



.pl domain

name market



ANNUAL REPORT 2019

Introduction

Dear Readers,

The year 2019 was for the .pl domain registry a time of intensive activities related to increasing the level of security of Internet domain names. At the beginning of the year the .pl Registry Lock service was made available, allowing to limit the risk of entering changes, not authorized by the registrant.

Due to the consolidation of the market of entities registering .pl domain names and in response to the demand submitted by NASK Partners, the Registry designed and implemented an automated transfer service. It enables formalized transfer of the domain service, performed by the registrar terminating cooperation with NASK, while maintaining continuity of service.

Bearing in mind the need to maintain security and continuity of DNS network operation, the Registry increased the efficiency of this service for the .pl domain by extending anycast DNS network. As a result, the response time to queries about name addresses in the .pl domain was shortened and the level of resistance to DDoS attacks was increased. It is also worthwhile to note that in 2019 the number of domain names secured with the DNSSEC technology increased by 4.43%, as compared to the previous year. The .pl domain registry noted their record number, namely 524 343, by 22 260 more than in 2018. At the end of 2019 there were 2 513 491 active names in the .pl domain registry. The number of renewals amounted to 1 676 097 and was higher by 21 583 than in the previous year. The renewal rate in the second quarter of 2019 amounted to 65.94% and was the highest in the last decade, while at the end of the year it reached 65.43%. In 2019, the .pl domain registry maintained its national domain share in the market at the level of 72%, one of the highest among national domain registries.



Kamil Sitarski
DYREKTOR NASK PIB

In the first three quarters of 2019, there were by 7.6% fewer registrations than in the corresponding period of the previous year, and in the fourth quarter, by 18% fewer. In the second half of 2019, the .pl domain registry noted a decrease in the number of registrants, after significant growth to over 1.08 million in the first half of the year. The number of domain names registered for natural persons increased from 38.04% at the end of 2018 to 41.84% at the end of 2019.

The Annual Report 2019 for the first time contains information on the actions taken by NASK to counteract abuse of the .pl domain names. I encourage you to read the chapter devoted to this issue.

At the end, worthy of note is that NASK received a positive result of the audit of the information security management system compliance with the requirements of ISO/IEC 27001 and a positive recommendation to maintain the certificate of compliance of the implemented quality management system compliant with the requirements of ISO 9001:2015. The quality management system covers all the processes related to registration and maintenance of Internet domain names carried out at NASK.

More information, summarizing the activities of the .pl domain registry in 2019, you will find in this report.

I encourage you to get acquainted therewith.

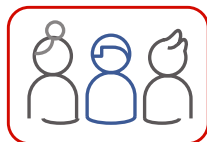
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2019 in .pl domain registry – facts and figures



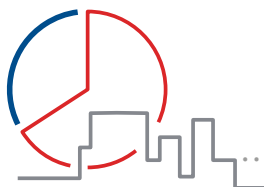
Over **814 thousand**
new names



Over **1.07 million**
registrants



34.7% registrants are
natural persons



65.3% registrants are
organizations



2.34 domain names fell
for one registrant



Over **2.5 million**
active .pl domain names



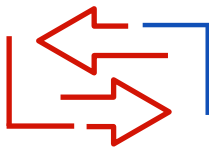
213 Partners of the
.pl domain registry



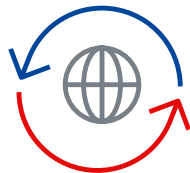
Over **524** thousand names
secured with DNSSEC



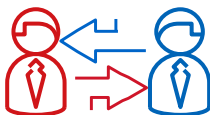
Over **2.2** thousand new
registrations daily



Over **137** thousand
transfers



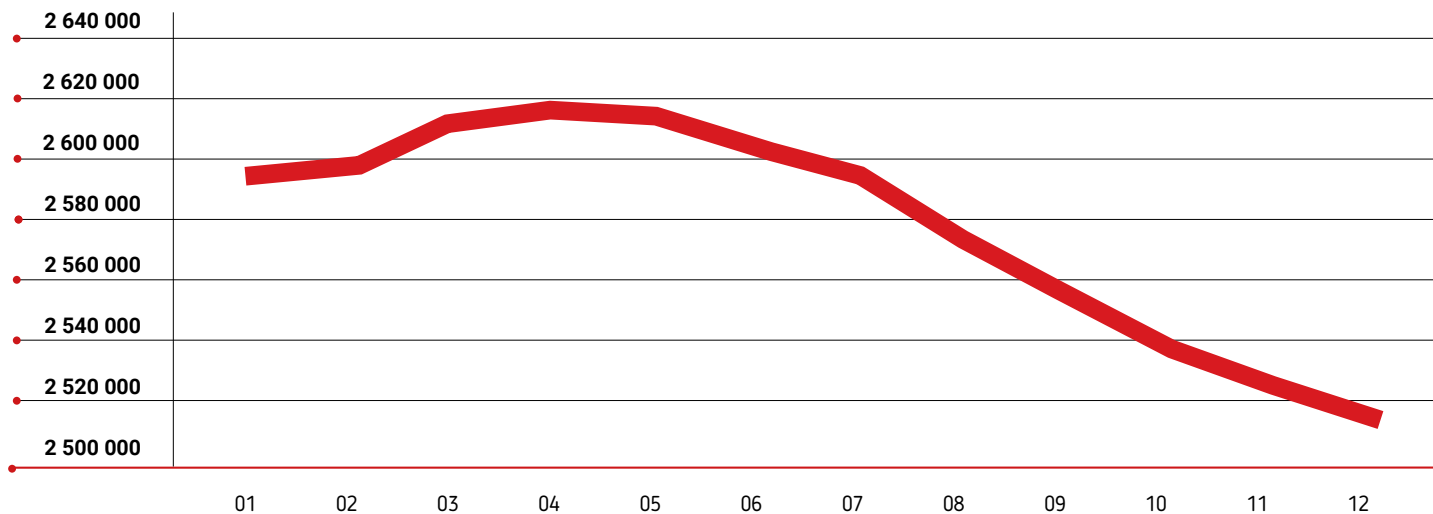
Nearly **1.68 mln**
million renewed names



26 Partners providing
.pl Registry Lock

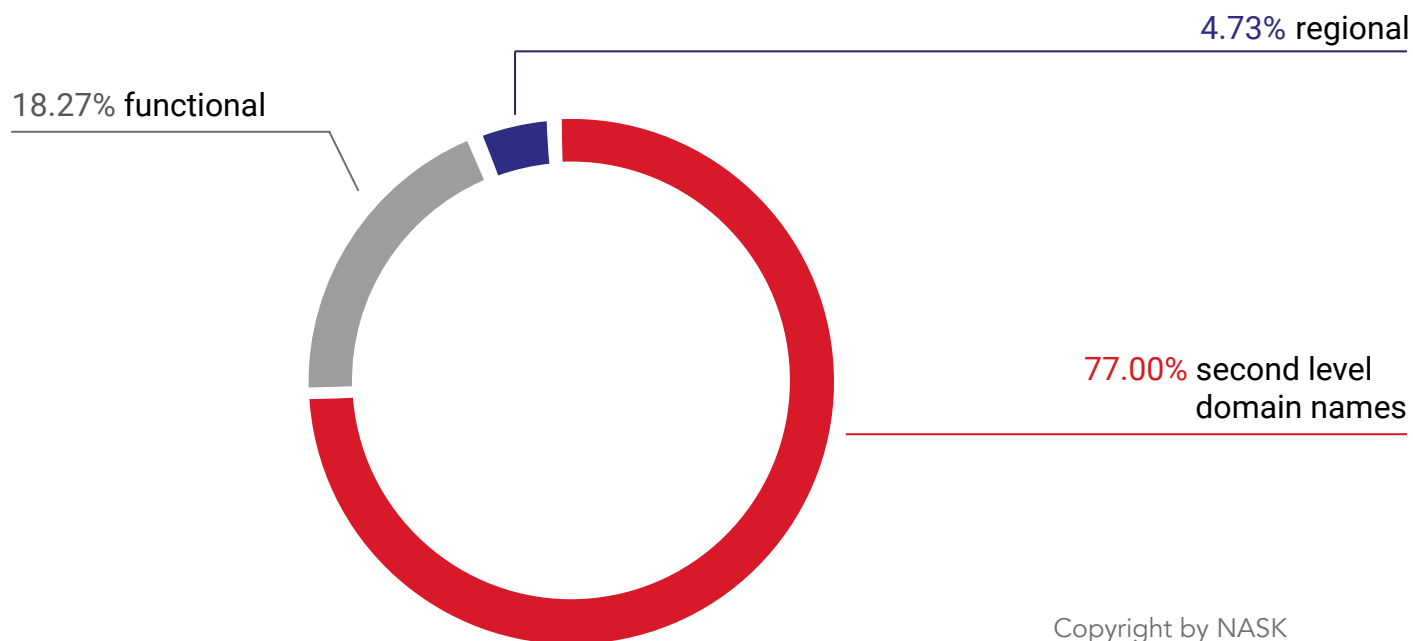
Number of .pl domain names maintained in 2019

Number of .pl domain names in DNS



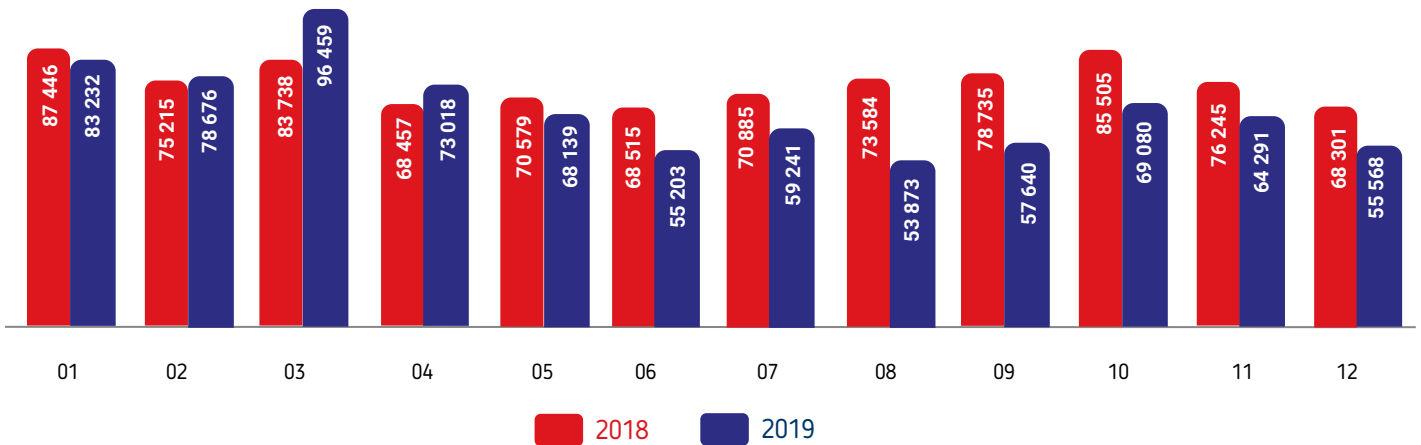
Copyright by NASK

Number of domain names active in DNS as divided into the type of zone in 2019



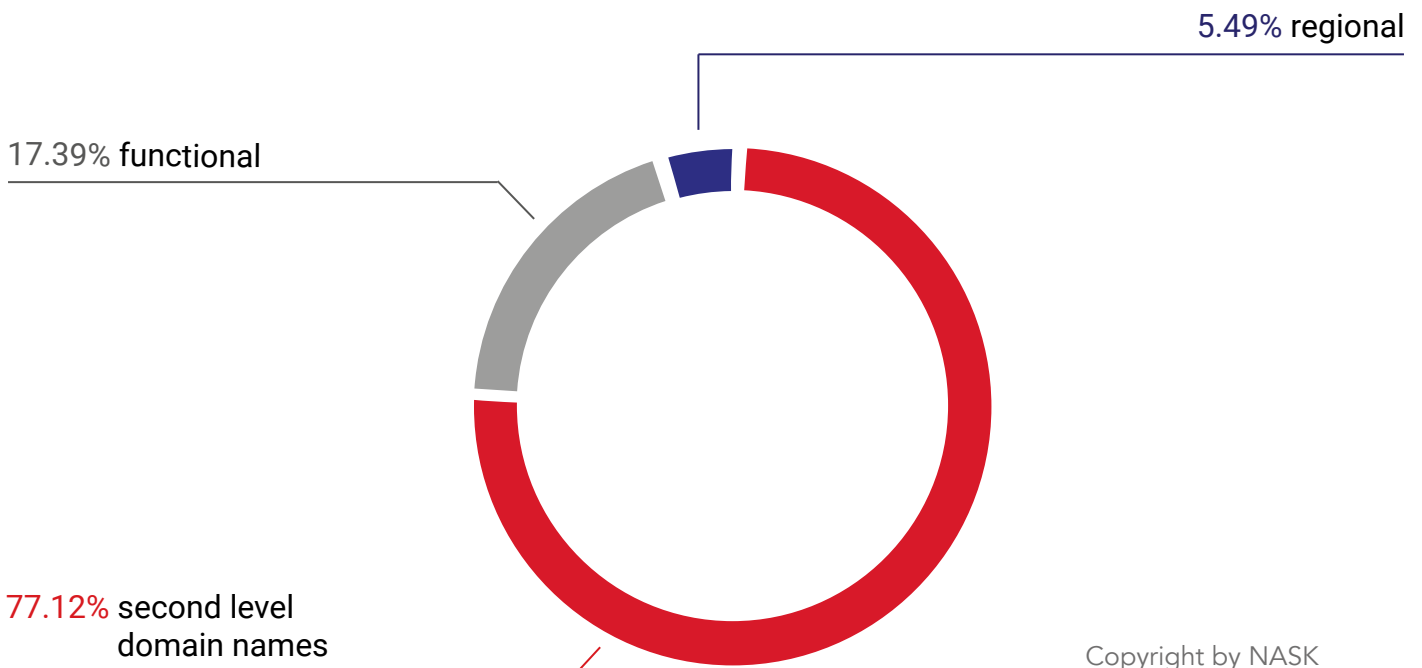
Copyright by NASK

Number of registrations of .pl domain names



Copyright by NASK

.pl domain name registrations as divided into a type of zone in 2019

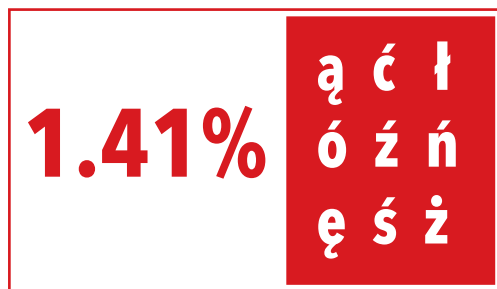


Copyright by NASK

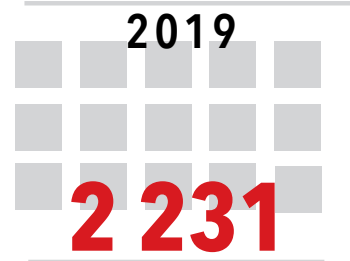
In 2019 in the .pl domain registry there were entered

814 420

names



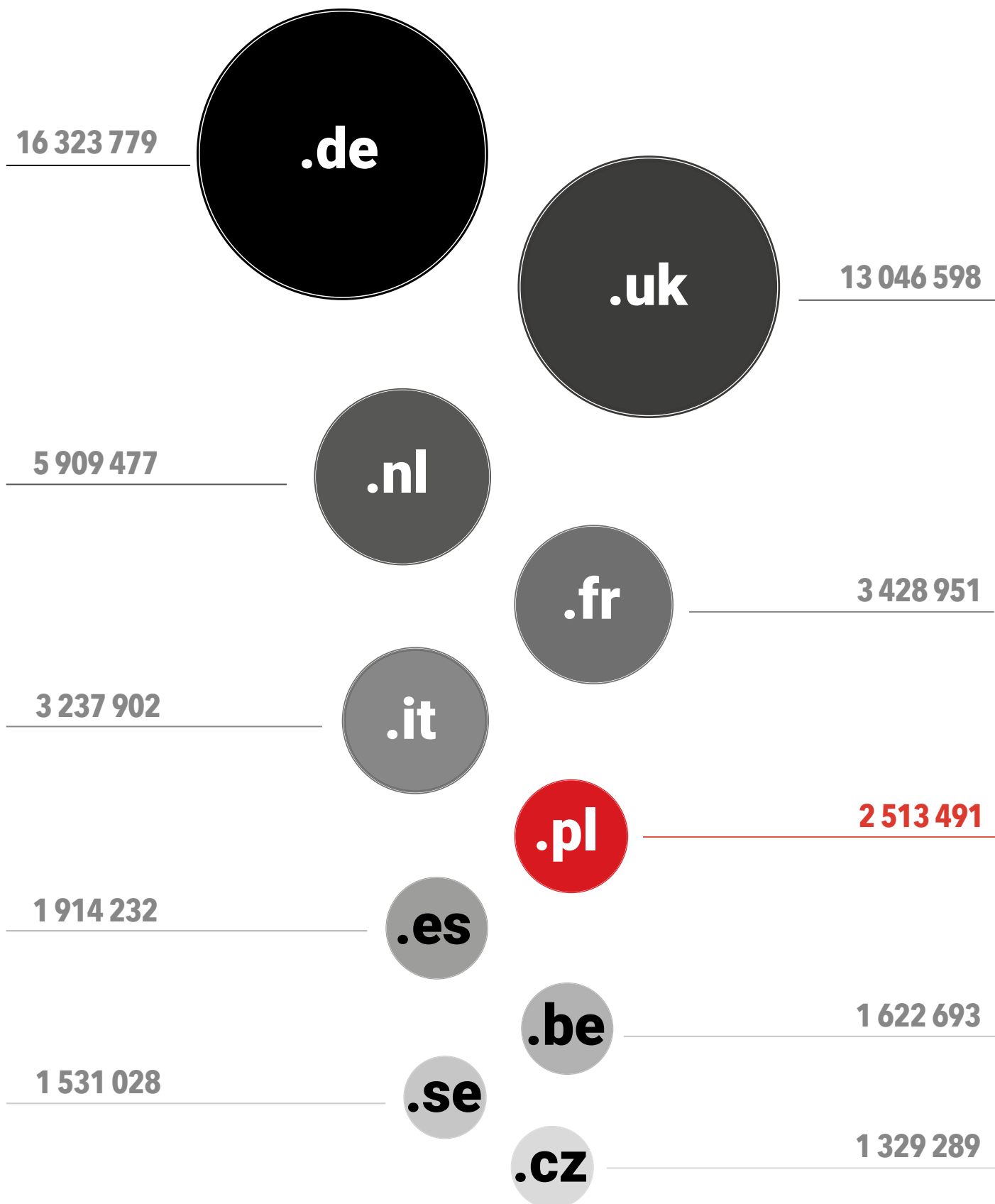
thereof containing national diacritic signs



A daily average number of .pl domain names



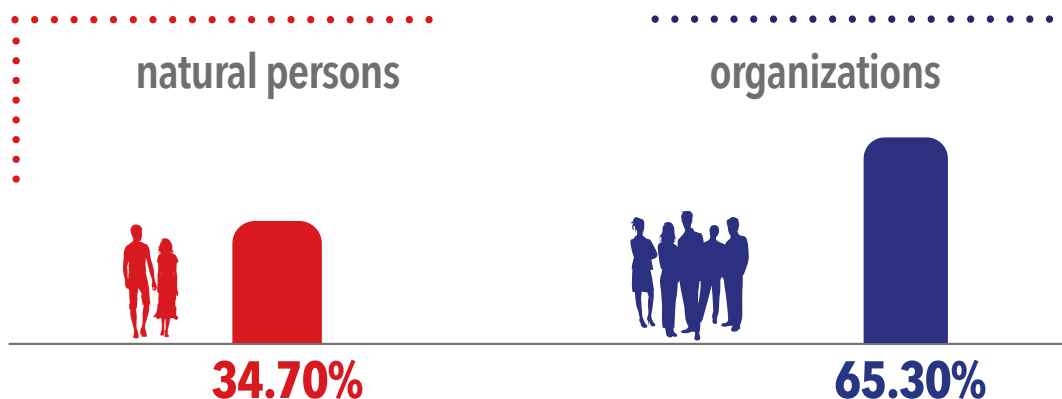
Ranking of ccTLD registries (EU area)



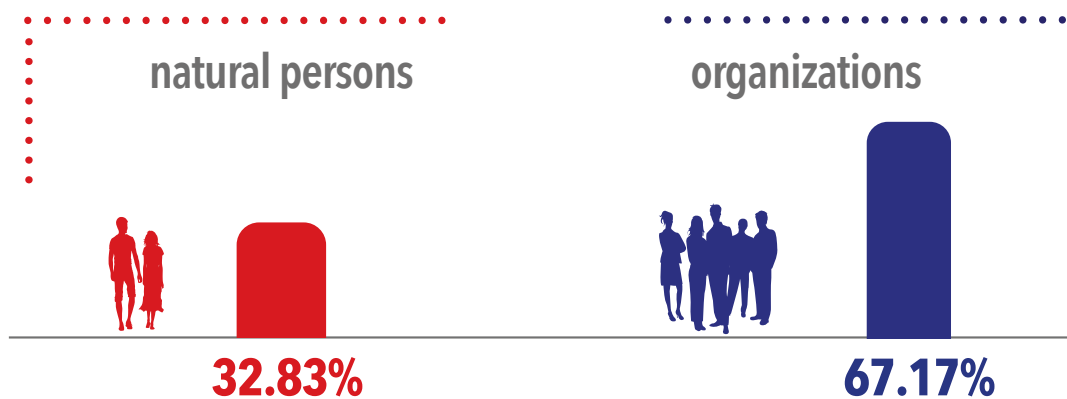
Number of .pl domain name registrants

1 072 587

Registrants divided into types



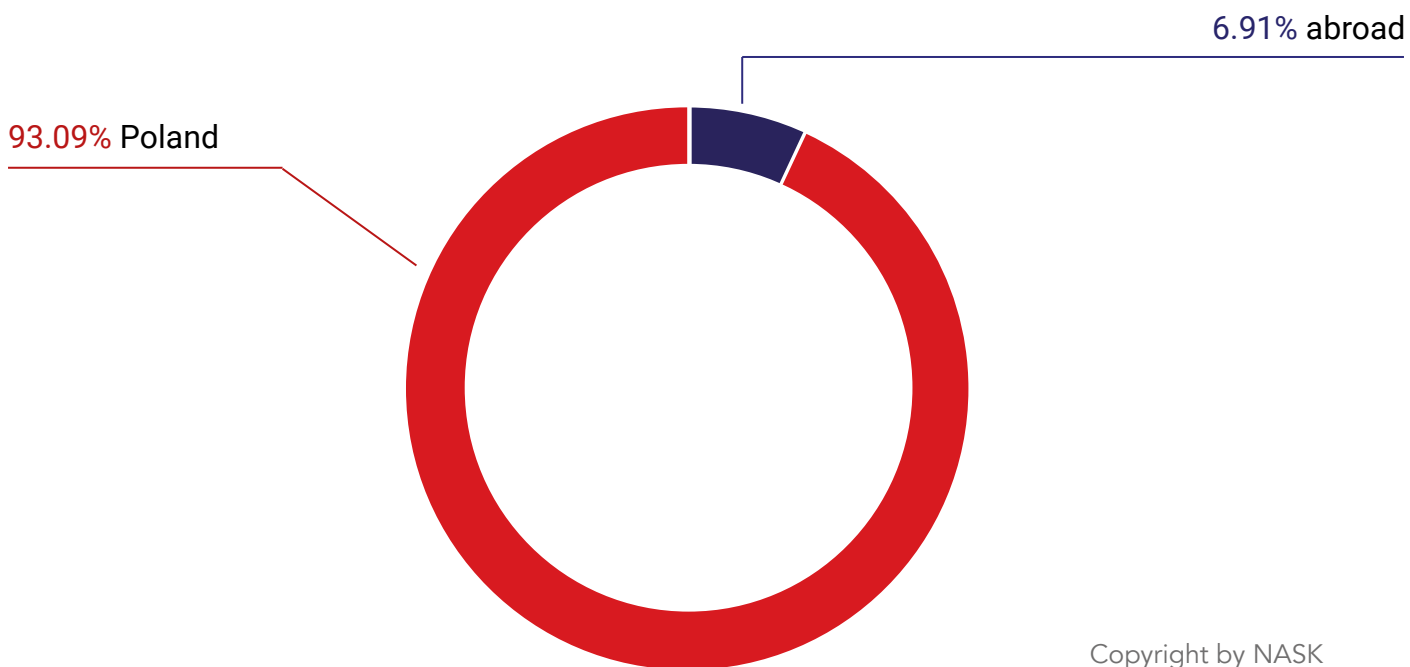
Domain names active in DNS as divided into the type of a registrant



.pl domain name registrations as divided into the type of a registrant

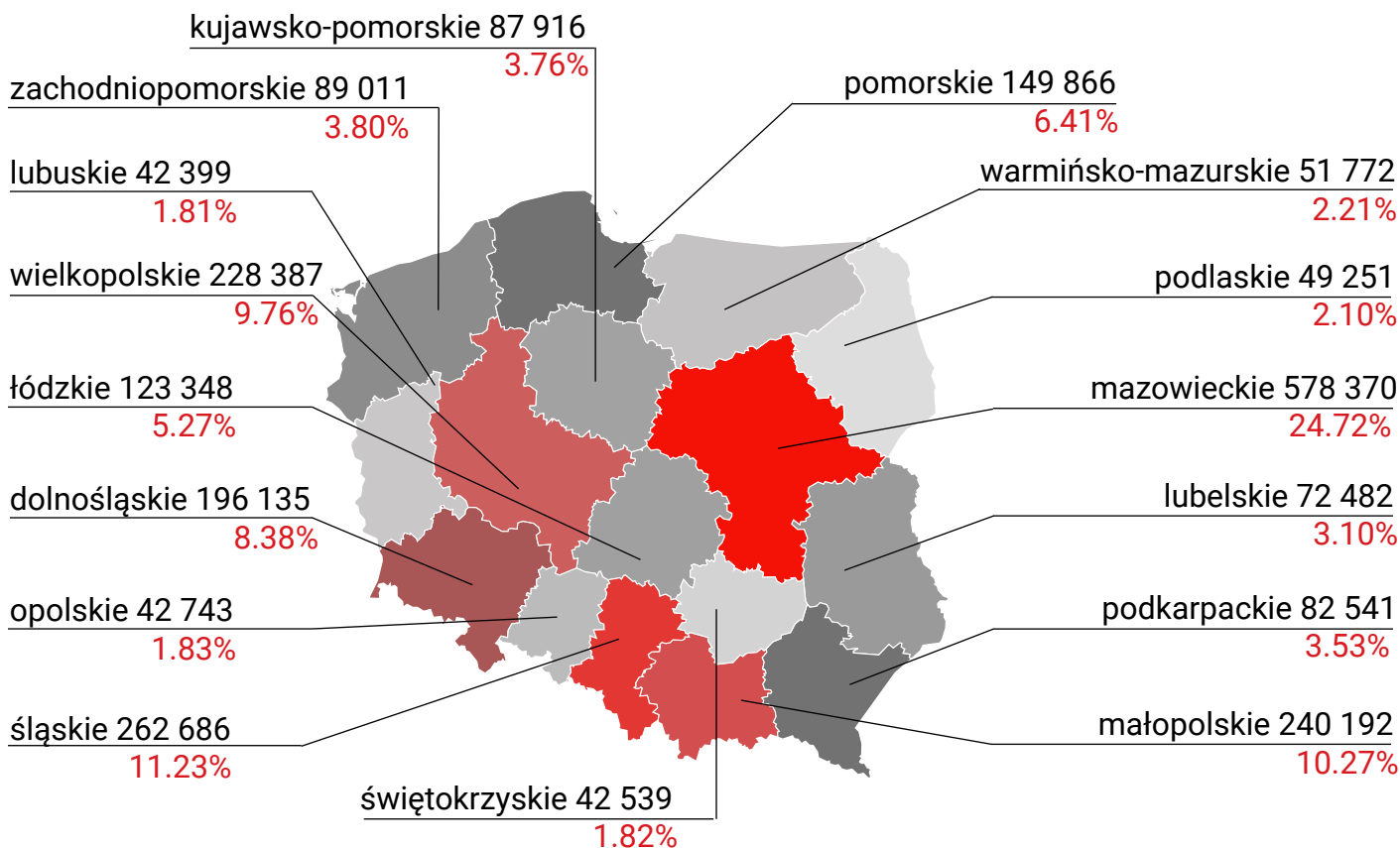


Location of .pl domain name registrants



Copyright by NASK

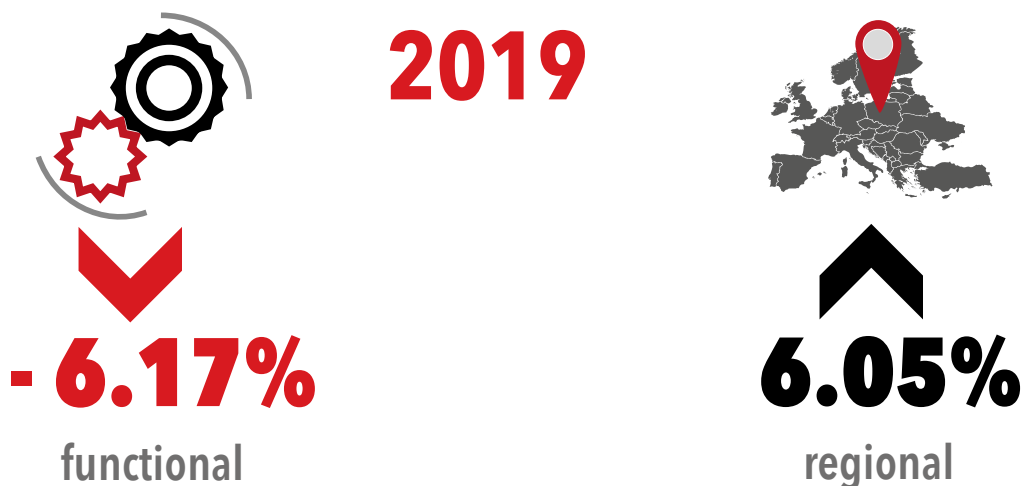
Province



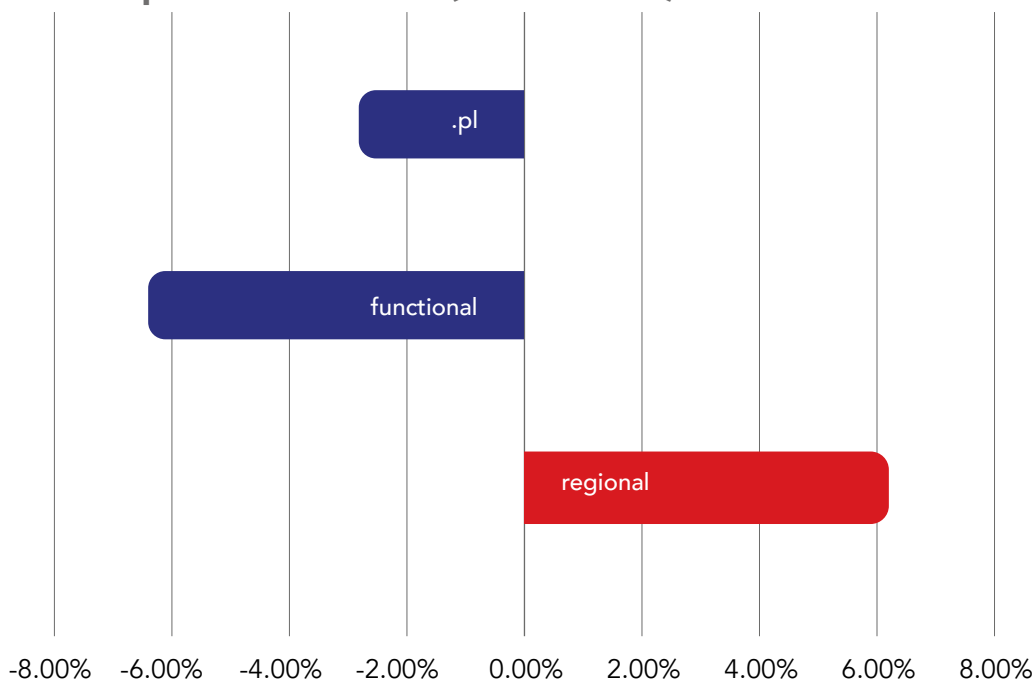
Dynamics of the .pl domain zones

The number of regional domain names in the .pl zone increased by 6.05%, compared to the previous year, while the number of functional domain names decreased by 6.17%.

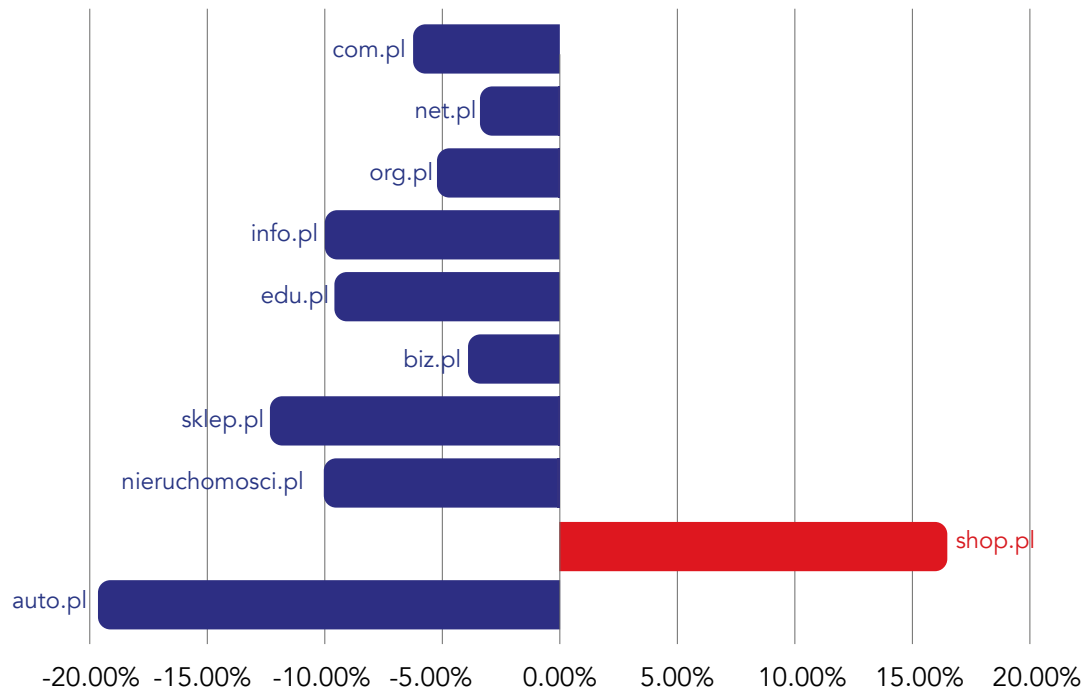
The charts below illustrate the dynamics of changes in zones with the highest number of names.



Dynamics of the .pl domain zones (2019-2018)

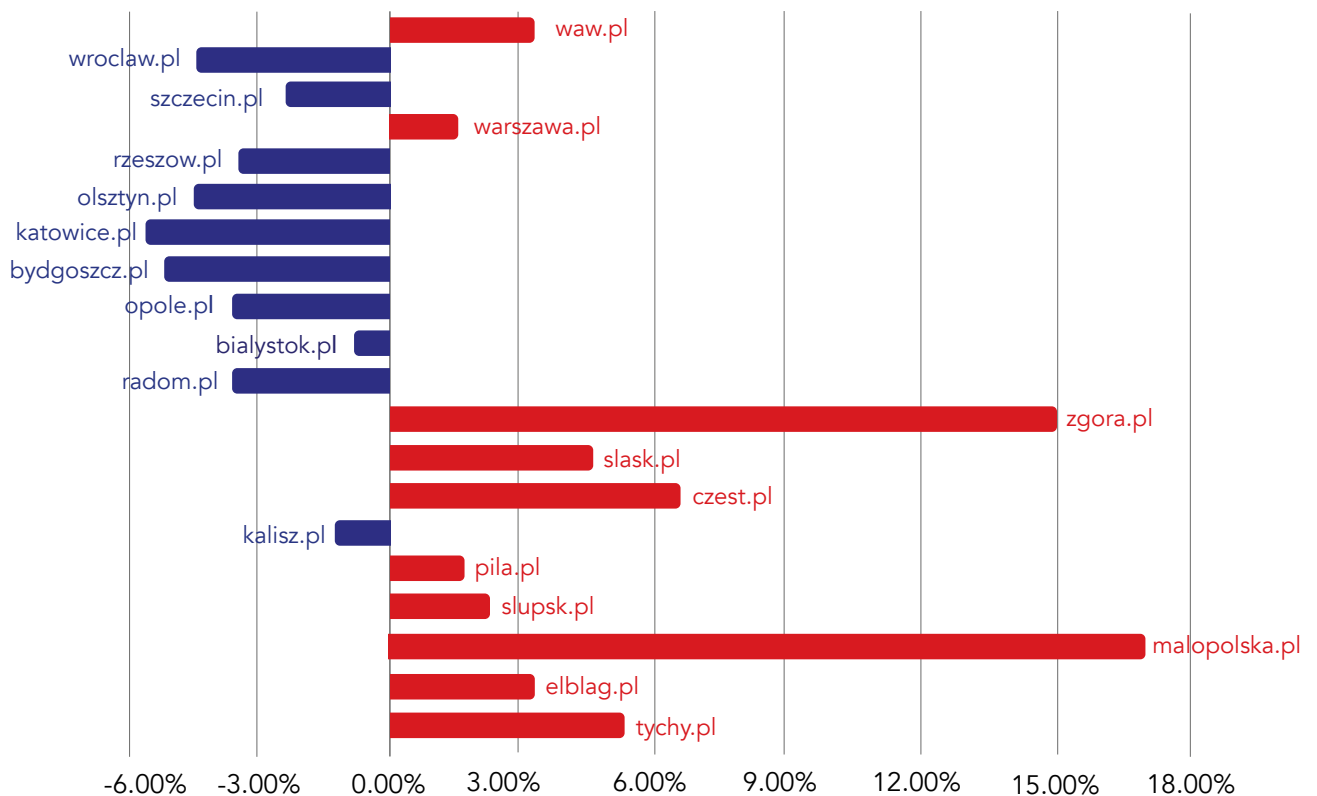


Dynamics of functional domain names (2019-2018)



Copyright by NASK

Dynamics of regional domain names (2019-2018)



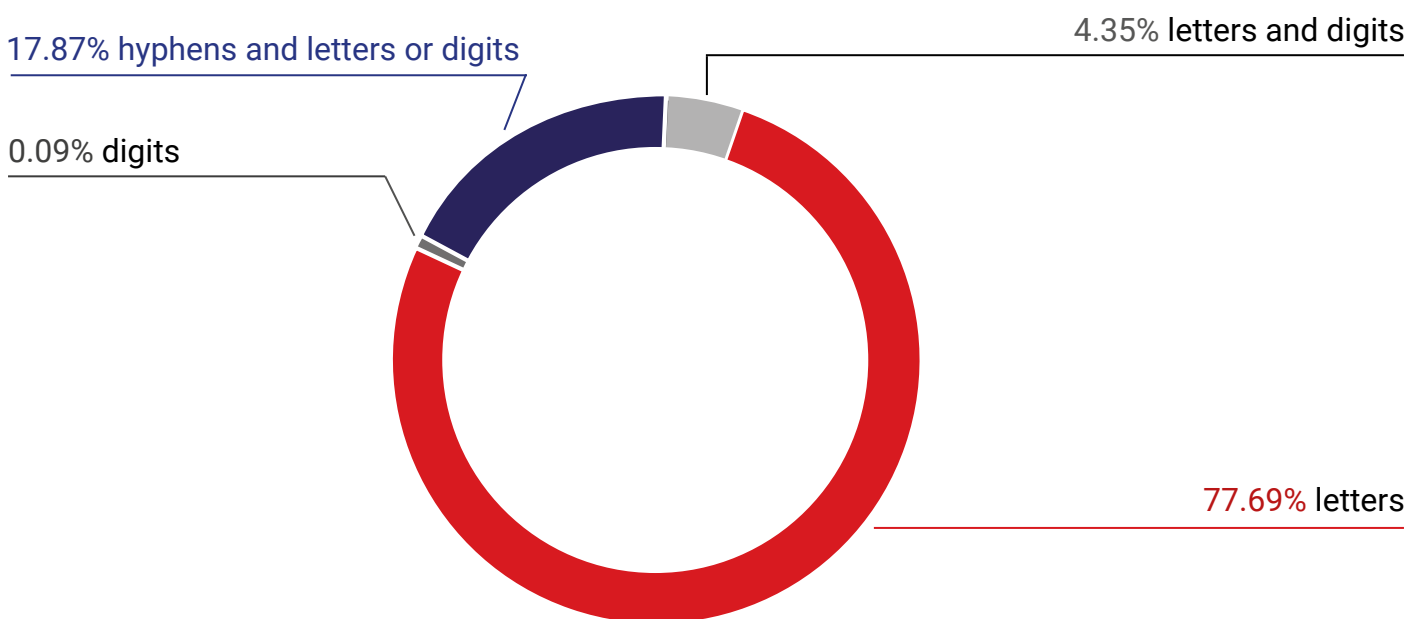
Copyright by NASK

Structure of .pl domain names

In 2019 the average length of names in the .pl domain registry was **11.06** characters. The maximum allowed length, 63 characters, had **8 names**. More than half of the .pl domain names (51.58%) had from 1 to 10 characters, while the

most numerous group (**8.91%**) consisted of 9-character names. Single character names constituted **82.10%** and double character names **16.47%** of all .pl domain names. **1.43%** of .pl domain names had 3 and more characters.

Characters in .pl domain names



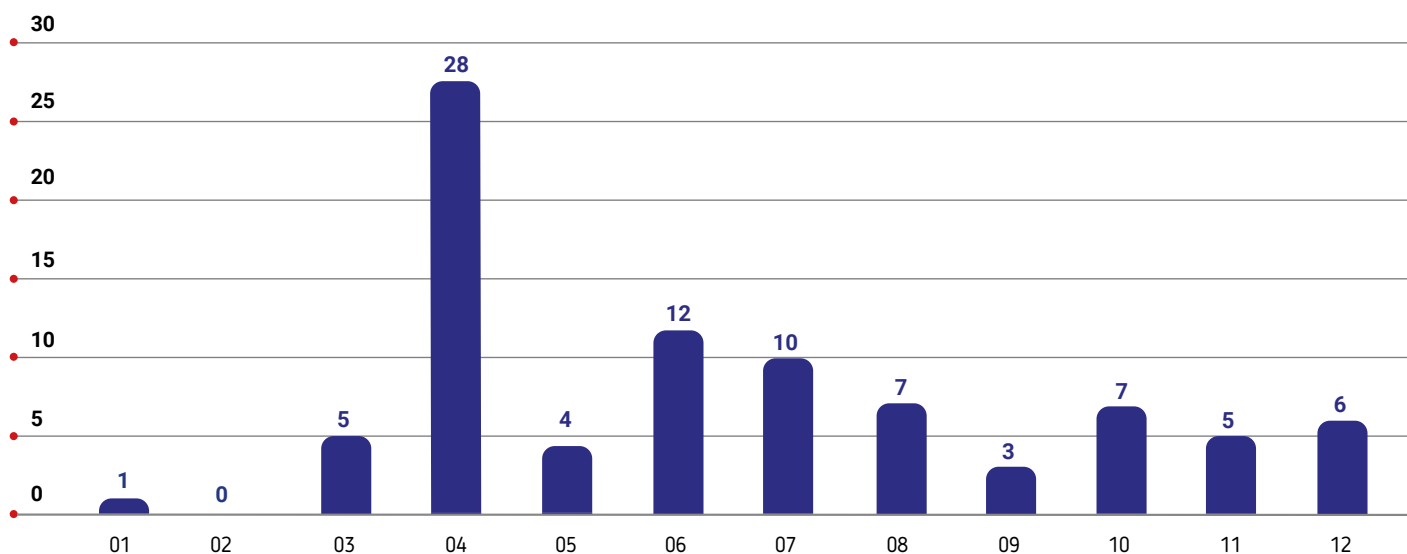
Copyright by NASK

Abuse prevention with .pl domain names

The Registry enables interested Internet users to register their names in the .pl domain, ensures their functionality and takes care of a high level of security of domain names in the administered .pl zone. The .pl Domain Name Regulations as well as the Policy of the .pl domain registry on the prevention of .pl domain names being used for abusive purposes, published in May 2019, constitute a formal basis for actions to be taken in case of illegal or dishonest practices with the application of the .pl domain names. The aim of those actions is to minimize the effects, growing for years, to which registrants of, among others, the .pl domain names may be exposed. Domain names, registered for incomplete or incorrect registrant's data, in many cases, are also used for distributing malicious software or for other illegal online activities violating the law. It is worthwhile to note that the Policy does not apply to infringements in the area of the right to the .pl domain name and disputes on the names which are heard before the arbitrary or common court in accordance with the .pl Domain Name Regulations. Within the framework of activities, undertaken by the .pl domain registry in 2019, in the aftermath of the determination of the infringement

of the provisions of the Regulations and the principles of the Policy or relevant decisions of duly authorized state bodies, the registry blocked 88 domain names in total, out of which as many as 83 names were used for phishing (a method of data extortion) or for distribution of malicious software, 2 were blocked at the request of the prosecutor and 3 as a result of the registrant's failure to provide/refusal to provide true contact data, necessary for the performance of the agreement by NASK. Blocking of a domain name shall be understood as suspension of delegation of a given domain name to the DNS by technical assigning thereto an appropriate status by the registry. What is important, that action is not definitive, i.e. it is reversible at any time and does not deprive the registrant of the rights to the domain name. In accordance with the Policy on the prevention of .pl domain names being used for abusive purposes, a .pl domain name registrant, against whom the actions described above have been taken, has the right to appeal within 14 days from the date of taking such actions by the registry. In 2019 there were not any appeals submitted with respect to domain names blocked by NASK.

Statistics on domain names blocked in 2019



.pl Registry Lock - number of secured .pl domain names

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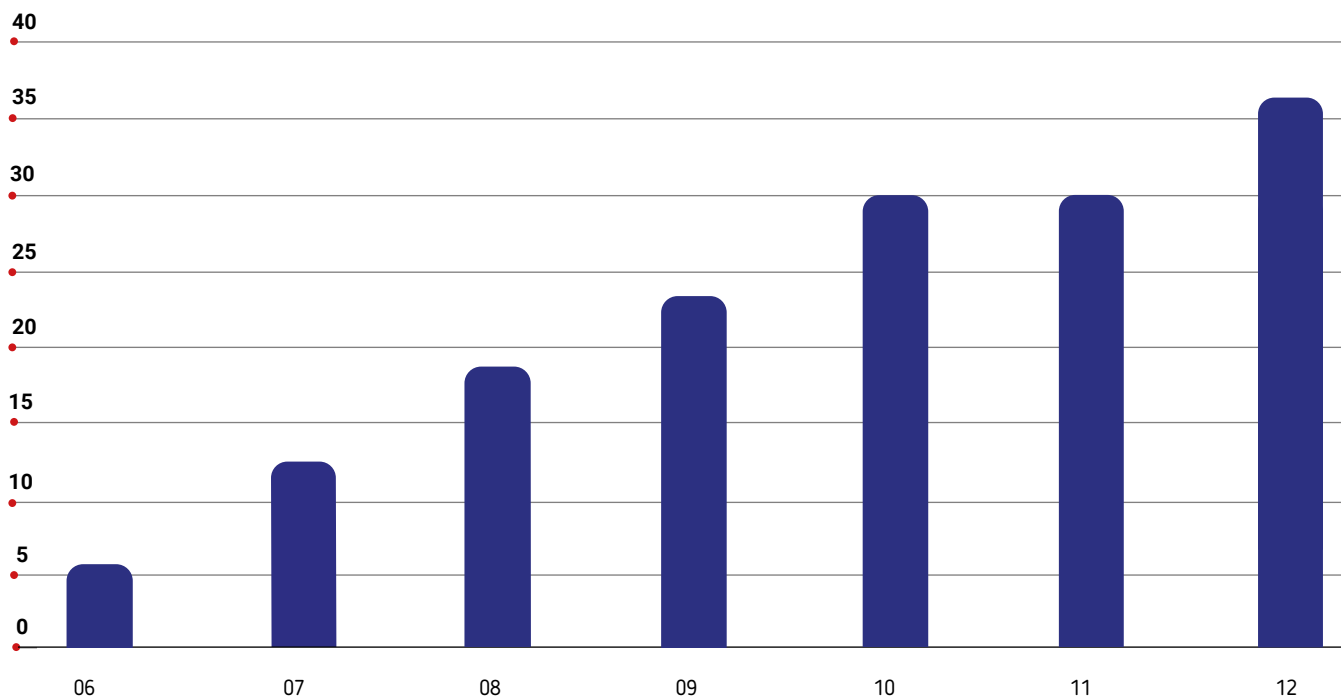
The .pl Registry Lock service, offered by the .pl domain registry, allows to technically secure current registration data of a domain name at the registry level. Activation of the .pl Registry Lock prevents, among others, the deleting of a domain name, changing of a registrant or changing the domain name delegation.

The .pl domain registry distinguished* two companies with the highest number of domain names secured with .pl Registry Lock in 2019: Agnat Sp. z o. o. (domena.pl) and H88 S.A. (domeny.pl)



*alphabetical order

Number of domain names with active .pl Registry Lock



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DNSSEC - number of secured .pl domain names

At the end of 2019, the .pl domain registry contained **524 343** names secured with DNSSEC (Domain Name System Security Extensions). From the beginning of January 2019 the number of secured .pl domain names increased by further **22 260** names. Among the European registries associated in CENTR (Council of European National Top-Level Domain Registries),

the .pl domain registry was fourth in terms of the number of domain names secured with the DNSSEC protocol.

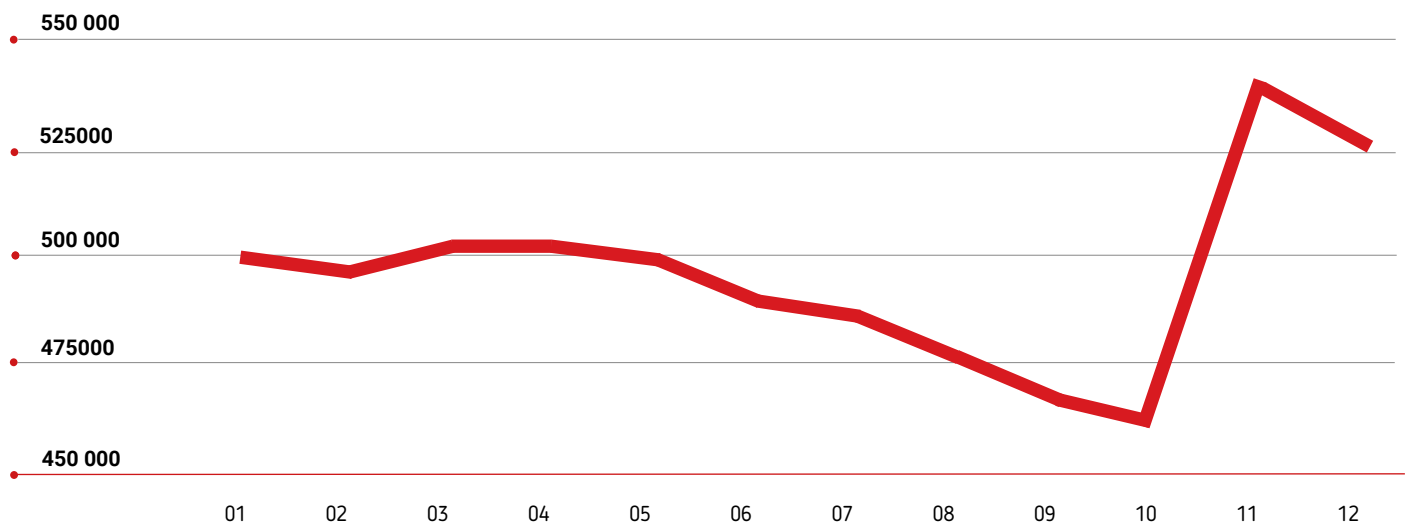
The .pl domain registry distinguished* three companies with the highest number of domain names signed with DNSSEC in 2019:

Aftermarket.pl Limited, nazwa.pl sp. z o.o., OVH SAS.



*alphabetical order

Number of the .pl domain names secured with DNSSEC



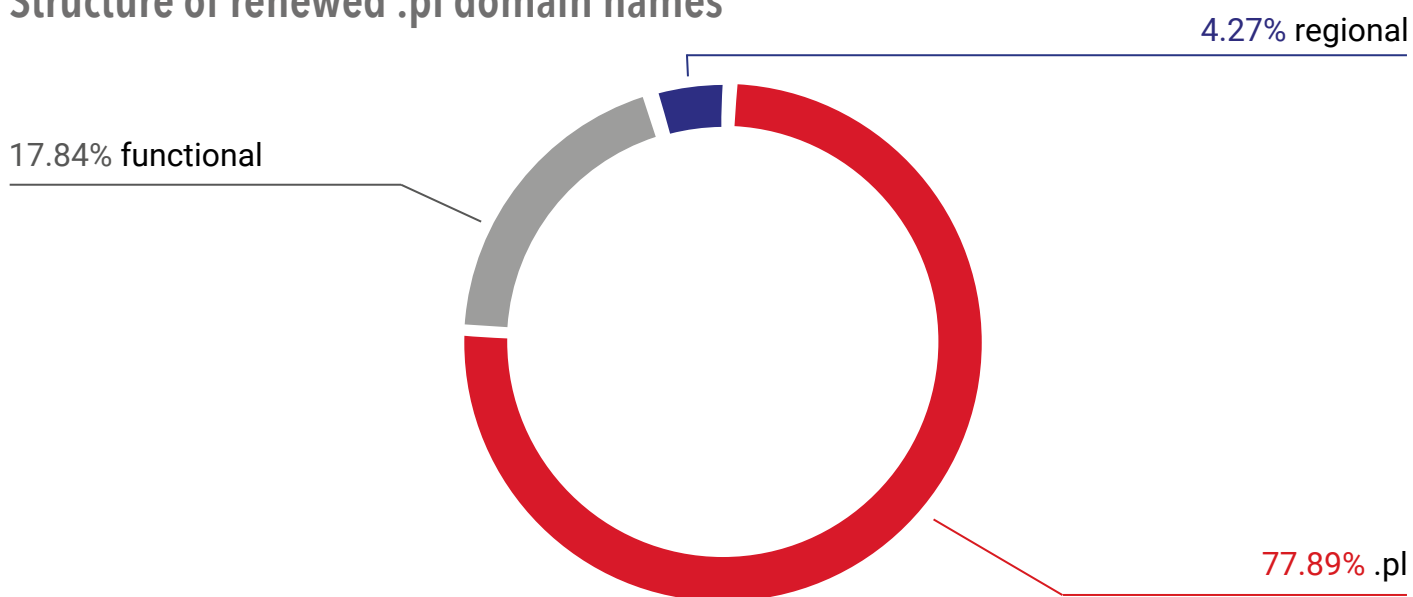
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Domain names renewed for a consecutive billing period

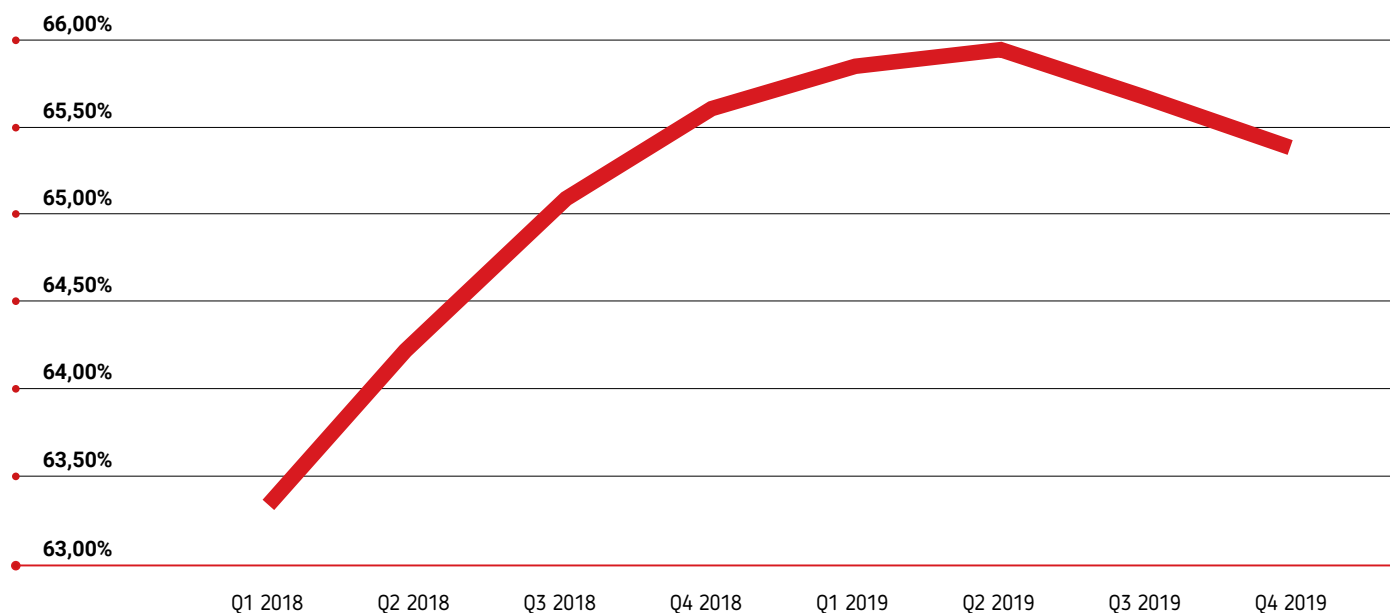
In 2019 **1 676 097** .pl domain names were renewed. From the beginning of January to the end of December 2019, registrants shifted the end dates of their domain names' billing periods **6 515** times by an individually defined number of days. In the third and fourth quarter of 2019 the Registry recorded a decrease in the number of renewals of .pl domain names.

The observed decrease in the number of names, renewed for a consecutive billing period, was impacted by the ending registrars' promotion periods - probably only a part of the registrants were interested in maintaining a domain name after the promotion.

Structure of renewed .pl domain names

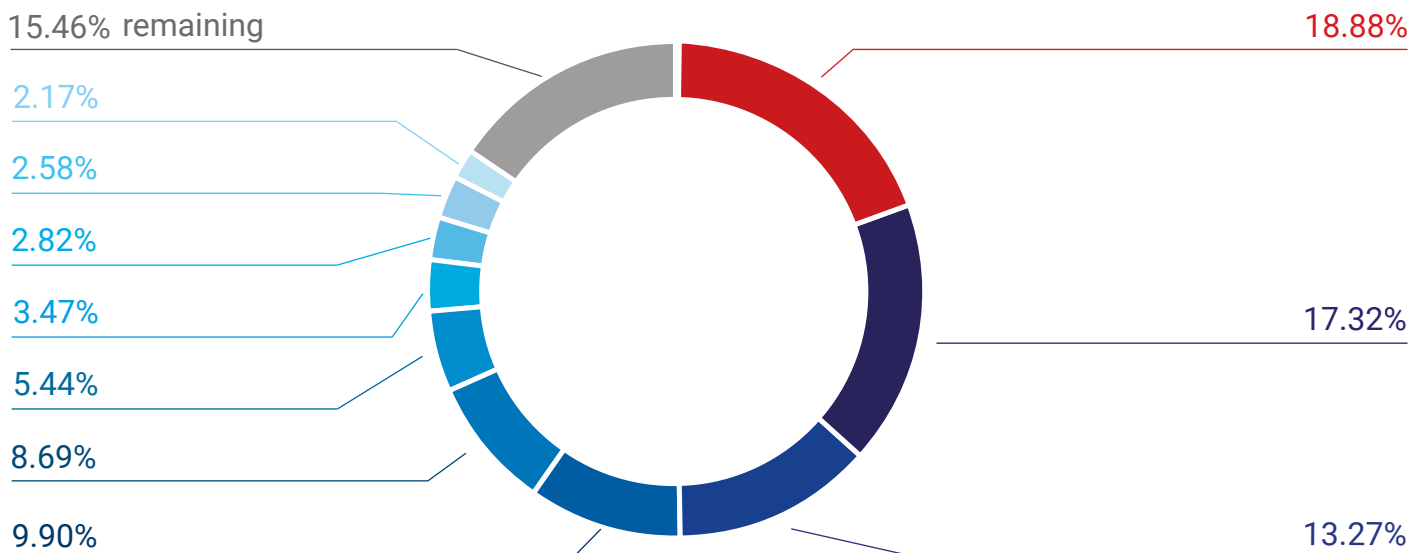


Renewal rate of .pl domain names



.pl domain name market share

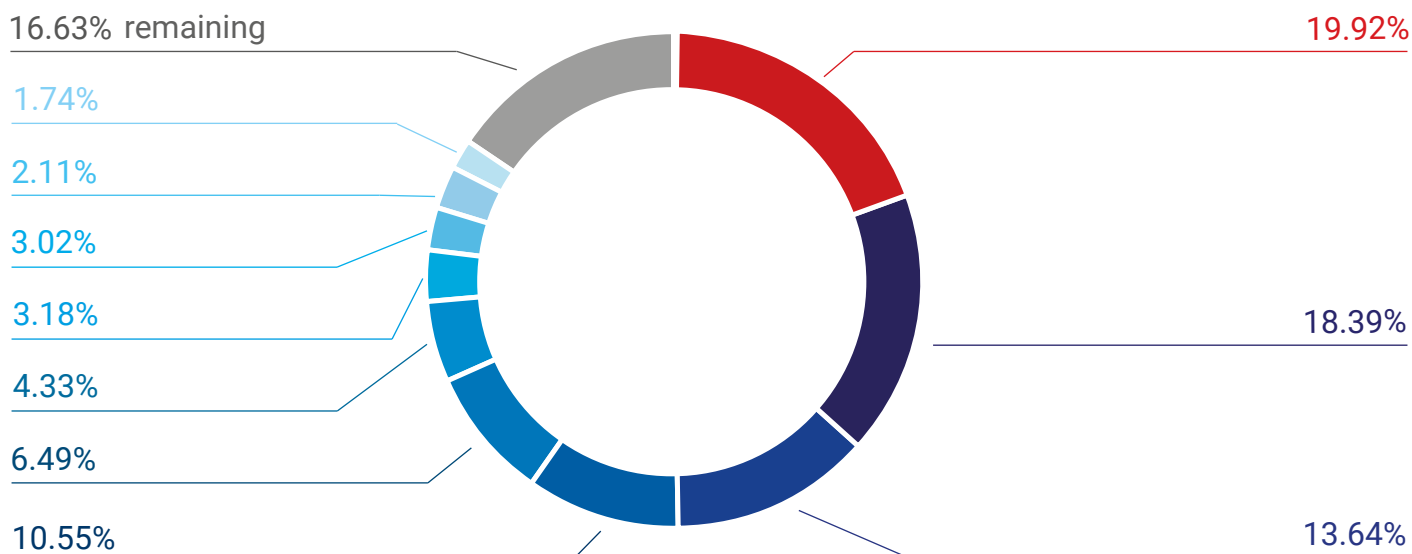
Partner's market share in the service of .pl domain names, 2019



The graph presents ten NASK Partners handling the highest number of .pl domain names

Copyright by NASK

Partner's market share in the service of registrants of .pl domain names, 2019



The graph presents ten NASK Partners handling the highest number of .pl domain name registrants

Copyright by NASK

Timeline

FEBRUARY

6-7 February

28th CENTR
Marketing workshop,
Copenhagen, Denmark

20 February

46th CENTR
Administrative workshop,
Bern, Switzerland

MARCH

4 March

Positive recommendation
of an independent certifica-
tion body to maintain the
certificate of conformity
of the implemented quality
management system with
the requirements of the
international standard ISO
9001:2015,
Warsaw, Poland

15 March

Domain
Name Day,
Poland

26 March

.pl Registry Lock -
introduction to the
offer of provided
services

MAY

14 May

Open Source Day
conference,
Warsaw, Poland

16 May

Release of the
Annual Report 2018

16 May

IT w Bankowości
GigaCon,
Warsaw, Poland

21 May

Oracle Cloud Day
conference
Warsaw, Poland

27-29 May

CENTR Jamboree
Workshop,
Amsterdam, The Nether-
lands

JUNE

5 June

6th Seminar of the
Court of Arbitration for
the Internet Domain Na-
mes at PIIT,
Nicolaus Copernicus
University
Toruń, Poland

11 June

Meeting with the
Partners of the
.pl domain registry
Warsaw, Poland

JULY

30 July

29th anniversary of the esta-
blishment of the .pl domain
On 30 July 1990, IANA, an
organization, managing at
that time top level domains,
made a notation of „.pl”
ccTLD, assigned
administratively to Poland

AUGUST

Extension of anycast DNS network - start of cooperation with the Canadian Internet Registration Authority (CIRA),

31 August

ENUM - termination of the service

SEPTEMBER

Extension of anycast DNS network - start of cooperation with ipcom GmbH

4-5 September

1st Cyber Security Forum during 29th Economic Forum in Krynica Zdrój, Poland

10 September

Introduction of new services for Partners: Bulk transfer (automated transfer), merger of accounts and assignment

19-20 September

48th CENTR Administrative workshop, Oslo, Norway

OCTOBER

8-9 October

14th edition of the Ecommerce Standard conference, Warsaw, Poland

9-10 October

62nd CENTR General Assembly, Brussels, Belgium

NOVEMBER

2-8 November

66th ICANN Session, Montreal, Canada

13 October

41th CENTR Technical Workshop, Rotterdam, The Netherlands

17-18 October

30th CENTR Marketing workshop, Oxford, United Kingdom

5 November

Red Hat Forum conference, Warsaw, Poland

15 November

Positive result of the surveillance audit of the information security management system compliance with the requirements of ISO/IEC 27001, Warsaw, Poland

22-23 October

SECURE 2019, Warsaw, Poland

25-29 November

Internet Governance Forum 2019, Berlin, Germany

DECEMBER

9 December

Internet Governance Forum Poland, Warsaw, Poland

13 December

NASK Day, Wrocław, Poland

Marketing of .pl domain registry

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In 2019, the marketing activities of the .pl domain registry were focused mainly on promoting services increasing the security of the .pl domain and on reaching as many recipients as possible - current and potential new registrants - with information on the .pl domain. The marketing communication was conducted through the Internet channels, traditional media and event marketing activities.

As a part of the promotion of a new service raising the security level of domain names, .pl Registry Lock, an informing animation about the hijacking of a domain name by a cybercriminal was prepared, containing also tips on how to avoid such a situation.

The .pl Registry Lock service was widely promoted in the press, business and social networking services. Representatives of the Registry also presented the service at the IT w Bankowości conference, Ecommerce Standard, as well as at one of the most important conferences on ICT security in Poland - SECURE.

NASK Partners had an opportunity to get acquainted with the new service during the information and promotion meeting organized in the Registry's office.





An important event, which has been permanently marked in the .pl domain registry calendar, is the Domain Name Day, celebrated on 15 March. In 2019, the employees of the Registry organized „Pociąg do domeny .pl” at the Central Railway Station in Warsaw - an event during which you could broaden your knowledge about the registration of .pl domain names, take part in a competition with prizes or make creative animations with the Registry logo.

„Pociąg do domeny .pl” enjoyed great interest of travellers, not only from Poland, but also from abroad.



It is also worthwhile to mention the street survey "What do you know about 'the Internet'?". The survey was carried out among passers-by who were asked questions related to the Internet and domain names

(e.g. what is spam? how many .pl domain names are registered? how many Internet users are there in the world? what does the www acronym stand for?).



In 2019, public relations activities were also undertaken. Information on new services of the Registry and data from the .pl domain market were

published periodically in quarterly reports and the annual report summarizing the year 2018.

Security of .pl zone

One of the most important aims of the .pl domain registry is to ensure safe, continuous and stable operation of the .pl domain. This concerns both the technologies applied and risk management procedures that have been implemented.

The .pl domain registry, as a member of international organizations such as ICANN (The Internet Corporation for Assigned Names and Numbers) and CENTR (Council of European National Top-Level Domain Registries), co-creates and applies best practices and guidelines for Internet management, including those related to the security of domain names.

It was ICANN that, in early 2019, called on domain registries and major players responsible for security to fully deploy DNSSEC (Domain Name System Security Extensions) to protect the network and key parts of the Domain Name System (DNS) infrastructure.

DNSSEC protects against modifications of the responses, to queries for digital addresses, received from the Internet and ensures that they come from the right source so that the Internet user can be sure to receive authentic data. As early as at the turn of 2011 and 2012, the .pl domain registry started to secure the .pl domain with the DNSSEC protocol, and in 2012 it made the DNSSEC service available to registrants. At the end of 2019, over 0.5 million .pl domain names were secured with DNSSEC. Among the registries associated in CENTR, the .pl domain registry was fourth in terms of the number of domain names secured with this solution.

Another action, taken by the Registry in 2019, aimed at increasing the security of registrants and service stability, was to expand its own network of anycast DNS, by establishing cooperation with other global service providers, thus shortening the time of response to the .pl domain name address queries and incre-

asing the resistance of the domestic Internet to DDoS attacks.

In the area of administrative activities, increasing the security of .pl domains, the Registry introduced the .pl Registry Lock service and the bulk transfer.

.pl Registry Lock is a service providing additional protection against unauthorized or accidental administrative changes to the domain name, attempts to remove or take over the domain name, e.g. as a result of a cyberattack, error or unauthorized action of a third party. The service consists in preventing certain actions on the domain name without the express consent of the registrant. Those actions, among others, include: deletion of the paid domain name, change of the domain name registrant's data, change of the registrant of a domain name, transfer of the service to another registrar. The .pl Registry Lock service is primarily addressed to business customers. In 2019, several dozen NASK partners placed the service in their offers.

Bulk transfer consists in transferring all .pl domain names serviced by a given registrar to another. It can be carried out only during the process of terminating the cooperation between the registrar and NASK, and it requires both registrars to obtain appropriate consents of the registrants. It is aimed at strengthening the security of registrants by ensuring continuity of service of the .pl domain names in unusual situations.

The proof of the highest quality of services, provided by the .pl domain registry, is the fact that NASK is the world's first national registry of domain names to implement the quality management system and since 2004 it has been continuously holding the certificate of conformity of the maintained system with the requirements of ISO 9001.

Internet 24/7 - overview

In 2019, the .pl domain registry, in a series of articles, Internet 24/7, raised primarily issues related to the security of Internet users and .pl domain name registrants.

We invite you to read the article - **ICANN Calls for Full DNSSEC Deployment, Promotes Community Collaboration to Protect the Internet:**

www.dns.pl/en/NASK_Q1_2019_REPORT_EN.pdf

In the middle of the year, in regard to the new .pl Registry Lock service, released by the Registry, an article on the prevention of the so-called domain name hijacking was published. Domain name hijacking is a situation when an attacker gets unauthorized access to the domain name registration data. The text describes spectacular attacks related to domain name takeovers. In recent years more than 4 thousand Internet domain names, belonging to more than 600 organizations, have been hijacked. The .pl Registry Lock service was implemented by the .pl domain registry in March 2019, and by the end of the year 26 Partners had already offered the service to .pl domain name registrants.

We invite you to read the article - **Registry Lock – response to an increasing threat of domain name hijacking:**

www.dns.pl/en/NASK_Q2_2019_REPORT_EN.pdf

In the report Q3 2019, published during the pre-Christmas online shopping fever, the article was devoted to the subject of the threat of fake shops. According to the CERT Polska report, in 2018, there was almost a threefold increase in incidents related to fake online shops, as compared to 2017. The article contains tips on how to recognize a fake shop and not fall victim to fraud (e.g. pay attention to suspiciously bargain prices, look for opinions about a given seller on the Internet).

We invite you to read the article - **Fake shops - a growing threat:**

www.dns.pl/en/NASK-Q3-2019-REPORT-EN.pdf

In the report for the last quarter of 2019, the Registry presented its cyber security activities throughout the year. The article discusses the development of the own network of Anycast DNS servers, as well as the establishing of cooperation with other providers of this service (Canadian Internet Registration Authority (CIRA) based in Ottawa and ipcom GmbH, a subsidiary of nic.at, based in Salzburg).

We invite you to read the article - **Increasing the security and stability of the DNS service for the .pl domain:**

www.dns.pl/en/NASK-Q4-2019-REPORT-EN.pdf

From the perspective of 2020

In the summary of the report, we would like to inform you that we have completed the next stage of the development of the Registry's website - www.dns.pl. We are convinced that you will find there many interesting statistics, publications and information related to the works and the activity of the Registry in various areas.

The .pl domain registry, within the frames of strengthening the communication on emphasizing the identity and benefits of having a digital address in the .pl domain, will develop and implement programmes addressed to entrepreneurs, especially to small and medium-sized enterprises. The aim of the campaign will be to inform on the advantages of doing business (and not only) using regional and functional domains, as a tool for digital identity identification, and to pay attention to the security aspect of the Internet. Moreover, in 2020, the Registry will continue works aimed at preventing abuse of names in the .pl domain.

In the current year, the .pl domain registry plans to undertake a number of technical tasks related to extension and modernization of DNS systems. The aim of those activities is to ensure an increase in the bandwidth of the Internet in our zone and to increase the level of security and stability of the Registry services. It is also planned to launch a new project to build and implement the Registry system using the latest technologies.

In hindsight of this report being compiled, it should be added that at the beginning of the year we implemented in the Registry systems new technical procedures for handling the DNSSEC protocol, which is one of the main security pillars of the .pl domain. We managed to significantly reduce the time of signing and validating the zones in comparison to previously applied techniques.

In the first quarter we hosted the 49th CENTR Administrative Workshop. Workshops and the consultation of the representatives of the European Registries focused on the area of Internet domain name security services. In the working groups of the registries, associated in CENTR, there were undertaken design works on the standardisation of Registry Lock models - a service also offered by the .pl domain registry - to establish a coherent approach to the security of this service.

In this report, in the chapter *Abuse prevention with .pl domain names* for the first time we publish information on blocked domain names. Within a few months of this year, the number of blocked domain names increased over three times. In the interest of the Internet users, we will gradually increase our resources and organizational and technical capacity in order to ensure the highest possible level of Internet security.

Text:

Anna Gniadek, Agata Leszczyńska,
Katarzyna Nitychoruk, Weronika Rakowska,
Tomasz Szladowski

**Compilation and description of data
gathered from the .pl domain name
registry system:**

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Translation:

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