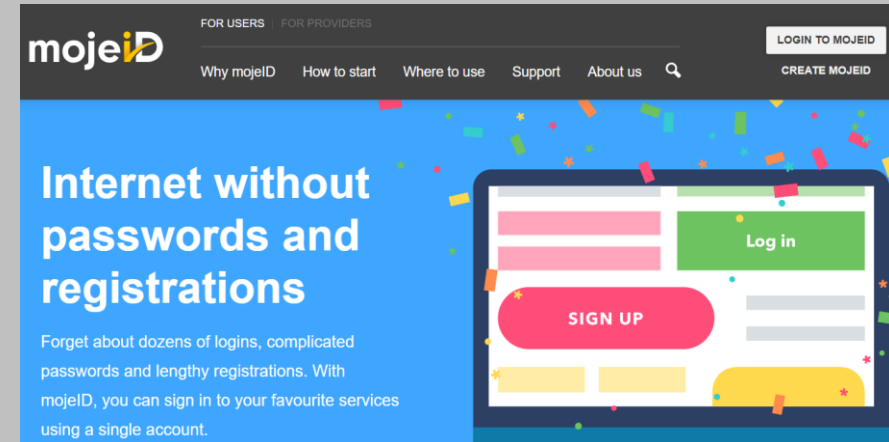
- There needs to be strong public-private partnership
- There should be a free market of Identity Providers from which natural and legal persons are free to choose
- The public sector should establish minimum baseline requirements for Identity Providers to meet
- Any digital identity credentials should be interoperable across national borders

# Increasing Use of Digital Identities as Part of Domain Name Registration Process

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# CZECH REPUBLIC -.CZ

- CZ.NIC has incorporated the use of a digital identity into their domain name registration process to protect personally identifiable information.



## MOJEID

MojeiD is a new service based on the OpenID principle thanks to which you can subscribe to various websites where you can see the icon mojeiD or OpenID. You change data by yourself in your mojeiD account which brings a benefit to the domain owners because mojeiD can be linked as a contact person to domains.

You can find out more at [www.mojeid.cz](http://www.mojeid.cz).

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# CZECH REPUBLIC -.CZ (Whois Output)



## DOMAIN NAME DETAILS

Domain name	mlich.cz
Registered since	2012-02-22
Last update date	2013-12-03
Expiration date	2019-02-22
Holder	<a href="#">JOZEF-MLICH</a> Jozef Mlich
Administrative contact	<a href="#">JOZEF-MLICH</a> Jozef Mlich
Sponsoring registrar	<a href="#">REG-WEB4U</a> Web4U s.r.o. since 22 Feb 2012, 17:22
Secured by <a href="#">DNSSEC</a>	
Status	

Name server set	WEB4U
Name server	ns2.web4u.cz 77.93.218.150 2a01:430:134::150
Name server	ns.web4u.cz 81.91.87.50 2001:1568::7050
Technical contact	<a href="#">WEB4U</a> Web4U s.r.o.
Sponsoring registrar	<a href="#">REG-WEB4U</a> Web4U s.r.o. since 3 Oct 2007, 14:53
Status	Has relation to other records in the registry

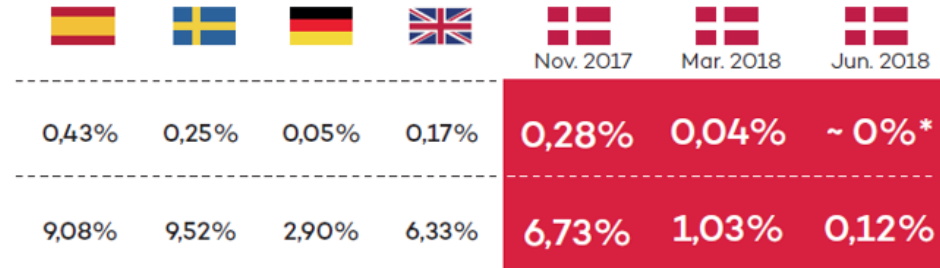
Key set	WEB4U
DNS Key	Flags: <a href="#">257</a> (ZONE, Secure Entry Point (SEP)) Protocol: <a href="#">3</a> (DNSSEC) Algorithm: <a href="#">14</a> (ECDSA Curve P-384 with SHA-384) Key: <pre>AF21F5W1DeBctgwbHp95WQvk10nGSr4wkThqLMVY Q12peN5Eu/QeqN01K+pdMK55PWug2GN0Qd6+f7Kw 66cC130mhvO1ZYaV5511NFU1311pYbIPgKwxLNMv KlweaeB58</pre>
Technical contact	<a href="#">WEB4U</a> Web4U s.r.o.
Sponsoring registrar	<a href="#">REG-WEB4U</a> Web4U s.r.o. since 23 Sep 2009, 14:06
Status	Has relation to other records in the registry

 [Verified record statement](#)

Handle	JOZEF-MLICH
Organization	
Name	Jozef Mlich
VAT number	<i>Not disclosed</i>
Identification type	<i>Not disclosed</i>
Identification data	<i>Not disclosed</i>
Email	<i>Not disclosed</i>
Notify e-mail	<i>Not disclosed</i>
Phone	<i>Not disclosed</i>
Fax	<i>Not disclosed</i>
Registered since	2013-12-03
Created by registrar	<a href="#">REG-MOJEID</a> MojeID
Last update	2018-05-15
Last transfer	
Address	<i>Not disclosed</i>
Sponsoring registrar	<a href="#">REG-MOJEID</a> MojeID
Contact verification status	 Contact is identified  Contact is conditionally identified
Status	MojeID contact Has relation to other records in the registry Update forbidden Sponsoring registrar change forbidden Deletion forbidden

# Emerging Trends in Digital Identity Usage

- Estonia (.EE) and Denmark (.DK) have also incorporated the use of digital identifiers into the domain name registration process
- Denmark use resulted in a substantial decrease in the instances of online intellectual property infringement



- The European Union has enacted a new regulation (eIDAS) establishing a set of standards for electronic identification and trust services for electronic transactions



# Emerging Trends in Digital Identity Usage

- CENTR is the association of European country code top-level domain (ccTLD) registries

## **CENTR is calling for authors!**

2018-11-19 **NEWS**

### **Context**

CENTR will celebrate its 20th Anniversary in 2019 and would like to mark this occasion by publishing a series of articles covering industry research, historical data analysis and articles on the future of technologies such as digital IDs.

Some ideas of themes could be: 20 years of Digital ID; the past, present and future of ccTLDs; ccTLDs and identity; history of industry; statistics on identity / ccTLDs, the evolution of digital ID from a legal perspective. These articles will be published over the course of the year, before all being combined together into one paper, which will be published at the end of 2019. The foremost aim of this paper is to strengthen the industry's reputation, highlight its achievements and increase its visibility.

# Idea

- The League of Arab States with the support of ESCWA and the ITU helped secure the rights to operate the .ARAB TLDs (ASCII & IDN)
- Use the .ARAB TLD as a platform to promote the cross-border use of digital identities in conjunction with regional ccTLD managers
- The digital identity framework would establish credentials for both natural and legal persons, with natural persons being anonymized
- Personally Identifying Information (PII) would be escrowed within each country, with only the anonymized digital credentials being shared cross boarder
- There would be the establishment of due process rules under which the identity of a person could be unmasked to ensure transparency and trust.

Thank You