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How TLS 1.3 adoption (and disposal of SSL) is going

Jan Kopřiva

jan.kopriva@alef.com @jk0pr

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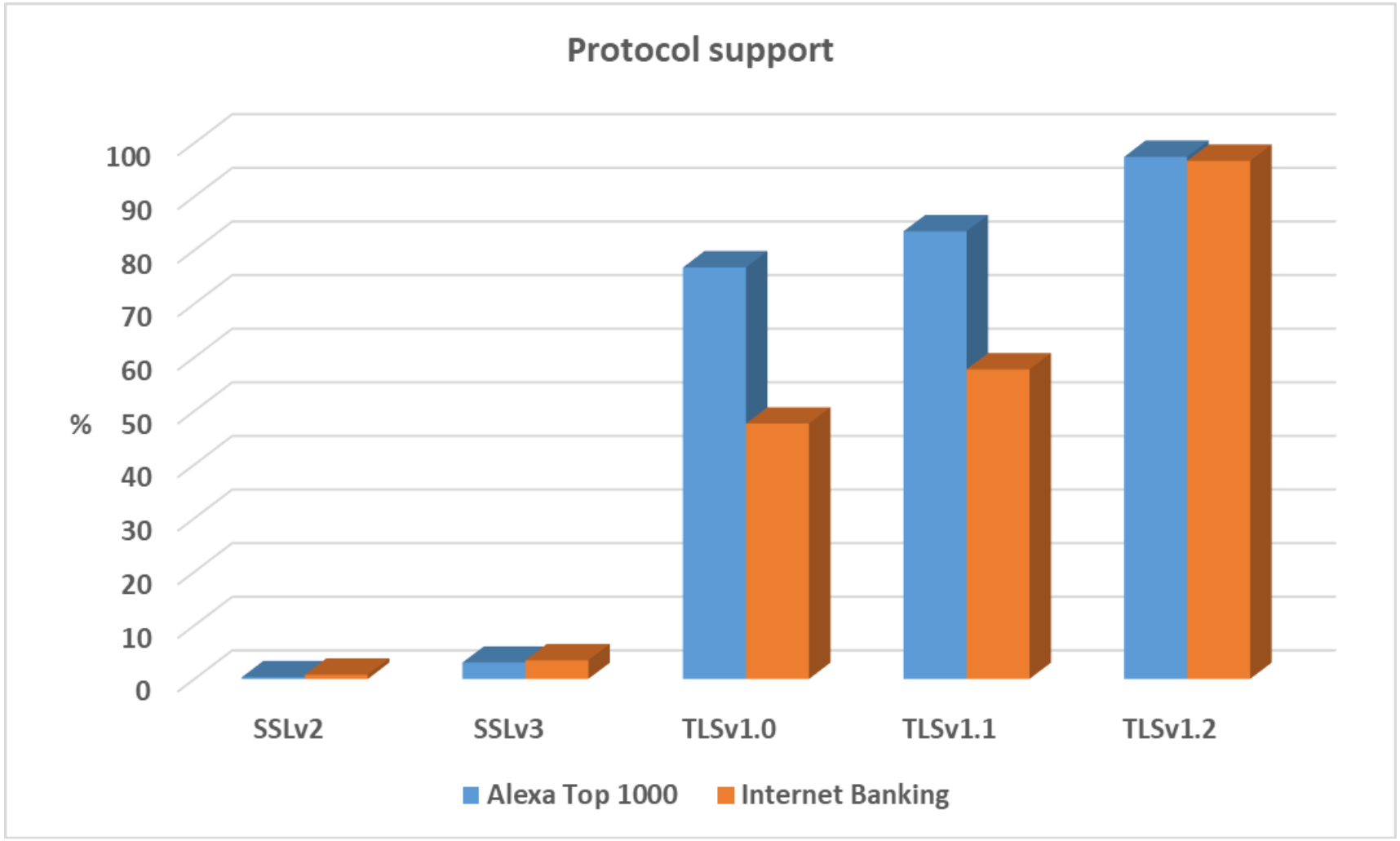
Quick overview of SSL/TLS versions

Protocol	Published	Status
SSL 1.0	Unpublished	Unpublished
SSL 2.0	1995	Deprecated in 2011 (RFC 6176)
SSL 3.0	1996	Deprecated in 2015 (RFC 7568)
TLS 1.0	1999	Deprecated in 2020 (RFC 8996)[8][9][10]
TLS 1.1	2006	Deprecated in 2020 (RFC 8996)[8][9][10]
TLS 1.2	2008	
TLS 1.3	2018	

Source: Wikipedia

Interesting historical data – internet banking 2019



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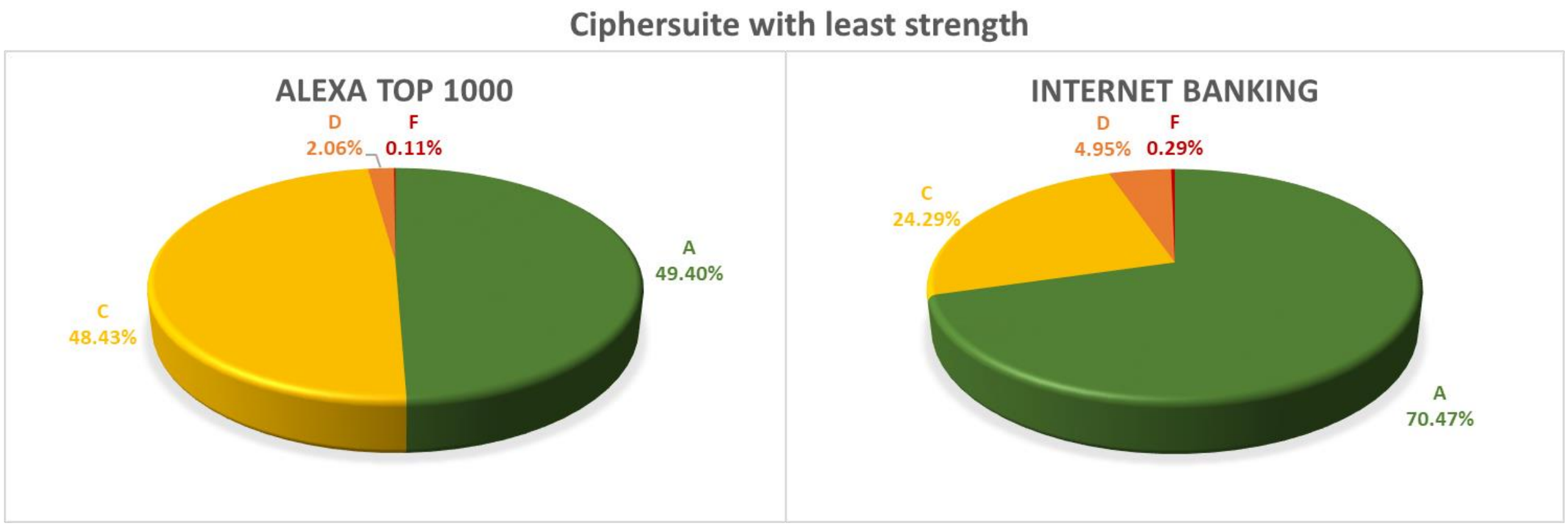
Source: SANS Internet Storm Center

Interesting historical data – internet banking 2019



Source: SANS Internet Storm Center

How does SSL/TLS use look now?

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Source: Shodan

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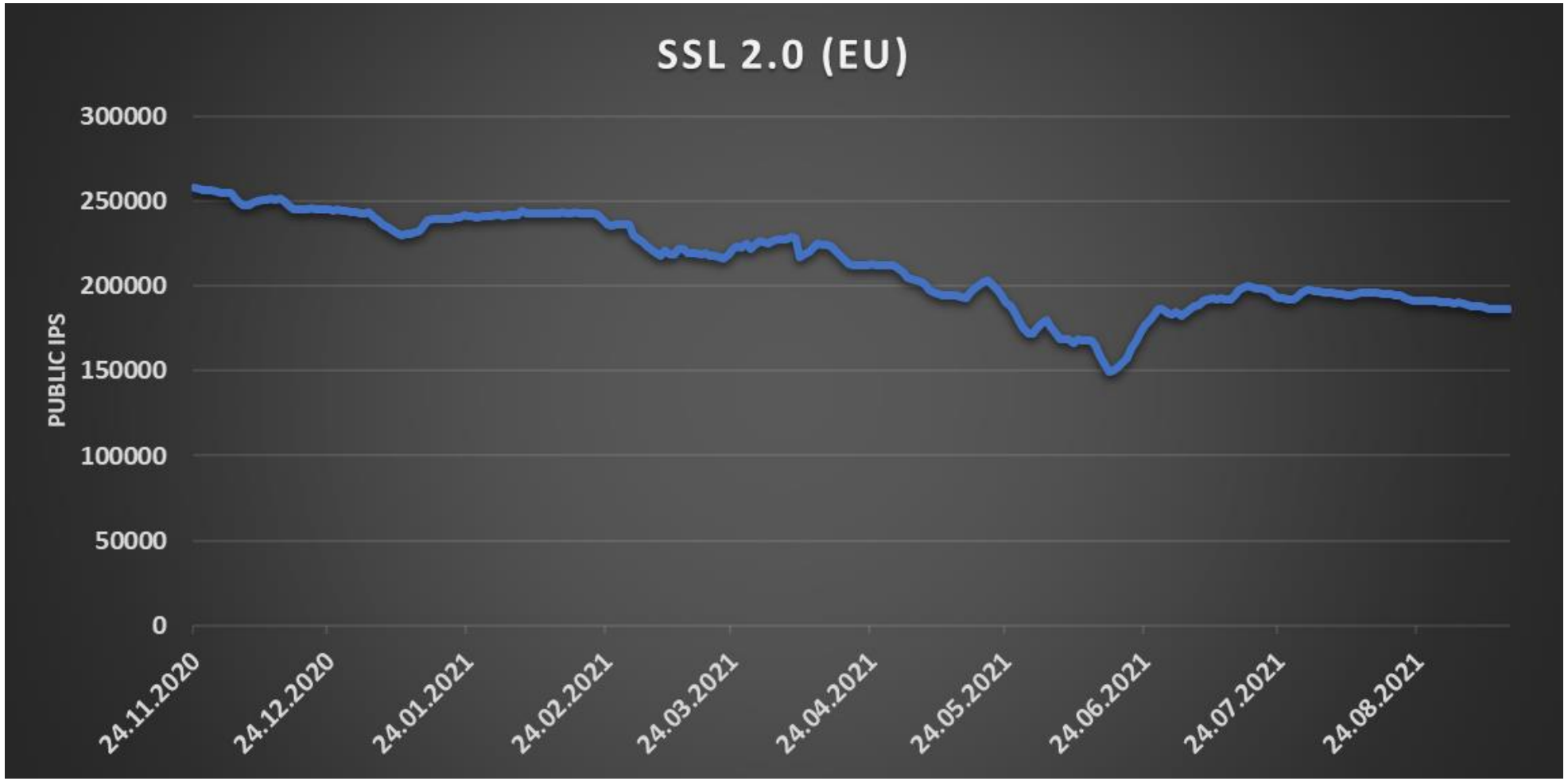

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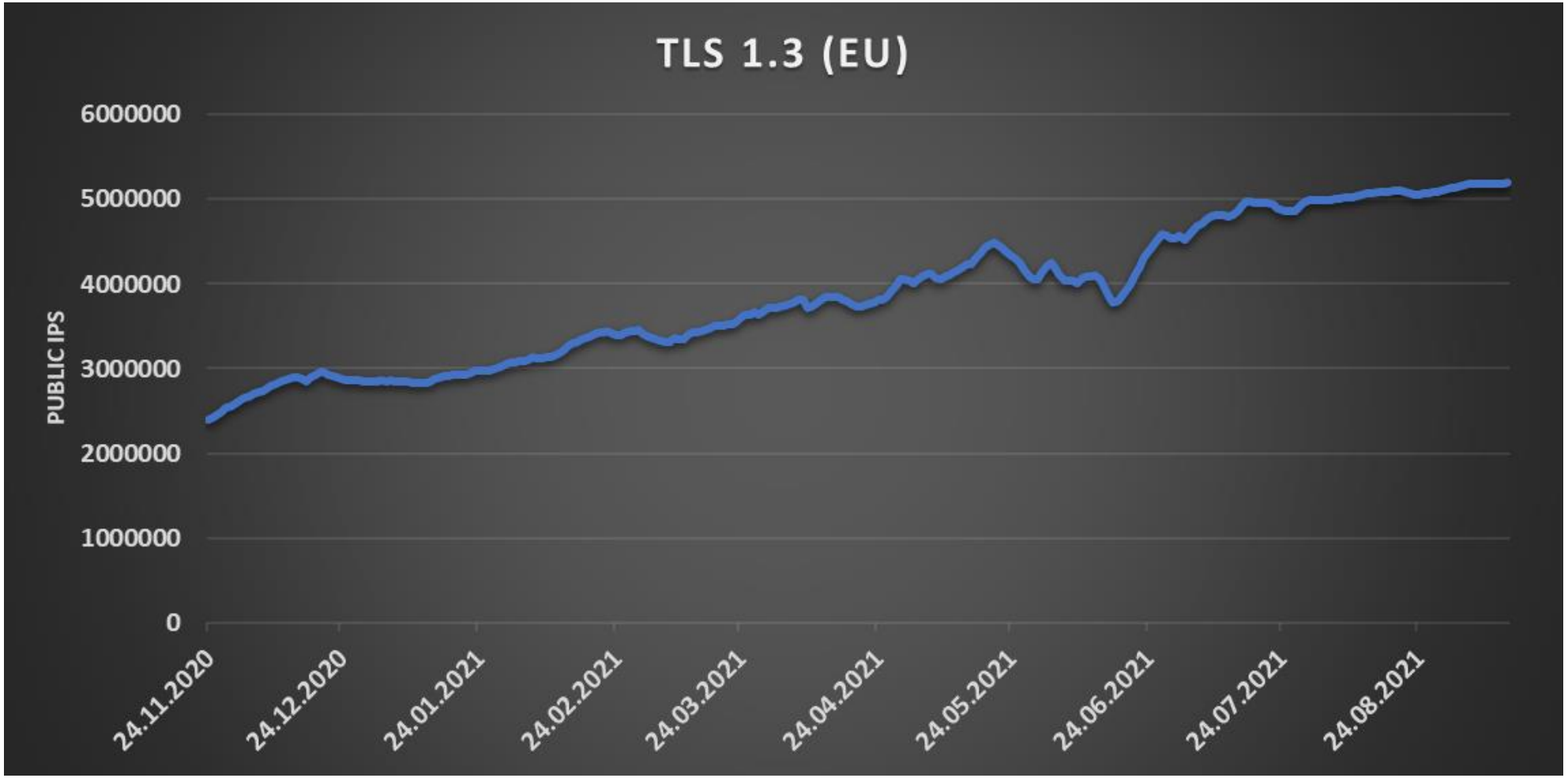

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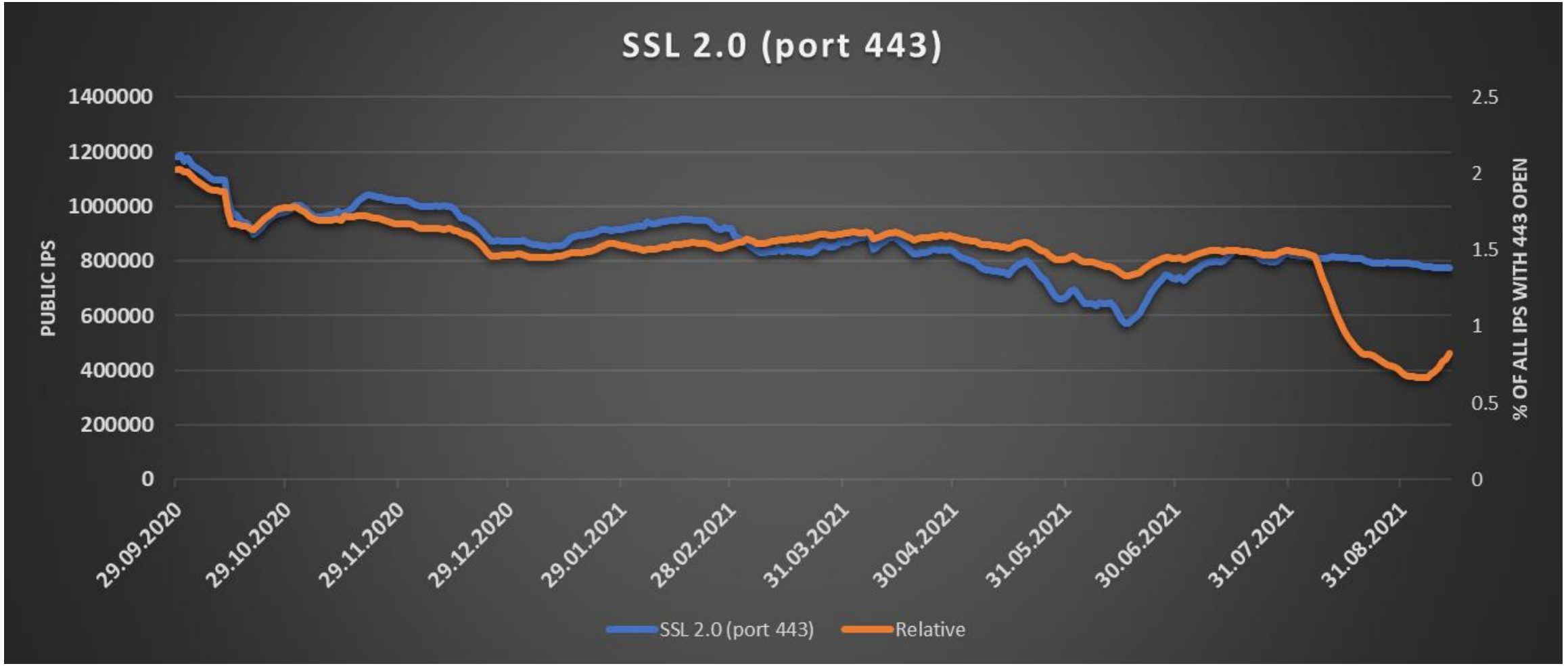
Source: Shodan

SSL/TLS on port 443



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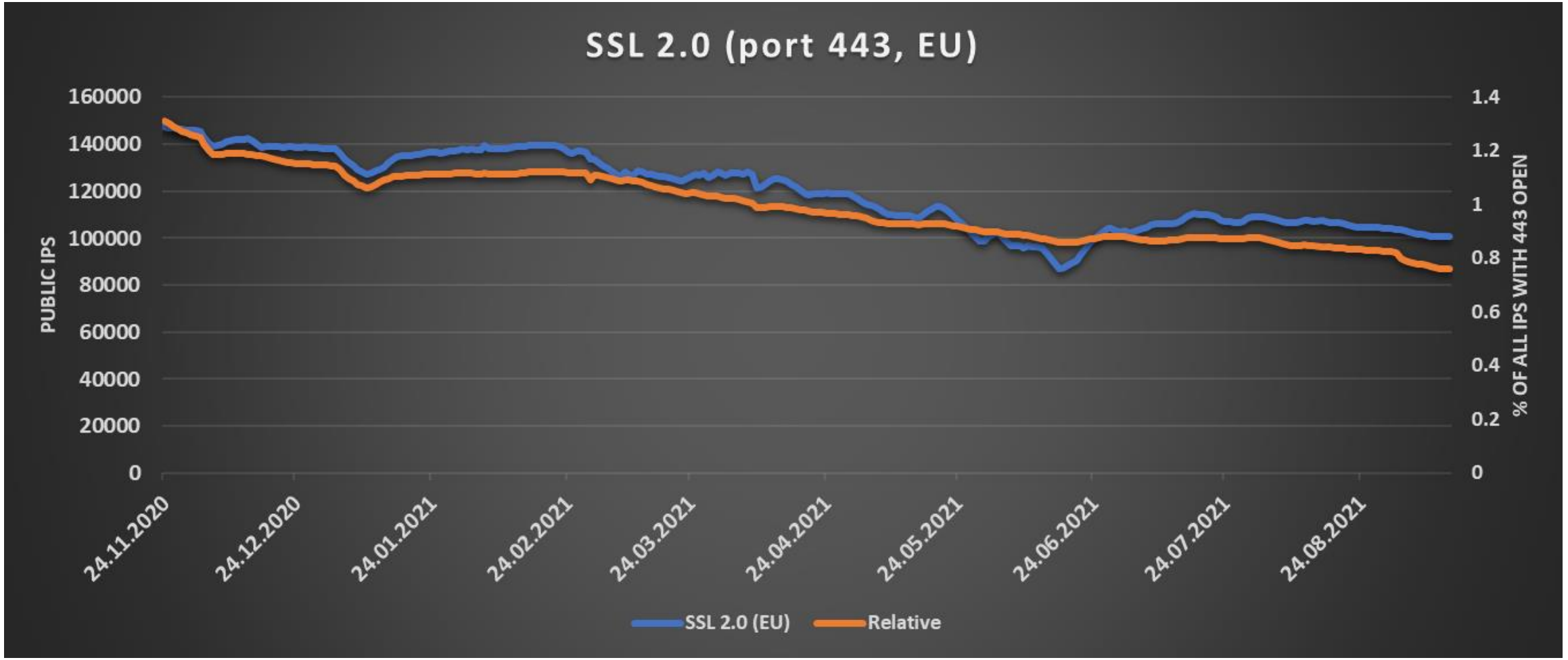
SSL/TLS on port 443



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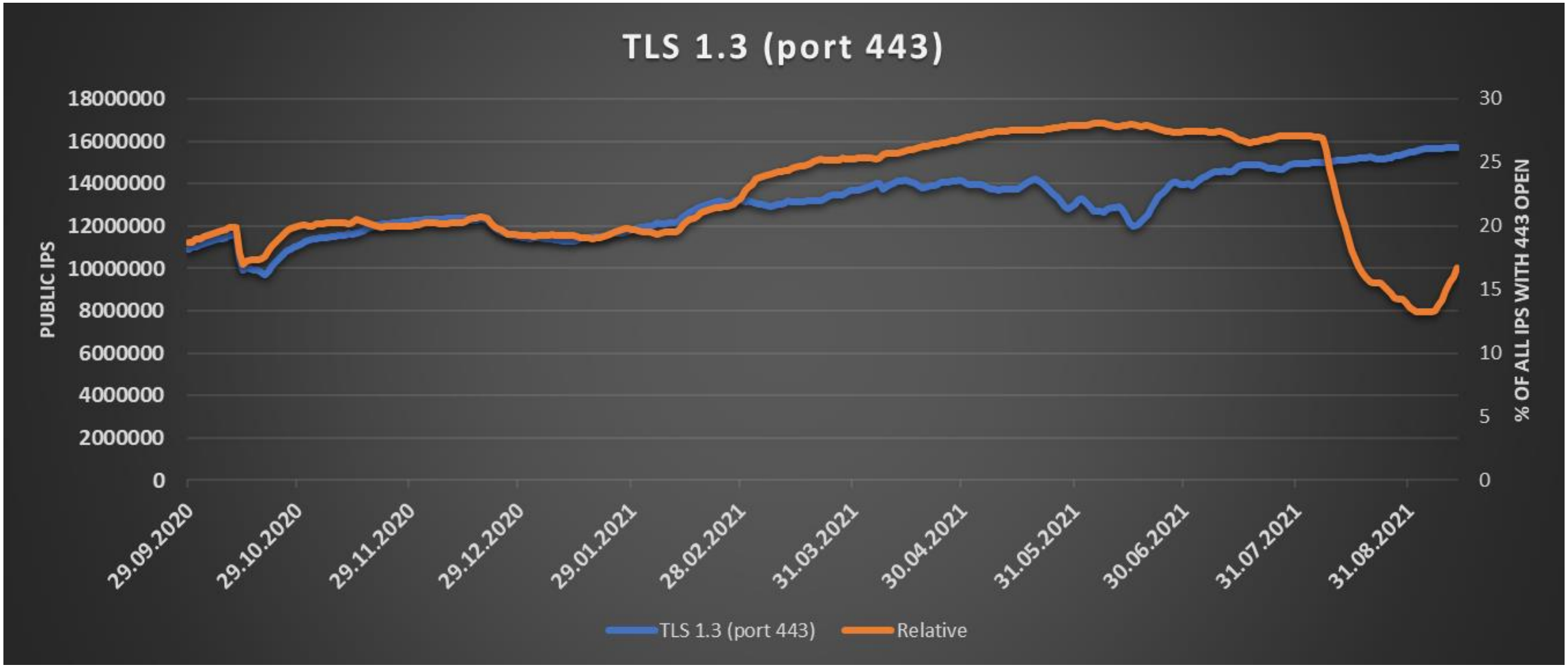
Source: Shodan

SSL/TLS on port 443



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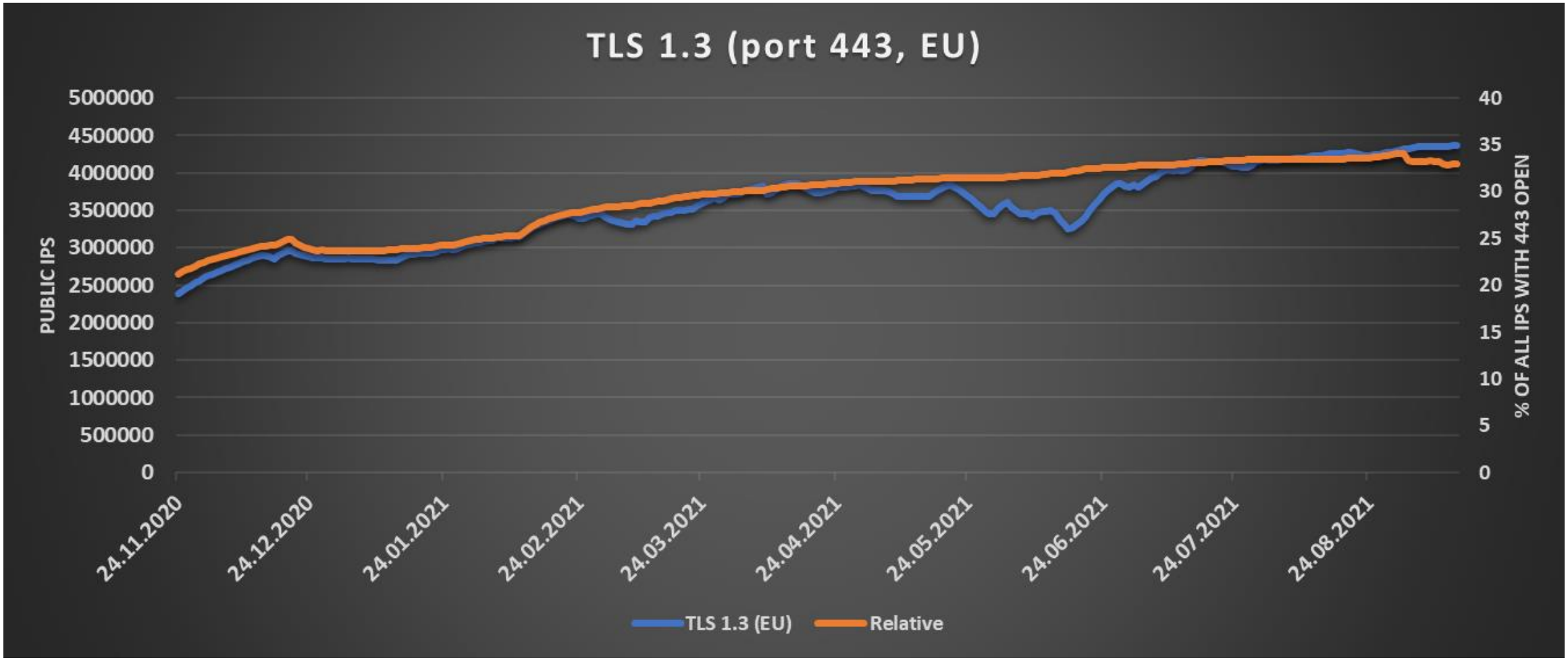
SSL/TLS on port 443



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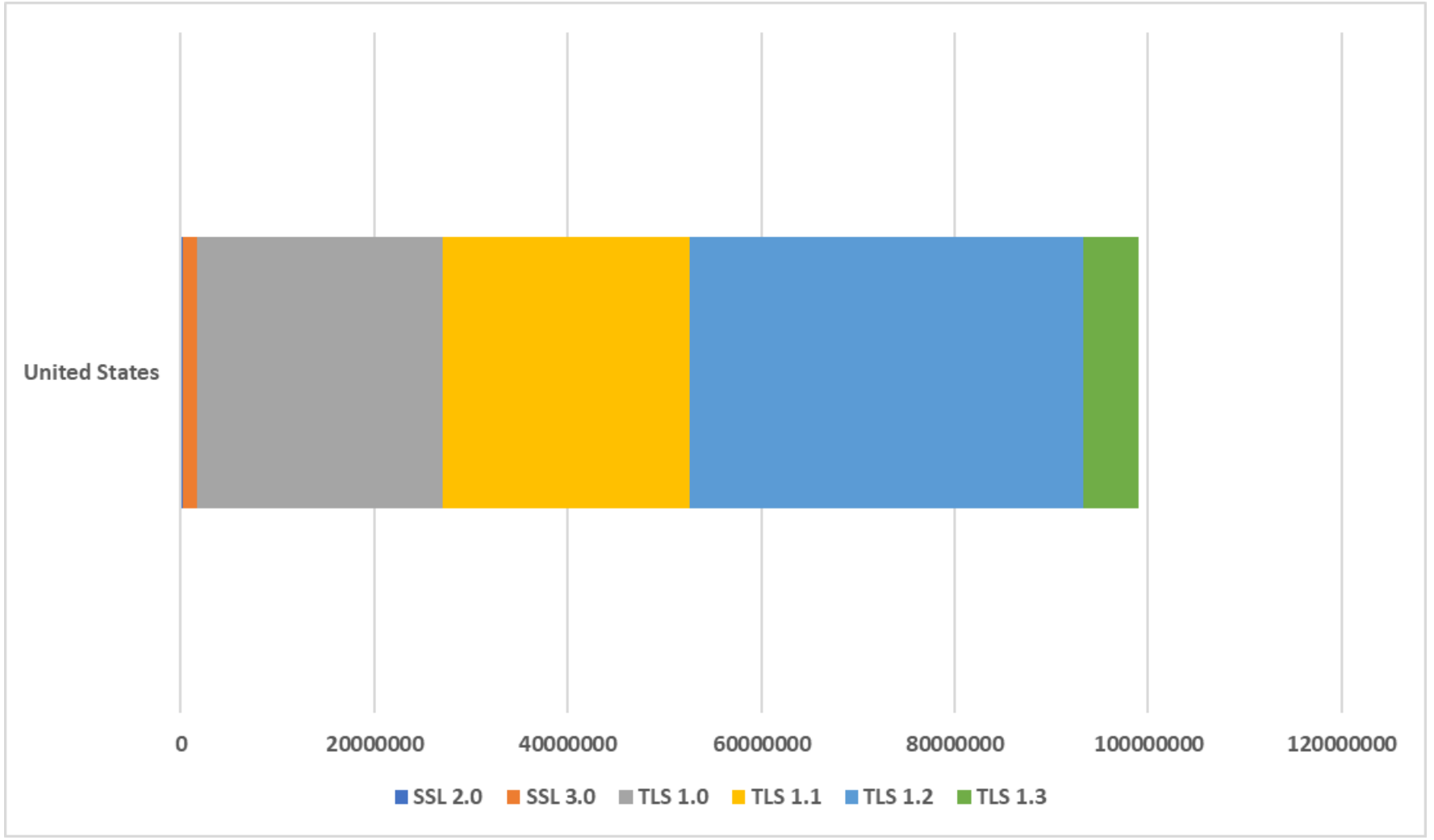
Source: Shodan

Differences between countries



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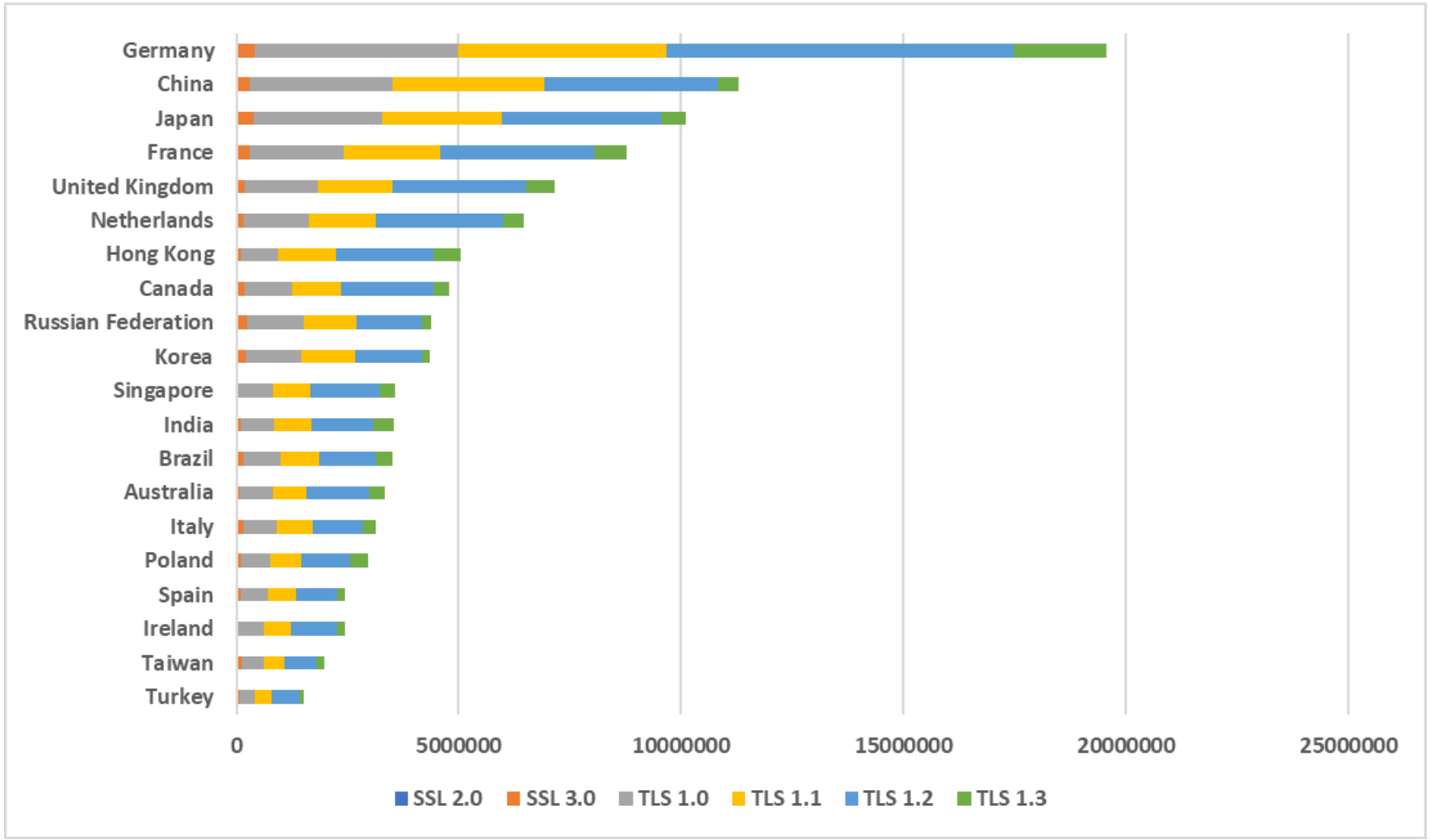
Differences between countries



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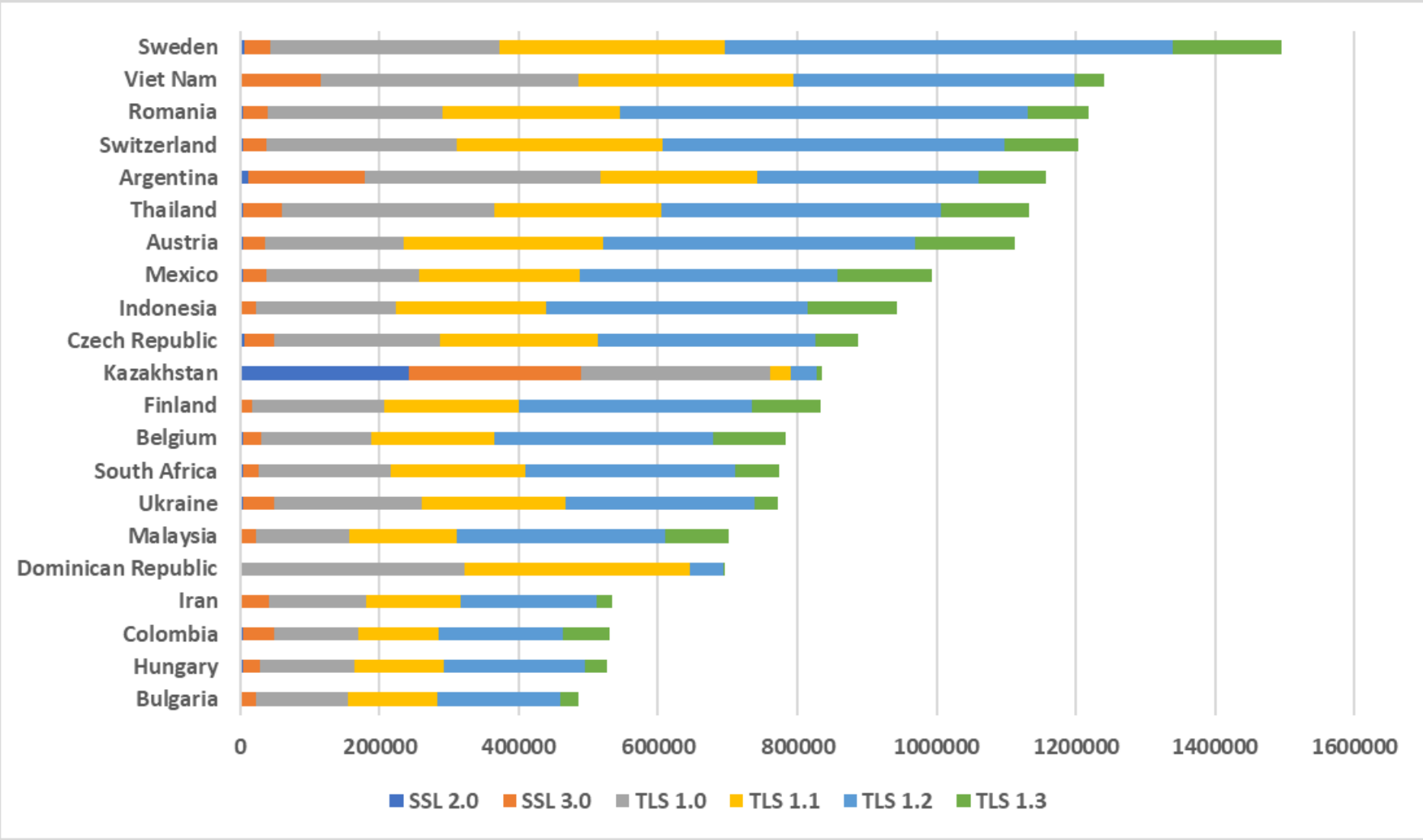
Differences between countries



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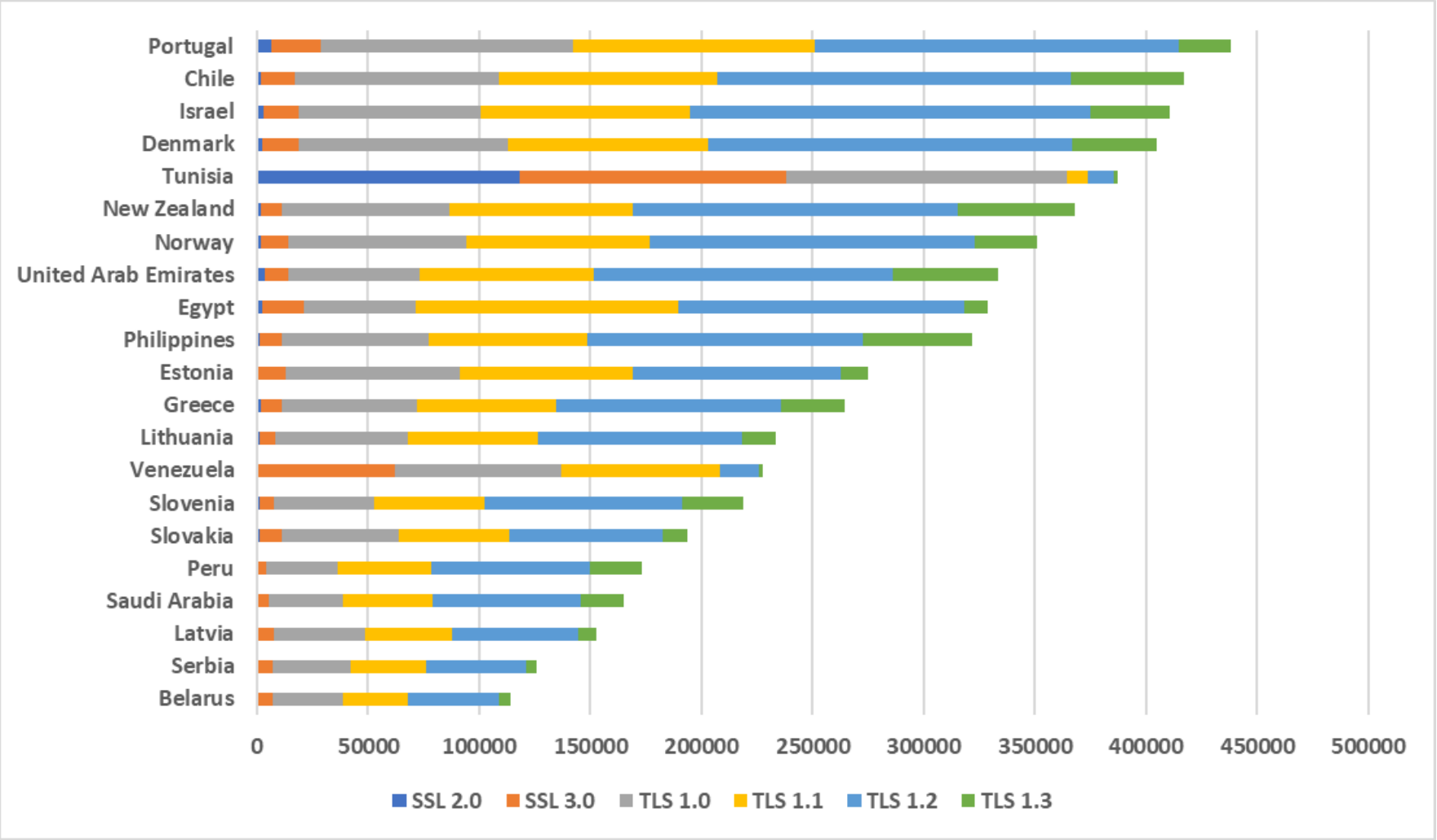

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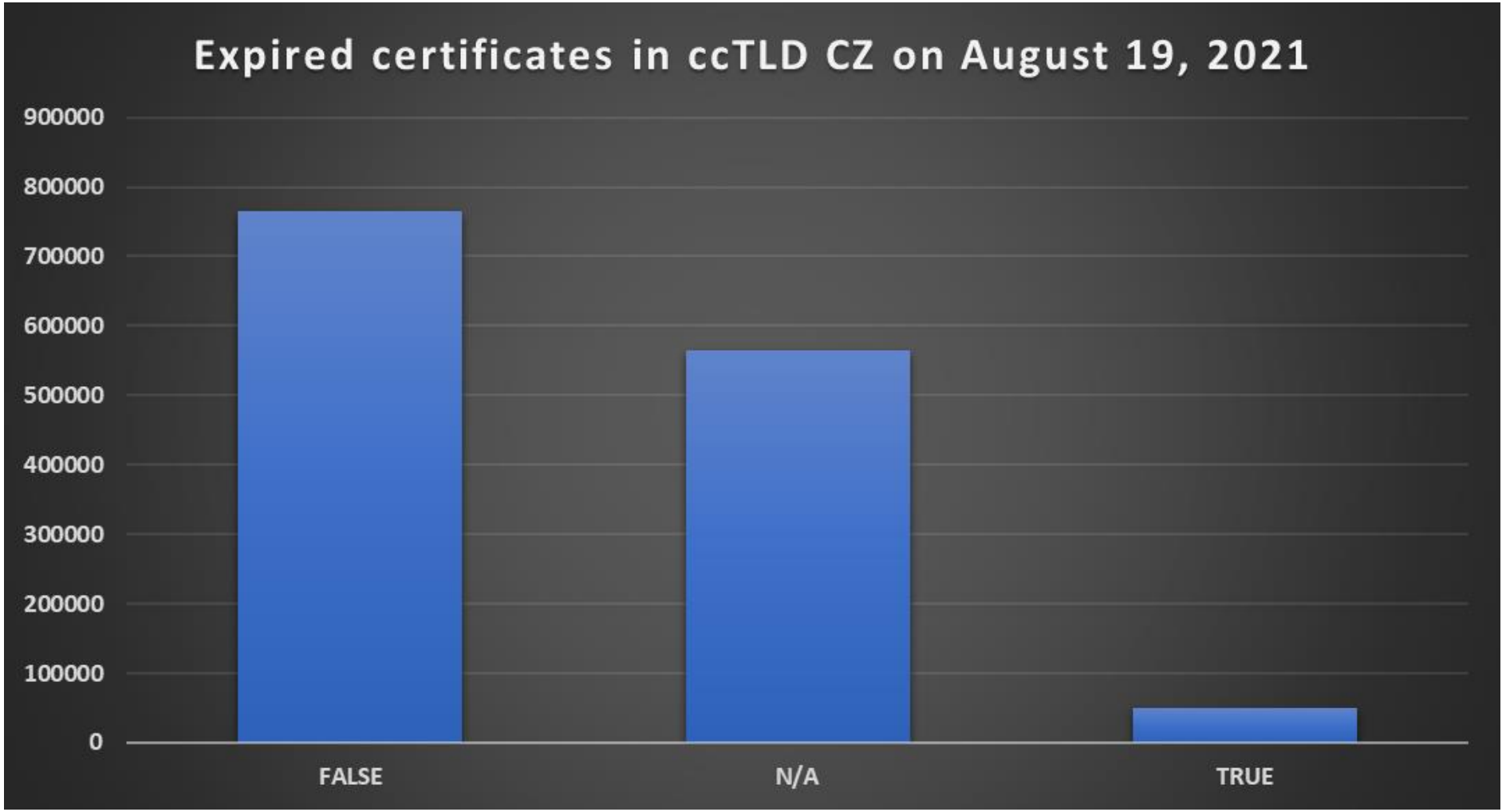
Source: Shodan

That‘s not all…

- To get a more thorough overview we‘d need numbers for:
  - Trusted vs. Untrusted (self-signed/expired/…) certificates
  - Supported ciphersuites
  - Issuing CAs
  - …

The remaining data can potentially be obtained



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Source: CZ.NIC

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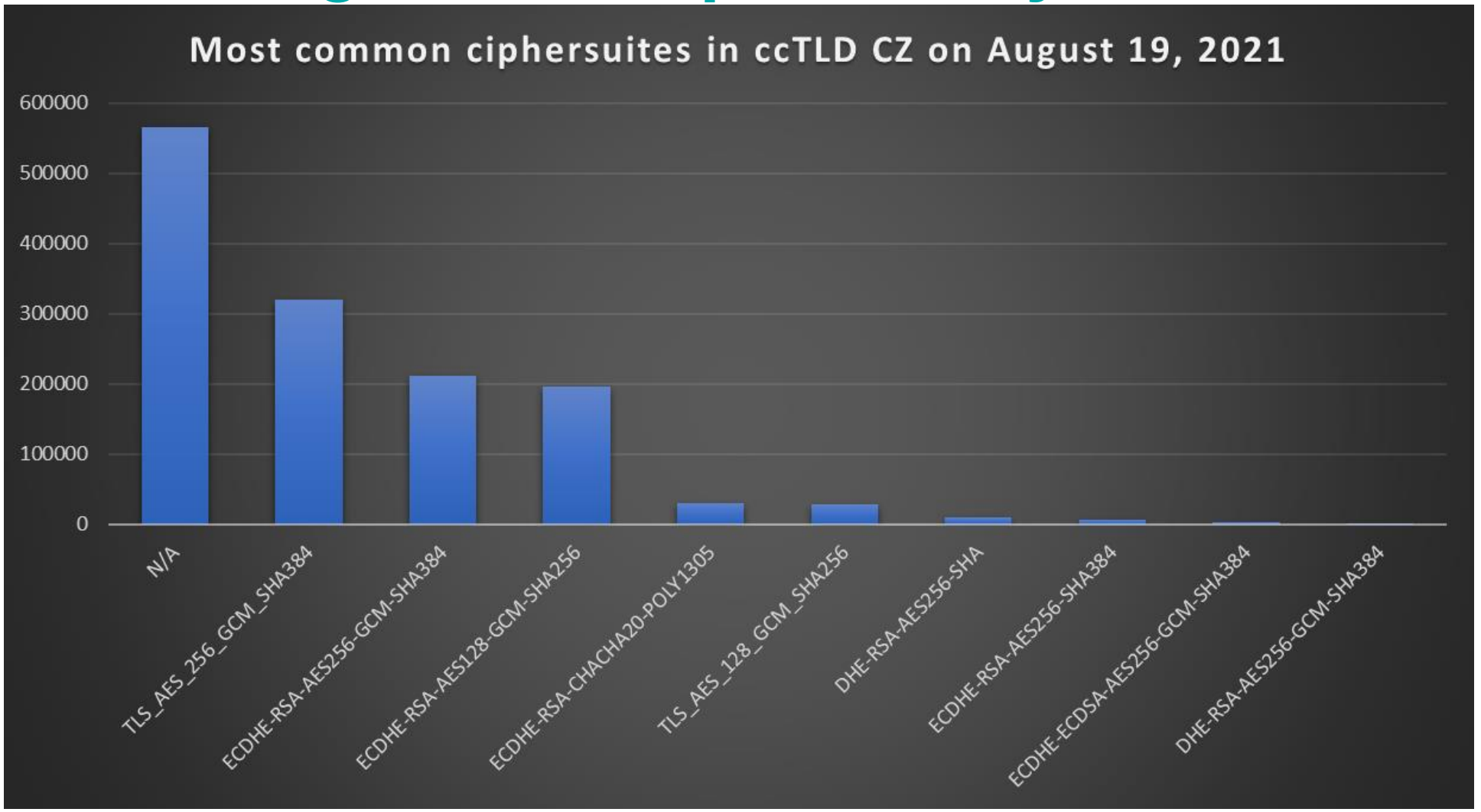

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Source: CZ.NIC

Do you want to take a look at your constituency?

- Passive option
  - Shodan (+TriOp) or similar platform

- Active option
  - Nmap or similar tool
  - ADAM from CZ.NIC

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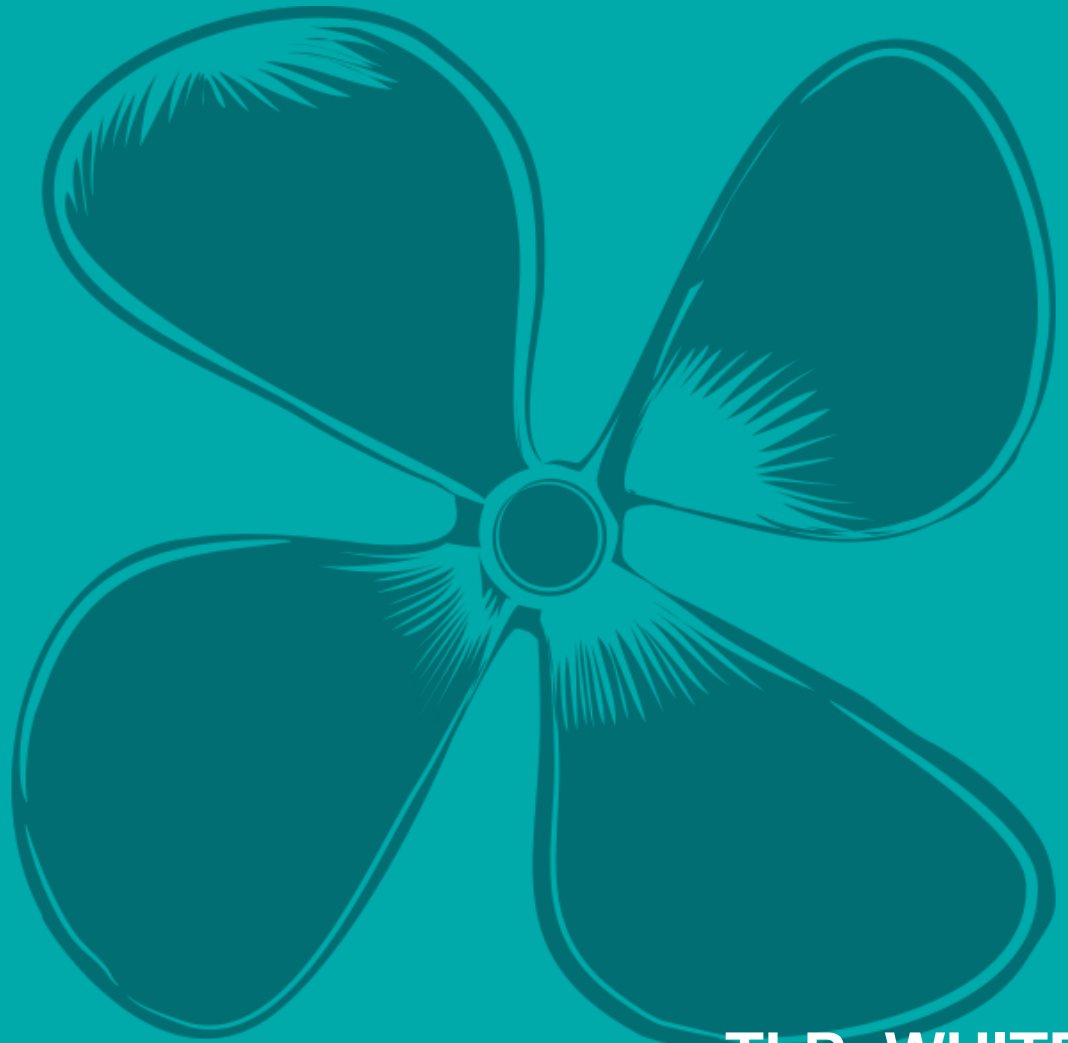
Thank you for your attention



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