Sovereign Internet
and the Number Resources

Russian regulatory practices update

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Bits of Russian Internet history

- Internet formalized in Russian legal space as Public Services Telecommunication Network (along with "telephony") - does not work really as relevant ITU documents were missing
- Only formal licensing and lawful intercept requirements
- Starting 2012 more regulation appears, mostly for control over end user identification and activity, accessed information

Attempts to bring Internet regulation into UN/ITU

Bits of Russian Internet history

Russian Internet regulation is ineffective ether for purposes declared officially (child protection, terrorism prohibition) or purposes undeclared (political oposition ihibition). This led to waves of "improving" regulation like:

- increasing of responsibilities of licensed ISPs
- adding more regulated actors (news aggregators, search engines, VPN operators, bloggers, social networks,...)
- more lawful bulk wiretapping SORM1-2-3 and "Yarovaya" package

  all on account of ISP and regulated actors, still ineffective

"Sovereign Internet" law

Beginning of 2019, very "Russian bureaucratic" language, for purposes of Sustainability and Security

Like other regulations "patches" to existing Telecommunications and Information laws, number of bylaws have to be created

Formal framework putting ASN, IP addresses and DNS into regulatory space, setting obligations to holders of resources ("owners" in language of this law, "Owner of the Number of Autonomous System"), introducing number of registries and reports.

PSTN-like regulation strikes back!

"No expenses in federal budget"

Previous presentation: https://ripe78.ripe.net/archives/video/32/

More than 10 Government decrees on:

Center for Monitoring And Control of Public Services Telecommunication Network

Extending powers of Ministry and Regulator

Trainings on "sustainable, secure and complete functioning of" PSTN

Centralized control of PSTN

"Technical Means for Countering Threats"

LEA Cooperation for Owners of the Number of AS

Register of Internet Exchanges

Number of Telecom Ministry decrees on:

Schedule on "Internet disconnection trainings" (missing for 2021 and 2022)

Number of "requirements" to "Owners of the Number of AS owning Technological Network"

RosKomNadzor (regulator) orders on:

National Domains Name System operations and TLDs belonging to it
Center for Monitoring and Control of the PSTN
Reporting requirements for Owners of the Number of AS
Verification and submission of information
LEA interaction
IXP operations
Traffic localization

Center for Monitoring and Control of the PSTN

Number of Instructions for AS-owners.
Not normative or public documents!!!
Available via RKN service portal, changes without notification)

To extend 3 RKN orders (47 pages total) issued 430 pages in 6 instructions +xml schemas

Reporting connected operators, IXPs, their owners, connectivity lines, interconnection parameters, you name it …

Register for Address-Number Resources

via RKN service portal
54 pages CMC PSTN instruction

reporting **as-set, aut-num, inet6num, inetnum, mntner, organization, person, role, route, route6**

possible import via whois from RIR database is also possible

(not import/export attributes of aut-num (yet?))

Information System of CMC PSTN

Obligation to connect to this Information system (7 page instruction)

From all border routers

BGP feed (only feed to)

SNMP (v2 preferred)

Netflow feed

IP addresses of routers and protocol parameters have to be filled in .XLSX file sent to CMC PSTN

National Domain Name System

CMC PSTN instruction (5 pages) on how to set up recursive, forwarders or root DNS servers

```
zone "." {
  type static-stub;
  server-addresses { 195.208.6.1; 195.208.7.1; 2a0c:a9c7:a::1; 2a0c:a9c7:b::1;};

server 194.85.254.37;
zone "." {
      type slave;
      file "<path/to/file>";
      masters { 194.85.254.37; };
};
options {
 forward first;
 forwarders { 195.208.4.1; 195.208.5.1; 2a0c:a9c7:8::1; 2a0c:a9c7:9::1;};
};
```

National Domain Name System

brought to you by MSK-IX

ЦЕНТР МОНИТОРИНГА И УПРАВЛЕНИЯ
СЕТЬЮ СВЯЗИ ОБЩЕГО ПОЛЬЗОВАНИЯ

Инструкция по подключению операторов связи и владельцев автономных систем к национальной системе доменных имен (НСДИ)

Руководитель проектов DNS
АО «ЦВКС «МСК-IX»

П.Б. Храмцов

«___» _____ 2021 г.

```
inetnum:        194.85.254.0 - 194.85.254.255
org:            ORG-JCE1-RIPE
netname:        MSK-IX
descr:          8 Marta Street 1, bld. 12, office XXXV, room 19
descr:          Moscow 127083, Russian Federation
country:        RU
```

Additions to Administrative Offences Code

13.42 violations in operation of Technical Means for Countering Threats

13.43 violations in IXP operation and usage of registered IXPs

13.44 violations of use of National Domain Name System

13.45 violations of Centralized Control of PSTN

13.46 violations of cooperation with LEAs

Court cases observed: 13.45 (for non-reporting), 13.44 (non-usage of NDNS, latest cases - exclusive usage of NDNS)

Loosened regulatory scope: not "Number of the AS owner", but "set of network equipment with unique identifier"

More "Sovereign Internet" to come

- acceptance of the routing commands
- validation of reported data
- "Internet disconnection" trainings quarterly
- Interconnection only for "properly reported" operators and IXes

"Landing" of the foreign companies

On 1st November 2021 proposed legislation to oblige all even non-public networks holding AS number to store internal traffic for up to 3 years (equivalence of existing "Yarovaya package" for ISPs)

Sovereign Internet coincidence?

In June 2021 RIPE NCC External Relations officer - Technical Advisor (Ukraine national, residing in Russia) have been declared undesirable and expelled from Russia with ban for 25 years

At ENOG18 (June 2021) RIPE NCC Managing Birector informed that ERO-TA is suspended until investigation ends. Investigation continues (information from last week NCC webinar).
Russia and region lack proper communication!

To be discussed at NCC Services, i hope.

Concerns for Community

Actual sovereignization is done on lowest level by non-public documents.

Not observed by lawyers, rights defenders, international community

No more "one world one internet", stantards (tratiotions) broken

Bad regulatory example

Any criticism by external Internet Governance becomes rationale for more sovereignization.

Questions?

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Questions to YOU:

Root server operators (including RIPE NCC), how are you going to operate in Russia?

Content providers, caches, CDNs?

Foreign IXPs?

How about Internet regulations in your country?