

Internet protocols as critical cognitive infrastructures

Kevin Limonier

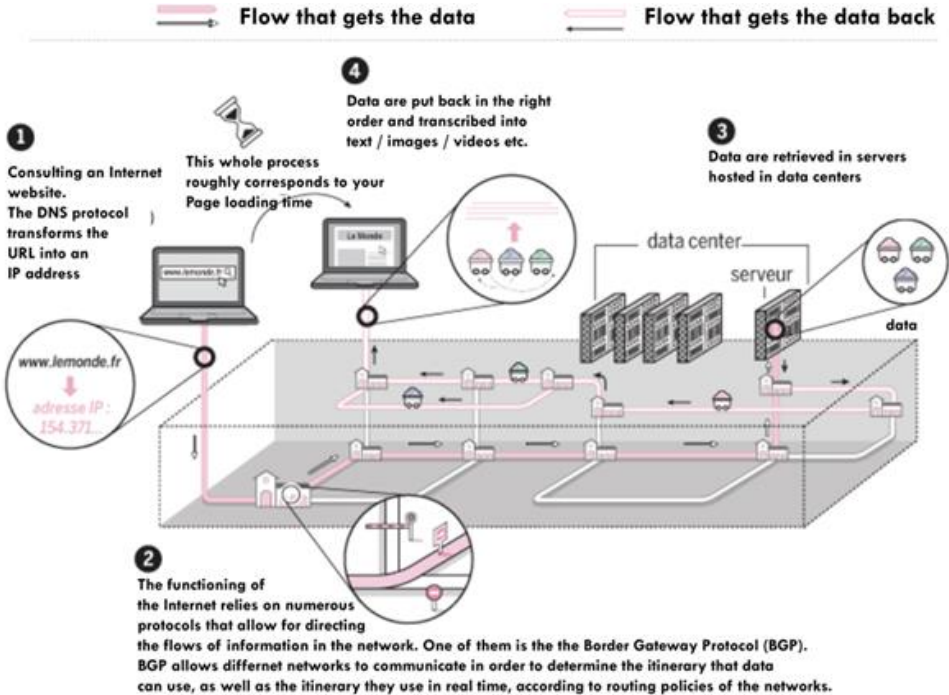
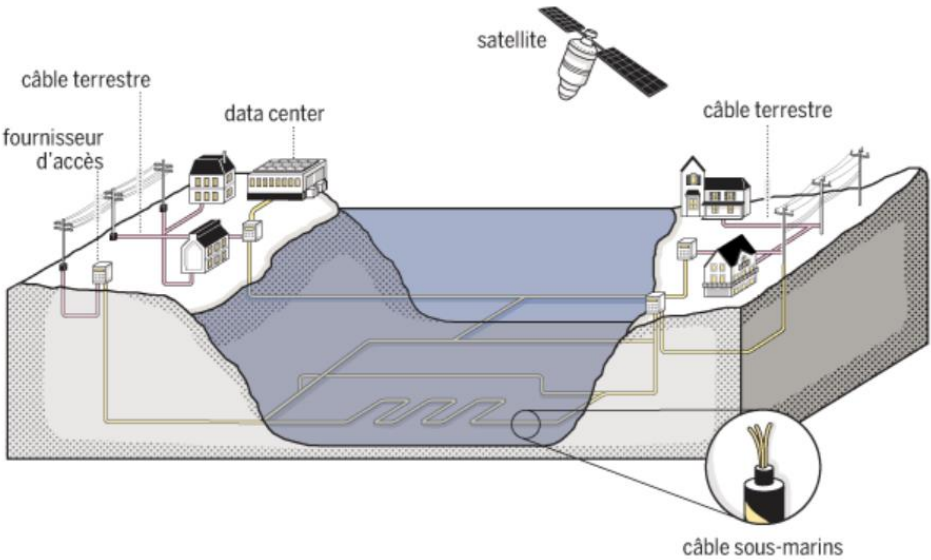
Associate Professor

French Institute of Geopolitics (University of Paris 8) -

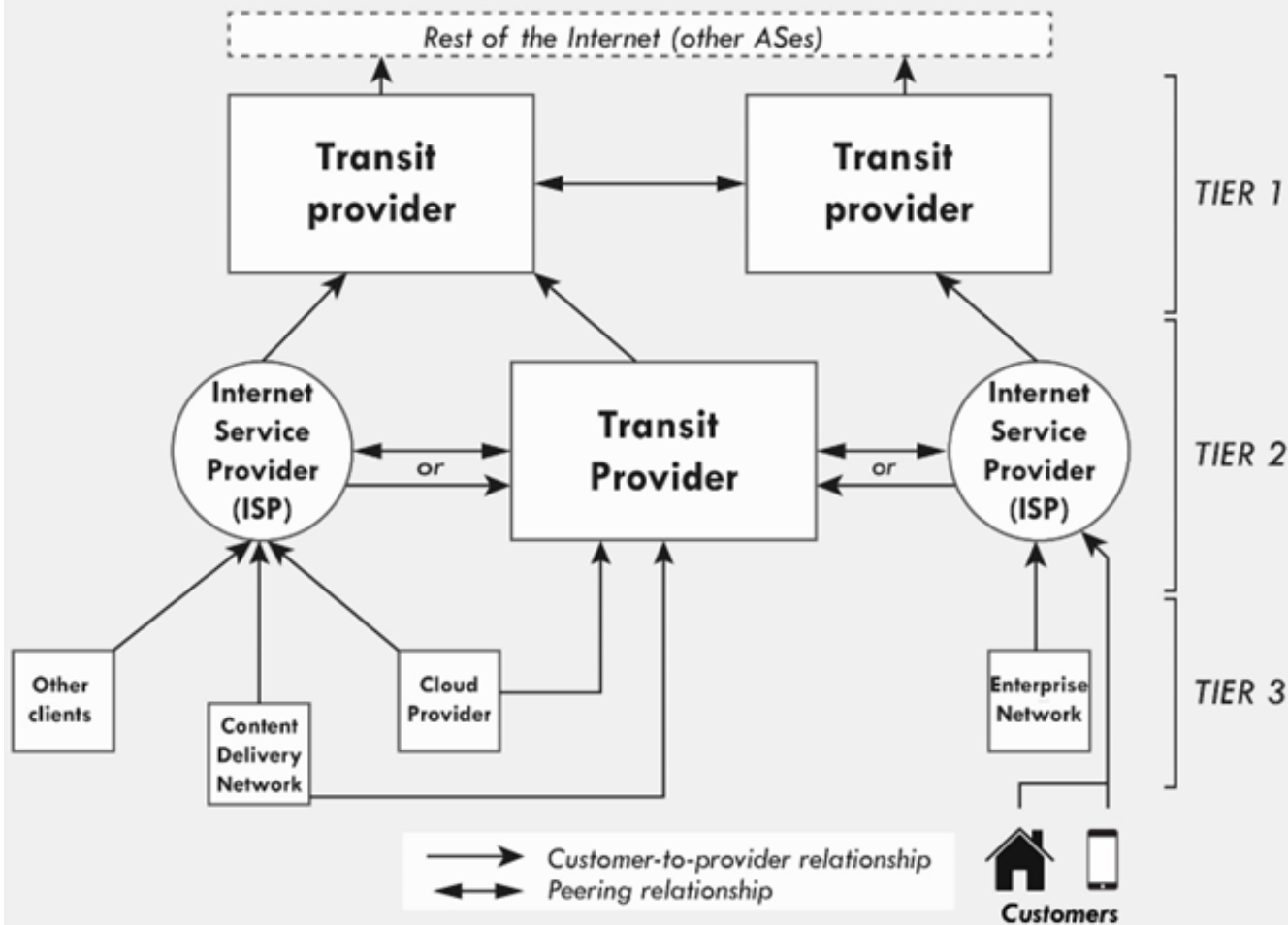
www.geopolitique.net

GEODE Research Center - www.geode.science

Cyberspace as a combination of physical/logical infrastructures

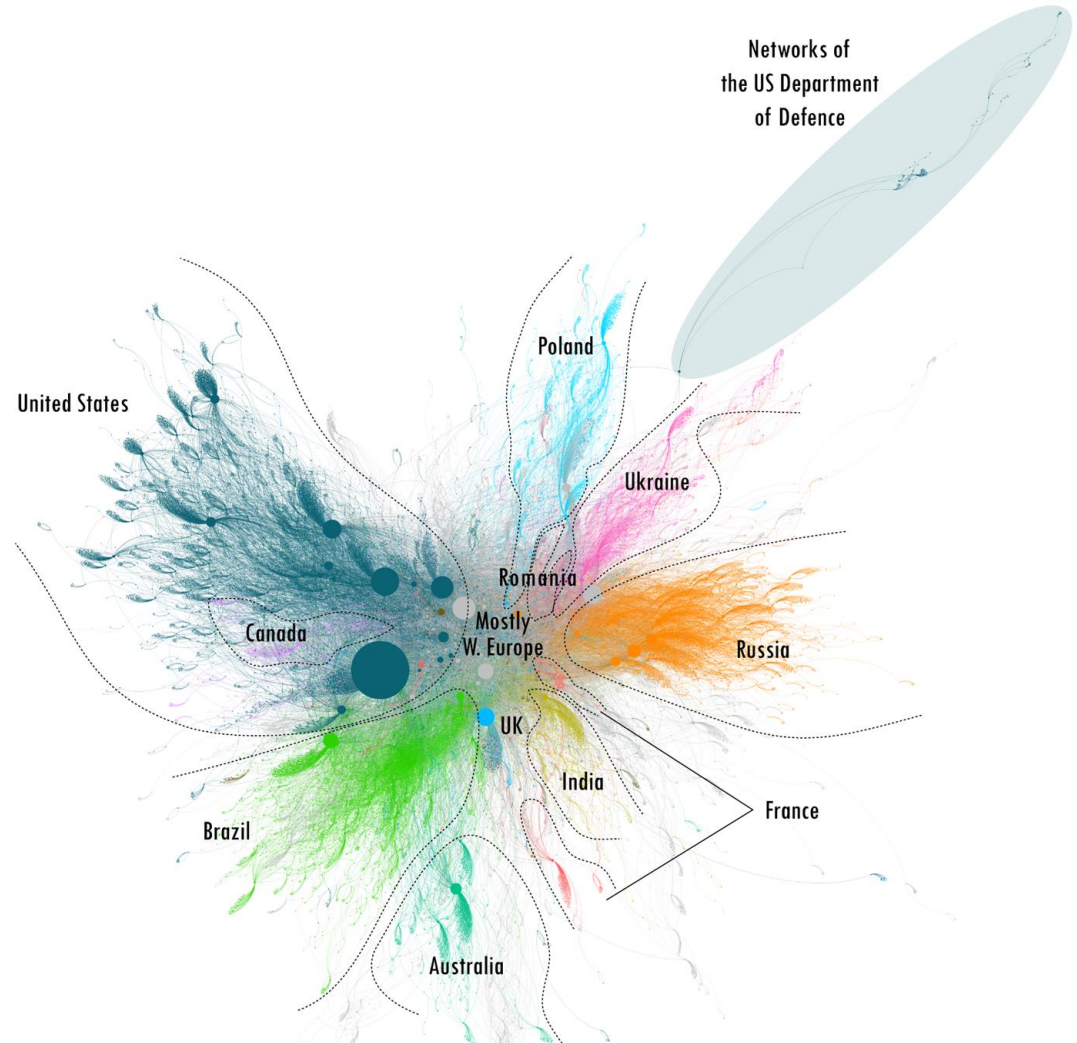


Schematic Illustration of The Basic Structure of Autonomous Systems



The geopolitical shape of the Internet

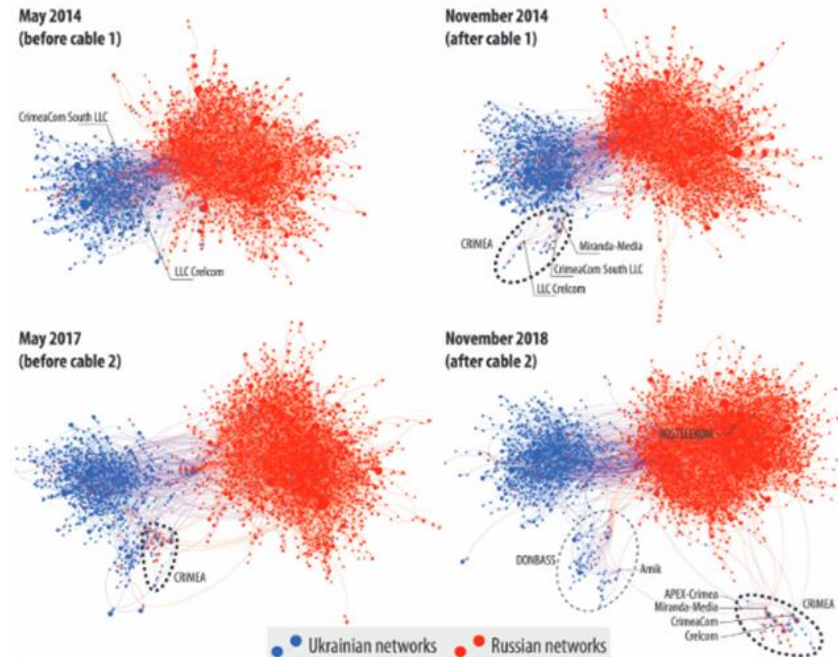
(logical mapping of BGP agreements worldwide)



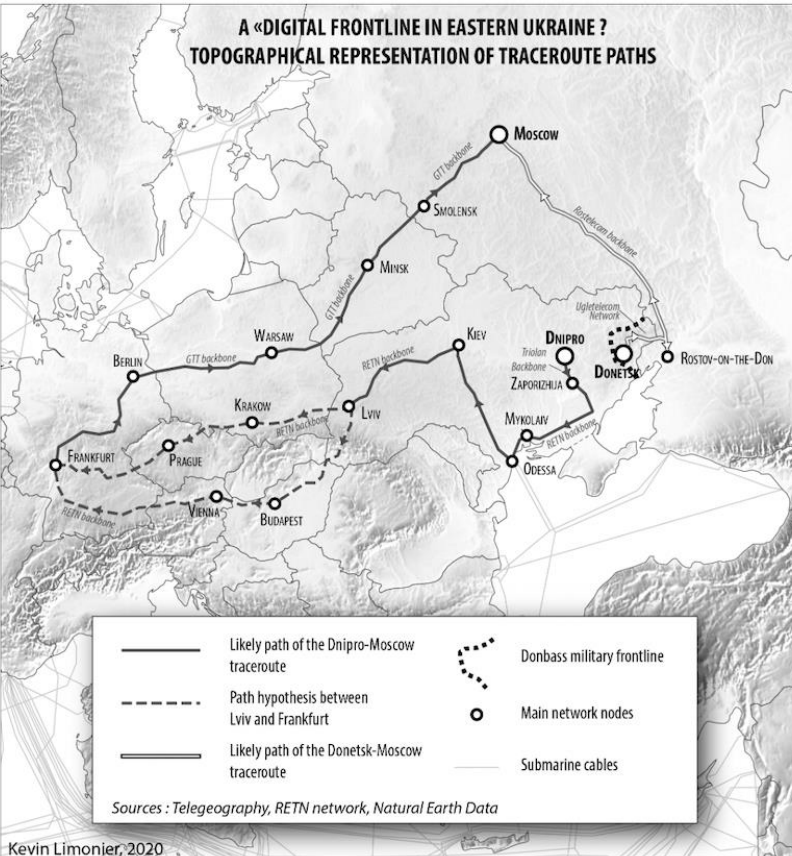
Mapping digital borders & frontlines

Limonier, K., Douzet, F., Pétiñiaud, L., Salamatian, L., & Salamatian, K. (2021). Mapping the routes of the Internet for geopolitics: The case of Eastern Ukraine. *First Monday*, 26(5). <https://doi.org/10.5210/fm.v26i5.11700>

FIGURE 11. THE FRAGMENTATION OF UKRAINE'S CYBERSPACE, 2014–2018

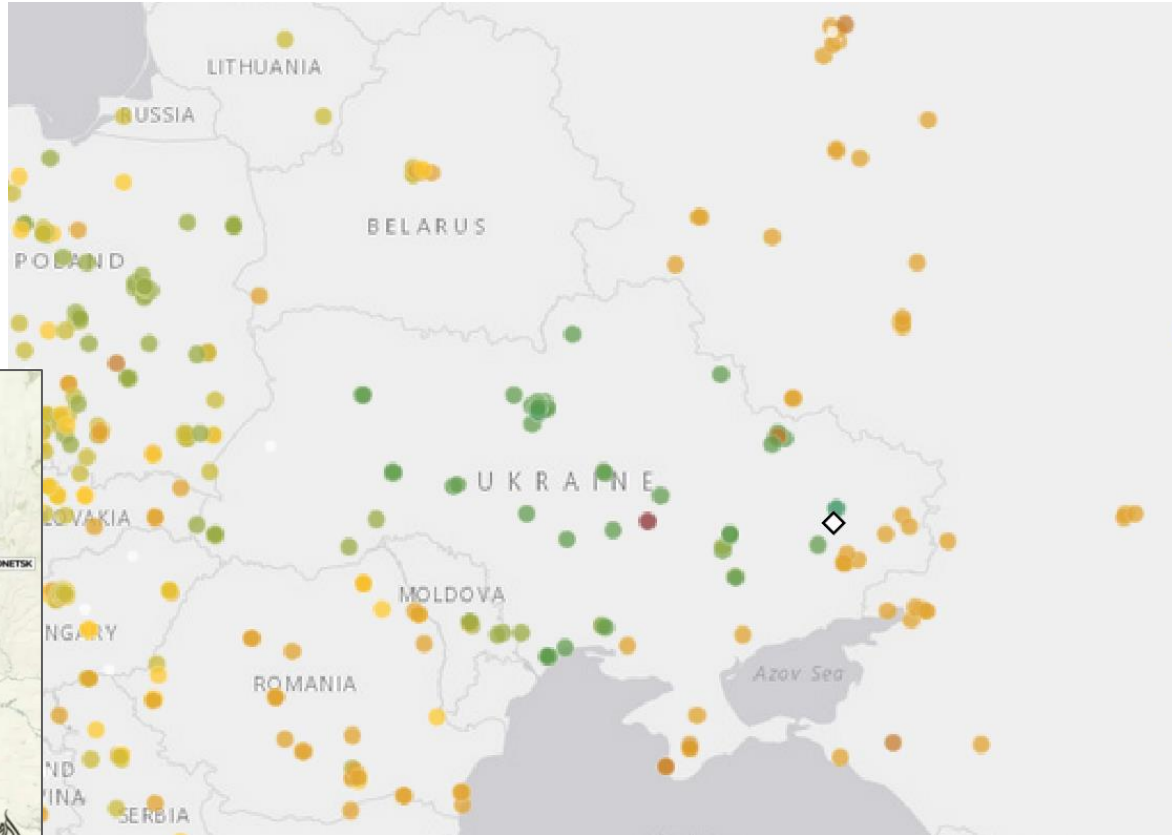
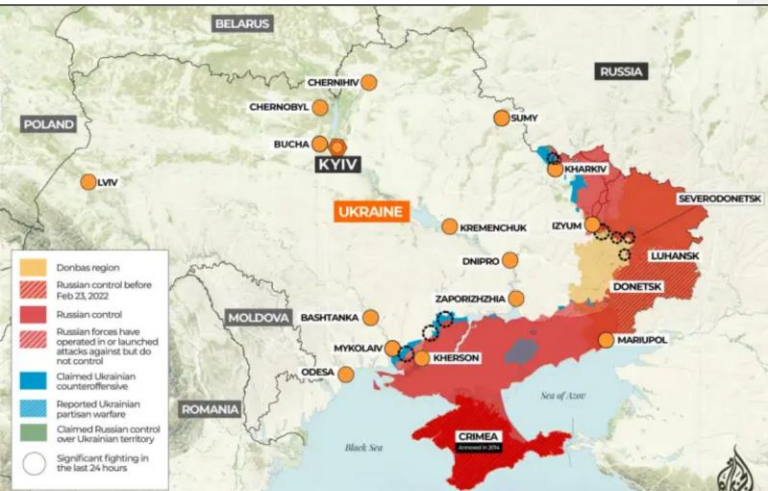


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From digital borders to cognitive borders

Traceroutes from
Ukraine's neighborhood
towards Kramatorsk
(Donbass region,
controlled by Kyiv)



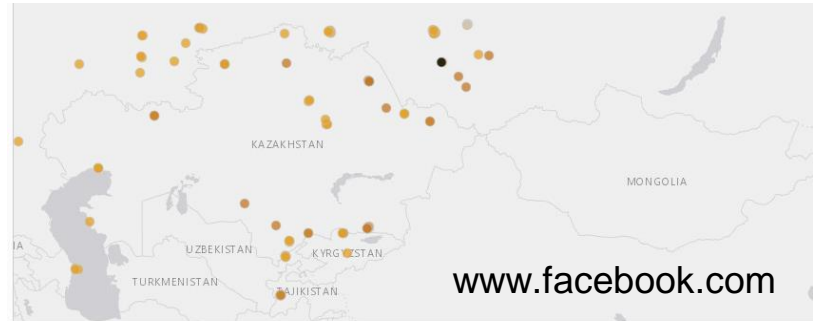
From digital dependence to cognitive dependence ?

Comparison of latencies for reaching servers of Russian and Western platforms in Central Asia



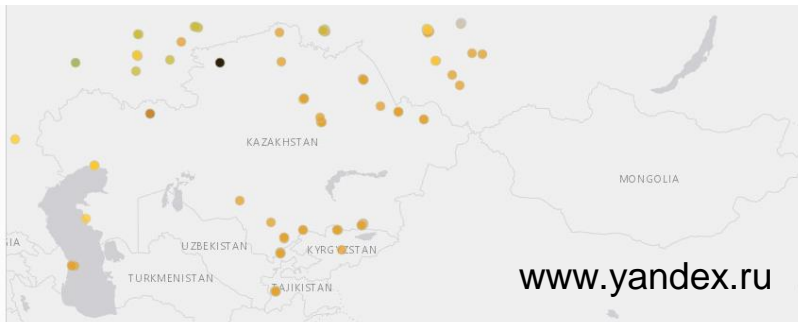
www.google.com

< 10 ms: 0 < 20 ms: 0 < 30 ms: 0 < 40 ms: 0 < 50 ms: 0 < 100 ms: 107 < 200 ms: 36 < 300 ms: 0 > 300 ms: 0 No Data: 2 Unreachable: 1



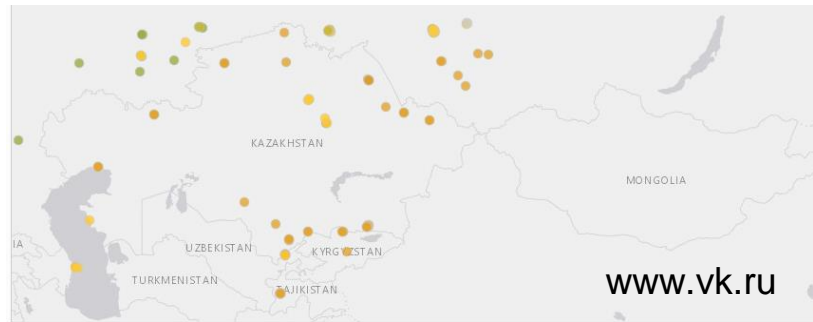
www.facebook.com

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www.yandex.ru

< 10 ms: 0 < 20 ms: 0 < 30 ms: 1 < 40 ms: 18 < 50 ms: 16 < 100 ms: 105 < 200 ms: 3 < 300 ms: 0 > 300 ms: 0 No Data: 2 Unreachable: 1



www.vk.ru

< 10 ms: 0 < 20 ms: 0 < 30 ms: 10 < 40 ms: 10 < 50 ms: 33 < 100 ms: 88 < 200 ms: 2 < 300 ms: 0 > 300 ms: 0 No Data: 2 Unreachable: 1

DNS infrastructure

WHOIS sputniknews.africa

```
Domain Name: sputniknews.africa
Registry Domain ID: dom_3LPE--1
Registrar WHOIS Server: whois.1api.net
Registrar URL: http://www.1API.net
Updated Date: 2022-08-15T15:02:18Z
Creation Date: 2022-08-03T15:02:16Z
Registry Expiry Date: 2023-08-03T15:02:16Z
Registrar Registration Expiration Date: 2023-08-03T15:02:16Z
Registrar: 1API GmbH
Registrar IANA ID: 1387
Registrar Abuse Contact Email: abuse@1api.net
Registrar Abuse Contact Phone: +49.68949396850
Reseller:
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Registry Registrant ID: REDACTED
Registrant Name: REDACTED
Registrant Organization: ROSSIYA SEGODNYA ULUSLARARASI HABER AJANSI TURKIYE IRTIBAT BUROSU
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