



COORDINATION CENTER  
FOR TLD RU/PΦ

# Statistical monitoring system

ccNSO Meeting at ICANN , Hyderabad

7 November 2016

# Why would anyone need statistics?



- **To watch trends**
- **To check the data**
- **To prove or dismiss your theory**
- **To make informed decisions**
- **To evaluate the results of your actions**

# Statdom.ru



## Russian Domains

About .RU .PH .SU Data compare

### Summary report

## Summary report

#### Domains

- Total number of domain names
- Domain names development
- Renewal rates
- Domain names by registrant type
- Geographical distribution of domain names
- Domain names length
- Age of domain names
- Renewal rates per age
- DNSSEC-signed domain names

#### Registrars

- Domain names by registrar
- Delegated domain names per registrar
- Domain names growth per registrar
- Renewal rates per registrar
- Distribution of registrants per registrar
- Organizations and individuals per registrar
- Registrar transfers
- DNSSEC-signed domain

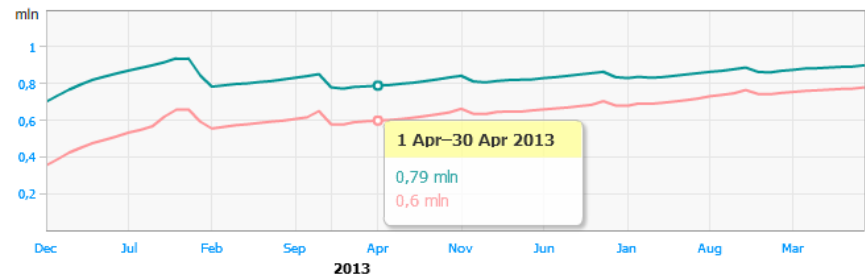
23 October 2016 (yesterday)

Total domain names ▲ +0,05 %  
**904 549**

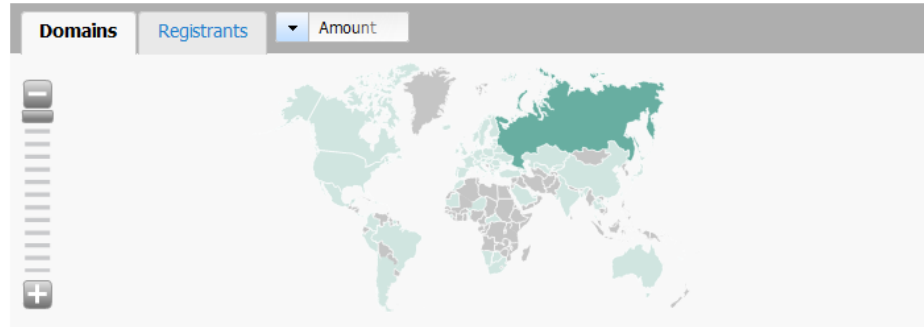
Delegated domain names ▲ +0,08 %  
**785 429**

Delegated domain names share ▲ +0,02 %  
**86,83 %**

#### Total number of domain names



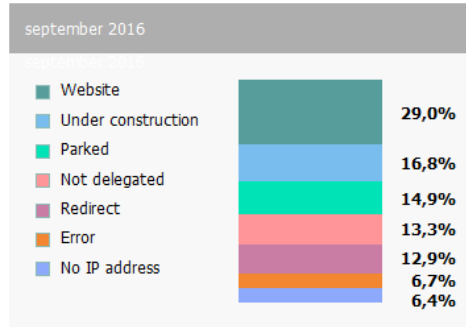
#### Geography



Domain names by registrar

Distribution of registrants per registrar

#### Domain name usage



Number of domain names by registrar

Registrar transfers

DNSSEC-signed domain names per registrar

Registrants

Total number of registrants

Geographical distribution of registrants

Number of domain names by registrant

DNSSEC-signed domain names per registrants

Sites

Domain name usage

Servers

Webservers

TLS Statistics

Basic data on TLS-certificates

CA names

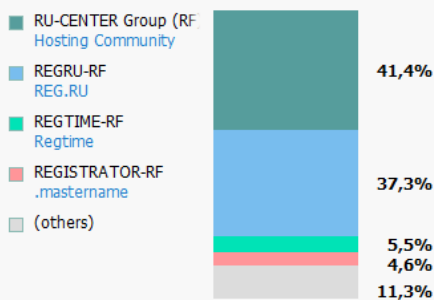
Certificates signature algorithms

Key Strength Distribution

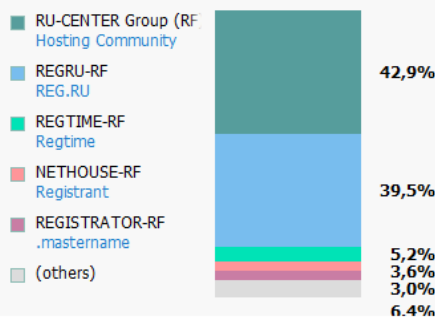
Certificates lifetime

Web Technometrics

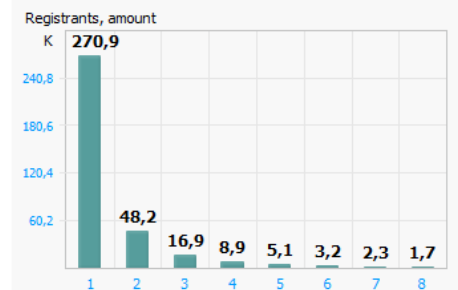
### Domain names by registrar



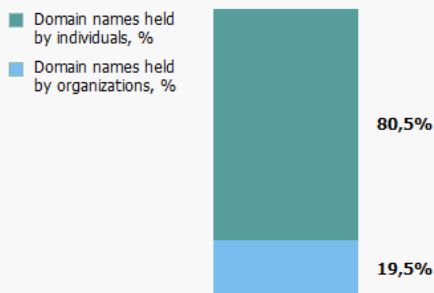
### Distribution of registrants per registrar



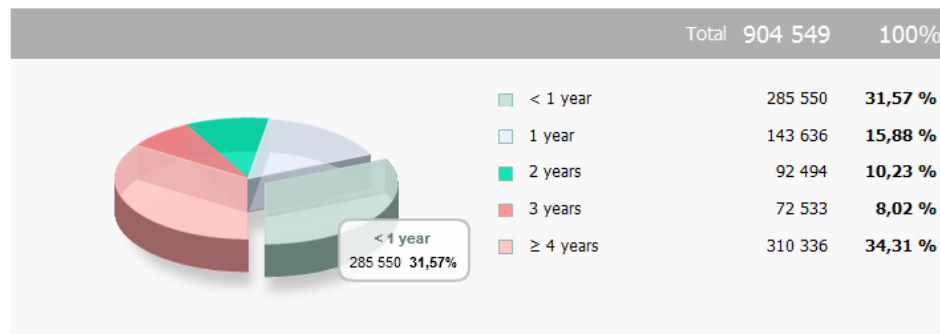
### Number of domain names by registrar



### Domain names by registrant type



### Age of domain names



# NEW: tls-statistics



## Russian Domains

О проекте .RU .РФ .SU Сравнение отчётов

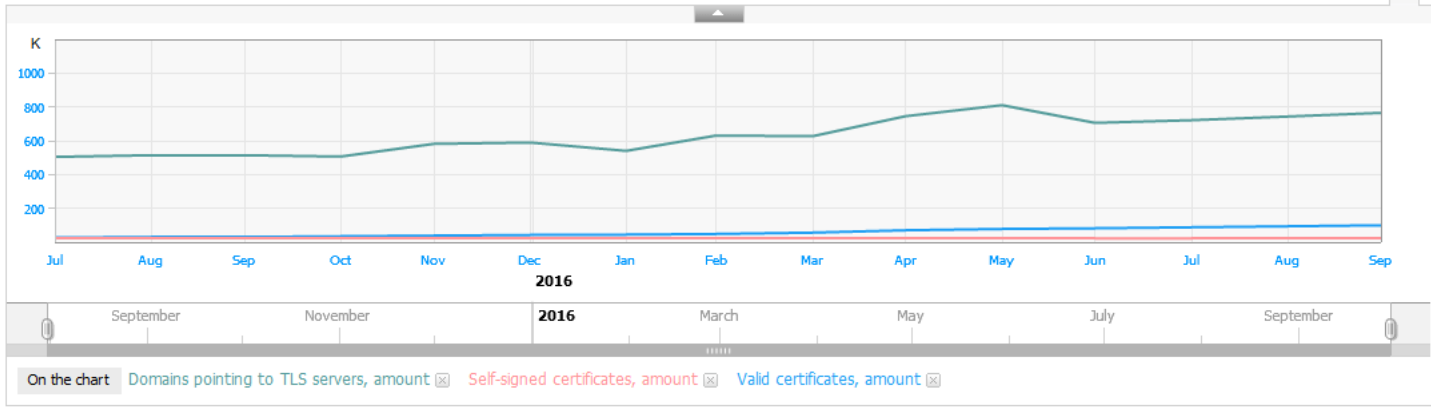
Сводный отчёт

### Basic data on TLS-certificates

Отчёт Экспорт

Jul 2015 — Sep 2016

- Domains
- Registrars
- Registrants
- Sites
- Servers
- TLS Statistics
  - Basic data on TLS-certificates
  - CA names
  - Certificates signature algorithms
  - Key Strength Distribution
  - Certificates lifetime
- Web Technometrics



On the chart Domains pointing to TLS servers, amount Self-signed certificates, amount Valid certificates, amount

Date	Domains pointing to TLS servers, amount	Self-signed certificates, amount	Valid certificates, amount	Valid EV certificates, amount	Correct HTTPS nodes, amount
September 2016	765 733	22 090	100 504	567	124 285
August 2016	744 665	21 935	94 526	543	116 991
July 2016	723 330	22 691	89 014	544	110 888
June 2016	706 775	23 075	83 293	524	103 616
May 2016	812 009	23 349	78 593	498	96 755
April 2016	746 443	23 424	71 567	475	87 084
March 2016	628 256	23 394	56 683	478	69 483

# NEW: tls-statistics



## Russian Domains

Founders



Русский Интернет English

About .RU .PФ .SU Data compare

Summary report

### CA names

Report Export

Jul 2015 — Sep 2016

- Domains
- Registrars
- Registrants
- Sites
- Servers
- TLS Statistics

Basic data on TLS-certificates

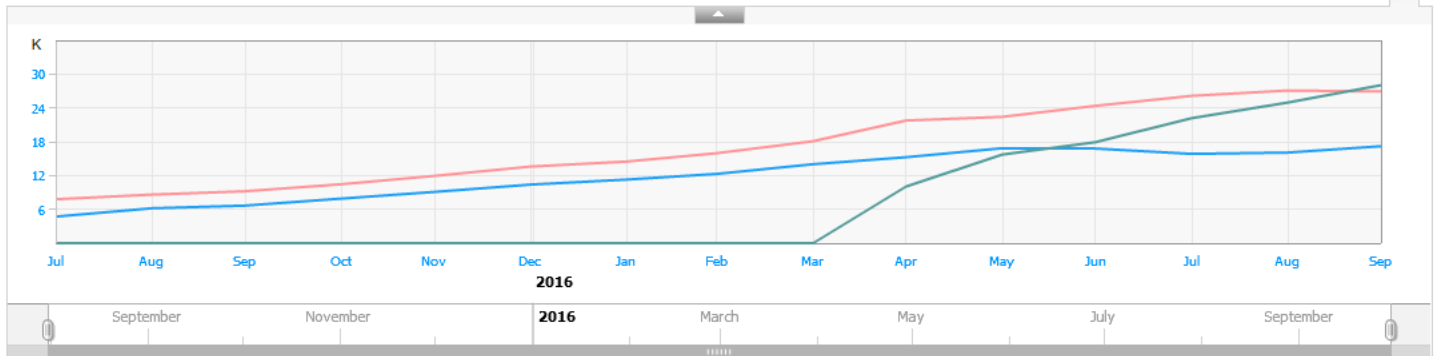
CA names

Certificates signature algorithms

Key Strength Distribution

Certificates lifetime

Web Technometrics



On the chart: Let's Encrypt Authority X3 (Certificates, amount) COMODO ECC Domain Validation Secure Server CA 2 (Certificates, amount) GlobalSign Domain Validation CA - SHA256 - G2 (Certificates, amount)

### Certificate Authorities

Equalize columns' width

	Certificates, amount	Certificates, %
<b>Total</b>	<b>100 504</b>	<b>100,00</b>
Let's Encrypt Authority X3	28 074	27,93 %
COMODO ECC Domain Validation Secure	26 947	26,81 %
GlobalSign Domain Validation CA - SHA2	17 252	17,17 %
COMODO RSA Domain Validation Secure	8 018	7,98 %
Others (<1%)	7 189	7,15 %

# NEW: tls-statistics



statdom.ru/tld/ru/report/certsignalg/#37

Поиск

## Russian Domains

Founders



Русский English

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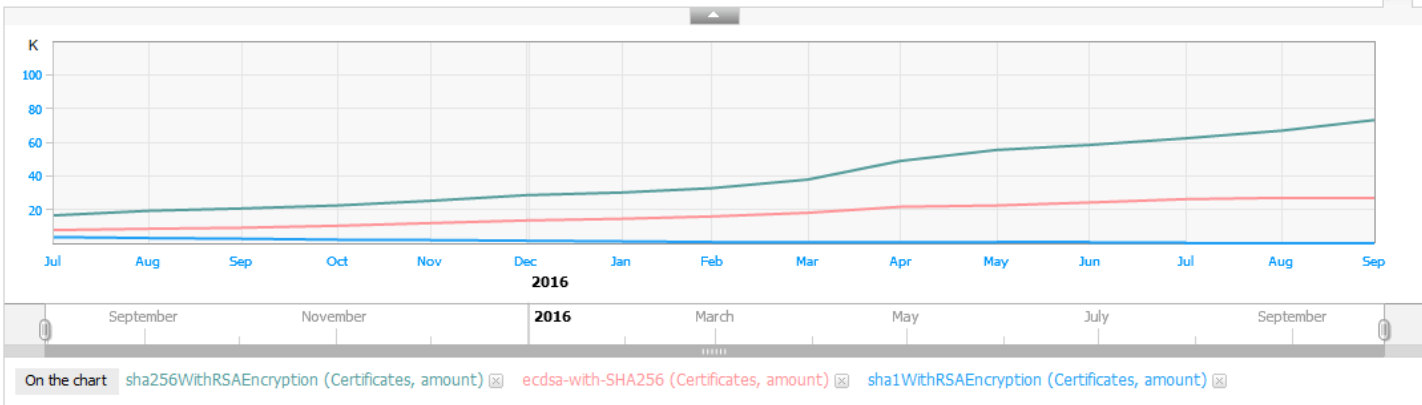
### Summary report

## Certificates signature algorithms

Report Export

Jul 2015 — Sep 2016

- Domains
- Registrars
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- TLS Statistics**
  - Basic data on TLS-certificates
  - CA names
  - Certificates signature algorithms**
  - Key Strength Distribution
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On the chart sha256WithRSAEncryption (Certificates, amount) ecdsa-with-SHA256 (Certificates, amount) sha1WithRSAEncryption (Certificates, amount)

### Algorithms

Equalize columns' width

	Certificates, amount	Certificates, %
<b>Total</b>	<b>100 504</b>	<b>100,00</b>
sha256WithRSAEncryption	73 203	72,84 %
ecdsa-with-SHA256	26 947	26,81 %
sha1WithRSAEncryption	353	0,35 %
sha512WithRSAEncryption	1	< 0,01 %



# NEW: tls-statistics



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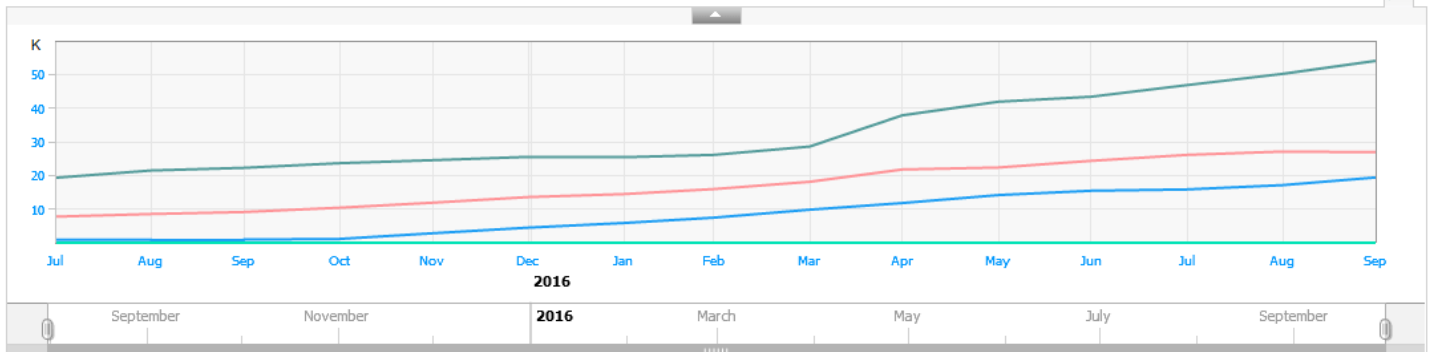
### Summary report

## Key Strength Distribution

Report Export

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On the chart RSA (2048) (Certificates, amount) ECDSA (256) (Certificates, amount) RSA (4096) (Certificates, amount) RSA (8192) (Certificates, amount) RSA (3072) (Certificates, amount)

Algorithms **Approximated key strength** Exact key strength

	Certificates, amount	Certificates, %
<b>Total</b>	<b>100 504</b>	<b>100,00</b>
RSA (2048)	54 107	53,84 %
ECDSA (256)	26 952	26,82 %
RSA (4096)	19 430	19,33 %
RSA (8192)	10	0,01 %
RSA (3072)	3	< 0,01 %

# New project

Statistical Monitoring System



- **To create & maintain the regularly updated and constantly developing information source to demonstrate the status and trends of the Internet development in Russia and to indicate potential deficiencies and “risk zones”**

- **To define and to structure the data sources;**
- **To design a process of gathering, analyzing, storing and presenting of the statistical information (including organizational aspects);**
- **To conducts specialized investigations focused on specific subjects of Internet development;**
- **To ensure access to the reports for various categories of users**

- **Complex approach to information to present current trends of Internet development as defined in the Long-Term Program of Development of the Russian Segment of Internet and Internet-dependent Sectors of Economy**
- **To use at maximum extent the official sources of statistical data to ensure consistency in data and to match the requirements of Federal Service of State Statistics of Russian Federation, OECD, Eurostat and ITU;**
- **To conduct specialized research to investigate the specifics of Internet development in Russia**
- **To design integral indicators by regions and sectors of economy**

# Main areas of monitoring

## Human capital in Internet environment

- Demand for Internet technology
- Demand for Internet-skills in everyday life
- Demand for Internet-skills in business

## E-business

- Key sectors of Internet economy
- Horizontal expansion of Internet technologies

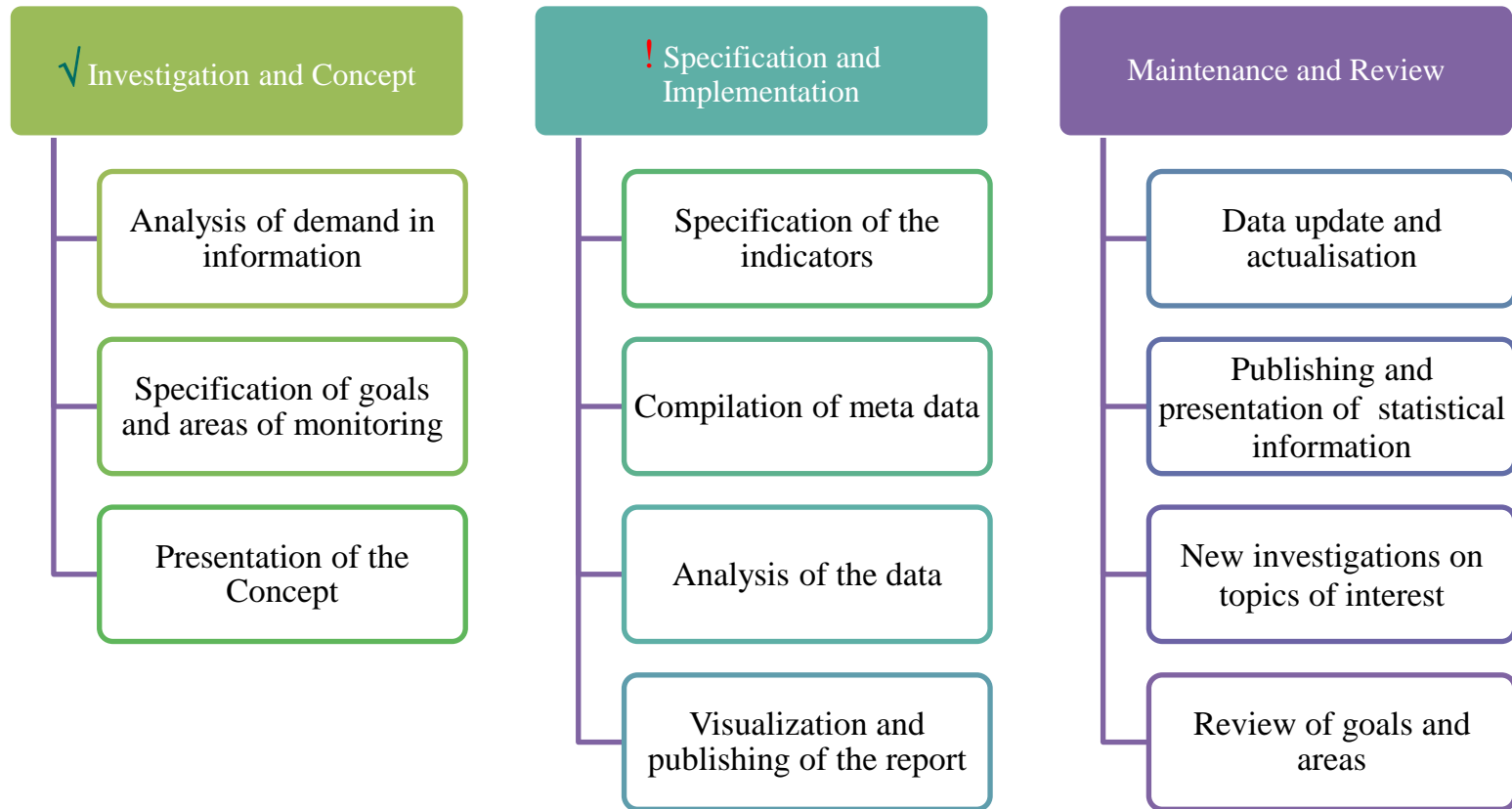
## E-government

- E-services
- E-government
- E-medicine
- E-learning
- E-culture
- IT-security

## Digital media & communications

- IPTV and on-line broadcasting
- E-media

# Steps



Q I-II 2016

2016-2017

2018 and further



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# Thank you for your attention

Irina Danelia

[i.danelia@cctld.ru](mailto:i.danelia@cctld.ru)

[cctld.ru](http://cctld.ru)