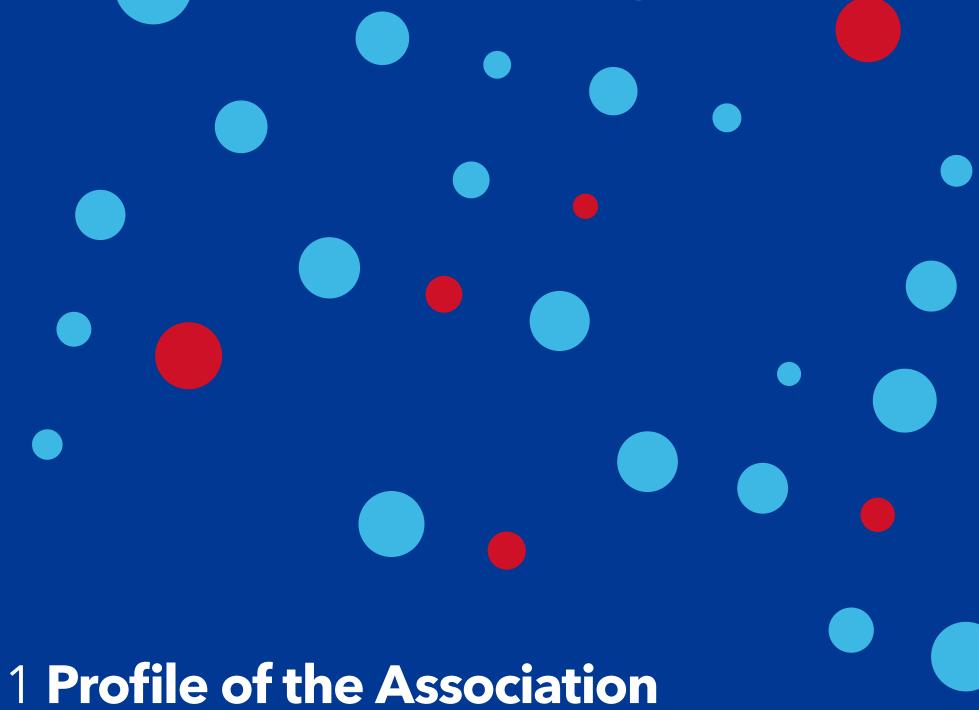
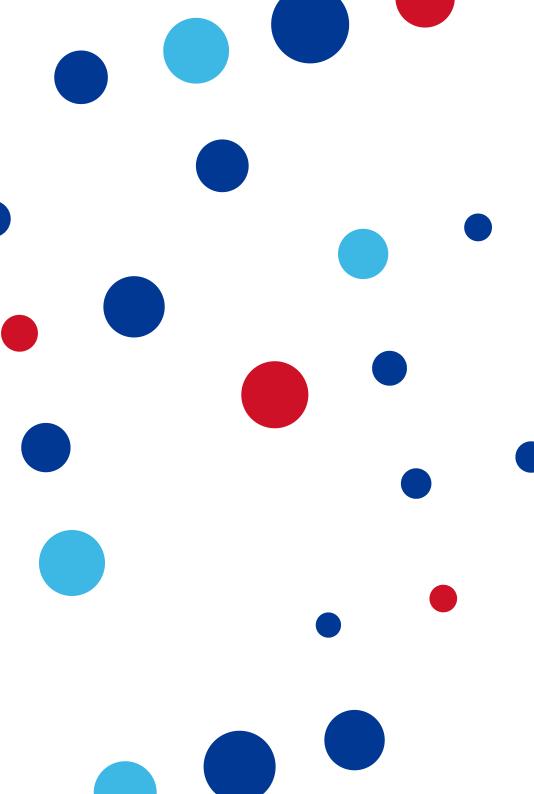


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CZ.NIC, a special interest association of legal entities, is an open and independent organisation whose main activity is the administration of the register of the top-level national .CZ domain and ensuring the operation thereof.

The Association's activities in the field of security are also very important, involving both the CSIRT.CZ national security team and other security projects.

In addition to these activities, the Association is dedicated to research, development and awareness in the field of the internet, internet protocols, network traffic and new technologies in general. The CZ.NIC Association ranks the support and development of the internet community both in the Czech Republic and abroad among its long-term goals.

The CZ.NIC Association was established in May 1998, mainly due to the growing importance of the internet and, thus, the number of its users and those interested in registering domain names in ccTLD .CZ. At the end of 2022, the Association had 121 members divided into three chambers.

At present, the Association is a stable and trustworthy entity capable of ensuring the reliable operation of the .CZ Czech national domain. Since 2013, the CZ.NIC Association has been the holder of the ISO 27001 certification, confirming the safe handling of information, including setting appropriate rules and procedures.

For domain name holders and registrars and other entities that use the internet for their work and leisure time, the Association is a reliable partner that not only provides domain name administration but also safeguards internet security and is involved in socially beneficial activities - both in the form of projects and awareness or educational activities.

# 2 Foreword from the Chairman of the Board of Directors

## Ladies and Gentlemen,

Allow me to present in a few paragraphs the Annual Report of our Association for 2022.

Thanks to the dedicated work of management and our employees, we were able to run all the services of the Association properly and, despite various considerable constraints, we met both the financial and activity plans for 2022.

According to the valid concept, the main activity of the Association is the administration of the national .cz domain, which we have been doing flawlessly for a long time. We want to continue to improve, which is why we strive to upgrade and innovate not only our physical infrastructure, but also our software and services with an emphasis on cybersecurity. While the number of domains has been growing relatively slowly in recent years, this growth continues. Last year we saw a 2.7% increase in domains.

In addition to the administration of the national domain, our Association also operates the internet infrastructure and public services for the benefit of (not only) the local community. Citizens can benefit from various projects with useful tools and services. Please allow me to mention at least some of them: the Turris secure router and services based on it, the MojelD (MyID) authentication system linked to the Portal of the National Identification and Authentication Point (including the strictest secure authentication mode), the globally widespread BIRD routing daemon, the Knot DNS server software, the Datovka application, as well as the operation of CSIRT.CZ in the mode of the National CERT of the Czech Republic under the Cyber Security Act. Not only do we use internal funding sources for our projects, but we have also been successful

in obtaining grants and subsidies. The projects supported in this way include eIDAS, RegeID, PROKI, Safer Internet, Sparta and CyberExchange.

I cannot fail to mention the war that the Russian Federation started in Ukraine. The war has resulted in a large number of dead, wounded and kidnapped, as well as massive material and ecological damage. On the first day of the war, we took the highly extraordinary step of blocking eight disinformation domains, based on the terms of registration, after consulting with Military Intelligence and upon the recommendation of the government. We are well aware of the great value of free speech, but at that moment of fatal danger we saw standing up to the war aggressor as the higher value. No criminal complaint or lawsuit alleging the illegality of domain blocking was successful. We supported the hardpressed Ukrainian people with 10 million crowns, which we donated to humanitarian aid through the Post Bellum organisation; we also donated 220 of our MOX routers to the "Keep Ukraine Connected" project and built a DNS stack for .ua. Our employees have behaved admirably, donating tens of thousands of crowns from their benefit programme to the Ukrainian Embassy.

I would like to thank our registrars for the care they give to the end holders of the domains in our register. It is also necessary to acknowledge the efforts of the employees of the Association, whose work results in the satisfaction of users with our services.

All the important information about the Association and its activities in 2022 is provided in the following chapters of this Annual Report. I firmly believe that we will be able to deliver on our vision and adopted concept in the future and continue to be a reliable and trustworthy partner.

RNDr. Karel Taft, MBA - Chairman of the Board of Directors



## Ladies and Gentlemen,

Allow me to recap a few important events of 2022:

this year we also faced the uncertainty caused by reverberations from the COVID-19 pandemic. Considering that it was the pandemic that caused a relatively rapid increase in domain registrations in recent years, there were fears that its end, coupled with the relaxation of restrictions and the resumption of "off-line" activities, would cause a decline in the number of registered domains. The great news is that these fears did not materialise, and also given the circumstances, solid growth continued in 2022. The number of .cz domains increased by 2.7% to 1,463,116.

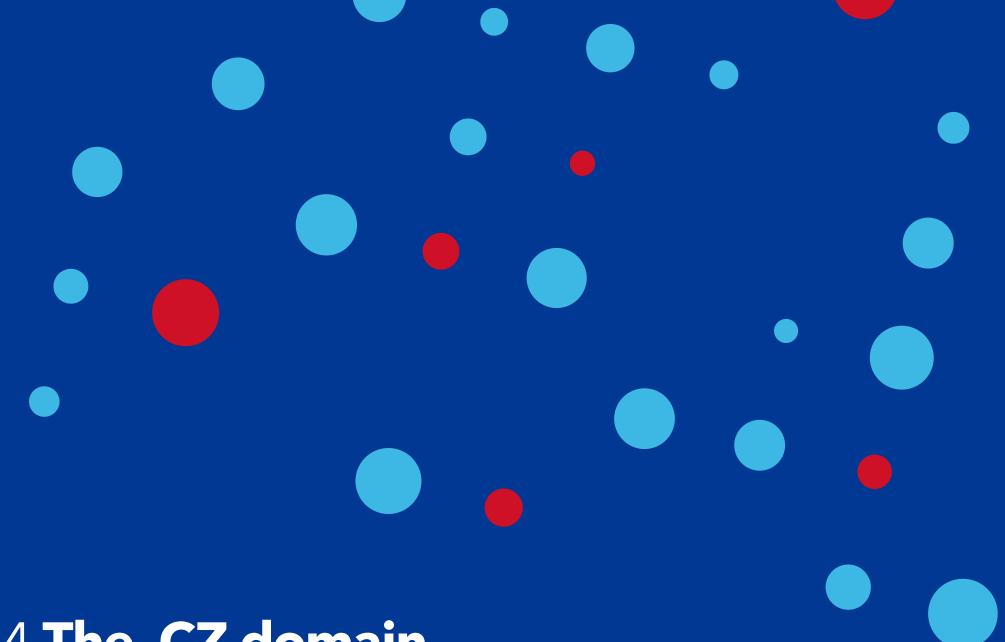
It is certainly not possible to forget about perhaps the most significant event of 2022, namely the barbaric aggression of the Russian Federation against Ukraine. Our Association, of course, could not stand by passively and we tried to help war-stricken Ukraine. In cooperation with NIX. CZ association, we helped the Ukrainian domain register hostmaster. ua move its systems to a data centre in the Czech Republic. During this event, it was very interesting to see how well the hardware and service suppliers responded; in a time of electronics shortage, they were able to deliver all the necessary components for this project in record time. At the same time, I would like to thank the ICANN organisation, the top internet administrator, which provided substantial financial support for this project.

Of course, we did not stop at just helping the Ukrainian register. As with major humanitarian disasters in the past, we also tried to help financially and donated CZK 10 million to the Post Bellum "Help Ukraine with the Memory of a Nation" fundraiser.

In 2022, we continued to work successfully on our traditional open source projects such as Knot DNS, Knot Resolver, BIRD, Turris and Adam. Awareness-raising and prevention projects also received attention. We were therefore very pleased that the consortium led by our Association succeeded again with its project and will be the official national Safer Internet Centre and partner of the European Commission on Safer Internet for Children and Adolescents by June 2024. We again joined forces with Linka bezpečí (Helpline) on this project and new partners joined the consortium - One World at Schools (Jeden svět na školách - JSNS) of the People in Need organisation, and the Children's Crisis Centre. After the end of the restrictions brought about by measures related to the COVID-19 disease, our CZ.NIC Academy training centre returned to full operation and we were finally able to hold our traditional CSNOG and IT conferences in their standard form.

As is the case every year, it is understandably difficult to name any one project or service of ours that has moved forward the most. Good results were achieved in almost all respects. Personally, I was very happy with the MojeID service. Despite significant competition in the field of identification services, such as BankID, we managed to attract new users and introduce further improvements. In mid-2022, the Czech Republic completed notification of the MojeID service according to the eIDAS Regulation. The MojeID service thus became the first Czech non-state authentication tool usable throughout Europe. Thanks to MojeID, it is now possible to log in to the tax portals of Slovakia, Belgium and Sweden, the social security portal of the Netherlands, a number of portals of European institutions or domain administration portals of Estonia, Denmark, etc.

Ladies and gentlemen, I wish you a pleasant time reading this Annual Report and I believe that you will agree with me when I declare 2022 another successful year for our Association.



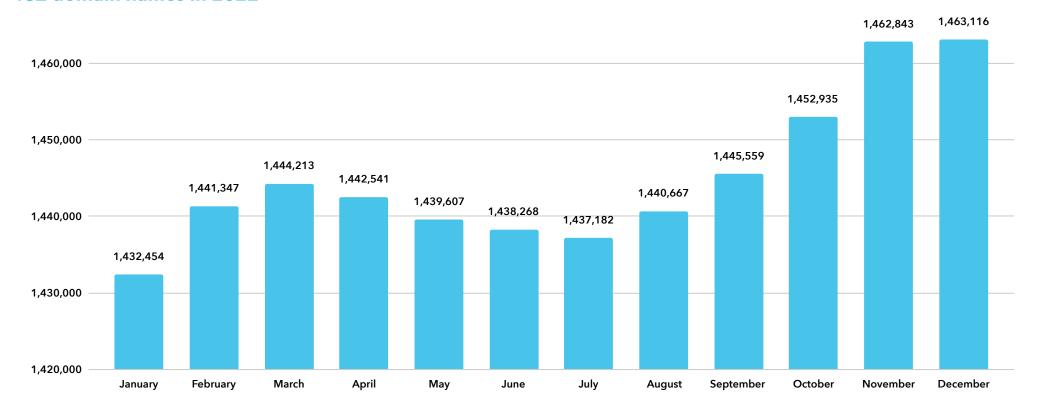
4 The .CZ domain

# 4.1 Status and development of number of registrations

Total number of registered .CZ domain names in 2022

In the two previous years, an accelerated year-on-year increase in the total number of .CZ domains was recorded, namely by 3.2% and 3.8%. The gains in recent years could be attributed to the effects of the COVID-19 pandemic, when much of the business and social activity shifted to the online environment.

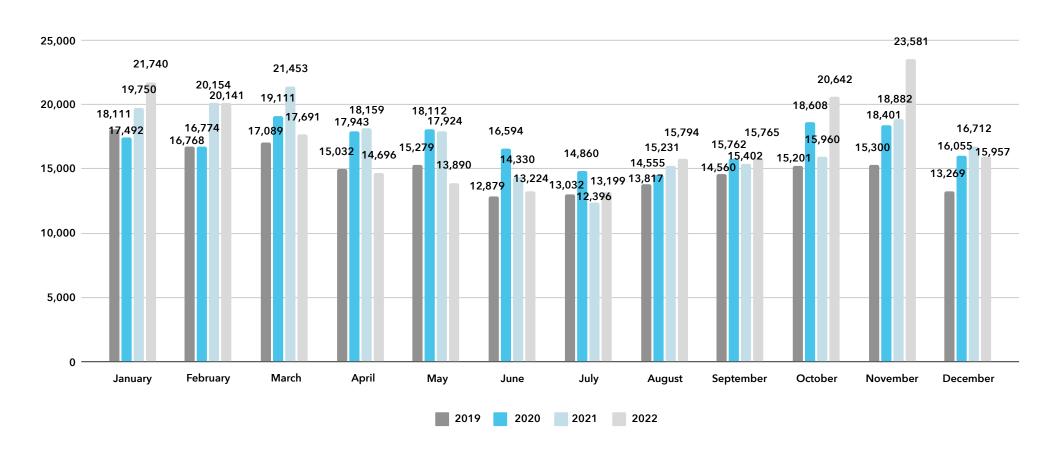
In 2022, year-on-year growth was already slightly lower: **2.7%**. The total number of registered .CZ domains at the end of the reporting period was **1,463,116**.



<sup>\*</sup>The data in the chart is always as of the last day of the month; the increase in the number of domain names is calculated from 1 January to 31 December.

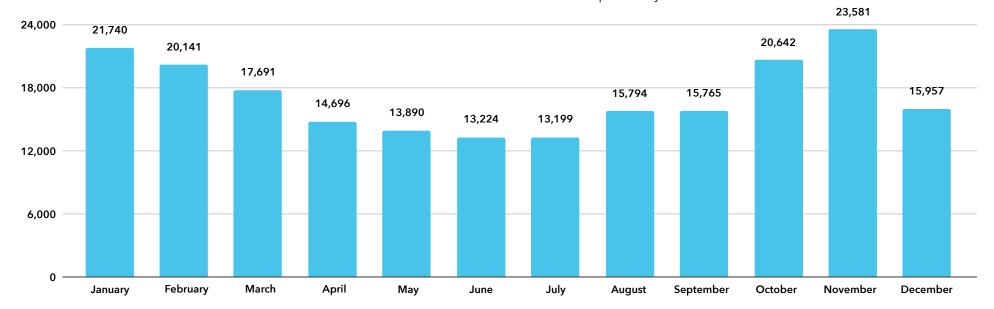
The following histogram shows the monthly numbers of domain registrations over the last four years. It is a comparison with 2019, which had been the last year unaffected by the first and second waves of the COVID-19 pandemic (2020, 2021), and 2022, when the increase in the number of domains could be associated with events in Ukraine. While in 2020 and 2021 we can see the largest increases in periods of the worsening pandemic situation in the Czech Republic, registrations in 2022 had a more typical course without a clear anomaly.

### Number of domain registrations, 2020 - 2022

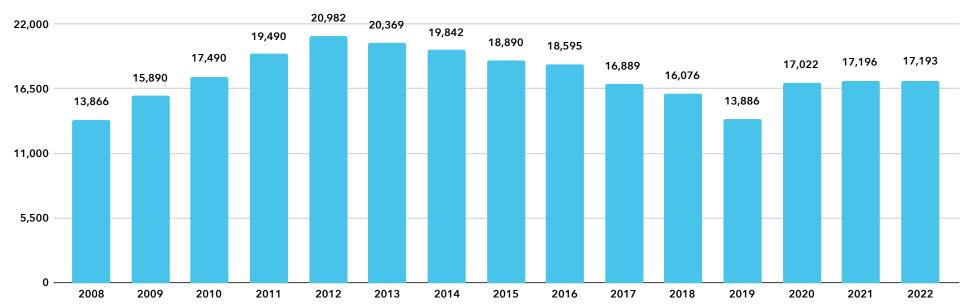


### Number of newly registered .CZ domain names in 2022

In 2022, an average of **17,193 new domain names** were registered **every month**. The increase in the number of registrations is similar to the previous year.



### Development of the average monthly number of new registrations since 2008



### 4.2 Registrars

The system of .CZ domain administration is based on a distributed principle in which the registration of domain names is carried out by contractual partners of the CZ.NIC Association - registrars. CZ.NIC acts towards them essentially as a wholesale partner, but also ensures the technical aspects of the functionality of the .CZ top-level domain.

During 2022, the following took place at the registrars:

- change of the name of the registrar Dial Telecom, a. s. to Quantcom, a.s.;
- final merger of the registrars Webglobe, s.r.o. and the original
   One Solution s.r.o., where this registrar legally, as a company, belonged to Webglobe, s.r.o., but in the system of domain registrations in the
   CZ.NIC Association it had previously been acting independently;
- SAV.COM, LLC from the USA became the new registrar on 1 September 2022.
- At the end of 2022, the Association was therefore cooperating with 44 companies, of which 24 were domestic and 20 foreign, on the basis of the concluded registrar agreement. This number of entities offers more choice to end customers and also promotes competition.

## 4.2.1 Overview of .CZ domain name registrars

### List of all accredited registrars as of 31 December 2022

1API GmbH

ACTIVE 24, s.r.o.

AERO Trip PRO s.r.o.

Ascio Technologies inc.

ASPone, s.r.o.

e-BAAN Net s.r.o.

**CORE ASSOCIATION** 

O2 Czech Republic a.s.

DomainProfi GmbH

Gandi SAS

Gransy s.r.o.

Instra Corporation Pty Ltd

INTERNET CZ, a.s.

InterNetX GmbH

Corporation Service Company

(Singapore) Pte Ltd

Key-Systems GmbH

KRAXNET s.r.o.

Lexsynergy Limited

MarkMonitor Inc.

Media4web, s.r.o.

MIRAMO spol. s r.o.

NAMESHIELD SAS

nexum Trilog a.s.

Com Laude

ONE.CZ s.r.o.

Hosting Concepts B.V.

OVH, Sas

PIPNI s.r.o.

Quantcom, a.s.

Safenames Ltd.

SAV.COM, LLC

Seonet Multimedia s.r.o.

Seznam.cz, a.s.

TELE3 s.r.o.

THINline s.r.o.

ZooControl s.r.o.

united-domains AG

Variomedia AG

Web4U s.r.o.

Webglobe, s.r.o.

Websupport, s.r.o.

. .

WEDOS Internet, a.s.

ProfiHOSTING s.r.o.

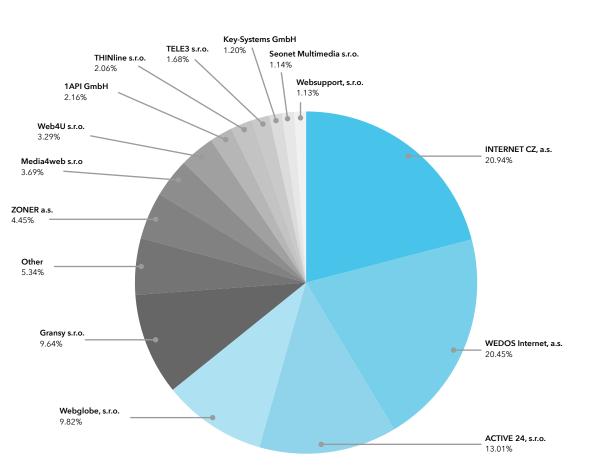
ZONER a.s.

## 4.2.2 Major domain name registrars

At the end of 2022, the most important registrar with the highest number of administrated domains was again INTERNET CZ, a.s., closely followed by WEDOS Internet, a.s. On the next rungs of the imaginary ladder were ACTIVE 24, s.r.o., Webglobe, s.r.o. and Gransy s.r.o.

#### **Number of domains by registrars**

The chart shows registrars with a market share of over 1%.



## 4.2.3 Certification of Registrars

Launched in the middle of 2011, the certification project has the goal of making it easier for end users (i.e. parties interested in a new registration, as well as existing domain name holders) to find their way amongst the high number of registrars, particularly regarding their portfolios and the quality of service they offer. The certification methodology was prepared in cooperation with registrars and the APEK (Association of E-commerce).

Registrars interested in participating in the programme can always receive the *Certified Registrar* logo for the period of one year.

It is very encouraging for end customers that the quality of services offered by registrars is continuously improving.

At the end of 2022, seven registrars met the criteria to receive five stars. For a long time, there has not been a registrar with only three stars among the certified registrars.

### The service quality of registrars, reflected in the number of stars assigned

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
****	3	6	8	9	10	10	9	9	9	8	7	7
***	3	5	4	3	2	2	3	3	3	3	3	2
***	2	1										
**	1											

## 4.2.4 Cooperation with registrars

In accordance with its main activities and long-term objectives, the CZ.NIC Association aims to promote and support domain registration under the top-level .CZ domain. Given the distributed method used for the administration of the national domain, the CZ.NIC Association has limited options for addressing potential domain name holders through a direct marketing event, because the administration of the national domain is distributed.

Therefore, a **co-marketing programme** was established, under which CZ.NIC contributes to registrars that meet the prescribed conditions for the implementation of communication campaigns aimed at promoting domain name registrations in ccTLD .CZ. The amount of the contribution depends on the size of the registrar, the volume of the campaign, and other factors, such as the use of the MojelD service with connection to NIA (which, among other things, influences the correctness of data in the register and the protection thereof) or domain security through DNSSEC,

which are used by CZ.NIC to motivate the registrars to expand these technologies.

Also thanks to the co-marketing programme, the **Czech national domain** .**CZ** is popular among users and is well and often visible, for example on outdoor advertising. The high level of popularity of the programme is demonstrated by the number of registrars involved, as well as by the volume of funds used. In 2022, the programme included 11 registrars, to which the CZ.NIC Association paid a total of CZK 11,447,521.

## 4.2.5 Resolving disputes over domain names in ccTLD .CZ

It takes about two to three years to resolve a dispute in a general court, unless there are complications - for example, in the manner of deciding on a remedy, in which case you can add another year or two.

A lot will happen in the internet environment in five years, so the Association tried to find an alternative way to resolve domain disputes faster and, at the same time, to make such a solution respectable, stable and therefore effective. This is why the **Alternative Dispute Resolution** (ADR) system has been functioning since the summer of 2004. Until 2015, it took the form of arbitration, in which it was possible to file a dispute concerning the domain name against its holder with the Arbitration Court attached to the Economic Chamber of the Czech Republic and the Agricultural Chamber of the Czech Republic. The Arbitration Court has discussed over one hundred disputes during the ten years of existence of this alternative dispute resolution method.

Following a decision by the Supreme Court at the end of 2013, there was a change, and in March 2015, the ADR system was introduced, the basic principles of which are essentially identical to those that have been successfully used in disputes over generic TLDs (UDRP) or domain names registered in the .EU top-level domain. The platform where the disputes take place is administered by a trusted entity on the basis of a concluded memorandum. That entity is the Arbitration Court attached to the Economic Chamber of the Czech Republic and the Agricultural Chamber of the Czech Republic, which is one of the three permanent arbitration courts that exist in the Czech Republic. This permanent arbitration court has considerable authority, with the undeniable advantage of offering online proceedings.

However, the **ADR system** used since 2015 is not an arbitration procedure within the meaning of the arbitration law, which is also reflected in the terminology used. The system is based on a contractual arrangement and only a domain name transfer or cancellation can be claimed therein. Other claims, e.g. for compensation for damage, issuance of unjust enrichment, removal of a defective condition or adequate compensation, need to be brought before the court with legal jurisdiction. The issued decision is not an enforcement title for the execution of the decision; the ongoing dispute in the new ADR system does not constitute an obstacle to lis pendens (i.e. ongoing proceedings in the same matter), and a resolved dispute does not constitute an obstacle to the decided matter. The same claims can, therefore, be forwarded to a general court during the proceedings or afterwards.

More than six years of using the new ADR system shows that this dispute resolution system has been accepted and that its popularity is stable:

Year	Number of disputes initiated in ADR
2015	7
2016	20
2017	22
2018	22
2019	29
2020	29
2021	22
2022	25

Of all the general courts, the Municipal Court in Prague is the one that most often hears disputes over domain names, especially in view of the fact that it is a specialised court for, inter alia, competition and intellectual property disputes, which are the most frequently violated rights in the case of domain disputes. In conclusion, it should be noted that the majority of claimants, the owners of the rights, leave the Arbitration Court attached to the Economic Chamber of the Czech Republic and the Agricultural Chamber of the Czech Republic with their claim being satisfied, and they usually receive the Expert's decision within three months of the commencement of the dispute resolution.

### 4.2.6 Customer support

**Customer support** being available **24/7** is an integral part of securing the operation of the .CZ domain.

The main objective of customer support is **to provide the best possible care to domain name holders**, particularly in situations where a domain name is to be cancelled or transferred, or where contact details change.

Assistance for MojeID service users and their validation is also an integral part of customer support.

Customer support prides itself on a proactive approach to domain name holders. It aims to eliminate the possibility of a domain name being excluded and forfeited as a result of, for example, an outdated contact or an unpaid fee. Given the distributed .CZ domain administration system, customer support is the only case in which the CZ.NIC Association is in direct contact with domain name holders.

In addition to the standard e-mails notifying customers in particular that their domain registration has not been renewed for the coming period, our customer support has manually checked more than 250,000 domains before their removal from the .CZ zone (i.e. effectively being disabled) or contacted by phone or SMS more than 190,000 holders threatened with domain name cancellation.

### **Development of individual customer support activities**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Manual check of domain names before elimination	-	8,916	15,176	18,586	21,598	20,512	20,894	21,834	21,437	20,867	19,947	18,658	20,544
Manual check of domain names before cancellation	-	4,314	11,061	14,378	16,666	16,041	16,529	16,864	17,000	16,869	15,814	15,050	16,160
Calls to holders (contacts) of domain names scheduled for cancellation	4,263	4,314	4,767	6,690	7,808	7,367	7,826	7,573	790	904	632*1	444*1	552
Text messages - information about upcoming domain name cancellation	-	-	-	-	-	-	-	8,139*2	8,948	9,859	8,946	9,028	9,510
E-mails sent before elimination	1,201	1,429	1,708	1,716	1,915	1,718	1,849	3,157	2,826	3,036	2,554	2,066	3,633
Responses to e-mail inquiries	828	1,240	1,746	1,945	2,782	3,015	2,074	2,319	2,080	2,802	3,646	3,245	2,783
Responses to telephone inquiries	561	1,063	1,120	1,242	1,416	1,262	1,227	994	774	720	768	1,547	1,393
Requests (validation, blocking)	145	180	248	315	455	405	701	776	559	363	246	162	155
Chat inquiries	-	-	-	-	-	166*3	132	114	168	262	460	1,295	503
Manual data accuracy check	-	-	-	-	1 073*4	875	953	1,372	1,628	1,170	1,701	1,188	1,387

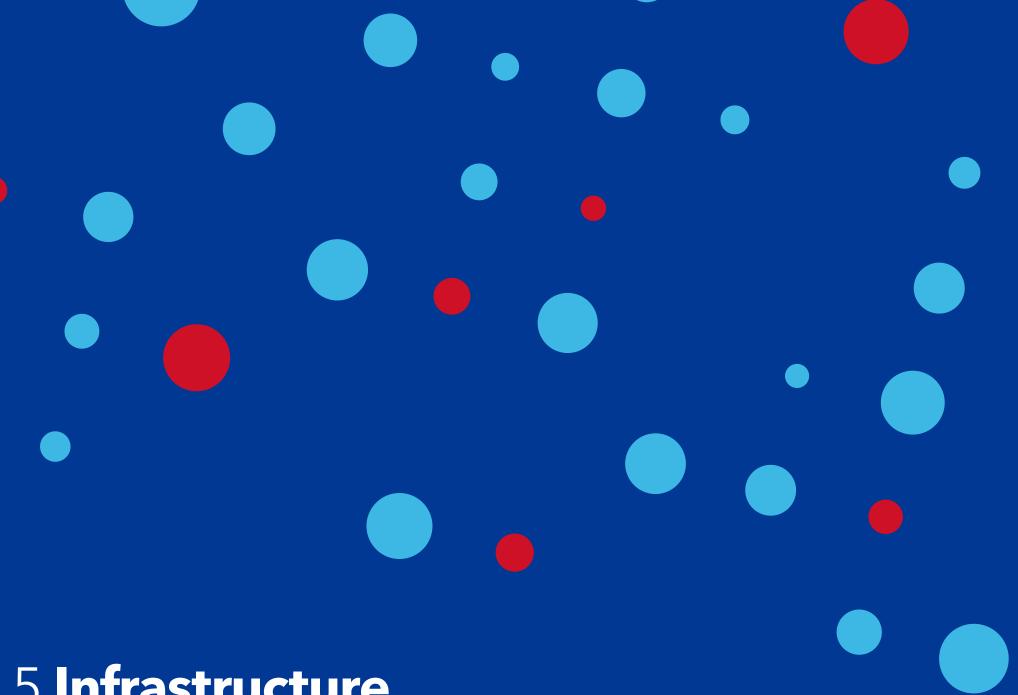
The data represents the average number of the given activities per month

<sup>\*1</sup> Because of the limited operation of offices during the pandemic, the statistics take into account only a portion of the calls made.

<sup>\*2</sup> Monthly average of sent text messages in the second half of 2017.

<sup>\*3</sup> Monthly average since April 2015, when the service was launched.

 $<sup>^{*}4</sup>$  Monthly average since July 2014, when the practice of manual data checking was introduced.



### 5.1 Data centres

The DSDng central register system is fully redundant, which means that its availability is ensured at all times. All hardware and software is located at three separate locations:

- the DC TOWER data centre of České Radiokomunikace in Prague 3,
- the CE Colo data centre in Prague 10,
- a non-public location outside of Prague.

All the locations have their own internet connection and a connection to the electrical grid. The DC TOWER data centre is connected to the distribution network from three independent transformer stations, while the CE Colo data centre and the location outside of Prague are supplied from two transformer stations. A back-up power supply is available in all data centres via UPS, and possible longer electricity outages are bridged by power from diesel generators.

In 2022, the CZ.NIC Association upgraded the capacity of IP transit connectivity in a non-public location outside of Prague to 100 Gbps.

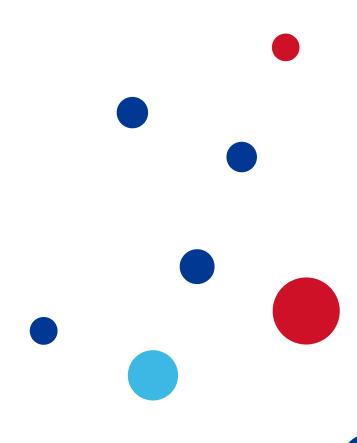
As part of the construction of own data routes, the first own route between the private hall in the DC TOWER and the offices of the Association in Milešovská Street was put into operation, with a used capacity of 100 Gbps and spare optical fibres. The low-capacity back-up wireless connection of offices was replaced with a leased fibre-optic circuit over a different route with 10 Gbps capacity.

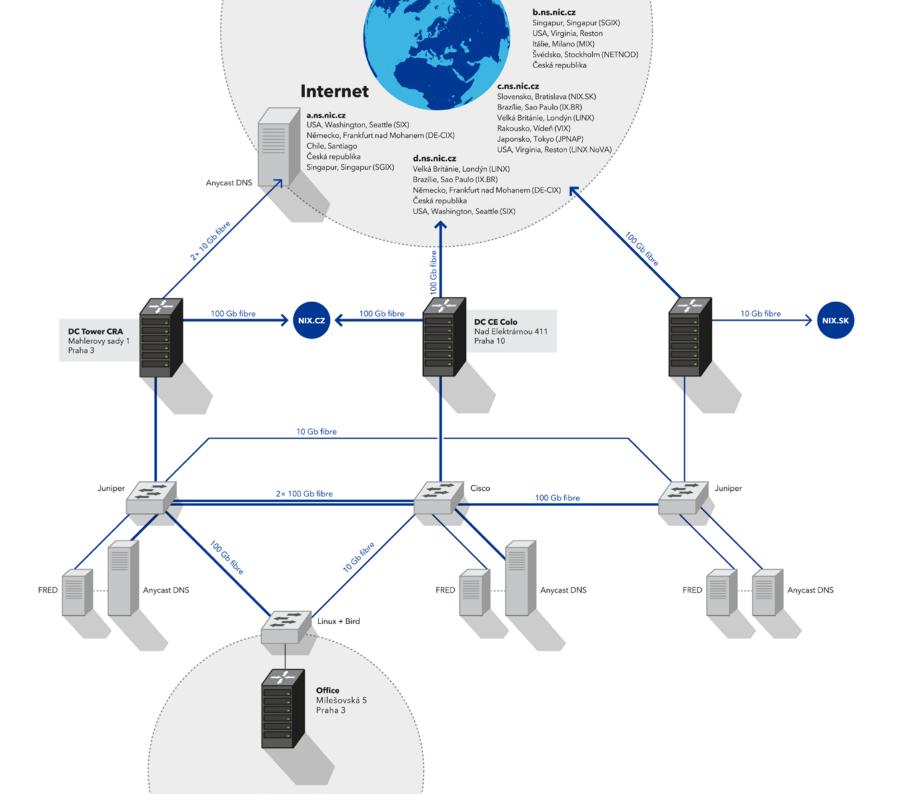
Furthermore, in 2022 the Association passed the recertification of meeting the technical requirements of the FENIX project with a result of 100%.

In the context of the energy crisis, there were also activities aimed at energy savings. At the end of the year, the DC TOWER Data Centre managed to save up to 20% compared to the long-term average.

A significant contribution to this was, among other things, the hardware renewal of a large DNS stack (see below for details).

All hardware equipment, including the exact location, physical connections and other details in all data centres in the Czech Republic and abroad has been registered in the new Netbox system since 2022.





## 5.2 Technical aspects of domain administration

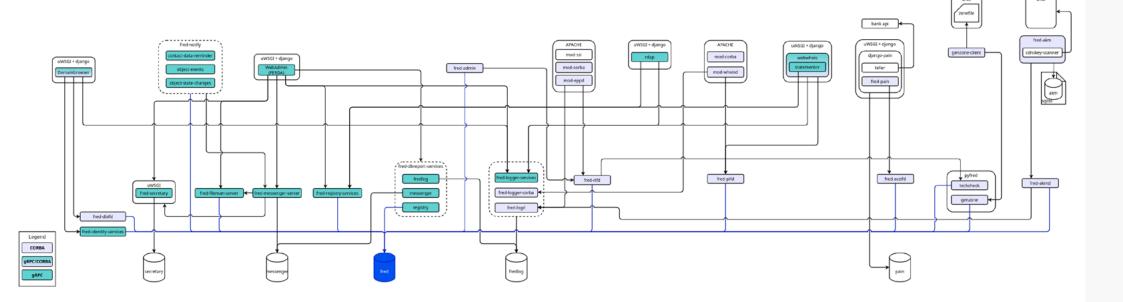
The register infrastructure strictly adheres to hardware diversity rules in order to minimise the failure of the central domain register as a whole in the case of a specific hardware manufacturer's failure. Each site is therefore equipped with technologies from different manufacturers. The same approach is also used by the Association for authoritative DNS (Domain Name System) software, which it operated on three different systems (Knot, Bind and NSD).

The actual **software of the central register** is designed in a way that ensures that any component of the architecture can be replaced by a copy thereof, which runs on the server in the other locations, at any time. A critical component is the PostgreSQL database, which is always being replicated to both of the other locations during standard operation. When the primary location is down, traffic can be redirected to the replicated database without any limitations or any impact on functionality. Back-up systems are designed and operated in such a way that the operation of the register can be taken over by any components within a very short time.

The central register system is prepared for operation on IPv4 and IPv6, and its current implementation for the .CZ domain (as well as all DNS servers) is operated on both these protocols.

The fact that administrators' logins to these systems are conditioned on the use of two-factor authentication in the form of a FIDO token contributes to higher security of the register and MojelD infrastructure. In 2022, the Association continued to make extensive changes to the FRED system's architecture in order to increase its modularity and configurability. Specifically, messaging migrated to a new messenger module developed in the previous year and the development of a contacts verification module was launched, which will help meet the requirements of the European NIS2 directive in the future and reduce the administrative burden of contacts verification.

The robustness of the FRED system has long been verified by performance tests. In previous years, the tests were deployed in a test environment, and in 2022 the tests were extended to a production environment. The test took place during an announced outage on an isolated production environment and focused on EPP throughput, specifically simulating fights for domains. The test generated 20 times the load of normal operation and the system handled it without overloading. The test provided valuable data for locating less efficient parts of the current system architecture and repeating the tests in the future.



## 5.2.1 FRED (Free Registry for ENUM and Domains)

The FRED software for the operation of the central register, developed and operated by the CZ.NIC Association, was made available as open-source under the GNU GPLv3+ licence in order to support smaller registers. This way, smaller and newly-started registers can operate their domain on a system designed for Czech domain operation, which is, however, prepared (thanks to its parameters and capacity) for a much higher number of domains than are currently registered in ccTLD .CZ.

Besides the Czech Republic, the FRED system controlled the domain administration **in ten other countries** in 2022. It is used to administer the domains of Argentina (.AR), Bosnia and Herzegovina (.BA), Costa Rica (.CR), Albania (.AL), North Macedonia (.MK), Tanzania (.TZ), Angola (.IT.AO and .CO.AO), Malawi (.MW), Lesotho (.LS) and Macao (.MO). The deployment in Argentina, with over 670,000 registered domains, is the second-largest instance of the FRED system.

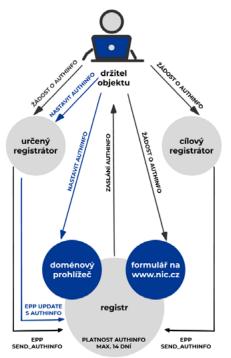
The CZ.NIC Association offers support for the implementation and operation of the FRED system for other TLDs.



Due to its wide use around the world, the development of the FRED system also focused on long-term sustainability and configurability in 2022. The Association is therefore continuously rewriting the oldest components of the system according to current standards and needs. The developers released a new version of the command line of the FRED client over the new epplib library and refactored all the sending clients.

The FRED system adds new functionality ever year. In 2022, the security of object transfers in the register was improved with the authinfo, which now has a limited validity adjustable by the register, is stored hashed, and is not entered when the object is created. Thanks to cooperation with .CZ domain registrars, this innovative change was deployed into production, making the .CZ register one of the first to implement the changes according to RFC 9154 approved in December 2021.

To improve security and personal data protection, at the beginning of 2022 the ability to read contact details outside of the designated registrar was restricted to after the authinfo has been entered.



A FRED system module developed over the long-term is the new web interface for helpdesk operators (FERDA), where the Association's staff managed to add a whole range of new functions in 2022. Connected contact objects can now be displayed in the interface and then also messages related to the objects. Interfaces were also added here for the retention activity of operators before removing domains from the zone or deleting them. A tool for registrar administration, including zone access, was also integrated. In addition, a MojelD account administration tool was added to help support users. The reports and statistics section was also expanded, and so this new web interface with two-factor authentication is gradually becoming the primary web interface for domain register administration, replacing the outdated interface that is no longer being developed.

The year 2022 also brought a number of requirements for the FRED system resulting from the operational needs of the .CZ domain register. In the first quarter, in response to the Russian Federation's military invasion of Ukraine, the Association extended the protection period for domain holders from Ukraine. During the year, there were again mass transfers of objects between registrars (REG-STABLE -> REG-WEBGLOBE, REG-ONESOLUTION -> REG-WEBGLOBE), which were caused by the continuing consolidation of the .CZ domain market. Several modifications to the FRED system were also triggered by communication with external entities, including modifications to the processing of bank statements and the export of data to the accounting firm.

In order to increase the transparency of the Association's activities, a page with currently administratively retired domains was launched in the first half of 2022.

During the year, statistics were also compiled on the fights for domains that are being removed from the zone. Subsequently, a proposal for a domain auction system was prepared, which should ensure a level playing field in

the future for the access to domains removed from the zone after the expiry of the protection period. This proposal was discussed at a seminar with registrars and at a meeting with members of the Association. After incorporating comments, it will be ready for implementation in 2023.

## **5.2.2 Authoritative DNS** server system for .CZ

The servers administrating records of .CZ domains are operated by the CZ.NIC Association in several sites around the world. In addition to the three sites in the Czech Republic (mentioned in the <u>Data Centres</u> chapter), additional servers are operated in 11 countries.

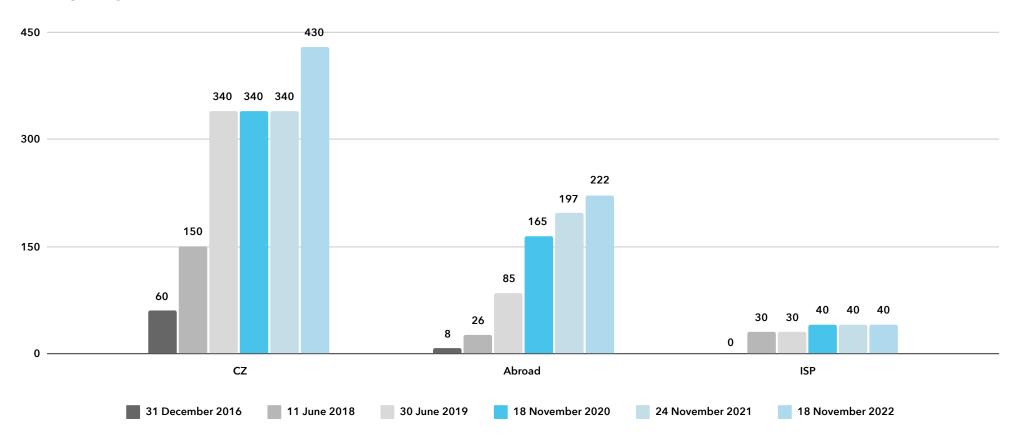
In Europe, these are the hubs in Austria (Vienna), Germany (Frankfurt am Main), the United Kingdom (London), Sweden (Stockholm),

Italy (Milan) and Slovakia (Bratislava). In North America, this includes the United States (Reston), where the Association operates one hub in cooperation with ICANN, a hub in the LINX NoVA peering centre, as well as a hub on the west coast (Seattle). In South America, this includes Brazil (São Paulo) and Chile (Santiago de Chile). In Asia, the Association operates DNS servers in Japan (Tokyo) and in Singapore (Singapore).

The total data capacity on DNS servers for .CZ increased to almost 700 Gbps in the reporting year.



### **Data capacity on DNS servers**



## 5.2.3 DNS infrastructure upgrade

In 2022, the CZ.NIC Association continued increasing the resilience of the .CZ DNS infrastructure against DoS attacks and covering the needs of the continuous growth of operations. Generational renewal of 100 Gbps DNS stacks began, with both hardware and software upgrades to the primary site in DC TOWER. The internal architecture of the stack went from 10 Gbps to 40 Gbps and XDP technology was deployed. Thanks to these changes, the stack is now capable of handling up to 400 Gbps of DNS traffic, with only 10 servers handling it now instead of the previous 30. This reduced its operating energy consumption by about 2.3 kW.

In addition to the Czech Republic, where the operational requirements are the greatest, the Association also focused on improving performance in foreign locations in 2022. A traffic prioritisation system was developed and deployed to all sites with SW routers. At the Swedish site (NETNOD), which also handles a significant part of the traffic coming from Asia, XDP technology was deployed, increasing the capacity of this site to handle DNS traffic while maintaining HW parameters several times.

In total, the DNS infrastructure for the .CZ domain at the end of 2022 had the unique capacity of 100+ physical servers and a connection capacity of almost 700 Gbps distributed in 20 geographically remote locations in twelve countries on four continents.

In order to ensure stable operation of the .CZ domain, the Association performs, in addition to regular hardware renewals and upgrades,

periodic maintenance and development of the DNS anycast software. In 2022, there was a migration to Debian 11 at all sites that use this distribution and a number of software updates to network equipment.

The hidden master server on which the .CZ zone is generated also underwent both a hardware and software update. It was supplemented with two validation servers, which perform defined checks of the correctness of the zone content and the zone is then distributed from them to all DNS anycast sites.

In 2022, the operation of the so-called SLD and ODVR DNS servers was also separated so that they do not share any part of the infrastructure with the main anycast. SLD DNS servers serve as authoritative for non-critical domains operated by the Association. ODVR servers serve as public DNSSEC validating DNS resolvers. It is desirable that the operation of these services does not interfere with each other and that there is a clear separation between critical and non-critical infrastructure.

For planning the development of anycast, the Association makes good use of data from the ADAM project, which collects and processes traffic data from all DNS anycast hubs. One of the most important DNS traffic parameters monitored by the ADAM project is RTT (Round-Trip-Time) – the time required for communication between a DNS traffic source and an authoritative DNS server, or its weighted averages related to a specific DNS traffic source, or a geographical or network aggregation of these sources. Thanks to this method, the Association is able to effectively manage the quality of DNS traffic of the .CZ domain in relation to the size of traffic in individual regions of the world.

For major internet service providers, CZ.NIC operates mirrors of .CZ DNS anycast nodes - ISP DNS stacks, in the networks of those providers. The main advantage of this service is the full availability

of services in the .CZ domain in the event of an attack against the authoritative DNS servers of the CZ.NIC Association.

Customers of companies with the ISP DNS stack will thus not be affected by any attack in any way, and the internet services in the .CZ domain will remain fully available to them. Another advantage is the acceleration of their responses in the network of a provider with the ISP DNS stack. The companies that use this service of the CZ.NIC Association are Seznam.cz, a.s., Vodafone Czech Republic and CESNET.

### 5.2.4 Utilisation of .CZ DNS infrastructure

Since 2018, the Association has been operating a part of the secondary DNS servers of .CA - domains of the Canadian Internet Registration Authority (CIRA) - on a commercial basis. This cooperation continued successfully in 2022.

The Canadian register counts more than three million domains and is, therefore, approximately twice the size of its Czech counterpart. From a technical point of view, this involves the sharing of the capacity of DNS servers, which are primarily intended for the .CZ domain, with another entity. As a result of significant upgrades in recent years, this capacity is dimensioned many times higher than the actual utilisation, and therefore it is useful and beneficial to use it for other projects as well.

An important step in this area in 2022 was the creation of "E" and "F" anycasts, which are reserved for hosting purposes, and the TLD extensions that the Association operates for partners were transferred to them. Both anycasts are designed to provide quality coverage across

the globe and offer high handling capacity while still leaving some sites and capacity reserved only for .CZ TLDs. The hosting service was thus more standardised, offers the possibility to easily use the infrastructure capacity for other entities and, at the same time, maintains significant independence of the operation of the .CZ domain itself.

## 5.3 Support for internet infrastructure

### 5.3.1 IPv6 support

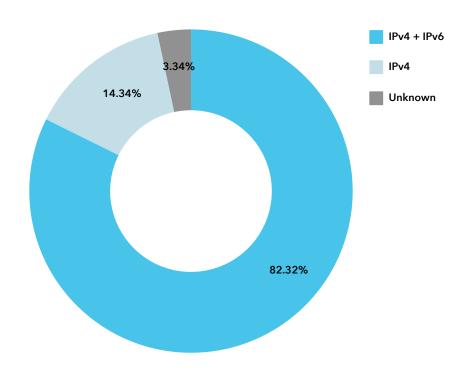
IP addresses, similarly to DNS, are the basic building blocks of the internet. Without IP addresses, it is not possible to connect to the global network, which also prevents the mutual recognition and interconnection of computers. The current space of IP addresses of the version 4 internet protocol (IPv4) has essentially been exhausted. The new version of the internet protocol, IPv6, is a response to the lack of IPv4 addresses, as it offers a much larger bank of addresses, as well as new possibilities.

The long-term goals of the Association include **supporting the deployment of the IPv6 technology** at all levels, i.e. content, networks and end devices. In cooperation with registrars, which are often also web hosting operators, the CZ.NIC Association tries to support IPv6 on the side of web, e-mail and DNS servers. The Association also participates in promoting IPv6 within state administration.

All services operated by the Association are available in dual-stack mode, i.e. on both IPv4 and IPv6.

In 2022, the representation of IPv6 traffic on authoritative DNS servers remains at around one-third and on the public ODVR resolver at one-tenth. The share therefore did not change significantly over the last year.

### History of the number of .CZ domains supporting IPv6



### **5.3.2 DNSSEC support**

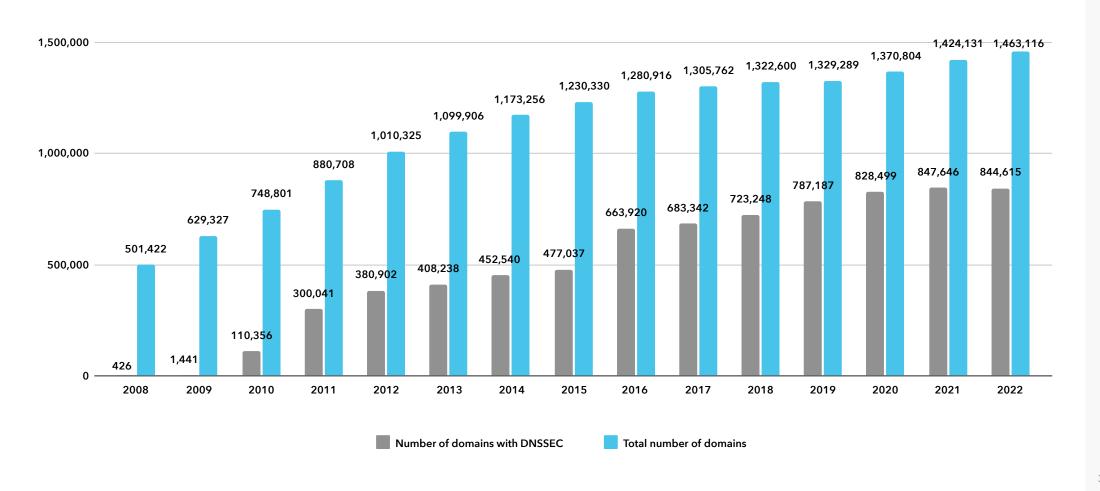
DNSSEC technology is a DNS extension that increases its security through asymmetric cryptography.

**DNSSEC** provides users with the assurance that the information obtained from the DNS has been provided by the correct source, is complete and its integrity has not been breached during transmission. **The DNSSEC** technology has been available since 2008 within the Czech national domain .CZ. The .CZ domain was thus one of the first top-level domains where this technology could be used.

The absolute number of domains secured with DNSSEC has been steadily increasing since then, which is also driven by cooperation with registrars; nevertheless, the proportion of domains with this security extension fell slightly to 57.7% in 2022. Yet, with its share of signed domains, the Czech Republic continues to clearly rank among the world leaders.

Ondřej Filip, CEO of the Association, was appointed as Cryptographic Officer Trusted Community Representative (TCR) in 2022. He becomes one of fourteen trusted representatives of this organisation who have access to the hardware security module, the initiation of which is necessary for the root zone signing process. The TCR group was established within the IANA international organisation in an effort to increase DNS security using the DNSSEC technology.

### History of the number of .CZ domains with/without DNSSEC

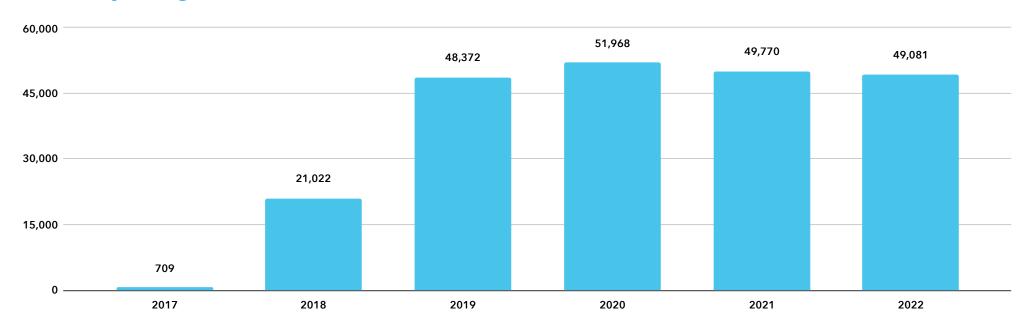


In addition to support from registrars, the main internet service providers in the Czech Republic are gradually introducing DNSSEC technology as well. This makes the system fully functional for most regular internet users.

The high level of DNSSEC support for the .CZ domain is, among other things, aided by the **support of the automated administration of DNSSEC keys**, which CZ.NIC introduced in 2017, the first in the world to do so. This was possible thanks to introducing support for the new RFC 7344 and RFC 8078 standards in the FRED domain administration system. These extensions are thus available to all TLD administrators that use the FRED system. Administrators of authoritative DNS servers will then be assisted in the implementation of this simplification via Knot DNS, which is also compatible with these standards.

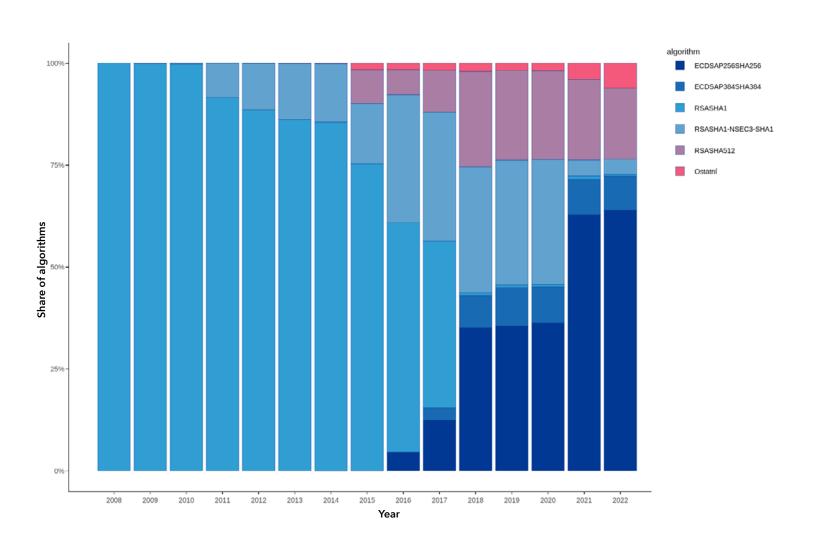
DNSSEC can now be easily deployed for those domains where it was not previously possible - e.g. for domains not supported by the DNSSEC registrar or for domains that are administered by someone other than the registrar. However, the number of domains under automated administration of DNSSEC keys has been stagnating in recent years, as can be seen in the chart below.

### Development of the number of domains under the system of automated DNSSEC key management



The choice of an encryption algorithm is a very important parameter affecting the level of security with the DNSSEC technology. The following chart shows how the representation of individual algorithms in the .CZ domain has been changing since 2008.

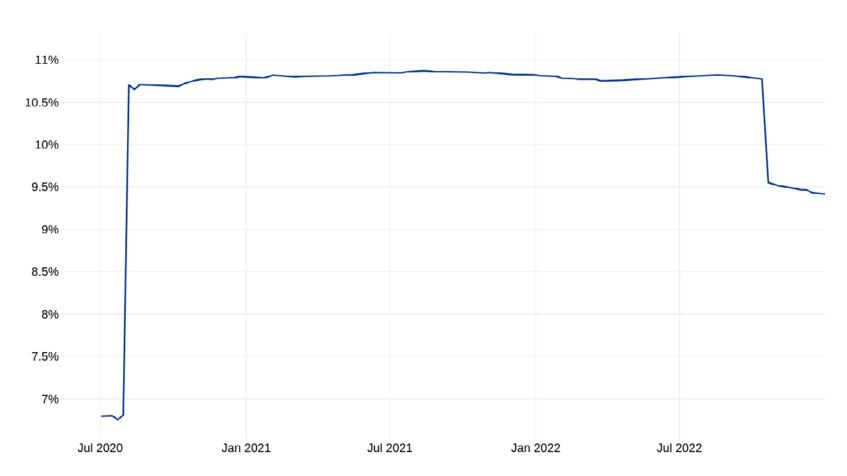
### History of the representation of individual DNSSEC algorithms in the .CZ domain since 2008



The decline of the previously dominant RSASHA1 algorithms (RSASHA1-NSEC3-SHA1) using the SHA-1 hash function also continued in 2022. The function is considered weak, but according to current recommendations, it does not yet pose any significant threat to DNSSEC security. The migration to more secure cryptographic algorithms was almost complete at the end of 2022, as less than 4.2% of second-level domains under .CZ continue to use these weaker algorithms.

In 2021, the National Cyber and Information Security Agency issued a public decree under the Cyber Security Act (CSA) stipulating that operators of information systems covered by the CSA will have to secure their e-mail boxes using, inter alia, DNSSEC, TLS and DANE. Therefore, in 2022, the Association decided to supplement public statistics with the level of support for the DANE protocol in the .CZ domain register or in individual SMTP server operators.

### Share of domains with DANE in the .CZ domain register



## 5.4 Support for basic internet infrastructure

#### **Operation of root servers**

In 2022, the CZ.NIC Association continued to operate mirrors on the K and L root servers. Therefore, CZ.NIC operates mirrors of two out of a total of 13 root name servers that are the basis of the internet domain names system (DNS). Their operation improves not only the security and stability of the root servers on a global scale, but especially their availability in the European region.

#### **Support for evolving registers**

Besides these root servers, the Association's infrastructure is also used to support emerging registers through the operation of secondary name servers for their ccTLD. Angola, Malawi, North Macedonia, Tanzania and Guatemala use this option to administer their national domains. The Association also operated the infrastructure for the operation of the DNS register of domains of Brazil and the association of Latin American ccTLD LacTLD in its data centres in 2022.

#### **Support for the Ukraine register**

The military conflict in Ukraine triggered in 2022 had a significant impact on the online world and the operation of the .ua register. Ukraine faced not only cyber attacks, but also physical shelling of data centres, widespread power outages and problems with staffing the register operation. The CZ.NIC Association was approached by Ukrainian

colleagues with a request for assistance and decided to help as much as possible to keep the register and the .ua domain running. In cooperation with a number of partners (in particular NIX.CZ, ISP operators and vendors of server and network HW), the Association within weeks built a strong DNS stack capable of handling DNS traffic in the order of 100 Gbps, which is, in terms of network as well as physically, separated from the infrastructure for the .CZ domain, and made it available to Ukrainian colleagues for the needs of the .ua domain along with several servers for support systems or the register backups. Based on rapidly evolving needs and deepening collaboration, the architecture was later redesigned and by the end of 2022, the DNS stack capacity was downgraded in favour of a significantly more powerful infrastructure for the register itself. The services provided by the Association are operated from two sites and provide key support for the functionality of the Ukrainian domain. Several papers on the details of this assistance were presented at a number of conferences, both organised by the Association (CSNOG 2022, IT 22) and at events abroad.

#### **Hosting DNS zones and servers**

On the basis of the bilateral sharing of knowledge and long-term cooperation, the Association also operates a secondary authoritative DNS server for the Czech neutral peering hub NIX.CZ.

Another form of support aimed at the local internet community is hosting the servers of certain non-profit organisations, e.g. Jeden svět na školách (One World in Schools) project of the Člověk v tísni (People in Need) organisation, and operating a server with a mirror of popular Linux distributions – Ubuntu, Debian, Fedora, etc.

#### **Open DNSSEC Validating Resolvers (ODVR)**

Since 2010, the Association has also operated Open DNSSEC Validating Resolvers (ODVR), which are freely available for use instead of the DNS resolvers as an alternative to DNS resolvers operated by connection providers.

The ODVR service (also because it is operated on the Association-developed Knot Resolver) supports encrypted DNS communication using DNS-over-HTTPS (DoH) and DNS-over-TLS (DoT). Since 2020, the option of using this encrypted DNS communication has even been incorporated in the user interface of the Google Chrome browser (from version 87 on Windows and Android OS).

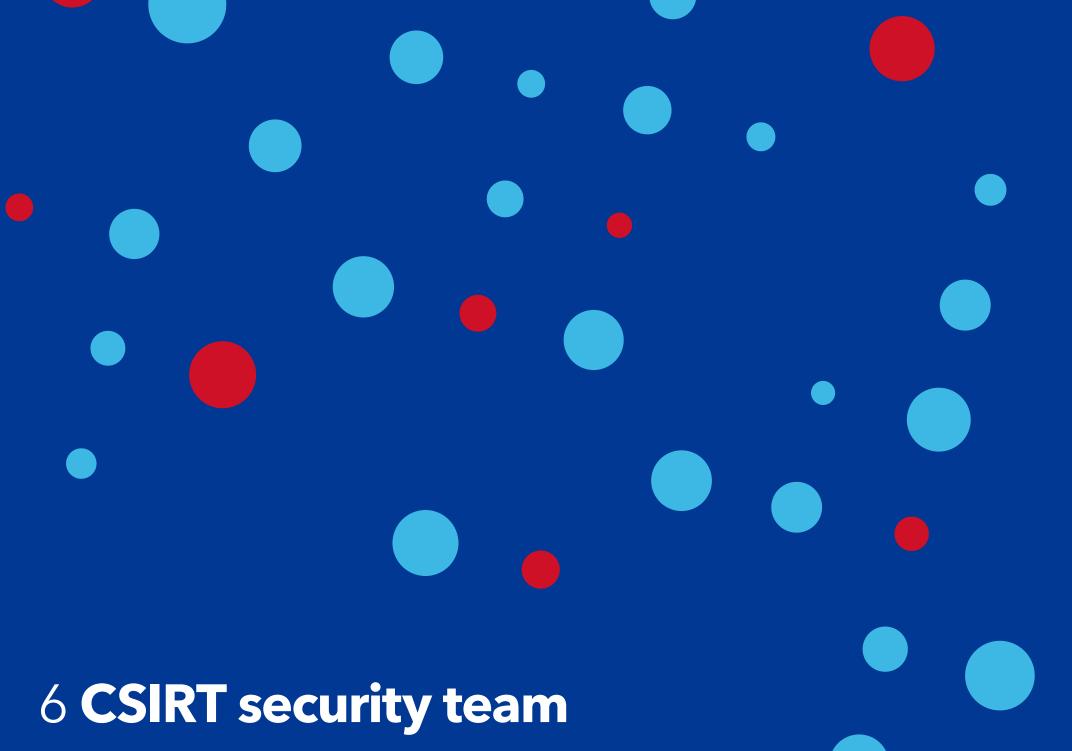
#### **RIPE Atlas Anchor hosting**

The CZ.NIC Association is actively involved in the RIPE Atlas global monitoring network project and supports this project by hosting fixed monitoring points called RIPE Atlas Anchor.

In 2022, the Association also participated in this project by supplying HW probes of its own production (Turris MOX platform modified for the needs of RIPE Atlas Anchor).

#### **Hosting a public NTP server**

One of the key operating conditions of many computer systems is correct time synchronisation. Systems connected to the internet use the NTP internet protocol for this purpose. The CZ.NIC Association has long hosted a public top-level NTP server (stratum 1) controlled by GPS and fitted with a high-quality oscillator of the OCXO DHQ type. In 2022, the NTP server's HW was replaced by a newer model that also supports the European Galileo satellite system.



The growing importance of the internet and the rising number of its users are accompanied by a growing number of security incidents, such as the misuse of a computer, a network element or a network for illegal activities – e.g. sending spam, copyright breaches, phishing or tapping of data. The severity of these incidents is also increasing. Dependence on cyberspace and the level of criticality of failure associated with it is also greater, where not only the ordinary user or various private law institutions are exposed, but also the infrastructure of the state itself.

It is therefore necessary to create, formalise and streamline the defence against attacks on these entities - CSIRTs (Computer Security Incident Response Teams) are being created for this purpose. CZ.NIC has long-term experience with projects in the field of internet infrastructure, and therefore it is involved in supporting the activities of security teams at the national and academic level. The Association also runs its own CZ.NIC-CSIRT team responsible for dealing with incidents within AS25192, as well as incidents that affect the name servers for the .CZ domain and 0.2.4.e164.arpa.

# 6.1 CSIRT.CZ National CERT Team of the Czech Republic

The <u>CSIRT.CZ</u> security team is the **official national security team of the Czech Republic** and is operated in accordance with Act No. 181/2014
Coll., on cybersecurity, and the public-law contract concluded
on 18 December 2015 with the National Security Authority (NSA).

As of 1 August 2017, the newly established National Cyber and Information Security Agency (NÚKIB) took over the position of the NSA and thus became the manager of cybersecurity issues and the national authority in this field.

The objective of the CSIRT.CZ team is, in particular, to deal with incidents connected with cybersecurity in networks operated in the Czech Republic.

In addition, it also focuses on prevention, research and education.

CSIRT.CZ collects and evaluates data on notified incidents and forwards them to the persons responsible for the operation of the network or service which is the source of the incident in question, and/or provides help with coordination. In its activities, the team cooperates with a number of entities with which it exchanges information on individual incidents and their solutions on the basis of mutual trust.

#### **Cooperation of CSIRT.CZ**

In order to effectively carry out its tasks as defined by legislation, the team cooperates with a number of entities at both the national and international level:

- national level cooperation mainly with NÚKIB (especially the government CERT team), the Police of the Czech Republic (PCR), CSIRT/ CERT with different constituencies, internet service providers (ISP), banks and others
- international level the team is part of the CSIRTs Network structure (a network bringing together national and governmental CSIRTs/CERTs of the EU Member States), actively cooperates with the European Union Agency for Cybersecurity (ENISA) and EUROPOL.

Other international structures of which it is an active member include:

- FIRST (an organisation that connects security teams from around the world and is thus a platform through which the teams involved can effectively respond to security incidents, threats and cooperate to resolve them),
- Trusted Introducer TI (an organisation established by the European CERT community back in 2000 to address common needs and to build a service infrastructure that provides important support to security teams; the organisation certifies security teams according to their proven and tested level).

In 2022, the CSIRT.CZ security team continued to participate in the Safer Internet Centre (SIC CZ) project, which is implemented by the CZ.NIC Association under the name Bezpečně na netu (Safe on the Net).

Cooperation takes place at the level of ensuring the operation of the STOPonline.cz hotline, which is intended for reporting illegal online content and for awareness and education of both children and parents. The team members also participated in the training activities of the SIC CZ project when needed.

#### **6.1.1 Traffic statistics**

In 2022, CSIRT.CZ handled 2,067 security incidents. Compared to the previous year, their number increased by almost 20%. The team once again achieved the highest registered number of addressed incidents in the records of its own statistics, which it has kept since 2008.

This is a more than 100% increase since before the pre-pandemic period. The ever-increasing number of reports prompted us to better automate incident response, which reduced the number of e-mails sent.

#### **Number of incidents addressed**

	2017	2018	2019	2020	2021	2022
Sensor Network*	13,858	18,435	14,911	16,217	10,284	8,815
Phishing	409	518	483	738	1,281	1,485
Spam	121	144	128	216	165	220
Malware	99	135	85	109	141	224
Other	200	58	85	86	54	63
Probe	26	171	141	68	66	69
Trojan	94	0	0	0	0	0
DOS	14	7	16	16	11	0
Botnet	29	20	4	2	1	4
Virus	0	0	0	0	0	0
Portscan	13	16	3	29	7	2
Pharming	3	10	9	3	0	0
Total	1,008	1,079	954	1,267	1,726	2,067

<sup>\*</sup> Sensor Network is not included in the total number

In 2022, the trend of a sharp increase in reported incidents falling into the phishing category continued, and a relatively large year-on-year increase was also recorded in the malware category.

Both CSIRT.CZ and CZ.NIC-CSIRT are actively communicating the issue of the increase in social engineering attacks with other stakeholders and are actively seeking a comprehensive approach to addressing this problem. An effective solution was found that helps identify phishing content and promptly prevent its spread. More information about this procedure is described in the chapter Fighting Phishing in the .CZ domain.

The annual increase in the number of incidents can be attributed to many aspects. It is clear that the increasing digitisation of society, the automation of processes and the increasing use of information systems in many areas have an impact. This trend accelerated significantly during the pandemic, the onset of which also corresponds to the increase in attacks relying on social engineering. It is also reflected in the most frequent incidents dealt with in 2022 in cooperation with the Police of the Czech Republic:

- phishing campaigns,
- fake e-shops,
- fraudulent websites offering investments in virtual currencies,
- fraudulent behaviour on advertising portals,
- fake websites.

### 6.1.2 Awareness and educational activities

Probably the biggest events in the area of awareness and education were the team's involvement in international exercises Locked Shields and Cyber Europe. The purpose of both exercises is to develop collaboration capabilities in the field of cybersecurity. We participated in the Cyber Europe exercises on two levels, as players and as organisers for the Czech community, which was represented by nine teams from the Czech Republic and, exceptionally, also one team from Slovakia.

The **Cyber Europe** exercises, which this year focused on the healthcare sector, was loosely followed by the Health Czech exercises organised by the NÚKIB. Members of our team introduced participants to the possibilities of identifying suspicious e-mail communication and watched, from the position of an expert committee, how the crisis teams coped with individual tasks.

In the area of training and education, a training course on **Internet Security and Privacy** focusing on the most common threats in the area of cyber security was implemented in cooperation with the CZ.NIC Academy. Recognition of threats and risks is aimed at understanding, preventing and familiarising users with active and passive digital footprints, safe behaviour principles, privacy and anonymity on the internet.

Knowledge, experience and activities are published on the blog of the CZ.NIC Association. The **Mouse is for the Cat** series was published throughout the year, and while it does not directly address security, it can help readers become more efficient in more than just the Linux environment.

CSIRT.CZ also traditionally dedicated itself to presenting its own experience at various forums and conferences. Among the presentations for the professional public we can mention, for example, the **Cyber Attacks** conference or the **Research in the Field of Cybercrime and Cybersecurity** expert seminar organised by the Institute for Criminology and Social Prevention. The events for the general public then included presentations of CSIRT.CT's work at the Europe Day event, the Safer Internet Festival conference, and the programmes New Day on CNN Prima News and Good Morning on Czech Television.

Among the awareness-raising activities that the team has been involved in for a long time is publishing news from the world of security. We continue our active cooperation with the root.cz server with our own series **Security Insights** (Postřehy z bezpečnosti). This is a regular security review of the past few days. The published information highlights the most interesting events and news, but also the vulnerabilities that should be addressed. In 2022, the team published a total of 12 posts.

In addition to the **Security Insights** series, the **Security News** section can be followed on the CSIRT.CZ website, which is designed to quickly and concisely disseminate the most important information about ongoing attacks and discovered vulnerabilities.

# 6.1.3 National and international cooperation

In 2022, the CSIRT.CZ team became part of the TRIO chairmanship in the CNTW (CSIRTs Network) and as a "chair trio handover" took responsibility for, among other things, ensuring continuity of activities with the European Union Agency for Cybersecurity (ENISA), organising CNTW Meetings and preparing a report for the Cooperation Group. As part of the Czech EU Presidency, close cooperation with GovCERT.cz, the French government team (ANSSI), the Swedish government and national team (CERT-SE) and the current chair of the trio (SI-CERT) was ongoing since 1 June.

Other important activities in the field of international cybersecurity stem from the NIS Directive and the Cyber Security Act.

We continue to support security teams and involvement in the international Trusted Introducer (59 teams involved) and FIRST (7 teams involved) communities. Interest in TI membership is also supported by the FÉNIX project. As part of the international FIRST community, a site visit (an audit checking that the conditions for membership in the FIRST community have been met) was conducted for the three teams that had met the conditions for entry.

A specific type of cooperation is regular and close interaction between the national security team CSIRT.CZ and the government team GovCERT. CZ within the CSIRTs Network established on the basis of the European NIS Directive. The CSIRTs Network brings together national and government teams from the member states of the European Union. This traditional cooperation between the national CERT team (CSIRT.CZ) and NÚKIB (the government team GovCERT.CZ) is based mainly on joint incident handling, sharing of necessary information and various expert consultations. The national security team CSIRT.CZ and the government team GovCERT.CZ meet several times a year on various occasions.

We managed to organise CSIRT.CZ working group, which was attended by 70 members of the security community which listened to a number of interesting lectures. In addition to the above, the team cooperates with other security teams and entities in the area of national and international security through the various consultations and support it provides.

### **6.1.4 Preventive** activities

The main role of CSIRT.CZ is prevention and awareness-raising. Ongoing prevention services include:

#### **Penetration and stress testing**

In 2022, penetration testing of several commercial entities and stress testing of a customer operating critical information infrastructure was successfully performed. The MojeID service also underwent penetration testing.

#### PROKI (Prediction and Protection from Cyber Incidents)

In 2022, when the disk capacity of the PROKI system was increased, IntelMQ was upgraded to version 2 and is currently being upgraded to version 3.

In 2021, the team had started cooperation with the Turris Sentinel project, which helps detect attackers by evaluating firewall logs, running so-called mini-pots (i.e. miniature honeypots) as well as full-fledged honeypots (HaaS). In this project, owners and operators of Turris routers can voluntarily connect their devices that are connected in different networks and geographical locations to become part of a distributed network of security probes. The team continued this collaboration in 2022.

The analysis of Turris mini-pots outputs is now also sent to a separate part of PROKI. Tens of millions of events per day are recorded here.

Outputs from the Turris Sentinel project are used for security analyses within the team's activities and are stored together with data from the PROKI system.

PROKI statistics	Number
Number of e-mails sent from PROKI	32,449
Number of unique recipients (abuse contacts) of PROKI reports	733
Number of unique Czech IP addresses that we recorded by some means	51,177

#### **MDM** service

The MDM (Malicious Domain Manager) service is a proprietary, freely available, open-source application based on the principle of using publicly available sources informing about domains with web presentations that have been attacked or have been abused for phishing or for spreading malicious code, and then informing the persons responsible for the operation of such domains with a request to investigate or correct the situation.

#### Web scanner

Web scanner is one of the preventive security services that is intended for operators and administrators of websites, especially non-profit organisations and public administration, helping them detect potential vulnerabilities in their internet presentations. The vulnerability assessment takes into account current trends and rankings compiled within the Open Web Application Security Project (OWASP). During 2022,

18 domains were tested on the basis of 16 submitted orders and 5 entities were tested within the SIC CZ project.

#### **Honeypots**

Other activities beyond the mandatory activities defined by the Cyber Security Act include the operation of honeypots.

We observed 802 unique malware samples on Linux honeypots cowrie in 2022. We registered 132 samples on Windows dionaea honeypots. In the case of cowrie honeypots, there was a 47% decrease in the number of registered samples compared to the previous year. In contrast, dionaea honeypots increased by less than 5%.

HAAS statistics	Number
Number of registered users	4,501
Number of connections/attacks	33,768,024
Number of executed commands	13,458,397
Number of unique attacking IP addresses	196,610
Number of unique samples captured	7,024

#### 6.2 CZ.NIC-CSIRT

The CZ.NIC-CSIRT team is responsible for **handling incidents that affect name servers for the .CZ domain**, 0.2.4.e164.arpa and AS 25192.

On the basis of the <u>Rules of Registration</u>, the CZ.NIC Association is entitled to cancel the delegation of a domain name if it is used in such a way that threatens national or international computer security. This can happen, for example, by distributing harmful content (viruses, malware) or by faking the content of another service (phishing) through the domain name or services available through it.

The CZ.NIC-CSIRT team can also cancel the domain name when the server available through the domain name is the control centre of networked hardware which distributes harmful content (botnet).

#### Fighting phishing in the .CZ domain in 2022

In the last three years there has been a large increase in phishing sites that have been reported to the national security team CSIRT.CZ. While in 2018 we had dealt with 518 phishing sites, in 2019 it was "only" 483, a year later it was already 738 sites, in 2021 we had crossed the 1,000 threshold (1,277) and in 2022 we were at 1,485. However, our statistics reflect only a small part of the total number of attacks because the national CSIRT operates as a "last resort" and therefore only a small part of attacks are reported to us.

With the overall increase in phishing attacks, there was also an increase in the number of attacks carried out using .CZ domains that were directed at Czech users. This fact forced us to make more frequent use of the option of cancelling the delegation of a domain name, which is available

to us under Article 17.1 - Rules of Registration of Domain Names in the ccTLD .CZ. The importance of this change can be demonstrated in a real case, where 1,489 users visited a domain with phishing content before it was taken down, and after that we recorded 7,217 other users trying to access the domain. More than 80 per cent of phished users were thus no longer able to access the malicious content.

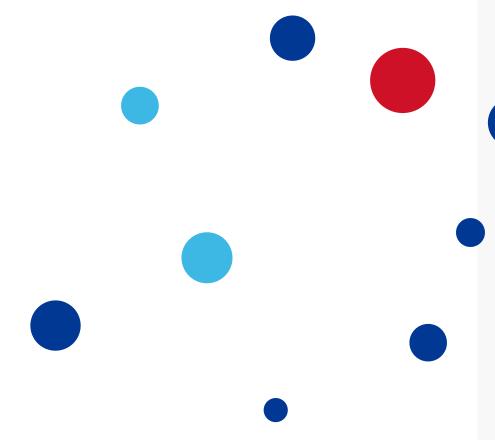
In 2022, based on internal methodology, we revoked delegation in a total of 110 cases. In eight cases, phishing sites directly mimicking internet banking were involved, in 21 cases we eliminated domains mimicking the appearance of the Czech Post website, which lured users to a supposed tax refund, and in 81 cases they were sites offering a supposed housing allowance.

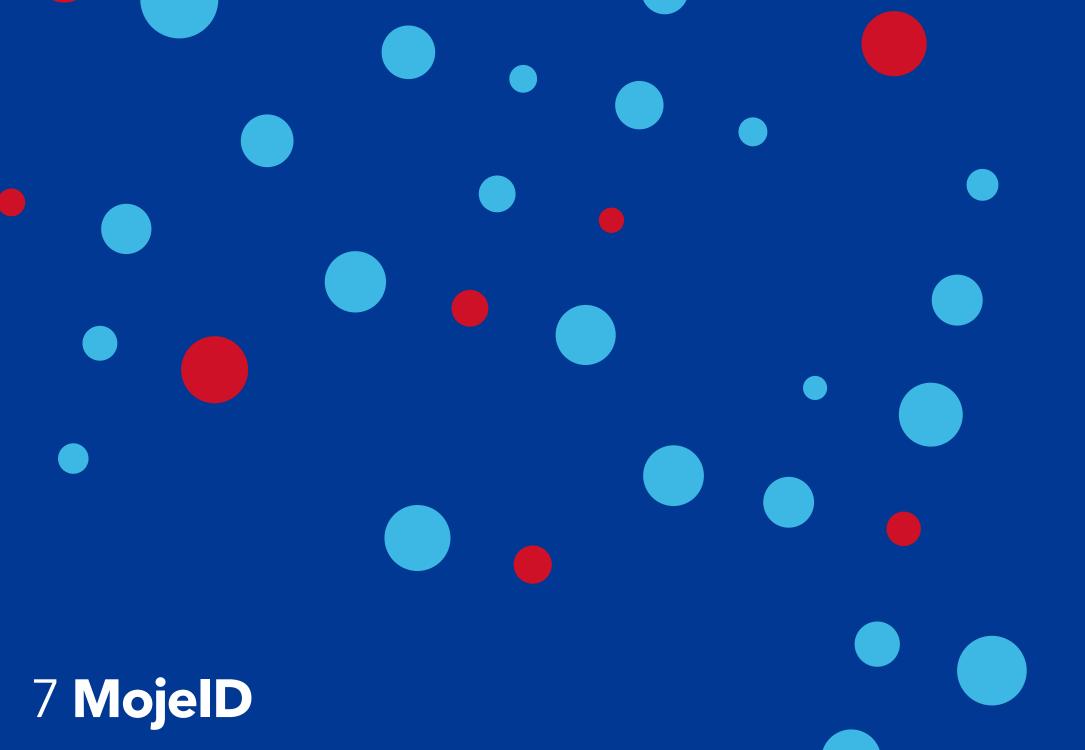
A major breakthrough is the team's ability to detect potentially phishing domains immediately after their registration in some cases. This allows us to include them in monitoring, which alerts us if unsafe content appears on the website. The basic information on the attack is then supplemented by the data we obtain from the <u>ADAM</u> project.

Examples of some domains and numbers of answered / unanswered queries:

	Answered	Blocked
24imp-svl.cz	784	5,652
cz-mp-sv.cz	722	988
givmp-a-sv.cz	1,081	4,505
givmpasv.cz	1,486	890
lonlinemp-svl.cz	1,013	5,453
lpostlmpasvl.cz	1,018	4,806
vasemp-a-sv.cz	547	744

Within the CZ.NIC Association, the CZ.NIC-CSIRT team also ensures implementation and fulfilment of internationally accepted information security management systems (ISMS) certification in compliance with the ISO 27001 standard. An external recertification audit took place in 2022, which confirmed that CZ.NIC continued to meet all the requirements of this standard. New versions of internal guidelines were also issued. In addition to the above, CZ.NIC-CSIRT was involved in the further development of the internal SIEM (Security Information and Event Management) and updated the internal ISMS and Phishing courses.





<u>MojelD</u> is a unique service for electronic authentication, which the CZ.NIC Association has been operating for **thirteen years**.

It allows internet users in the Czech Republic to log in to various online services using **uniform identification data**. It is a win-win situation. The user gets a means of identification without having to remember various login credentials for those applications that support MojelD. On the other hand, the operator implementing MojelD significantly increases the user experience of its service and obtains verified information about its visitors and clients.

MojeID is also one of the possible means of communication with state administration bodies thanks to its **connection with the National Identification and Authentication Point** (NIA).

Since 2021, when MojelD was accredited by the Ministry of the Interior to the "high" level of assurance, there has been no **more secure means of electronic identification** in the Czech Republic. The emphasis on security continued in 2022, when the older method of user identity verification known as "validation" was fully cancelled and replaced by the NIA authentication option. The former one-time password login and the outdated MojelD Authenticator application were also discontinued. The convenient, modern and accessible **MojelD Klíč** mobile app thus remains the most used account security option.

The second area of interest, in addition to security, was (and will continue to be in the coming period) improving the user experience of the service.

The MojeID Key app can now be used on **multiple devices**. In 2022, the process of improving the **UX design** of the account creation process began as well.

# 7.1 Security of the MojelD service

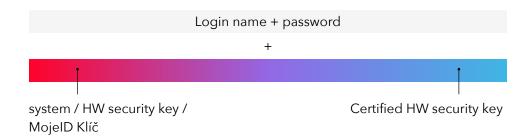
The basic features of MojelD include the security and trustworthiness of the entire system and the protection of personal data. The register of user details is protected on the same high level as the .CZ domains register. At each login, the user themselves can define which details from their profile are to be handed over to the provider for whose services the user wants to sign up using MojelD. This gives the user maximum control over their data.

MojeID offers a wide range of login options. A login name and password are the basics. Furthermore, the provider, to whose services the MojeID user is logging in, may determine whether this level of security is sufficient for them or whether the user must provide additional authentication by one of these means:

- MojeID Klíč\* mobile application,
- system security key (often included with common operating systems, such as Windows 10+ and Android version 7+),
- hardware security key (a suitable USB/NFC key is a prerequisite for the "high" assurance level).

<sup>\*</sup> The one-time password login options and the legacy MojelD Authenticator app were discontinued during 2022.

#### **Security level options for login methods**



# 7.2 Private sector and public administration partnership services

A key factor in the systematic expansion of the MojelD service is its support by internet service providers. The growing range of places where MojelD can be used has an impact on attracting new users, for whom it is important to be able to log in to as many services as possible with one name and password - those they use every day or those they are visiting for the first time.

We are thus constantly trying to reach out to other service providers and motivate them to introduce MojelD login to their services.

## 7.2.1 Private sector service providers

The partner network of private service providers had a similar composition in 2022 as in the previous year. The list of partners can be found in the <u>catalogue on the MojelD website</u>.

In the private sector, MojeID is used by:

- e-shops that are interested in the possibility of verifying the full age of their customers when selling specific goods or services,
- community servers,
- discussion forums,
- news sites,
- servers providing microservices,
- advertising servers and others.

# 7.2.2 Public administration service providers

In the autumn of 2020, the option **of linking** the MojelD account to the **National Identification and Authentication Point** (NIA) was launched.

Individuals can thus use MojeID to **log in to state administration and self-government services**, such as:

- the Citizen's Portal (checking the validity of documents, the balance of points in a driver's account, extracts from public registers, etc.),
- the Financial Administration Portal Moje dane (My Taxes) (online filing of personal income tax returns, real estate tax returns and other tax returns),
- ePortal of the Czech Social Security Administration (for example, to view the pension insurance information sheet),
- client applications of health insurance companies (reports on care provided, insurance premium payers and arrears, applications for contributions from prevention funds, etc.),
- the patient application for eRecept electronic prescriptions,
- web portals of some regions, cities and municipalities,
- library systems,
- systems of educational institutions and other entities.

The development of eGovernment services in general helps expand the network of public administration partners. For example, in 2022, MojelD users could use the service in the following cases:

- request for a contribution to the accommodation of refugees from Ukraine,
- application for an allowance of CZK 5,000 per child,
- application for a subsidy under the New Green Savings,
- electronic filing of tax returns.

# 7.2.3 Cooperation and implementation partners

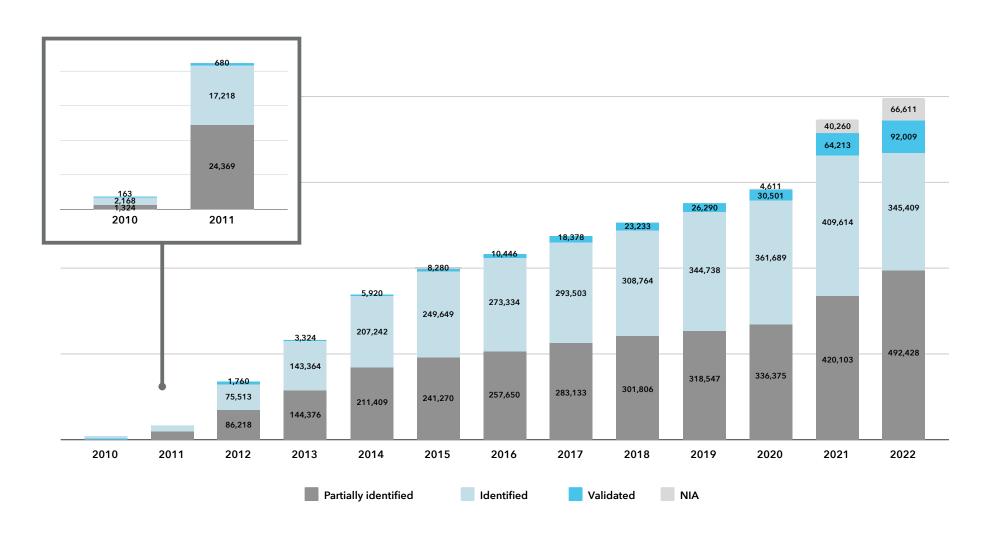
In 2022, cooperation was launched with a number of other technical partners to integrate MojelD. When implementing MojelD, service providers do not depend solely on technical support from the CZ.NIC Association. Their current list is available on the MojelD website, on the How to Get Started page.

# 7.3 Users of MojelD

The user base is the most valuable asset of the MojelD service. Without an increasing number of users, it would be difficult to attract more and more important service providers and make the service known among the general public. Throughout 2022, the MojelD user base grew by more than 100,000 new users, to a total of 929,846.

In 2022, efforts continued to increase the number of users connected to the National Identification and Authentication Point (NIA). As of 31 December 2022, the total number of such users was **66,611**. Compared to the end of 2021, the number of users linked to the NIA **increased by more than 26,000**, and its further growth will be one of the targets in 2023.

#### Level of user identity authentication



#### MojeID presentations at professional conferences

The CZ.NIC Association presented the MojeID service at three professional conferences in 2022.

The first of them, **ISSS 2022**, took place on 16 and 17 May in Hradec Králové. Participants had the opportunity to visit the MojelD stand and the Czech POINT mobile stand, where they could verify their identity and access online public administration services.

MojeID specialists present at the stand helped with the process of activating eGovernment services and provided participants with the necessary USB/NFC security keys, or assisted with the activation of the MojeID Klíč mobile application.

The same presentation model worked well at the **IS2** conference on 8 and 9 June in Prague and at the **Open Data Expo** conference on 22 November also in Prague.

MojelD was also nominated for the **Crystal Magnifier 2022 - Czech Internet Award** in the Tools and Services category.

# 7.4 MojelD as a tool for cross-border authentication in Europe

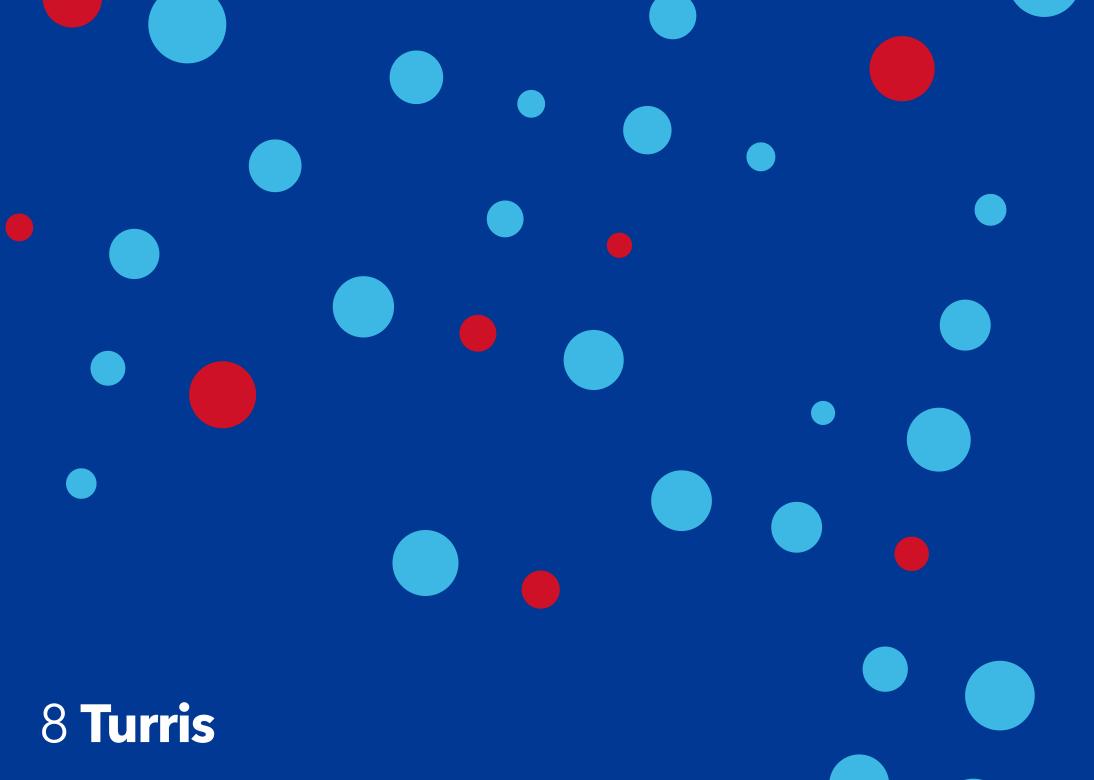
In the previous year, the CZ.NIC Association also actively participated in the Czech Republic's involvement in building an infrastructure for cross-border electronic identification, as defined by the eIDAS regulation. This regulation builds on the work under the STORK (Secure idenTity acrOss boRders linKed) pilot project, which the Association participated in, together with the Ministry of the Interior of the Czech Republic in 2012-2014. As an output of this project, the Association operated a gateway for cross-border authentication that used MojeID as the only means of authentication.

This gateway was gradually replaced in 2018 and 2020 by the official eIDAS node for the Czech Republic, operated by the Association on the basis of the contract with the National Registers Authority. This hub also includes a middleware component necessary for logging in with the German electronic identity card.

The Association has twice won tenders to operate this system, namely for the years 2018 to 2020 and for 2020 to 2024. As a part of the contract, the active involvement of the Association's staff in the functioning of the eIDAS Cooperation Group and eIDAS Technical SubGroup platforms continued throughout the year.

At the beginning of 2022, the process of assessing MojelD as a means also recognisable abroad was completed and in June the Ministry of the Interior of the Czech Republic submitted the official notification of MojelD. From July 2022, MojelD users can thus access public services not only in the Czech Republic but also in the other 29 EEA countries.

At the same time, the Association is actively monitoring the ongoing revision of the eIDAS regulation, which is to come up with a revolutionary wallet concept for the European Digital Identity. In order to pilot the entire ecosystem around this wallet, the European Commission has launched large-scale pilot projects. The Association will be actively involved in piloting this new system in the coming year.



Turris network devices have been developed by the CZ.NIC Association since 2013. They use a Linux-based open source system, a distributed adaptive firewall and other superior security features. Automatic updates are offered throughout their lifetime. More information on all the Turris models - Omnia, MOX and Shield - can be found on the website www.turris.cz.

In 2022, production was successful despite the existing global supply chain complications. We continued to work on the development of our sales network. In the middle of the year we changed our business strategy and managed to achieve higher sales than in the previous year and secure orders for the beginning of 2023.

For 2023, we plan to deepen our cooperation with customers and partners in order to maintain the set growth rate. At the same time, we plan to focus more on markets in Europe, expand the network of active distributors and thus find new customers.

# 8.1 Hardware development

In 2022, the hardware section of the Turris team continued working on new devices. The first of them - a compact transferrable device designed for home users - places particular emphasis on user security. It should extend the functionality of the existing Turris Shield product and replace it in the Turris family product portfolio as an affordable and user-friendly router that can be taken on the go when needed. The development of this device was completed and the prototype was tested. Market launch will depend on components availability and final pricing.

The second major project the developers were working on is the successor to the iconic and sought-after Turris Omnia device. A powerful router that will support 10 Gb/s WAN and LAN ports, Wi-Fi 6 connectivity and 5G cellular technology. The complexity of this device poses a number of technical challenges, and the completion of the prototype and its testing, including planning for mass production, is therefore a task for 2023.

A less extensive project, but important to customers, was the launch of updated versions of the Turris Omnia and Turris MOX routers. These routers were newly equipped with a Wi-Fi 6 card and the existing user community was offered upgrade kits to improve their existing device.

Production in 2022 exceeded eighteen thousand devices. This quantity was achieved while maintaining the current high quality and the minimum number of units complained. The devices are still manufactured in the Czech Republic.

# 8.2 Software development

One of the big priorities was the migration to the new version of OpenWrt. This was achieved by the end of 2022. Beyond that, however, Turris OS and its web interface saw many improvements over the course of the year. Noteworthy features include VLAN support on the WAN interface, Wi-Fi 6 support, IDS integration, and a significantly redesigned home page and third-party applications integration.

**Turris Sentinel** security programme also underwent development. A new web portal was deployed and presented to the public, allowing easy viewing of statistics generated from the data collected. This portal is linked to the reForis user interface so that users can easily get an overview of attacks against their devices.

As part of general awareness raising, a regular report was prepared from the collected data. A document with selected statistics for each past month, with explanatory commentary highlighting points of interest in the report is available on the <u>statistics website</u>.

In 2023, the Turris project will migrate to the new version of OpenWrt. There are also plans to continue to expand the reForis user interface with new features.

# 8.3 Business cooperation

The year under review, 2022, was marked by the restructuring of target markets and the negotiation of long-term contracts with major customers. The Turris sales team focuses on the European regions, particularly France, Benelux, UK and Sweden.

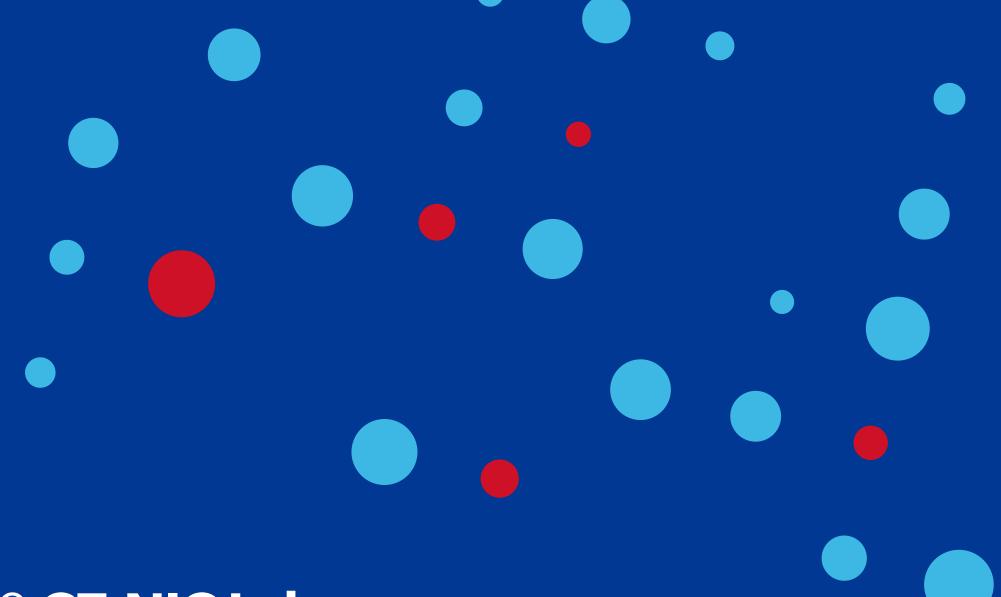
Successful business negotiations at the end of 2022 secured record pre-orders for the first half of 2023. Fulfilment of these orders in the order of low thousands of units of Turris Omnia device is expected by the end of 2023.

In addition to the presentation of Turris products at international trade fairs, more emphasis was placed on one-to-one meetings with corporate customers, which allow a more detailed presentation of the benefits of Turris devices.

A new version of Turris Omnia Wi-Fi 6 was launched in the second half of 2022. Outreach to distributors and promotion through newsletters and mailings in cooperation with distributors communicates new features and benefits of the devices.

At the end of the reporting period, cooperation with several renowned educational institutions was deepened and the Turris device was implemented in the teaching of subjects such as telematics, robotics and cybernetics at the following universities:

- CTU Faculty of Information Technology [CZ],
   Universidad Carlos III de Madrid [ES],
- Technical University in Vienna [A].



The CZ.NIC Labs are an organisationally separate research and development centre that focuses primarily on **innovative projects for the benefit** of both the Czech and global **internet community**. The projects support major trends in today's society, such as open data, eGovernment, open source software and support for disadvantaged users. They have their workplaces in all regional branches of the Association.

In 2022, CZ.NIC Labs worked on the following main projects:

- ADAM a system for the monitoring and analysis of services provided by the Association,
- BIRD a multiprotocol routing daemon,
- <u>Datovka</u> a multiplatform desktop and mobile application for access to ISDS data boxes,
- Knot DNS and Knot Resolver authoritative and recursive DNS server,
- <u>Tablexia</u> an educational application for children with dyslexia and other learning difficulties.

#### **9.1 ADAM**

An important prerequisite for the reliable operation of DNS servers in the .CZ domain, domain register and other services provided by the CZ.NIC Association is, among other things, the systematic and detailed monitoring of real DNS traffic and its immediate and additional analysis. These procedures can detect potential technical problems or network attacks, to which the DNS infrastructure is permanently exposed, in a timely manner, and also effectively plan further development of the infrastructure and services.

The main task of the ADAM (Advanced DNS Analytics and Monitoring) project is to **develop tools for the collection and processing of data from** 

**DNS servers**, to improve and expand the methods of their analysis, and to develop appropriate user interfaces and reporting methods.

The data collection and processing system developed in the past years is already in full production. The DNS Probe software developed by the Association collects transaction data from all authoritative and recursive servers and sends it in C-DNS format (RFC 8616) for processing to a central collector, where it is stored in the Apache Hadoop distributed database. The C-DNS library used by DNS Probe was extended in 2022 by a Python language interface to enable wider use.

A machine learning model was also developed to detect fake e-shops. On the basis of the Memorandum of Cooperation, the results are transmitted to the Czech Trade Inspection Authority, which had 187 fraudulent websites blocked in 2022 on the basis of the results and after its own investigation.

Outputs of the ADAM project intended for the public are available on the CZ.NIC Association's statistics website.

#### **9.2 BIRD**

BIRD is a software daemon for dynamic routing of the IP protocol, intended for Linux and BSD. The project originally began at the Faculty of Mathematics and Physics of Charles University, and the CZ.NIC Labs are participating in its further development. It is currently the most used route server software within peering centres in the world. According to a survey conducted by EURO-IX, more than two-thirds of the centres use it.

For the current version of BIRD 2.x, development of new features as well as fixes and enhancements was underway in 2022 according to reported requirements.

In addition, the development of a completely new version 3 continued separately in 2022, which will offer significantly higher performance thanks to multithreading and can, above all, take full advantage of the potential of modern multi-core processors. A full alpha version of series 3 is planned for release and publication in the first half of 2023.

#### 9.3 Datovka

The Datovka project is developing a library and an application for accessing data boxes and manipulating with data messages. The library and the desktop application are available for operating systems Windows, macOS and Linux distributions. The mobile app is designed for use on Android OS and iOS.

In 2022, development in **desktop** Datovka focused on improving the application's behaviour in stress situations and increasing its stability. There were changes in the code for processing data in JSON format. The response time when downloading large amounts of data messages was improved. The format of storing tags changed with respect to sharing them using the intended server. A tool was added for file service users to check whether data messages are in the file service.

A function for automated checking of the integrity of stored data with the possibility of automated correction was added to the **mobile** Datovka. Due to new security conditions on Android, the way backup data is stored was changed so the data is written to a ZIP archive. Now, backup and transfer data from the mobile app can be imported into the desktop app.

Mobile Datovka was localised into Ukrainian.

During 2022, the Ministry of the Interior published planned changes to the ISDS system, including the introduction of bulk data messages. Originally planned for deployment in early 2023, this change will eventually be deployed probably in mid-2023. Bulk data messages required quite extensive modifications to the libdatovka library, which were successfully implemented in the second half of 2022. Both versions of the Datovka app are thus ready for bulk messages, and updated versions will be released in early 2023.

## 9.4 Knot DNS and Knot Resolver

#### **9.4.1 Knot DNS**

Knot DNS is a software implementation of an authoritative DNS server. Emphasis is placed especially on achieving high performance when processing DNS queries and effective management of large TLD zones, including advanced automation of signing with the DNSSEC protocol. The Knot DNS project has already built recognition in the DNS community and among users, and is at the top of DNS server implementations in measuring peak performance.

In 2022, the development of other functionalities continued, including especially the completion of the implementation of TCP processing in XDP mode including RTT measurement and experimental support for

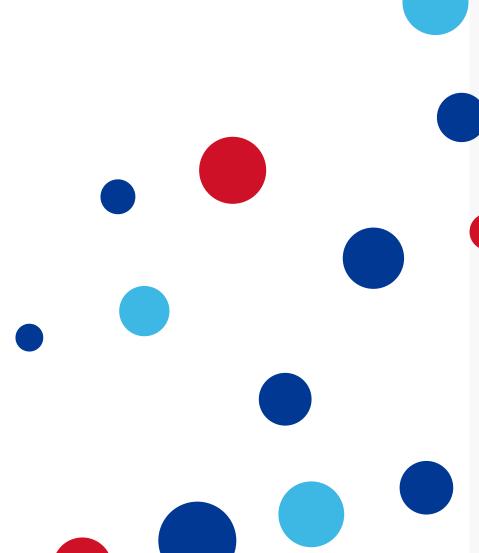
DNS-over-QUIC in the server as well as in kdig tool. The configuration was also extended to include the ability to cluster server descriptions, and automatic reverse zone generation was completed and will be released in the upcoming version 3.3.0 in 2023.

#### 9.4.2 Knot Resolver

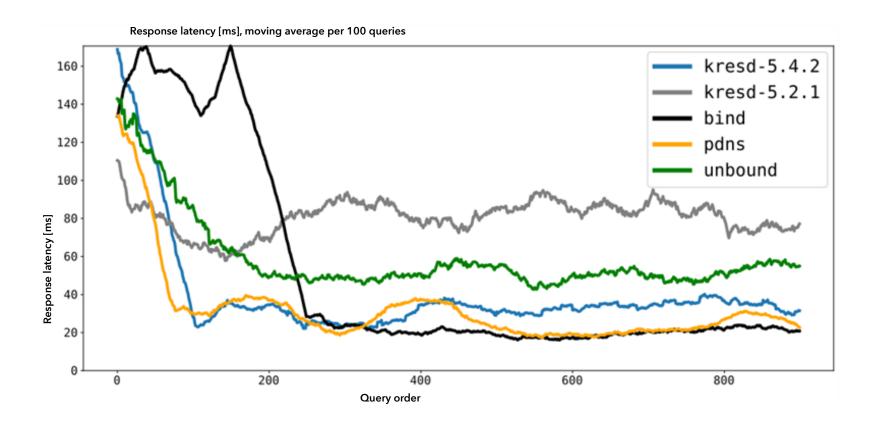
The Knot Resolver project is developing the recursive DNS resolver and pioneering technologies that improve performance, security and user privacy. Knot Resolver is deployed, inter alia, on the public ODVR resolver, but also as a system resolver on Turris routers. Better privacy and protection against certain types of attacks are provided by modern methods of minimising the content of DNS queries (RFC 9156) and aggressively caching negative DNSSEC responses (RFC 8806).

Software development in 2022 was focused on preparing version 6.0 of Knot Resolver, which is scheduled for release in the second half of 2023. A major change in this version will be especially a new configuration system that will allow the use of more user-friendly declarative configuration data as an alternative to the existing Lua language scripts. Another new feature in version 6.0 will be a new software component – a manager that will allow easier management and configuration of both individual resolver processes and the shared cache.

Other Knot Resolver enhancements implemented in 2022 include PROXYv2 protocol, which improves the resolver's cooperation with reverse proxy servers, and improved DNS query diagnostics using Extended DNS Errors (RFC 8914).



#### **Response latency**

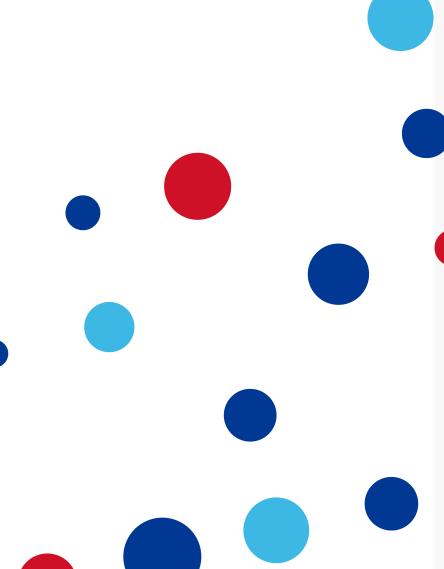


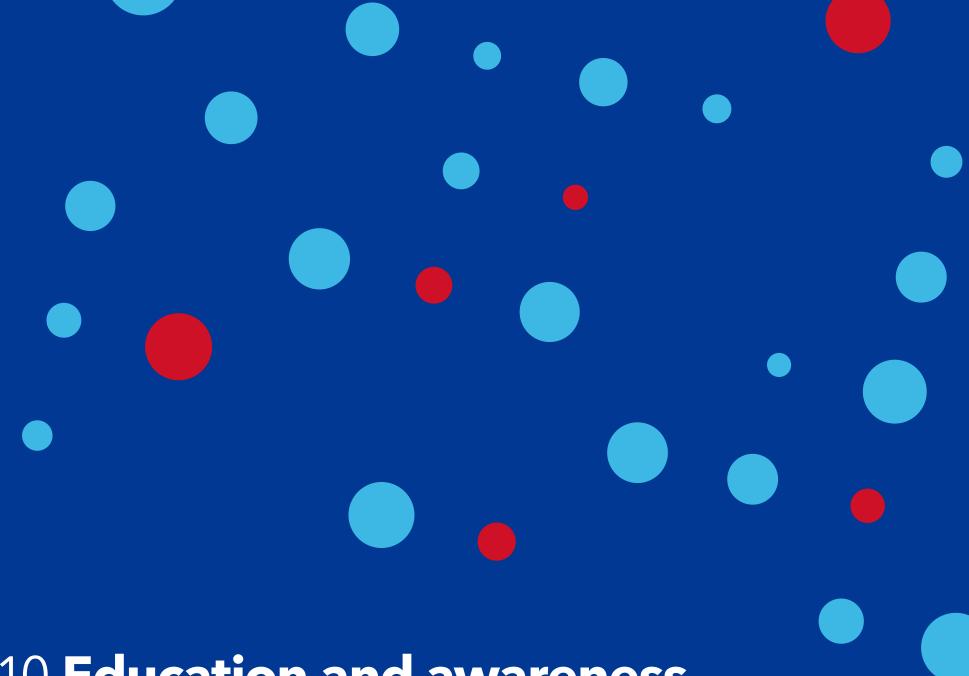
#### 9.5 Tablexia

Tablexia is an educational application that **helps with the development of cognitive skills**. It is intended primarily for children with dyslexia at the second level of elementary school. The application is intended for use both in schools as a supplement to standard teaching and in pedagogical and psychological counselling centres and other counselling facilities for pupils with learning difficulties. It is available for free in Google Play and the App Store, and a desktop version can be found on the project website. Currently, three language versions are fully functional: Czech, Slovak and German.

In 2022, the application was maintained for all supported platforms (bug fixes, ensuring operability on different operating system versions), including basic user support.

After a long delay caused by restrictions due to COVID-19, research of the efficiency of Tablexia finally took place in the autumn of 2022. The research was conducted in two primary schools primarily focused on children with specific learning disabilities. The testing was carried out on a sample of 144 children attending the second grade of primary school. The children were divided into experimental and control groups, and several batteries of tests were administered according to a timetable. The results of the testing will be analysed and will influence further work on the application.





10 Education and awareness

# 10.1 Communication with the public

An essential part of the CZ.NIC Association's activities is continuous, regular and systematic communication through public and private media, social networks, the Association's blog and newsletters.

In total, the Association published:

- 11 press releases,
- 26 press announcements,

which were given to professional journalists and journalists from media focusing on the general public or specific target groups. Press releases and announcements are published by the CZ.NIC Association on its website in the <a href="News">News</a> section, which is also part of the information pages of the Association's learning centre (the CZ.NIC Academy), the CSIRT.CZ security team and selected CZ.NIC Labs projects.

The communication was mainly related to topics concerning the administration, operation and development of the Czech national domain, key projects of the Association, and activities related to its operations – for example, cybersecurity, personal data protection, and education and awareness in the field of the internet and internet technologies.

#### **Media outputs**

In 2022, press releases appeared mainly in technically-oriented media. This most frequently meant the Root.cz and Lupa.cz portals. Last year, it was largely on these portals that CZ.NIC Association employees published their author texts. In the print media, these included, for example, interviews in the Právo daily, in the Konkursní noviny magazine, and in the NCKO Journal.

Ondřej Filip, CEO of CZ.NIC Association, and other employees were guests on TV and radio programmes on Czech Television (Hyde Park Civilizace, Studio CT 24, Newsroom CT 24), CNN Prima News (Nový Den, Zprávy), Seznam Zprávy and Czech Radio. The interest was mainly in topics related to internet security, the online safety of children, and the Czech national domain.

#### Social media

The Association has long been using social networks - <u>Facebook</u>, <u>Twitter</u> and <u>LinkedIn</u> - as its official communication channels. Supporters were able to read, in regular posts, about the activities of the Association, events and current happenings in individual projects.

Audience on social media at the end of 2022:

Y

Twitter: 5,812

6

Facebook: 3,506

in

LinkedIn: 1,792

#### Other communication channels

An important part of the communication is the **CZ.NIC News newsletter**.

In 2022, the Association's staff wrote 67 articles for the online CZ.NIC Staff Blog. The blog plays the role of the Association's official communication channel, so it is also used by journalists with a different focus.

	Media outp	Media outputs		ocial networks (fans)	
	Articles	Blog	Facebook	Twitter	
2012	21	97	900	630	
2013	29	95	1,100	1,000	
2014	38	84	1,500	1,750	
2015	57	82	1,800	2,370	
2016	57	59	2,600	3,088	
2017	73	49	2,826	3,573	
2018	56	55	2,905	3,942	
2019	63	47	2,984	4,297	
2020	64	50	3,156	4,605	
2021	71	56	3,215	5,049	
2022	60	67	3,506	5,812	

**Internal communication** is provided primarily by the **IN Newsletter**, which CZ.NIC employees usually receive once every two weeks.

# 10.2 Popularisation series

In the past, the CZ.NIC Association had made the creation of several co-production programmes of Czech Television possible. (These included, for example, two seasons of the series Nauč tetu na netu (Teach Your Aunt to Use the Internet) and selected episodes from the series Lovci záhad (Hunters of Mysteries), intended for children and young people. On the other hand, the original series Nebojte se Internetu (Don't Be Afraid of the Internet) is aimed at seniors.)

In the years 2021-2022, the Association continued its cooperation with Czech Television on the production of the second season of **Datová Lhota** series, which should premiere in the autumn of 2023. Aimed at the youngest viewers, the series had become the most watched show on the CT:D channel in 2020 and had above-average ratings overall in this year. The second season of the series should have 10 episodes like the previous one.

In 2022, the Association's employees also participated in the preparation of the second season of **Alenka v říši GIFů (Alice in GIFland)** series, focused on digital literacy and the prevention of risky behaviour on the internet. It is to be broadcast again on Czech Television in 2023.

With its 125 episodes, the series <u>Jak na Internet</u> remains the most extensive educational activity of the association aimed at the general public.

The series are also available online and are systematically used by organisations that focus on educating the selected risky groups - children and seniors.

# 10.3 The CZ.NIC Academy educational centre

In 2022, the <u>CZ.NIC Academy</u> expanded its portfolio of courses with three new ones: Containerisation (not only) with Docker, Data boxes and Lego programming. In addition to these face-to-face courses, a new e-course focusing on the issue of cyberbullying on was created in the Academy. The course offer is divided by target groups - IT professionals, public administration, schools and the public. The Association also tailors individual courses according to specific requirements. Courses, trainings and lectures are held in our training centre, but also in schools andcompanies.

The Academy offered its premises not only for holding full-time courses, but also served as a background for other events, both internal (training of new employees, workshops of tribal developers and administrators) and external (Turris Academy series). In July, the Academy held its traditional company suburban camp for children of employees.

#### List of courses and lectures for schools held in 2022

Name	Number of courses	Number of participants
Discussion of the Book "ONLINE ZOO"	19	344
Safe Cyberspace	3	58
Digital Footprint	6	217
Functioning of the Internet	5	93
Cyberbullying and Other High-Risk Phenomena	6	248
Unsafe Mobile Phone	1	18
Online Content Beyond the Edge	8	450
Discussion and Screening of Martyisdead Series	13	1,037
Social Networks	6	227

#### List of professional courses conducted at the CZ.NIC Academy in 2022

Name	Number of courses	Number of participants
Ansible - Mass Automation and Server Management	1	7
Internet Security and Privacy	1	6
Barrier-Free Digital Design for Beginners	1	10
DNSSEC - Securing DNS	2	16
E-mail Authentication	3	26
Git - Universal Versioning System	1	15
Containers (not only) with Docker	1	12
Lego Programming	1	6
Practice of Verifying Electronic Signatures	1	8
The Principles and Administration of DNS	2	19
Python Formally	3	31
Turris in Practice	2	11
Introduction to Linux	2	12
Vim	2	11

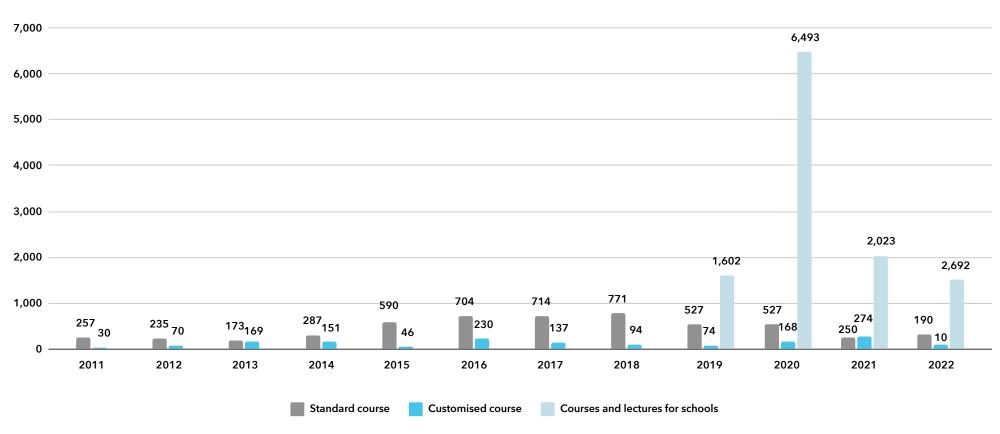
#### List of tailored courses taught at the CZ.NIC Academy in 2022

Name	Number of courses	Number of participants
Basics of CSIRT/CERT functioning	1	10

#### Total number of all courses organised at the CZ.NIC Academy in 2022

Course type	Total number of courses	Total number of participants
Professional courses	23	190
Customised courses	1	10
Schools	67	2,692
Total	91	2,892

#### **Development of the number of participants in the CZ.NIC Academy**



#### **10.4 Conferences**

On 22 June, the CZ.NIC Association organised the online conference, **Internet and Technology 22**.

Its main topics were:

- overview of current events in key projects of the Association,
- DNS,
- networking,
- security.

In 2022, the CZ.NIC, NIX.CZ and CESNET associations organised a community meeting of CSNOG 2022 (Czech and Slovak Network Operators Group). The main goal of this event was the mutual exchange of experience between internet access providers, telecommunications network operators, domain registrars, computer network operators and technical enthusiasts, as well as discussions on current topics and the sharing of solutions leading to the development of internet networks in the Czech Republic and the Slovak Republic. The meeting took place on 20 and 21 June.

In 2022, the CZ.NIC Association presented itself at a number of events and professional conferences in the Czech Republic:

- OpenAlt,
- Install Fest,
- Zlín Film Festival,
- Primary Prevention of Risky Behaviour Conference,
- SECURITY 2022,
- Public Administration Hackathon 4.0,
- participation in the jury at the Opening Data Together event.

Abroad, it was mainly participation in events of the following organisations:

- CENTR,
- RIPE,
- IETF.

In line with its strategy of supporting community events, the CZ.NIC Association hosted the CENTR Jamboree international meeting from 31 May to 2 June 2022.

## 10.5 CZ.NIC Edition

Publishing specialised and popular publications on topics related to the internet and its technologies is a traditional awareness-raising activity of the Association. **Printed and electronic books** are published in the CZ.NIC Edition.

Printed books are offered by the book distribution networks Kosmas, Euromedia Group and Pemic Books, and in the IKAR network in Slovakia.

Electronic versions of the books are available for purchase in formats designed for e-readers (EPUB and MOBI), e.g. at Palmknihy, Kosmas, Knihy Dobrovský and other retailers. The PDF format is available for free download on the CZ.NIC Edition website.

Following the publication of the first **audiobook**, **Online ZOO**, the Association managed in the past to establish cooperation with Grand IT company, which provides distribution of electronic content. At present,

the Association cooperates with, for example, portals such as Galerie Vodafone, Alza, Audiolibrix, Digiport, iKiosek and others.

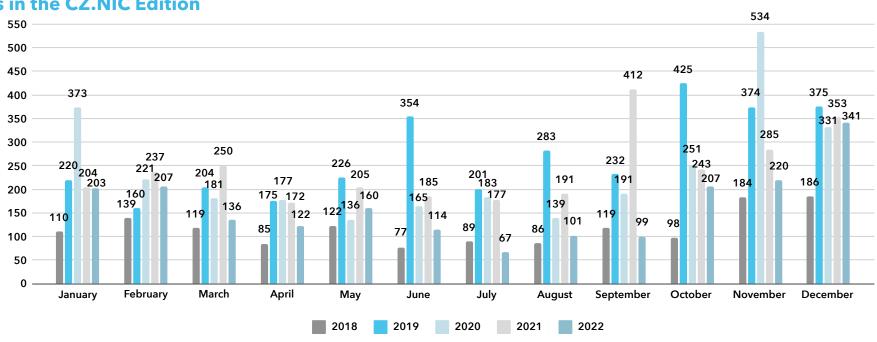
In 2022, the Edition was expanded to include the printed title **Průvodce labyrintem algoritmů - druhé vydání (A Guide to the Labyrinth of Algorithms - Second Edition)**. This title was written by Martin Mareš and Tomáš Valla.

The second edition of A Guide to the Labyrinth of Algorithms – just like the first one – tells how to design algorithms and how to study their behaviour. It contains many examples of algorithms and data structures with applications and exercises. It is intended for anyone who already knows some programming in any language and would like to learn how

to think algorithmically. Compared to the first edition, the current one is updated with algorithms for working with strings, randomised data structures, path finding in maps, a brief introduction to graph theory, and many new exercises.

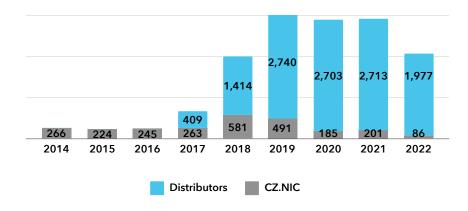
This brings the number of titles available to **27 professional or popular** science titles.

#### **Development of the sale of titles in the CZ.NIC Edition**



In 2022, **a total of 2,063 printed books were sold**, which represents a slight decrease compared to 2021.

#### **Overview of book sales by channel**





Connecting tens of millions of users across all continents, the internet is clearly the most important communication tool today. We often hear that the internet has no borders and does not fall under the authority of any government. This does not mean, however, that the internet is not governed or that it has no rules. Nevertheless, unlike many other sectors, the rules are often created by the internet community, which also includes employees of the CZ.NIC Association.

To ensure that no efforts of any member or organisation are in vain, mutual cooperation is essential, both at the national and international levels.

Cooperation with our domestic partners helps find the most acceptable system for national domain administration for the Czech user, and, at the same time, contribute to the expansion of new technologies and the development of the information society.

**International cooperation** not only helps to follow world trends, but also - thanks to the active participation of the Association's employees - contributes to their creation and shaping, which affects our everyday lives.

Thanks to their high level of expertise, the representatives of the Association, both management and other staff, are welcome guests at both domestic and international expert forums.

# 11.1 Cooperation in the Czech Republic

The CZ.NIC Association is a natural partner of public administration and special-interest associations operating in the field of the internet.

## 11.1.1 Cooperation with public administration

The domain name administration system, together with the related internet infrastructure, is a core critical infrastructure of the state, similar to the energy or transport networks. The CZ.NIC Association considers the protection of this key infrastructure as one of its basic duties. Without the efficient and secure functioning of this critical infrastructure, neither the further development of the digital economy in the Czech Republic, nor the further development of e-government services for Czech citizens and companies doing business in the Czech Republic, is possible.

The Association therefore cooperates continuously with a number of state authorities and organisations, such as the **National Cyber and Information Security Agency** (NÚKIB), the Ministry of the Interior of the Czech Republic, and the Police of the Czech Republic. The CZ.NIC Association operates the so-called **National CSIRT** of the Czech Republic for the NÚKIB on the basis of a public-law contract.

For the Ministry of the Interior of the Czech Republic, the CZ.NIC Association operates the national elDAS hub already in the second period on the basis of a contract from an open tender. A major advance for the use of public administration services in the EU countries in the past period was the acquisition of European notification for the MojelD service. This made MojelD a universal identity tool in the Czech Republic.

Another form of cooperation with state administration is the <u>Safer Internet Centre</u> project, which also includes the <u>STOPonline.cz</u> service. Its staff deals with reports of objectionable content on the internet, especially child pornography.

The Association was actively involved in the discussion of legislative proposals that may have an impact on the digital world both at the national and European level. Furthermore, Association representatives cooperated with the Czech Telecommunication Office, the Ministry of Industry and Trade of the Czech Republic, the Police of the Czech Republic, enforcement authorities, courts and authorities according to the statutory authorisation, i.e. with the Office for Personal Data Protection, trade and tax offices, the Customs Administration and other entities.

### 11.1.2 Cooperation with the Non-Profit Sector

The CZ.NIC Association supports a number of organisations and projects in the non-profit sector.

#### **People in Need**

The Association supports, in particular, the project of the humanitarian and educational organisation Člověk v tísni (People in Need) entitled **Jeden svět (One World)**. This project offers schools documentary films and accompanying methodological aids for teaching current topics of the contemporary world and modern history.

#### **OSF Foundation**

The main goals of the **Náš stát, naše data (Our State, Our Data)** project, of which the Association is a long-term partner, are to promote the principles and standards of open data and to promote, raise awareness and coordinate activities and experts on this topic.

In 2022, the anti-epidemic measures were already relaxed, so a large part of the events took place in person. Experts from the Association joined the project, for example, by speaking at the Civic Tech Open, where Jaromír Talíř participated in a panel debate on the topic "Architecture of Digitisation or How to Build it All".

Representatives of the Association also participated in the Open Data Expo event, where they offered participants at the MojelD stand the opportunity to obtain a Citizen Identity and access to online public administration services.

# 11.1.3 Membership in Professional, Interest and Other Organisations

#### Czech Television - Déčko

In 2022, the CZ.NIC Association was represented in "Déčkolegium", an informal board of advisors providing expert advice, feedback and opinions on the programmes and content of the popular Czech Television's children's channel Déčko. It also helps to acquaint parents with media issues.

#### NIX.CZ

The largest Czech Internet Exchange Point (IXP) covers domestic and foreign internet service providers for the purpose of interconnecting their networks. The NIX.CZ Association is the largest IXP in the Czech Republic and one of the most important ones in the world.

The CZ.NIC Association is a member of NIX.CZ and actively contributes to its activities, primarily through the **FENIX** project. NIX.CZ also uses the products of the CZ.NIC Labs, especially the BIRD multiprotocol routing daemon.

#### **Involvement in the FENIX project**

The Association helped establish the FENIX project on the platform of the biggest Czech peering hub, NIX.CZ, in 2013. The main aim of the project is to secure the availability of internet services among entities involved in this activity in the event of massive DoS attacks. The FENIX project is intended

for businesses providing connectivity for major connection and content providers that need to secure their operation in the most critical situations.

Any entity that meets the entry terms and conditions can join the FENIX project. These terms and conditions resonate with what the CZ.NIC Association has been promoting for a long time by its activities, especially with the development of a trustworthy, secure and stable internet infrastructure and services of general interest. To join the FENIX project, the applicant must, for example, run its own CERT/CSIRT team, support IPv6 and DNSSEC, have response rate limiting implemented and use BCP-38 source address filtering on its network.

# 11.2 Social responsibility (supporting third parties and projects)

The main activity of the Association is to operate and develop trusted, secure and stable infrastructure and generally beneficial internet services, especially the .CZ domain, for the benefit of the internet community in the Czech Republic. At the same time, however, it is mindful of responsible behaviour towards its surroundings and society as a whole, and considers it one of its main duties. Corporate social responsibility is an integral part of the corporate culture and includes economic, social and environmental aspects.

The Association cares about the satisfaction of not only the internet community in the Czech Republic, but also of its employees and partners. In doing so, it is mindful of responsible attitudes, ethical behaviour, environmental protection, innovative approaches and support for beneficial activities and organisations.

Thanks to the activities of the Association on the international internet scene, foreign stakeholder organisations are increasingly choosing CZ.NIC as a partner for cooperation and the Czech Republic as the location for their meetings. This gives representatives of the local internet community easier access to interesting topics and to the world's leading experts from the field of the internet.

#### **Environmental responsibility**

The CZ.NIC Association is fully aware of its responsibility towards the environment and tries to reflect this fact in its activities. It complies with environmental standards to minimise the impact of its activities on nature.

The Association is committed to environmentally friendly operations on its own premises - whether it is the efficient use of electricity or the sorting and recycling of waste. It is consistently interested in digitising all documentation. Using modern technology, it reduces excess heating so that waste is avoided but a comfortable working environment is maintained. It also closely monitors the environmental impact of its suppliers - e.g. the DC TOWER and CE Colo data centres, where the HW and SW for the central register system are operated, are certified according to the ISO 14001 (EMS) standard.

It also promotes environmental responsibility among its employees, who repeatedly participate in the "Do práce na kole" ("Bike to Work") event, which not only promotes the idea of active transport but also motivates regular exercise.

### Assistance to Ukraine in the context of the armed conflict

The Association contributed a total of CZK 10 million to humanitarian aid to Ukraine through a donation to the non-profit organisation POST BELLUM for the "Pomozte Ukrajině s Pamětí národa" ("Help Ukraine with the Memory of the Nation") collection.

In the past, the Association has also contributed to other humanitarian causes, such as the inhabitants of Moravian villages hit by a tornado, and flood victims in Bohemia.

Through the Dutch organisation Stichting Global NOG Alliance, the Association provided an **in-kind donation - Turris MOX routers worth CZK 565,000** to support the maintenance of a functional internet connection in Ukraine, in particular to maintain the services necessary to ensure the functioning of the state.

<u>Support for the operation</u> of the Ukrainian UA domain administrator (Hostmaster UA organisation) took place in the value of CZK 348,000 - e.g. hardware rental, hosting, etc.

At the beginning of the year, collections of used and new hardware were made to serve people fleeing the conflict to the Czech Republic, as well as a collection of material aid in the form of promotional items from the Association (towels, power banks, first aid kits, flashlights, reflective materials, etc.), which were sent directly to the affected places.

In addition, the **employees of the Association** themselves made a financial donation of CZK 61,000.

A highly discussed topic in 2022 was the **removal of eight domain names from the zone**. In connection with the armed conflict in Ukraine, on 25 February 2022 the CZ.NIC Association removed eight domain

names from the zone - through them so-called disinformation websites threatening the national security of the Czech Republic had been made available. This quite extraordinary step was taken after intensive consultations with the security forces of the state and on the basis of the recommendations of the Government of the Czech Republic in response to the military attack by the army of the Russian Federation against the sovereign state and the disinformation campaign that accompanied it.

The retired domain names were **returned to the zone on 25 May 2022**. The CZ.NIC Association regularly reviewed the continued necessity of this measure to remove the domain names from the zone. It also called on the Government of the Czech Republic at the outset to adopt systemic measures to prevent and avoid the spread of disinformation in the online environment and pointed out that in the interests of transparency and the predictability of its decision-making, it announced that after three months had elapsed since the blocking, it would keep these domains removed from the zone only on the basis of an order or decision by the competent state authority.

#### Publication of the list of domain names removed from the DNS

- the CZ.NIC Association may for several reasons decide to remove a particular domain name from the .CZ zone - the services, that are made available through such a domain name will thus become unavailable (not completely; they naturally remain in place, but they cannot be searched through the given domain name).

Such reasons are most often decisions of the Association in connection with incorrect data of the holder or application of Article 17 of the Rules of Registration of Domain Names (threat to national or international computer security - most often in connection with the spread of phishing), decisions of the competent state authorities, especially the police or courts.

The list, which is regularly updated, is available on the Association's website and its purpose is to increase transparency in the removal of domain names from the DNS - this has become more important in the context of the armed conflict in Ukraine and the removal of domain names that made available so-called disinformation sites.

#### **Helping animals**

The CZ.NIC Association has long contributed to the Prague, Jihlava and Zlín zoos for raising the Australian cassowary, whose original home is New Guinea and Australia.

#### **Secondary school vocational activity**

In 2022, the Association was also the main partner of the Secondary School Vocational Activity competition organised by the Ministry of Education, Youth and Sports of the Czech Republic. This project is designed to lead gifted students to take an independent and creative approach to solving expert issues.

# **Faculty of Mathematics and Physics, Charles University**

In the years 2021–2026, the Association will continue to be a partner of the Faculty of Mathematics and Physics of Charles University, where both entities will cooperate particularly in the field of research, development and education, as they are connected by a number of topics related to the internet and internet networks, as well as by key projects of the Association, such as the BIRD routing daemon and the Knot DNS authoritative DNS server. The Kasiopea programming competition was also supported during the reporting period.

#### **Public Administration Hackathon**

The Association also contributed to the Public Administration Hackathon, organised by the Supreme Audit Office, in the form of financial donations and in-kind donations.

# 11.3 Cooperation abroad

# 11.3.1 Membership in professional and interest organisations

#### **APWG (Anti-Phishing Working Group)**

A global coalition of private companies, state institutions and security forces focused on the global fight against cybercrime, especially spam.

# **CENTR (Council of European National Top Level Domain Registries)**

A non-profit organisation associating administrators of top-level domain names, both national and generic. It primarily targets European registers, but its members also include representatives of more distant regions, e.g. Canada and Japan. The CZ.NIC Association has been a member since 2001 and has been regularly involved in individual working groups' meetings.

One of CENTR's working groups, the Technical Working Group, has long been led by the Association's technical partner Jaromír Talíř.

# DNS-OARC (The Domain Name System Operations, Analysis and Research Centre)

A trusted platform that brings together key entities to share their experience from DNS operation, analysis, and research to be able to efficiently coordinate their activities, particularly those concerning the security of the system. Jaromír Talíř, technical partner of the CZ.NIC Association, was a member of the DNS-OARC Board of Directors until October 2022.

# **EURid (The European Registry of Internet Domain Names)**

An association, which, under the authority of the European Commission, administers the .EU top-level domain. CZ.NIC is its associate member and has a representative on the Board of Directors.

# **EuroISPA (European Internet Services Providers Associations)**

The European Internet Services Providers Association is the largest organisation, bringing together more than 2,300 organisations around the world. The main objective of EuroISPA, of which CZ.NIC has been a member since 2008, is to represent ISPs within the legislative processes of the European Union and facilitate the exchange of experience among individual internet service providers.

#### **CSIRT Network**

A CSIRT teams interest group, which acts as a contact point for the obliged entities identified in the NIS Directive (Directive of the European Parliament and of the Council concerning measures for a high common level of security of network and information systems across the Union). The group primarily deals with technical issues related to the implementation of this agenda.

# FIRST (Forum of Incident Response and Security Teams)

The first international organisation associating security teams. It has over 680 teams in more than 100 countries around the world, with significant representation by American and European teams. It is the only organisation that provides membership to teams from around the world and also covers product teams. The CSIRT.CZ team became a member of the FIRST organisation as early as 2015.

# ICANN (Internet Corporation for Assigned Names and Numbers)

An international non-profit organisation founded in 1998, the main task of which is to administer and assign not only generic top-level domain names (gTLDs) and top-level national domain names (ccTLDs), but also IP addresses. The CZ.NIC Association, as a national domain administrator, sends its representatives to regular meetings, and its experts actively participate in the activities of the working groups. Ondřej Filip, CEO of CZ.NIC, is a member of the prestigious Security & Stability Advisory Committee (SSAC) within ICANN.

#### **IETF (Internet Engineering Task Force)**

An organisation founded in 1986, which is directly linked to the birth of the internet. It is made up of an international community of leading specialists, network architects, and representatives from the commercial sector. The IETF approves and promotes internet standards - and RFC documents - which govern the majority of internet operations. Our employees are actively involved in some of them. Meetings of members of this organisation have also taken place several times, thanks to the cooperation of the CZ.NIC Association in Prague.

The CZ.NIC Labs' employees participate, within the IETF, mainly in the activities of the DNSOP (DNS operation), NETCONF (network devices configuration) and NETMOD (configuration and status data modelling) working groups. Ladislav Lhotka, the technical partner of the Association, has long been an active member of the IETF community, and he is the first Czech ever to participate in the creation of an internet standard as the lead author (RFC 6110).

In the year before last, the IETF organisation had issued a new internet standard (RFC 9108) and in 2022 another one (RFC 9130) was added - in both cases Ladislav is a co-author.

# **INHOPE** (International Association of Internet Hotlines)

INHOPE is an international association of over 55 hotlines aimed at combating and eliminating illegal online content, especially child pornography. The main benefits of INHOPE membership include access to the ICCAM database (derived from "I see Child Abuse Material") and the possibility of effective cooperation with other countries and institutions, particularly Interpol, in removing illegal content.

The CZ.NIC Association, with the STOPonline.cz line operated by it, became an associate member in June 2017. In 2018, the Association had gained full membership in this prestigious association, as part of the Safer Internet Centre project implementation. From 2022, the Association has also received a special financial reward in recognition of the high number of reports processed.

# **Europol (European Union Agency for Law Enforcement Cooperation)**

Europol is an organisation dedicated to preventing and combating organised crime. The organisation falls under the European Union and seeks to improve cooperation between the Member States, in particular through police and judicial advisory and its awareness-raising and educational activities.

# RIPE NCC (Réseaux IP Européens Network Coordination Centre)

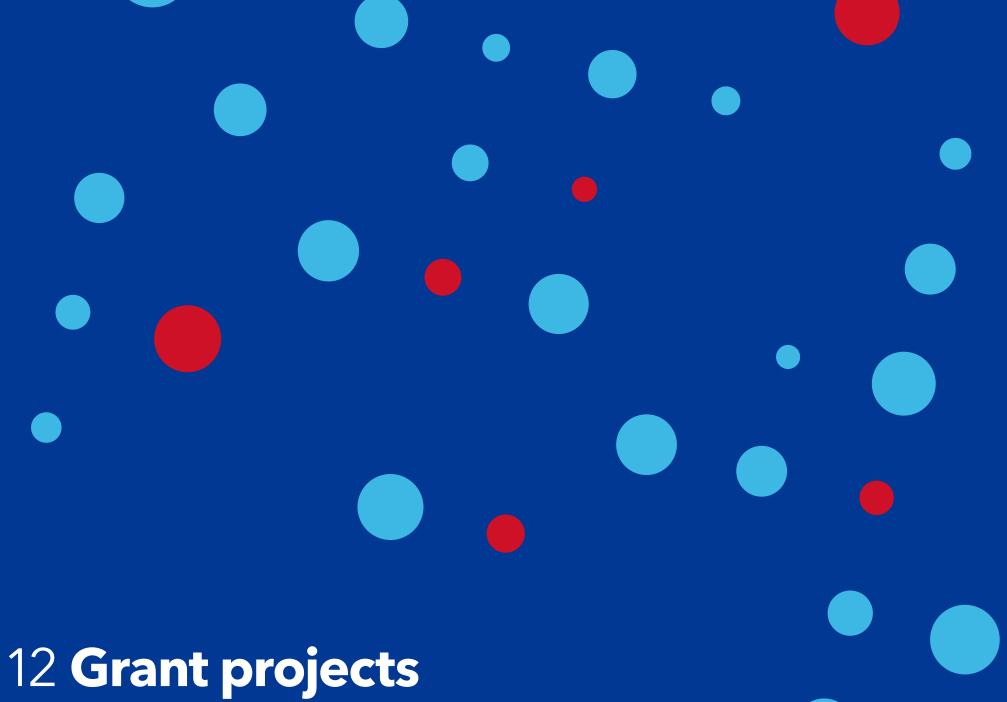
An independent non-profit organisation that supports internet infrastructure. Its core activities include the operation of the RIR (Regional Internet Registry), which allocates internet resources and related services (such as IP addresses) to its members. The CZ.NIC Association, as one of the members, not only attends regular meetings, but also participates in other thematic meetings and training events organised by this organisation. In the reporting year, Ondřej Filip, CEO of the CZ.NIC Association, became the Chairman of the Board of Directors of this organisation.

#### **TF-CSIRT**

TF-CSIRT is an organisation that brings together security teams, predominantly from Europe. The CSIRT.CZ team has the highest possible level of membership of this organisation – certified. CZ.NIC-CSIRT is an accredited member.

#### **US WISPA**

An association of wireless internet service providers dedicated to the development of wireless internet, compliance with the highest standards of provided services, and the use of the latest technology in practice in the UK and Ireland.



In 2022, the CZ.NIC Association was part of several international research & development projects. In doing so, it actively participated in addressing existing technological challenges and supporting the development of selected modern technologies and topics in the field of information technology. In accordance with the development strategy for the period 2022-2024, CZ.NIC's attention was focused on cyber security, electronic identity and safe behaviour on the internet.

In addition to the opportunity to work on technological and societal challenges, the added value of the projects is the opportunity to deal with important topics, including those that may not be attractive to mainstream commercial entities. We also consider cooperation with Czech and foreign partners across the private, academic, non-profit and public spheres to be important. By its project activities, the Association strengthens its position as a trusted partner of the state and a responsible player in the field of technology.

The year 2022 was marked by the completion of the implementation of the European projects SPARTA, CyberExchange and Safer Internet Centre of the Czech Republic for the period 1/2021-6/2022.

The CZ.NIC Association became a member of the international consortia of **DNS4EU and EWC** (European Digital Wallet) projects, both of which have been supported by the European Commission for implementation starting in 2023. In July 2022, a new phase of the Safer Internet CZ (SIC CZ) project was launched.

# **Involvement in European Cooperation Projects**

CZ.NIC was part of European projects co-financed by the EU's Horizon 2020, Connecting Europe Facility (CEF) and Digital Europe Program (DEP). Through them, the European Commission implements its strategies

and goals in fundamental areas of the economy. Great attention is paid to information and communication technologies and European networks.

In the reporting period, the following projects were implemented with the support of the European Commission:

#### CyberExchange

The international project CyberExchange led by the CZ.NIC Association supported cross-border cooperation in the fight against cyber threats. Representatives of national and governmental security teams from the Czech Republic, Croatia, Latvia, Luxembourg, Malta, Poland, Austria, Romania, Greece and Slovakia took part in the project.

The core of the project was professional internships, during which representatives of the security teams had the opportunity to share their experience and strengthen their professional capacities. The project also supported technical internships aimed at supporting the deployment of modern software tools developed by individual national teams. CyberExchange was compatible with the MeliCERTes platform, which is one of the "building blocks" of cross-border digital infrastructure services.

Due to the COVID-19 pandemic, an extension of the project until June 2022 was agreed. CZ.NIC employees participated in two exchange internships during the project period. We also hosted representatives of Polish CERT.PL. A month before the end of the project, a simulation exercise for security specialists from all partner organisations took place in Split, where participants had the opportunity to practice responding in various crisis situations and to use their existing theoretical knowledge and practical experience.

As planned, the project was successfully closed in 2022 and all administrative and procedural requirements were met. The Association

gained practical experience in managing a non-technical (soft) cyber project and expanded skills and knowledge in the field of cybersecurity.

#### **Safer Internet Centre CZ (SIC CZ)**

In 2019 the CZ.NIC Association took over the coordination of national activities aimed at improving online safety of children in the Czech Republic.

In line with the Commission's strategies, the Centre aims to support and strengthen the protection of children on the internet, to develop their skills, to empower children in the digital world and, in general, to enable them to feel safe when using technology and to shape their lives online.

In the first half of 2022, the previous project, originally planned until the end in 2021, was coming to an end.

Until June 2022, preventive and educational activities were implemented and **the prevention centre**, the children's and parents' crisis line and the **STOPonline.cz hotline for combating illegal content on the internet** were operated.

CZ.NIC and Helpline primarily continued to spread awareness of the topics of risky phenomena and behaviour on the internet and to educate children, teachers and parents in order to strengthen their digital competences.

A conference and a partner **Advisor Board SIC CZ** were organised as part of the Zlín Film Festival and dozens of trainings in primary schools and screenings of the #martyisdead series and follow-up discussions with students and teachers were realised.

Educational events were held throughout the Czech Republic, which was also facilitated by the activities of the Helpline within the established programme "Safety Line in Your Classroom" ("Helpline in Your Classroom").

The existing educational content was further expanded with videos on selected risk topics created in cooperation with Palacký University in Olomouc. The main topics were cyber-grooming, cyber-bullying and sexting.

At the same time, a video tutorial for educators and children from children's homes was presented in the reporting year.

Last but not least, the <u>CSIRT.CZ</u> team's activity also targeted educational institutions by testing the vulnerability of primary school web portals.

The operation of the STOPonline.cz hotline, which processed a total of 4,140 reports in 2022 (compared to 1,854 reports in the first half of the reporting period), also falls under CSIRT.CZ. The topics of racism, fraudulent e-shops and child pornography were the most represented (277 websites with such content were reported to the ICCAM international system).

However, the international activities of SIC CZ are not limited to the aforementioned areas. CZ.NIC is a member of the international networks **Insafe** (uniting national SICs) and <u>INHOPE</u> (uniting national hotlines).

Insafe sits on three important working committees. One of the latest initiatives is the start of cooperation with the emerging SIC in Slovakia.

The centre also includes so-called **Youth Panel**, where youth representatives are given space. During the reporting period, a lecture on robotics was organised for them and their own activity was

continuously supported – for example in the form of a school peer-to-peer programme. One of the representatives of the Czech panel also took part in an interview with EU Commissioners Thierry Breton and Doubravka Šuica.

From mid-2022, SIC CZ has been operating in a new composition. The CZ.NIC Association and Helpline were joined by the Children's Crisis Centre (Dětské krizové centrum - DKC), an educational programme of the People in Need organisation (JSNS). This created the largest national consortium to date, which aims at increasing children's safety in the internet environments. Just like in the past, the project was supported, for the period of 2022-2024, by the Commission at the originally planned level and scope.

In cooperation with Czech Television, the second series of the popular awareness-raising series "Alice in the Land of GIFs" was prepared.

Selected educational and preventive activities were also initiated. Representatives of CZ.NIC (prevention centre and STOPonline.cz) participated in 31 events for a total of 2,554 participants from the ranks of children, teachers and parents in the period in question. At the same time, educational events were also launched on the side of the Helpline (3 events for 140 children) and JSNS (22 seminars for 496 children).

The Helpline also recorded two new episodes of the podcast "Na tenké lince" ("On the Thin Line") and introduced a specific podcast aimed specifically at children called "Utržené sluchátko" ("The Severed Earpiece"). JSNS began work on a new series of DigiStories, a prevention video game that will focus on the negative phenomena associated with time spent on the internet and this year's Media Education Week. It also introduced two new audiovisual spots taken from the Irish educational portal Webwise.

The new project also brought an extension of the services provided by the Helpline to include the DKC crisis line. This fact not only increases the availability of professional interventions for children, young people, their parents and teachers, but also promotes the exchange of experiences and examples of good practice and cooperation in general. A unique activity in the EU context is the operation of a crisis clinic for child victims of crime via the internet.

In terms of priority topics, **SIC CZ will focus on selected topics of risky behaviour on the internet** (cyber-bullying, sexting, sexual content created by children, stalking, self-harm of children), safe use of modern technologies (digital footprint, privacy), addictive behaviour (netolism), children's digital rights, and media and digital literacy.

Attention will also focus on social bubbles, so-called **rabbit holes**, and phenomena associated with delivery systems and algorithms.

#### **SPARTA**

In 2022, the research and development project SPARTA was successfully completed, in which a total of 44 organizations across Europe pooled their knowledge and skills.

The overarching goal of this activity was to map and reevaluate the current approach to cyber security research in Europe. As part of the SPARTA project, selected solutions were developed and shared to help security experts prevent cybercrime and increase cyber security.

CZ.NIC was represented in the project by members of the national CERT/CSIRT team, who participated in the implementation of one of the research parts of the project called **T-Shark** as an end user. Its aim was to create a comprehensive framework for the detection, identification and,

above all, prediction of cyber threats and for the sharing of information among partners.

In addition to its own professional work, the project enabled the establishment and deepening of relationships with actors across Europe (40 partners were involved in the project) involved in the field of cyber security from different angles of their professional activity. This fact helps further establish CZ.NIC in the professional European community.



### 13.1 Member base

The member base of the Association is made up of a number of **entities** which are significantly involved in the functioning of the Czech internet. Members include representatives of internet and telecommunications service providers, domain name registrars, publishers of internet and print media, and e-commerce businesses, as well as entities for which the internet and domain names are "only" an important communication tool.

The CZ.NIC Association is thus one of the places where these representatives can meet and, at the same time, influence the future direction of the Czech internet. Further expansion of the Association's knowledge portfolio, streamlining its management and response to the constant development of the internet, allows a wide range of business activities for members and their involvement in the Association's activities, either by attending General Meetings, working groups and seminars, or e-mail conferences, or by directly working in the Association's bodies.

#### **Membership conditions**

A legal entity that meets the following general terms and conditions for membership can become a member of the Association:

- location of the registered office or organisational unit in the territory of a Member State of the European Union,
- holding at least one domain name in ccTLD CZ,
- payment of the entrance membership fee.

The members of the Association are divided into three chambers:

- Chamber of Domain Name Holders,
- ISP Chamber,
- Chamber of Registrars.

The statutes govern the special terms and conditions of membership in the individual chambers. The chamber arrangement brings benefits to the members of the Association, who can easily formulate and defend their opinions and interests together with other similarly-oriented entities.

This arrangement also makes the operation and negotiations of the Association bodies, particularly the Collegium and General Meeting, more efficient.

# 13.1.1 Number of members by chamber

As of 31 December 2022, the CZ.NIC Association had a total of **121 members**.

# **Development of the number of members by chamber**

Chamber/ Year	ISP	Registrars	Domain name holders	Total
2008	15	11	31	57
2009	17	14	32	63
2010	19	19	37	75
2011	23	17	49	89
2012	27	18	61	106
2013	27	19	65	111
2014	24	20	69	113
2015	23	20	72	115
2016	25	20	67	112
2017	26	18	71	115
2018	26	19	69	114
2019	27	17	72	116
2020	27	17	75	119
2021	29	16	75	120
2022	28	16	77	121

#### **Division of members by chamber**

ISP	23.2%
Registrars	13.2%
Domain name holders	63.6%

# 13.1.2 Overview of members by chamber

Overview of chamber members as of 31 December 2022

# **Chamber of Domain Name Holders** (Business Name, Company ID No.)

ABRATICA s.r.o.	26108534
ACOMWARE s.r.o.	25047965
ADAPTIVITY s.r.o.	24156027
AdminIT s.r.o.	27864901
Advio Network, s.r.o.	28565673
Adytia Innovation OÜ	14498430
AKREDIT, spol. s r.o.	25797387
ALEF NULA,a.s.	61858579
ALENSA, s.r.o.	27179681
AliaWeb, spol. s r.o.	26117363
Asociace pro elektronickou komerci, z.s. (Association of E-commerce)	68684797
AUDITEL, s.r.o.	26775034
CD PROFESIONAL security agency, s.r.o.	25712713
CISCO SYSTEMS (Czech Republic) s.r.o.	63979462
.CO.CZ s.r.o.	14364786
COMGUARD a.s.	0405426
ComSource s.r.o.	29059291
Com-Sys TRADE spol. s r.o.	16188781
CQK HOLDING a.s.	28405579
CYBERSALES a.s.	26199653
Datahost s.r.o.	26390973
DELL Computer, spol. s r. o.	45272808
ECOMOLE LTD.	04171080
ekolo.cz s.r.o.	27141659

Fortion Networks, s.r.o.       26         Gordian Investments s. r. o.       24         Greenlux s.r.o.       28         Holubová advokáti s.r.o.       24         ICZ a.s.       25         igloonet, s.r.o.       27         I. H. P. společnost s ručením omezeným       48         INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MASANTA s.r.o.       26         MEASUREMENT PRAHA, s.r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Pražský Účetní Servis s.r.o.       26	
Gordian Investments s. r. o.       24         Greenlux s.r.o.       28         Holubová advokáti s.r.o.       24         ICZ a.s.       25         igloonet, s.r.o.       27         I. H. P. společnost s ručením omezeným       48         INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MASANTA s.r.o.       26         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Pražský Účetní Servis s.r.o.       26	7203824
Greenlux s.r.o.       28         Holubová advokáti s.r.o.       24         ICZ a.s.       25         igloonet, s.r.o.       27         I. H. P. společnost s ručením omezeným       48         INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneří s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Pražský Účetní Servis s.r.o.       26	6397994
Holubová advokáti s.r.o.   24     ICZ a.s.   25     igloonet, s.r.o.   27     I. H. P. společnost s ručením omezeným   48     INBES, spol. s r.o.   14     Intell. Net s.r.o.   27     Internet Info, s.r.o.   25     Internet Mall, a.s.   26     Klíč, spol. s r. o.   28     Laurián s.r.o.   29     MAFRA, a.s.   45     Mailkit s.r.o.   26     MARIAS s.r.o.   26     MASANTA s.r.o.   27     MEDIA FACTORY Czech Republic a.s.   26     Michal Krsek & partneři s.r.o.   27     Modrá Busina s.r.o.   28     Moonlake Web Services, s.r.o.   29     Neutral czFree eXchange, z.s.p.o.   75     NEW MEDIA GROUP s.r.o.   26     Nux s.r.o.   27     Občanské sdružení Ubuntu pro Českou republiku   22     Orego finance s.r.o.   24     PharoCom s.r.o.   25     Pražský Účetní Servis s.r.o.   26     Pražský	4159778
ICZ a.s.       25         igloonet, s.r.o.       27         I. H. P. společnost s ručením omezeným       48         INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MASANTA s.r.o.       26         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       26         Pražský Účetní Servis s.r.o.       26	8608747
igloonet, s.r.o.       27         I. H. P. společnost s ručením omezeným       48         INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MASANTA s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	4686727
I.H. P. společnost s ručením omezeným       48         INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	5145444
INBES, spol. s r.o.       14         Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	7713482
Intell. Net s.r.o.       27         Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	8117846
Internet Info, s.r.o.       25         Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Pražský Účetní Servis s.r.o.       26         Pražský Účetní Servis s.r.o.       26	4502593
Internet Mall, a.s.       26         Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Pražský Účetní Servis s.r.o.       26         Pražský Účetní Servis s.r.o.       26	7971546
Klíč, spol. s r. o.       28         Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	5648071
Laurián s.r.o.       29         MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	6204967
MAFRA, a.s.       45         Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	8129377
Mailkit s.r.o.       26         MARIAS s.r.o.       26         MASANTA s.r.o.       25         MEASUREMENT PRAHA, s. r. o.       04         MEDIA FACTORY Czech Republic a.s.       26         Michal Krsek & partneři s.r.o.       27         Modrá Busina s.r.o.       28         Moonlake Web Services, s.r.o.       29         Neutral czFree eXchange, z.s.p.o.       75         NEW MEDIA GROUP s.r.o.       26         Nux s.r.o.       27         Občanské sdružení Ubuntu pro Českou republiku       22         Orego finance s.r.o.       24         PharoCom s.r.o.       25         Prague Business Office s.r.o.       27         Pražský Účetní Servis s.r.o.       26	9018919
MARIAS s.r.o.26MASANTA s.r.o.25MEASUREMENT PRAHA, s. r. o.04MEDIA FACTORY Czech Republic a.s.26Michal Krsek & partneři s.r.o.27Modrá Busina s.r.o.28Moonlake Web Services, s.r.o.29Neutral czFree eXchange, z.s.p.o.75NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	5313351
MASANTA s.r.o. 25  MEASUREMENT PRAHA, s. r. o. 04  MEDIA FACTORY Czech Republic a.s. 26  Michal Krsek & partneři s.r.o. 27  Modrá Busina s.r.o. 28  Moonlake Web Services, s.r.o. 29  Neutral czFree eXchange, z.s.p.o. 75  NEW MEDIA GROUP s.r.o. 26  Nux s.r.o. 27  Občanské sdružení Ubuntu pro Českou republiku 22  Orego finance s.r.o. 24  PharoCom s.r.o. 25  Prague Business Office s.r.o. 27  Pražský Účetní Servis s.r.o. 26	6449901
MEASUREMENT PRAHA, s. r. o. 04  MEDIA FACTORY Czech Republic a.s. 26  Michal Krsek & partneři s.r.o. 27  Modrá Busina s.r.o. 28  Moonlake Web Services, s.r.o. 29  Neutral czFree eXchange, z.s.p.o. 75  NEW MEDIA GROUP s.r.o. 26  Nux s.r.o. 27  Občanské sdružení Ubuntu pro Českou republiku 22  Orego finance s.r.o. 24  PharoCom s.r.o. 25  Prague Business Office s.r.o. 26  Pražský Účetní Servis s.r.o. 26	6136139
MEDIA FACTORY Czech Republic a.s.26Michal Krsek & partneři s.r.o.27Modrá Busina s.r.o.28Moonlake Web Services, s.r.o.29Neutral czFree eXchange, z.s.p.o.75NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.26Pražský Účetní Servis s.r.o.26	5730533
Michal Krsek & partneři s.r.o.27Modrá Busina s.r.o.28Moonlake Web Services, s.r.o.29Neutral czFree eXchange, z.s.p.o.75NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	4404971
Modrá Busina s.r.o.28Moonlake Web Services, s.r.o.29Neutral czFree eXchange, z.s.p.o.75NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	6288311
Moonlake Web Services, s.r.o.29Neutral czFree eXchange, z.s.p.o.75NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	7418570
Neutral czFree eXchange, z.s.p.o.75NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	8885961
NEW MEDIA GROUP s.r.o.26Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	9249911
Nux s.r.o.27Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	5093201
Občanské sdružení Ubuntu pro Českou republiku22Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	6124611
Orego finance s.r.o.24PharoCom s.r.o.25Prague Business Office s.r.o.27Pražský Účetní Servis s.r.o.26	7234631
PharoCom s.r.o. 25 Prague Business Office s.r.o. 27 Pražský Účetní Servis s.r.o. 26	2674608
Prague Business Office s.r.o. 27 Pražský Účetní Servis s.r.o. 26	4718955
Pražský Účetní Servis s.r.o. 26	5172131
	7143481
Qrator Labs CZ s.r.o. 03	6740575
	3620174
Seyfor, a. s. 01	1572377

SH.cz s.r.o.	25492063
Skymia s.r.o.	28238613
Software602 a.s.	63078236
Socha, spol. s r.o.	48291153
SVBsoft, s.r.o.	28523644
TechLabs s.r.o.	08618445
Tech Ware spol. s r.o.	14891107
TIKWI s.r.o.	28917651
Trustica s.r.o.	26514362
Unie vydavatelů, z.s. (Czech Publishers Association)	15887081
ÚVT, s.r.o.	25701118
Vedea s.r.o.	28913876
VIZUS.CZ s.r.o.	27155315
VOLNÝ, a.s.	63080150
Vymáhání a odkup pohledávek s.r.o., in liquidation	27566510
Webarium, s.r.o.	26089602
Webnames s.r.o.	44848692
Web security s.r.o.	06927351
Ztracené kobylky, z.s.	22753001
1X s.r.o.	44632142

# ISP Chamber (Business Name, Company ID No.)

ABAK, spol. s r.o. CZE ABAK, GmbH GER ABAK, Co.Ltd. ENG	40763153
Casablanca INT a.s.	09070931
CESNET, z.s.p.o.	63839172
COOLHOUSING s.r.o.	14893983
ČD - Telematika a.s.	61459445
České Radiokomunikace a.s.	24738875
Dragon Internet a.s.	27237800
Družstvo EUROSIGNAL	26461129

60722266 24737887 27374041
27374041
25352288
45021295
26051362
25129619
27344860
26277557
03213595
27612694
08544603
27252183
25816179
26041561
64949681
24288705
26900696
61505455
29007542

# **Chamber of Registrars (Business Name, Company ID No.)**

ACTIVE 24, s.r.o.	25115804
ASPone, s.r.o.	28274326
e-BAAN Net s.r.o.	26867257
INTERNET CZ, a.s.	26043319
KRAXNET s.r.o.	26460335
Media4web, s.r.o.	26735903
ONE.CZ s.r.o.	25503651
O2 Czech Republic a.s.	60193336

Quantcom, a.s.	28175492
Seonet Multimedia s.r.o.	27522041
Seznam.cz, a.s.	26168685
TELE3 s.r.o.	26096960
Webglobe, s.r.o.	26159708
Web4U s.r.o.	17311501
ZONER a.s.	49437381
ZooControl s.r.o.	05766656

# 13.2 Bodies of the Association

### 13.2.1 General Meeting

The supreme body of the Association is the General Meeting, i.e. all members of the Association. They are divided into three chambers - the Chamber of Registrars, the ISP Chamber, and the Chamber of Domain Name Holders.

Each member of the Association has the right to participate in the General Meeting and promote its ideas, opinions and comments, and to nominate candidates to the Association's bodies.

### 13.2.2 Collegium

The Collegium is a body of the Association consisting of members elected by the individual chambers of the General Meeting and/or by other persons.

The powers of the Collegium include, for example, approving the Association's concept and budget, approving agreements concluded between the Association and the state, and electing and removing members of the Board of Directors and the Supervisory Board.

The Collegium has a total of 21 members, of which 18 are elected by the individual chambers of the General Meeting. Public administration bodies nominate three members. Members of the Collegium are elected to serve three-year terms of office.

# Members of the Collegium elected by the General Meeting

#### **Chamber of Domain Name Holders**

- Antoš Marek
- Gruntorád Jan
- Košata Bedřich (re-elected for a further term of office from 20 December 2022)
- Ohnesorg Dan (re-elected for a further term of office rom 20 December 2022)
- Redl Jan
- Taft Karel

#### **ISP Chamber**

- Dragon Tomáš
- Košňar Tomáš (re-elected for a further term of office from 20 December 2022)
- Pečínka Vlastimil
- Pospíchal Zbyněk (re-elected for a further term of office from 20 December 2022)
- Procházka Marcel
- Švácha Milan

#### **Chamber of Registrars**

- Fiala Tomáš (end of term of office on 19 December 2022)
- Filípková, Ilona
- Hála Tomáš (until 20 June 2022, termination of office by resignation)
- Kukačka Martin
- Kysela Stanislav (re-elected for a further term of office from 20 December 2022)
- Polanský Lukáš (elected from 20 December 2022)
- Šmída Petr
- Štéc Petr (from 2 August 2022 instead of Tomáš Hála)

# Collegium members nominated by state authorities

- Bumbálková Zina, Ministry of Industry and Trade of the Czech Republic
- Náhlovská Lenka, Czech Chamber of Commerce
- Peterka Jiří, Czech Telecommunication Office

#### 13.2.3 Board of Directors

The Board of Directors is a governing body that manages the Association's activities and acts in its name.

#### **Members of the Board of Directors**

- Taft Karel (\*1971), Chairman of the Board of Directors
- Antoš Marek (\*1979), Vice-Chairman of the Board of Directors
- Filípková Ilona (\*1972), Member
- Kosňar Tomas (\*1965), Member
- Kukačka Martin (\*1980), Member

### 13.2.4 Supervisory Board

The Association's control body, which supervises the performance of the Board of Directors and the implementation of the Association's activities.

#### **Members of the Supervisory Board**

- Redl Jan, Chairman of the Supervisory Board
- Gruntorád Jan, Member
- Pečínka Vlastimil, Member

### 13.2.5 Management

- Filip Ondřej, Chief Executive Officer
- Peterka Martin, Chief Operating Officer and Deputy Managing Director
- Fuňka Tomáš, Chief Financial Officer
- Brůna Zdeněk, Chief Technical Officer
- Hála Tomáš, Chief Information Officer (from 1 April 2022)
- Chomyn Josef, Head of Research Team (CZ.NIC Labs)
   (from 12 September 2022)
- Hrušecký Michal, Head of the Hardware Development Department
- Písek Ondřej, Chief Marketing Officer
- Sládek Vilém, Chief Communications Officer
- Talíř Jaromír, Technical Fellow
- Lhotka Ladislav, Head of the Research Team (CZ.NIC Labs)
   (until 12 September 2022, Technical Fellow from 12 September 2022)
- **Novák Jaromír**, Partner for Relations with Public Administration
- Palán Petr, Turris Global Growth Manager (until 30 June 2022)



14 Human resources

The strength of the Association lies in its professionally competent and qualified employees, who are essential for the fulfilment of the Association's objectives and further development. It is no exaggeration to say that many of our employees are leading experts in their fields with a domestic as well as international reputation.

To strengthen individual competencies, all employees are continuously educated, both in the field of foreign languages, so-called soft skills, and in professional knowledge, so that they can achieve the highest possible professional and personal qualities and contribute with their knowledge and skills to the further development of the Association and thus also the Czech internet.

# 14.1 Number of employees

In 2022, the number of employees of the Association decreased slightly. However, the Marketing Department, the CSIRT department and the Development Department strengthened, while fewer colleagues now work in the Labs and the HW Development Department. However, the weakening of this Department is largely due to the internal transfer of sales support to the Marketing Department.

In 2022, the Association's management was joined by Tomáš Hála as IT Director and by Josef Chomyn who became the new Head of the CZ.NIC Labs.

Department	Number of employees (as of 31 December 2021)	Number of FTEs (as of 31 December 2021)	Number of employees (as of 31 December 2022)	Number of FTEs (as of 31 December 2022)
Management	11	10.600	12	11.600
Marketing/PR	9	9.000	12	10.000
Academy	1	1.000	1	1.000
Development	25	20.550	28	23.600
Network Administration	12	9.500	12	9.500
CZ.NIC Labs	26	22.750	21	17.000
Legal	2	1.750	2	1.750
Secretariat	2	2.000	2	2.000
HR	1	0.000	1	0.000
Customer Support	13	13.000	12	12.000
CSIRT	9	8.000	11	9.000
HW Development Department	29	24.750	19	16.300
EU Projects	5	2.750	6	2.750
Total	145	125.650	139	116.500

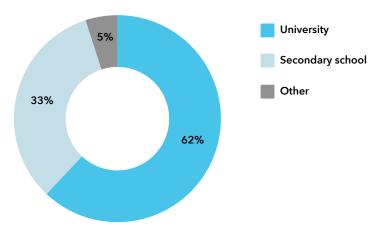
In addition to employing experienced professionals, we are also happy to nurture new talents, which is why we have university and secondary school students helping us on the basis of work agreements in many departments.

# 14.2 Employee structure

#### **Employee structure by education**

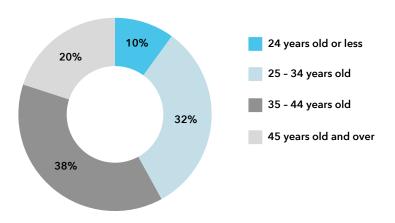
Most employees of the Association have a university degree. The CZ.NIC Association also provides fresh university graduates with the opportunity to acquire professional experience, building suitable conditions for them and assigning them to its branches in Brno, České Budějovice and Plzeň.

At the same time, the Association has an open door for talented secondary school students and university students. Therefore, the ratio of university-educated to secondary-school-educated workers has changed slightly in favour of secondary-school graduates.



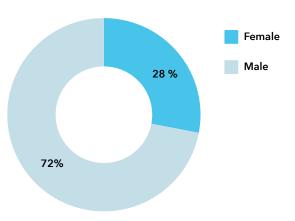
#### **Employee structure by age**

The average age of the Association's employees is 37 years. In terms of age structure, employees aged 35-44 predominate.



#### **Employee structure by gender**

In recruiting new employees, the CZ.NIC Association encourages equal opportunities and the involvement of women. Among other things, we offer the possibility of working part-time, which allows employees to combine their work and personal life. Given the structure of graduates in the technical branches of universities, however, the proportion of men still prevails, just like in other technology companies.





# 15.1 Balance sheet

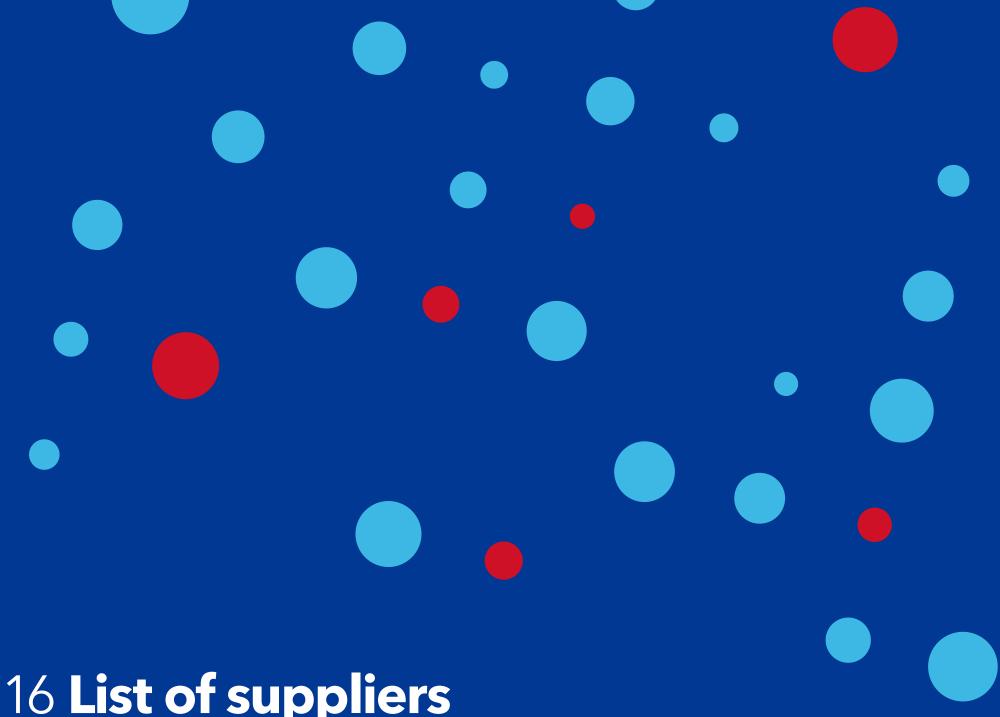
Fixed assets         89,103         89,001         80,579         75,682         81           Intangible fixed assets         1,438         1,333         931         253           Tangible fixed assets         87,665         87,668         79,648         75,429         80           Non-current financial assets         0         0         0         0         0         0           Current assets         444,082         479,202         521,033         556,449         569           Inventories         40,435         41,045         49,591         57,000         71           Receivables         8,860         10,425         14,560         24,348         34           Current financial assets         132,609         194,885         206,593         208,510         204           Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capi		2018	2019	2020	2021	2022
Intangible fixed assets         1,438         1,333         931         253           Tangible fixed assets         87,665         87,668         79,648         75,429         80           Non-current financial assets         0         0         0         0         0           Current assets         444,082         479,202         521,033         556,449         569           Inventories         40,435         41,045         49,591         57,000         71           Receivables         8,860         10,425         14,560         24,348         34           Current financial assets         132,609         194,885         206,593         208,510         204           Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Frofit/loss of previous years </td <td>Total assets</td> <td>534,656</td> <td>569,478</td> <td>602,667</td> <td>633,438</td> <td>653,028</td>	Total assets	534,656	569,478	602,667	633,438	653,028
Tangible fixed assets         87,665         87,668         79,648         75,429         80           Non-current financial assets         0         0         0         0         0           Current assets         444,082         479,202         521,033         556,449         569           Inventories         40,435         41,045         49,591         57,000         71           Receivables         8,860         10,425         14,560         24,348         34           Current financial assets         132,609         194,885         206,593         208,510         204           Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Prof	Fixed assets	89,103	89,001	80,579	75,682	81,573
Non-current financial assets         0         0         0         0           Current assets         4444,082         479,202         521,033         556,449         569           Inventories         40,435         41,045         49,591         57,000         71           Receivables         8,860         10,425         14,560         24,348         34           Current financial assets         132,609         194,885         206,593         208,510         204           Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Profit/loss of previous years         165,185         165,185         165,185         165         165           Profit/loss of the current fisca	Intangible fixed assets	1,438	1,333	931	253	845
Current assets         444,082         479,202         521,033         556,449         569           Inventories         40,435         41,045         49,591         57,000         71           Receivables         8,860         10,425         14,560         24,348         34           Current financial assets         132,609         194,885         206,593         208,510         204           Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Profit/loss of previous years         165,185         165,185         165,185         165,185         165,185         165           Profit/loss of the current fiscal period         5,733         20,667         23,663         <	Tangible fixed assets	87,665	87,668	79,648	75,429	80,728
Inventories       40,435       41,045       49,591       57,000       71         Receivables       8,860       10,425       14,560       24,348       34         Current financial assets       132,609       194,885       206,593       208,510       204,         Cash       262,178       232,847       250,289       266,591       258         Accrual of assets       1,471       1,275       1,055       1,307       2         Total liabilities       534,656       569,478       602,667       633,438       653         Equity       338,039       358,705       382,368       403,553       415         Share capital and capital funds       0       0       0       0       0         Funds from profit       167,121       172,853       193,520       217,183       236         Profit/loss of previous years       165,185       165,185       165,185       165       165         Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185       12         External sources       67,723       68,862       72,841       79,128       82         Reserves       6,454       8,691       14,512       14,671	Non-current financial assets	0	0	0	0	0
Receivables         8,860         10,425         14,560         24,348         34,           Current financial assets         132,609         194,885         206,593         208,510         204,           Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Profit/loss of previous years         165,185         165,185         165,185         165,185         165           Profit/loss of the current fiscal period         5,733         20,667         23,663         21,185         12           External sources         67,723         68,862         72,841         79,128         82           Reserves         6,454         8,691         14,512         14,671	Current assets	444,082	479,202	521,033	556,449	569,256
Current financial assets       132,609       194,885       206,593       208,510       204         Cash       262,178       232,847       250,289       266,591       258         Accrual of assets       1,471       1,275       1,055       1,307       2         Total liabilities       534,656       569,478       602,667       633,438       653         Equity       338,039       358,705       382,368       403,553       415         Share capital and capital funds       0       0       0       0       0         Funds from profit       167,121       172,853       193,520       217,183       236         Profit/loss of previous years       165,185       165,185       165,185       165,185       165,185       165         Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185       12         External sources       67,723       68,862       72,841       79,128       82         Reserves       6,454       8,691       14,512       14,671       18	Inventories	40,435	41,045	49,591	57,000	71,762
Cash         262,178         232,847         250,289         266,591         258           Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Profit/loss of previous years         165,185         165,185         165,185         165,185         165,185         165           Profit/loss of the current fiscal period         5,733         20,667         23,663         21,185         12           External sources         67,723         68,862         72,841         79,128         82           Reserves         6,454         8,691         14,512         14,671         18	Receivables	8,860	10,425	14,560	24,348	34,393
Accrual of assets         1,471         1,275         1,055         1,307         2           Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Profit/loss of previous years         165,185         165,185         165,185         165,185         165,185         165           Profit/loss of the current fiscal period         5,733         20,667         23,663         21,185         12           External sources         67,723         68,862         72,841         79,128         82           Reserves         6,454         8,691         14,512         14,671         18	Current financial assets	132,609	194,885	206,593	208,510	204,559
Total liabilities         534,656         569,478         602,667         633,438         653           Equity         338,039         358,705         382,368         403,553         415           Share capital and capital funds         0         0         0         0         0           Funds from profit         167,121         172,853         193,520         217,183         236           Profit/loss of previous years         165,185         165,185         165,185         165,185         165           Profit/loss of the current fiscal period         5,733         20,667         23,663         21,185         12           External sources         67,723         68,862         72,841         79,128         82           Reserves         6,454         8,691         14,512         14,671         18	Cash	262,178	232,847	250,289	266,591	258,542
Equity       338,039       358,705       382,368       403,553       415         Share capital and capital funds       0       0       0       0       0         Funds from profit       167,121       172,853       193,520       217,183       236         Profit/loss of previous years       165,185       165,185       165,185       165,185       165,185       165,185         Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185       12         External sources       67,723       68,862       72,841       79,128       82         Reserves       6,454       8,691       14,512       14,671       18	Accrual of assets	1,471	1,275	1,055	1,307	2,199
Equity       338,039       358,705       382,368       403,553       415         Share capital and capital funds       0       0       0       0       0         Funds from profit       167,121       172,853       193,520       217,183       236         Profit/loss of previous years       165,185       165,185       165,185       165,185       165,185       165,185         Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185       12         External sources       67,723       68,862       72,841       79,128       82         Reserves       6,454       8,691       14,512       14,671       18						
Share capital and capital funds       0       0       0       0       0         Funds from profit       167,121       172,853       193,520       217,183       236         Profit/loss of previous years       165,185       165,185       165,185       165,185       165,185       165,185       165,185       165,185       165,185       165,185       165,185       120,667       23,663       21,185       120,185       12	Total liabilities	534,656	569,478	602,667	633,438	
Funds from profit       167,121       172,853       193,520       217,183       236         Profit/loss of previous years       165,185       165,185       165,185       165,185       165,185       165         Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185       12         External sources       67,723       68,862       72,841       79,128       82         Reserves       6,454       8,691       14,512       14,671       18	Equity	338,039	358,705	382,368	403,553	415,460
Profit/loss of previous years       165,185       165,185       165,185       165,185         Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185         External sources       67,723       68,862       72,841       79,128         Reserves       6,454       8,691       14,512       14,671	Share capital and capital funds	0	0	0	0	0
Profit/loss of the current fiscal period       5,733       20,667       23,663       21,185       12         External sources       67,723       68,862       72,841       79,128       82         Reserves       6,454       8,691       14,512       14,671       18	Funds from profit	167,121	172,853	193,520	217,183	236,983
External sources         67,723         68,862         72,841         79,128         82           Reserves         6,454         8,691         14,512         14,671         18	Profit/loss of previous years	165,185	165,185	165,185	165,185	165,548
Reserves 6,454 8,691 14,512 14,671 <b>18</b>	Profit/loss of the current fiscal period	5,733	20,667	23,663	21,185	12,929
	External sources	67,723	68,862	72,841	79,128	82,402
Payables 61 269 60 171 58 329 64 457 64	Reserves	6,454	8,691	14,512	14,671	18,227
Taylores 01,207 00,171 30,027 01,107	Payables	61,269	60,171	58,329	64,457	64,175
<b>Accrual of liabilities</b> 128,894 141,911 147,458 150,757 <b>155</b>	Accrual of liabilities	128,894	141,911	147,458	150,757	155,166

In thousands of CZK

### 15.2 Profit and Loss Statement

	2018	2019	2020	2021	2022
Revenue from the sale of products and services	178,530	193,364	207,631	220,532	231,276
Sales of goods	11,267	20,210	24,522	54,530	50,954
Other operating income	13,304	13,813	11,657	9,878	4,277
Production consumption	67,523	70,268	65,827	94,937	93,216
Change in inventories of the Association's own operations	-951	82	256	445	341
Activation	0	0	0	0	0
Personnel costs	111,018	117,380	129,418	144,066	150,897
Valuation adjustments in the operating area	12,747	17,104	14,393	12,924	12,211
Other operating expenses	3,957	5,005	7,663	2,865	11,338
Operating profit/loss	8,807	17,548	26,253	29,703	18,504
Interest yields and similar revenue	311	1,286	920	279	4,616
Other financial income	57,271	30,343	24,606	43,495	70,838
Other financial expenses	58,233	25,590	22,578	47,976	73,855
Financial profit/loss	-651	6,039	2,948	-4,202	1,599
Profit before tax	8,156	23,587	29,201	25,501	16,404
Income tax	2,423	2,920	5,538	4,316	3,475
Profit after tax	5,733	20,667	23,663	21,185	12,929

In thousands of CZK



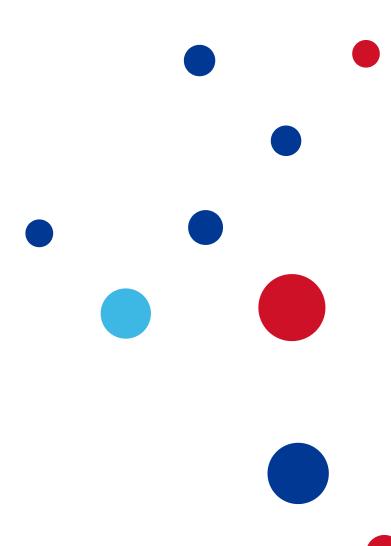
16 List of suppliers

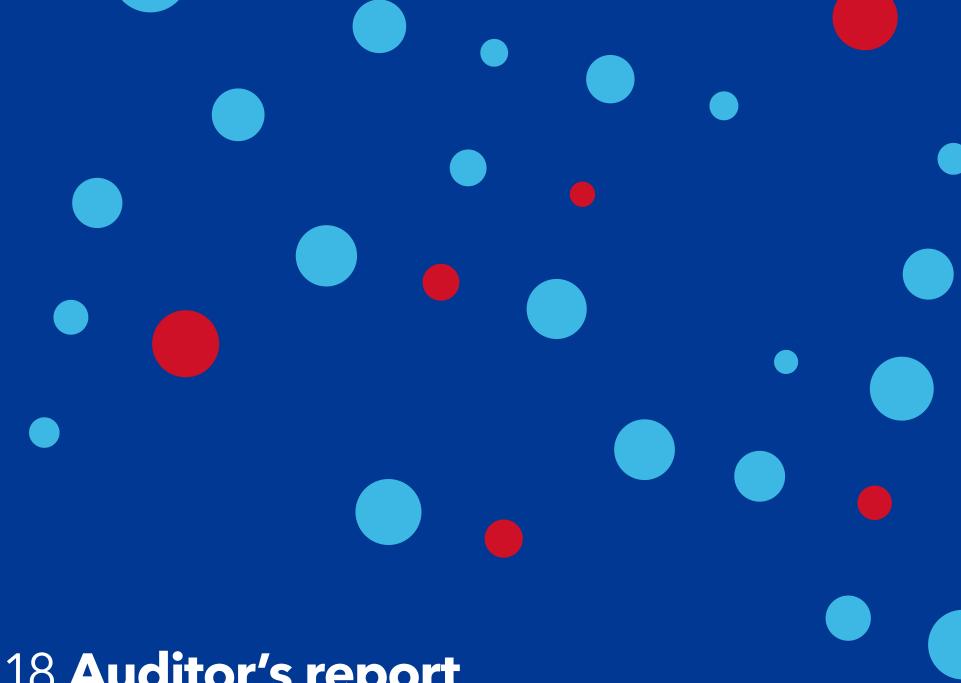
List of suppliers according to Art. 45.4. of the Statutes:

AsiaRF Co., Ltd. (Taiwan, CN)	CZK 6,217,798
Avnet Europe BV; Belgium (BE0464298616)	CZK 13,359,209
B2C, s. r. o., Czech Republic (CZ2795705)	CZK 8,010,179
SECTRON s. r. o., Czech Republic (CZ64617939)	CZK 7,914,330

17 Data on facts between the date of the financial statements and the General Meeting

No events occurred in the given time period that would have an impact on the data presented in the financial statements for 2022.





18 Auditor's report

Účetní závěrka

а

#### Zpráva nezávislého auditora

za rok končící 31. prosince 2022

Auditor

INTEREXPERT BOHEMIA, spol. s r.o., Mikulandská 2, Praha 1, 110 00, Tel:+420 224 933 658, Fax:+420 224 934 101 e-mail: secretary@interexpert.cz www.interexpert.cz

CZ.NIC. z.s.p.o.

Účetní období končící 31. prosince 2022

Obsah:

Zpráva nezávislého auditora

Účetní výkazy:

Rozvaha

Výkaz zisku a ztráty

Přehled o peněžních tocích

Přehled o změnách vlastního kapitálu

Příloha účetní závěrky

Výroční zpráva

#### Zpráva nezávislého auditora

Účetní jednotka:	CZ.NIC, z.s.p.o.		
Sídlo:	Milešovská 1136/5, 130 00 Praha 3 - Vinohrady		
Právní forma:	Zájmové sdružení právnických osob (dále jen "Sdružení")		
Identifikační číslo:	679 85 726		
Rozvahový den:	31.12.2022		
Účetní období:	01.01.2022 – 31.12.2022		
Účel činnosti:	Sdružení zejména a) provozuje a rozvíjí doménu nejvyšší úrovně ccTLD CZ; b) provozuje a rozvíjí důvěryhodnou, bezpečnou a stabilní informační a komunikační infrastrukturu, včetně vývoje a podpory rozvoje internetových služeb, a to především prostřednictvím inovativních projektů s otevřeným zdrojovým kódem; c) šíří a podporuje výuku, vzdělávání, osvětu a diskusi o aspektech internetových technologií; d) zabývá se zvyšováním úrovně kybernetické bezpečnosti.		

#### Výrok auditora

Provedli jsme audit přiložené účetní závěrky výše uvedené účetní jednotky sestavené na základě českých účetních předpisů, která se skládá z rozvahy k 31.12.2022, výkazu zisku a ztráty za období 01.01.2022 - 31.12.2022 a přílohy této účetní závěrky, která obsahuje popis použitých podstatných účetních metod a další vysvětlující informace. Údaje o účetní jednotce jsou uvedeny v příloze této účetní závěrky.

Podle našeho názoru účetní závěrka podává věrný a poctivý obraz aktiv a pasiv účetní jednotky k 31.12.2022 a nákladů a výnosů a výsledku jejího hospodaření za rok končící 31.12.2022 v souladu s českými účetními předpisy.

#### Základ pro výrok

Audit jsme provedli v souladu se zákonem o auditorech a standardy Komory auditorů České republiky pro audit, kterými jsou mezinárodní standardy pro audit (ISA) případně doplněné a upravené souvisejícími aplikačními doložkami. Naše odpovědnost stanovená těmito předpisy je podrobněji popsána v oddílu Odpovědnost auditora za audit účetní závěrky. V souladu se zákonem o auditorech a Etickým kodexem přijatým Komorou auditorů České republiky jsme na účetní jednotce nezávislí a splnili jsme i další etické povinnosti vyplývající z uvedených předpisů. Domníváme se, že důkazní informace, které jsme shromáždili, poskytují dostatečný a vhodný základ pro vyjádření našeho výroku.

#### Ostatní informace uvedené ve výroční zprávě

Ostatními informacemi jsou v souladu s § 2 písm. b) zákona o auditorech informace uvedené ve výroční zprávě mimo účetní závěrku a naši zprávu auditora. Za ostatní informace odpovídá představenstvo Sdružení.

Náš výrok k účetní závěrce se k ostatním informacím nevztahuje. Přesto je však součástí našich povinností souvisejících s ověřením účetní závěrky seznámení se s ostatními informacemi a

posouzení, zda ostatní informace nejsou ve významném (materiálním) nesouladu s účetní závěrkou či s našimi znalostmi o účetní jednotce získanými během ověřování účetní závěrky nebo zda se jinak tyto informace nejeví jako významně (materiálně) nesprávné. Také posuzujeme, zda ostatní informace byly ve všech významných (materiálních) ohledech vypracovány v souladu s příslušnými právními předpisy. Tímto posouzením se rozumí, zda ostatní informace splňují požadavky právních předpisů na formální náležitosti a postup vypracování ostatních informací v kontextu významnosti (materiality), tj. zda případné nedodržení uvedených požadavků by bylo způsobilé ovlivnit úsudek činěný na základě ostatních informací. Na základě provedených postupů, do míry, jež dokážeme posoudit, uvádíme, že

- ostatní informace, které posuzují skutečnosti, jež jsou též předmětem zobrazení v účetní závěrce, jsou ve všech významných (materiálních) ohledech v souladu s účetní závěrkou
- ostatní informace byly vypracovány v souladu s právními předpisy.

Dále jsme povinni uvést, zda na základě poznatků o povědomí o Sdružení, k nimž jsme dospěli při provádění auditu, ostatní informace neobsahují významné (materiální) věcné nesprávnosti. V rámci uvedených postupů jsme v obdržených ostatních informací žádné významné (materiální) věcné nesprávnosti nezjistili.

#### Odpovědnost statutárního orgánu účetní jednotky za účetní závěrku

Představenstvo účetní jednotky odpovídá za sestavení účetní závěrky podávající věrný a poctivý obraz v souladu s českými účetními předpisy a za takový vnitřní kontrolní systém, který považuje za nezbytný pro sestavení účetní závěrky tak, aby neobsahovala významné (materiální) nesprávnosti způsobené podvodem nebo chybou.

Při sestavování účetní závěrky je představenstvo účetní jednotky povinno posoudit, zda je účetní jednotka schopna nepřetržitě trvat, a pokud je to relevantní, popsat v příloze účetní závěrky záležitosti týkající se jeho nepřetržitého trvání a použití předpokladu nepřetržitého trvání při sestavení účetní závěrky, s výjimkou případů, kdy představenstvo plánuje zrušení účetní jednotky nebo ukončení její činnosti, resp. kdy nemá jinou reálnou možnost než tak učinit.

#### Odpovědnost auditora za audit účetní závěrky

Naším cílem je získat přiměřenou jistotu, že účetní závěrka jako celek neobsahuje významnou (materiální) nesprávnost způsobenou podvodem nebo chybou a vydat zprávu auditora obsahující náš výrok. Přiměřená míra jistoty je velká míra jistoty, nicméně není zárukou, že audit provedený v souladu s výše uvedenými předpisy ve všech případech v účetní závěrce odhalí případnou existující významnou (materiální) nesprávnost. Nesprávnosti mohou vznikat v důsledku podvodů nebo chyb a považují se za významné (materiální), pokud lze reálně předpokládat, že by jednotlivě nebo v souhrnu mohly ovlivnit ekonomická rozhodnutí, která uživatelé účetní závěrky na jejím základě přijmou.

Při provádění auditu v souladu s výše uvedenými předpisy je naší povinností uplatňovat během celého auditu odborný úsudek a zachovávat profesní skepticismus. Dále je naší povinností:

Identifikovat a vyhodnotit rizika významné (materiální) nesprávnosti účetní závěrky způsobené podvodem nebo chybou, navrhnout a provést auditorské postupy reagující na tato rizika a získat dostatečné a vhodné důkazní informace, abychom na jejich základě mohli vyjádřit výrok. Riziko, že neodhalíme významnou (materiální) nesprávnost, k níž došlo v důsledku podvodu, je větší než riziko neodhalení významné (materiální) nesprávnosti způsobené chybou, protože součástí podvodu mohou být tajné dohody (koluze), falšování, úmyslná opomenutí, nepravdivá prohlášení nebo obcházení vnitřních kontrol.

- Seznámit se s vnitřním kontrolním systémem účetní jednotky relevantním pro audit v takovém rozsahu, abychom mohli navrhnout auditorské postupy vhodné s ohledem na dané okolnosti, nikoli abychom mohli vyjádřit názor na účinnost jejího vnitřního kontrolního systému.
- Posoudit vhodnost použitých účetních pravidel, přiměřenost provedených účetních odhadů
  a informace, které v této souvislosti představenstvo účetní jednotky uvedlo v příloze účetní
  závěrky.
- Posoudit vhodnost použití předpokladu nepřetržitého trvání při sestavení účetní závěrky představenstvem a to, zda s ohledem na shromážděné důkazní informace existuje významná (materiální) nejistota vyplývající z událostí nebo podmínek, které mohou významně zpochybnit schopnost účetní jednotky nepřetržitě trvat. Jestliže dojdeme k závěru, že taková významná (materiální) nejistota existuje, je naší povinností upozornit v naší zprávě na informace uvedené v této souvislosti v příloze účetní závěrky, a pokud tyto informace nejsou dostatečné, vyjádřit modifikovaný výrok. Naše závěry týkající se schopnosti účetní jednotky nepřetržitě trvat vycházejí z důkazních informací, které jsme získali do data naší zprávy. Nicméně budoucí události nebo podmínky mohou vést k tomu, že účetní jednotka ztratí schopnost nepřetržitě trvat.
- Vyhodnotit celkovou prezentaci, členění a obsah účetní závěrky, včetně přílohy, a dále to, zda účetní závěrka zobrazuje podkladové transakce a události způsobem, který vede k věrnému zobrazení.

Naší povinností je informovat představenstvo a dozorčí radu mimo jiné o plánovaném rozsahu a načasování auditu a o významných zjištěních, která jsme v jeho průběhu učinili, včetně zjištěných významných nedostatků ve vnitřním kontrolním systému.

INTEREXPERT BOHEMIA, spol. s r.o. Mikulandská 2, 110 00 Praha 1 Oprávnění KA ČR č. 267

Ing. Emil Bušek, jednatel a auditor Oprávnění KA ČR č. 1325

Datum:	30-05-2023
Podpis auditora:	
	MUTT



Zpracováno v souladu s vyhláškou č. 500/2002 Sb. ve znění pozdějších předpisů

Název a sídlo účetní jednotky

CZ.NIC, z.s.p.o. Milešovská 1136/5 130 00 Praha 3 IČ: 67985726

#### ROZVAHA k 31.12.2022

			Minulé úč.období			
			Brutto Korekce Netto			Netto
	AKTIVA			v tis. Kč	v tis. Kč	v tis. Kč
	AKTIVA CELKEM	001	801 117	-148 089	653 028	633 438
A.	Pohledávky za upsaný základní kapitál	002			0	0
В.	Dlouhodobý majetek	003	225 807	-144 234	81 573	75 682
B.I.	Dlouhodobý nehmotný majetek	004	18 523	-17 678	845	253
B.I.1.	Nehmotné výsledky výzkumu a vývoje	005			0	0
B.I.2.	Ocenitelná práva	006	17 923	-17 678	245	253
B.I.2.1.	Software	007	7 124	-7 124	0	0
B.I.2.2.	Ostatní ocenitelná práva	800	10 799	-10 554	245	253
B.I.3.	Goodwill	009			0	0
B.I.4.	Ostatní dlouhodobý nehmotný majetek	010			0	0
B.I.5.	Poskytnuté zálohy na dlouhodobý nehmotný majetek a nedokončený dlouhodobý nehmotný majetek	011	600	0	600	0
B.I.5.1.	Poskytnuté zálohy na dlouhodobý nehmotný majetek	012	600		600	0
B.I.5.2.	Nedokončený dlouhodobý nehmotný majetek	013			0	0
B.II.	Dlouhodobý hmotný majetek	014	207 284	-126 556	80 728	75 429
B.II.1.	Pozemky a stavby	015	89 481	-26 387	63 094	63 949
B.II.1.1.	Pozemky	016	5 027		5 027	5 027
B.II.1.2.	Stavby	017	84 454	-26 387	58 067	58 922
B.II.2.	Hmotné movité věci a jejich soubory	018	116 552	-100 169	16 383	10 412
B.II.3.	Oceňovací rozdíl k nabytému majetku	019			0	0
B.II.4.	Ostatní dlouhodobý hmotný majetek	020	0	0	0	0
B.II.4.1.	Pěstitelské celky trvalých porostů	021			0	0
B.II.4.2.	Dospělá zvířata a jejich skupiny	022			0	0
B.II.4.3.	Jiný dlouhodobý hmotný majetek	023			0	0
B.II.5.	Poskytnuté zálohy na dlouhodobý hmotný majetek a nedokončený dlouhodobý hmotný majetek	024	1 251	0	1 251	1 068
B.II.5.1.	Poskytnuté zálohy na dlouhodobý hmotný majetek	025			0	0
B.II.5.2.	Nedokončený dlouhodobý hmotný majetek	026	1 251		1 251	1 068
B.III.	Dlouhodobý finanční majetek	027	0	0	0	0
B.III.1.	Podíly - ovládaná nebo ovládající osoba	028			0	0
B.III.2.	Zápůjčky a úvěry - ovládaná nebo ovládající osoba	029			0	0
B.III.3.	Podíly - podstatný vliv	030			0	0
B.III.4.	Zápůjčky a úvěry - podstatný vliv	031			0	0
B.III.5.	Ostatní dlouhodobé cenné papíry a podíty	032			0	0
B.III.6.	Zápůjčky a úvěry - ostatní	033			0	0
B.III.7.	Ostatní dlouhodobý finanční majetek	034	0	0	0	0
B.III.7.1.	Jiný dlouhodobý finanční majetek	035			0	0
B.III.7.2.	Poskytnuté zálohy na dlouhodobý finanční majetek	036			0	0

			Běžné úč. období			Minulé úč.období	
			Brutto	Korekce	Netto	Netto	
	AKTIVA		v tis. Kč	v tis. Kč	v tis. Kč	v tis. Kč	
C.	Oběžná aktiva	037	573 111	-3 855	569 256	556 449	
C.I.	Zásoby	038	75 617	-3 855	71 762	57 000	
C.I.1.	Materiál	039	62 090	-3 855	58 235	53 563	
C.I.2.	Nedokončená výroba a polotovary	040			0	a	
C.I.3.	Výrobky a zboží	041	13 527	0	13 527	3 437	
C.I.3.1.	Výrobky	042	1 064	0	1 064	1 003	
C.I.3.2.	Zboží	043	12 463		12 463	2 434	
C.I.4.	Mladá a ostatní zvířata a jejich skupiny	044			0	(	
C.I.5.	Poskytnuté zálohy na zásoby	045			0	(	
C.II.	Pohledávky	046	34 393	0	34 393	24 348	
C.II.1.	Dlouhodobé pohledávky	047	2 616	0	2 616	1 537	
C.II.1.1.	Pohledávky z obchodních vztahů	048			0	C	
C.II.1.2.	Pohledávky - ovládaná nebo ovládající osoba	049			0		
C.II.1.3.	Pohledávky - podstatný vliv	050			0	0	
C.II.1.4.	Odložená daňová pohledávka	051	2 308		2 308	1 277	
C.II.1.5.	Pohledávky - ostatní	052	308	0	308	260	
C.II.1.5.1.	Pohledávky za společníky	053			0	C	
C.II.1.5.2.	Dlouhodobé poskytnuté zálohy	054	308		308	260	
C.II.1.5.3.	Dohadné účty aktivní	055			0	C	
C.II.1.5.4.	Jiné pohledávky	056			0	(	
C.II.2.	Krátkodobé pohledávky	057	31 777	0	31 777	22 811	
C.II.2.1.	Pohledávky z obchodních vztahů	058	25 231		25 231	8 537	
C.II.2.2.	Pohledávky - ovládaná nebo ovládající osoba	059			0	C	
C.II.2.3.	Pohledávky - podstatný vliv	060			0	(	
C.II.2.4.	Pohledávky - ostatní	061	6 546	0	6 546	14 274	
C.II.2.4.1.	Pohledávky za společníky	062			0		
C.II.2.4.2.	Sociální zabezpečení a zdravotní pojištění	063			0	C	
C.II.2.4.3.	Stát - daňové pohledávky	064	1 801		1 801	642	
C.II.2.4.4.	Krátkodobé poskytnuté zálohy	065	1 695		1 695	7 342	
C.II.2.4.5.	Dohadné účty aktivní	066	2 771		2 771	6 179	
C.II.2.4.6.	Jiné pohledávky	067	279		279	111	
C.III.	Krátkodobý finanční majetek	068	204 559	0	204 559	208 510	
C.III.1.	Podíly - ovládaná nebo ovládající osoba	069			0	0	
C.III.2.	Ostatní krátkodobý finanční majetek	070	204 559		204 559	208 510	
C.IV.	Peněžní prostředky	071	258 542	0	258 542	266 591	
C.IV.1.	Peněžní prostředky v pokladně	072	43		43	61	
C.IV.2.	Peněžní prostředky na účtech	073	258 499		258 499	266 530	
D.	Časové rozlišení aktiv	074	2 199	0	2 199	1 307	
D.1.	Náklady příštích období	075	2 199		2 199	1 307	
D.2.	Komplexní náklady příštích období	076			0	C	
D.3.	Příjmy příštích období	077			0	0	

			Běžné úč. období	Minulé úč.období
		řádek	Netto	Netto
	PASIVA	č.	v tis. Kč	v tis. Kč
	PASIVA CELKEM	078	653 028	633 438
Α.	Vlastní kapitál	079	415 460	403 553
A.I.	Základní kapitál	080	0	C
A.I.1.	Základní kapitál	081		
A.I.2.	Vlastní podíly (-)	082		
A.I.3.	Změny základního kapitálu	083		
A II.	Ážio a kapitálové fondy	084	0	(
A.II. 1.	Ážio	085		
A.II. 2.	Kapitálové fondy	086	0	(
A.II. 1.2.	Ostatní kapitálové fondy	087		
A.II. 1.3.	Oceňovací rozdíly z přecenění majetku a závazků (+/-)	088		
A.II. 1.4.	Oceňovací rozdíly z přecenění při přeměnách obchodních korporací (+/-)	089		
A.II. 1.5.	Rozdíly z přeměn obchodních korporací (+/-)	090		
A.II. 1.6.	Rozdíly z ocenění při přeměnách obchodních korporací (+/-)	091		
A.III.	Fondy ze zisku	092	236 983	217 183
A.III.1.	Ostatní rezervní fondy	093		
A.III.2.	Statutární a ostatní fondy	094	236 983	217 183
A.IV.	Výsledek hospodaření minulých let (+/-)	095	165 548	165 185
A.IV.1.	Nerozdělený zisk minulých let	096	166 570	166 570
A.IV.2.	Neuhrazená ztráta minulých let (-)	097		
A.IV.3.	Jiný výsledek hospodaření minulých let (+/-)	098	-1 022	-1 385
A.V.	Výsledek hospodaření běžného účetního období (+/-)	099	12 929	21 185
A.VI.	Rozhodnuto o zálohové výplatě podílu na zisku (-)	100		
B.+C.	Cizí zdroje	101	82 402	79 128
В.	Rezervy	102	18 227	14 671
B.1.	Rezerva na důchody a podobné závazky	103		
B.2.	Rezerva na daň z příjmů	104		
B.3.	Rezervy podle zvláštních právních předpisů	105		
B.4.	Ostatní rezervy	106	18 227	14 671
C.I	Závazky	107	64 175	64 457
C.I.	Dlouhodobé závazky	108	6 689	15 094
C.I.1.	Vydané dluhopisy	109	0	C
C.I.1.1.	Vyměnitelné dluhopisy	110		
C.I.1.2.	Ostatní dluhopisy	111		
C.I.2.	Závazky k úvěrovým institucím	112		
C.I.3.	Dlouhodobé přijaté zálohy	113	6 689	15 094
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			Běžné úč. období	Minulé úč.období
PASIVA		řádek	Netto	Netto
	PASIVA		v tis. Kč	v tis. Kč
C.II.	Krátkodobé závazky	123	57 486	49 36
C.II.1.	Vydané dluhopisy	124	0	
C.II.1.1.	Vyměnitelné dluhopisy	125		
C.II.1.2.	Ostatní dluhopisy	126		
C.II.2.	Závazky k úvěrovým institucím	127		
C.II.3.	Krátkodobé přijaté zálohy	128	9	-
C.II.4.	Závazky z obchodních vztahů	129	21 609	18 68
C.II.5.	Krátkodobé směnky k úhradě	130		
C.II.6.	Závazky - ovládaná nebo ovládající osoba	131		
C.II.7.	Závazky - podstatný vliv	132		
C.II.8.	Závazky ostatní	133	35 868	30 6
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C.II.8.2.	Krátkodobé finanční výpomoci	135		
C.II.8.3.	Závazky k zaměstnancům	136	15 213	10 3
C.II.8.4.	Závazky ze sociálního zabezpečení a zdravotního pojištění	137	8 727	5 5
C.II.8.5.	Stát - daňové závazky a dotace	138	11 006	13 4
C.II.8.6.	Dohadné účty pasivní	139	711	11
C.II.8.7.	Jiné závazky	140	211	2
	Časové rozlišení pasiv	141	155 166	150 7
D.1.	Výdaje příštích období	142	248	2
D.2.	Výnosy příštích období	143	154 918	150 5

Sestaveno dne: 30.5.2023	Podpisový záznam statutárního orgánu účetní jednotky:
Právní forma účetní jednotky: zájmové sdružení právnických osob	
Předmět podnikání: provoz a rozvoj domény nejvyšší úrovně ccLTD CZ	

Zpracováno v souladu s vyhláškou č. 500/2002 Sb. ve znění pozdějších předpisů

Název a sídlo účetní jednotky

CZ.NIC, z.s.p.o. Milešovská 1136/5

130 00 Praha 3

IČ: 67985726

VÝKAZ ZISKU A ZTRÁTY

k 31.12.2022

			Běžné úč. období	Minulé úč.období
		řádek č.	v tis. Kč	v tis. Kč
i.	Tržby z prodeje výrobků a služeb	01	231 276	220 532
II.	Tržby za prodej zboží	02	50 954	54 530
A.	Výkonová spotřeba	03	93 216	94 937
A.1.	Náklady vynaložené na prodané zboží	04	34 517	39 474
A.2.	Spotřeba materiálu a energie	05	10 787	11 986
A.3.	Služby	06	47 912	43 477
В.	Změna stavu zásob vlastní činnosti (+/-)	07	341	445
C.	Aktivace (-)	08		
D.	Osobní náklady	09	150 897	144 066
D.1.	Mzdové náklady	10	111 663	105 947
D.2.	Náklady na sociální zabezpečení, zdravotní pojištění a ostatní náklady	11	39 234	38 119
D.2.1.	Náklady na sociální zabezpečení a zdravotní pojištění	12	36 588	34 586
D.2.2.	Ostatní náklady	13	2 646	3 533
E.	Úpravy hodnot v provozní oblasti	14	12 211	12 924
E.1.	Úpravy hodnot dlouhodobého nehmotného a hmotného majetku	15	10 140	11 634
E.1.1.	Úpravy hodnot dlouhodobého nehmotného a hmotného majetku - trvalé	16	10 140	11 634
E.1.2.	Úpravy hodnot dlouhodobého nehmotného a hmotného majetku - dočasné	17		
E.2.	Úpravy hodnot zásob	18	2 071	1 290
E.3.	Úpravy hodnot pohledávek	19		
III.	Ostatní provozní výnosy	20	4 277	9 878
III.1.	Tržby z prodaného dlouhodobého majetku	21	650	549
III.2.	Tržby z prodaného materiálu	22		
III.3.	Jiné provozní výnosy	23	3 627	9 329
F.	Ostatní provozní náklady	24	15 037	2 865
F.1.	Zůstatková cena prodaného dlouhodobého majetku	25		
F.2.	Zůstatková cena prodaného materiálu	26		
F.3.	Daně a poplatky	27	144	225
F.4.	Rezervy v provozní oblasti a komplexní náklady příštích období	28	3 555	159
F.5.	Jiné provozní náklady	29	11 338	2 481
*	Provozní výsledek hospodaření (+/-)	30	14 805	29 703

			Běžné úč. období	Minulé úč.období
		řádek č.	v tis. Kč	v tis. Kč
IV.	Výnosy z dlouhodobého finančního majetku - podíly	31	0	
IV.1	Výnosy z podílů - ovládaná nebo ovládající osoba	32		
IV.2.	Ostatní výnosy z podílů	33		
G.	Náklady vynaložené na prodané podíly	34		
V.	Výnosy z ostatního dlouhodobého finančního majetku	35	0	
V.1.	Výnosy z ostatního dlouhodobého finančního majetku - ovládaná nebo ovládající osoba	36		
V.2.	Ostatní výnosy z ostatního dlouhodobého finančního majetku	37		
Н.	Náklady související s ostatním dlouhodobým finančním majetkem	38		
VI.	Výnosové úroky a podobné výnosy	39	4 616	27
VI.1.	Výnosové úroky a podobné výnosy - ovládaná nebo ovládající osoba	40		
VI.2.	Ostatní výnosové úroky a podobné výnosy	41	4 616	27
l.	Úpravy hodnot a rezervy ve finanční oblasti	42		
J.	Nákladové úroky a podobné náklady	43	0	
J.1.	Nákladové úroky a podobné náklady - ovládaná nebo ovládající osoba	44		
J.2.	Ostatní nákladové úroky a podobné náklady	45		
VII.	Ostatní finanční výnosy	46	70 838	43 49
к.	Ostatní finanční náklady	47	73 855	47 97
•	Finanční výsledek hospodaření (+/-)	48	1 599	-4 20
	Výsledek hospodaření před zdaněním (+/-)	49	16 404	25 50
L.	Daň z příjmů	50	3 475	4 31
L.1.	Daň z příjmů splatná	51	4 506	4 73
L.2.	Daň z příjmů odložená	52	-1 031	-41
	Výsledek hospodaření po zdanění (+/-)	53	12 929	21 18
VI.	Převod podílu na výsledku hospodaření společníkům (+/-)	54		
***	Výsledek hospodaření za účetní období (+/-)	55	12 929	21 18
	Čistý obrat za účetní období = I. + II. + III. + IV. + V. + VI. + VII.	56	361 961	328 71

Sestaveno dne: 30.5.2023	Podpisový záznam statutárního orgánu účetní jednotky:
Právní forma účetní jednotky: zájmové sdružení právnických osob	
Předmět podnikání:	
provoz a rozvoj domény nejvyšší úrovně ccLTD CZ	

Zpracováno v souladu s vyhláškou č. 500/2002 Sb. ve znění pozdějších předpisů

lázev a sídlo účetní jednotky

CZ.NIC, z.s.p.o. Milešovská 1136/5 130 00 Praha 3 IČ: 67985726

		IC.	01905120
	PŘEHLED O PENĚŽNÍCH TOCÍCH (CASH FLOW)	Řád.	Běžné úč. období
	k 31.12.2022	č.	v tis. Kč
P. Stav pe	něžních prostředků a peněžních ekvivalentů na začátku účetního období	1	266 59
	Peněžní toky z hlavní výdělečné činnosti (provozní činnost)		(
z.	Účetní zisk nebo ztráta před zdaněním	2	16 40
A. 1	Úpravy o nepeněžní operace	3	8 430
A. 1 1	Odpisy stálých aktiv a umořování opravné položky k nabytému majetku	4	10 140
A. 1 2	Změna stavu opravných položek, rezerv	5	3 556
A. 1 3	Zisk z prodeje stálých aktiv	6	-65
A. 1 4	Výnosy z podílů na zisku	7	(
A. 1 5	Vyúčtované nákladové úroky s vyjímkou úroků zahrnovaných do ocenění dlouhodobého majetku a vyúčtované výnosové úroky	8	-4 616
A. 1 6	Případné úpravy o ostatní nepěněžní operace	9	C
A. *	Čistý peněžní tok z provozní činnosti před zdaněním a změnami pracovního kapitálu	10	24 834
A. 2	Změny stavu nepěněžních složek pracovního kapitálu	11	-9 216
A. 2 1	Změna stavu pohledávek z provozní činnosti, přechodných účtů aktiv	12	-10 937
A. 2 2	Změna stavu krátkodobých závazků z provozní činnosti, přechodných účtů pasiv	13	12 532
A. 2 3	Změna stavu zásob	14	-14 762
A. 2 4	Změna stavu krátkodobého finančního majetku nespadajícího do peněžních prostř. a ekvivalentů	15	3 951
A. **	Čistý peněžní tok z provozní činnosti před zdaněním	16	15 61
A. 3	Vyplacené úroky s vyjímkou úroků zahmovaných do ocenění dlouhodobého majetku	17	(
A. 4	Přijaté úroky	18	4 616
A. 5	Zaplacená daň z příjmů a doměrky daně za minulá období	19	-3 475
A. 6	Příjaté podíly na zisku	20	(
A. ***	Čistý peněžní tok z provozní činnosti	21	16 759
	Peněžní toky z investiční činnosti		(
B. 1	Výdaje spojené s nabytím stálých aktiv	22	-16 031
B. 2	Příjmy z prodeje stálých aktiv	23	650
B. 3	Zápůjčky a úvěry spřízněným osobám	24	(
B. ***	Čistý peněžní tok vztahující se k investiční činnosti	25	-15 381
	Peněžní toky z finančních činností		C
C. 1	Dopady změn dlouhodobých,resp. krátkodobých závazků	26	-8 405
C. 2	Dopady změn vlastního kapitálu na peněžní prostředky a ekvivalenty	27	-1 022
C. 2 1	Zvýšení peněžních prostředků z důvodů zvýšení základního kapitálu, ážia a fondů ze zisku.	28	-20 822
C. 2 2	Vyplacení podílů na vlastním jmění společníkům	29	(
C. 2 3	Další vklady peněžních prostředků společníků a akcionářů	30	(
C. 2 4	Úhrada ztráty společníky	31	(
C. 2 5	Přímé platby na vrub fondů	32	19 800
C. 2 6	Vyplacené podíly na zisku včetně zaplacené daně	33	(
C. ***	Čistý peněžní tok vztahující se k finanční činnosti	34	-9 427
F. Čisté zı	rýšeni resp. snížení peněžních prostředků	35	-8 049
R. Stav pe	něžních prostředků a pen. ekvivalentů na konci účetního období	36	258 542

Sestaveno dne: 30.5.2023	Podpisový záznam statutárního orgánu účetní jednotky:
Právní forma účetní jednotky: zájmové sdružení právnických osob	
Předmět podnikání:	
provoz a rozvoj domény nejvyšší úrovně ccLTD CZ	

Zpracováno v souladu s vyhláškou č. 500/2002 Sb. ve znění pozdějších předpisů

Název a sídlo účetní jednotky

CZ.NIC, z.s.p.o. Milešovská 1136/5 130 00 Praha 3 IČ: 67985726

#### PŘEHLED O ZMĚNÁCH VLASTNÍHO KAPITÁLU

k 31.12.2022

	Základní kapitál	Ážio	Kapitálové fondy	Fondy ze zisku	Výsledek hospodaření minulých let	Zisk (+) Ztráta (-) za období	Zálohy na výplatu podílu na zisku	Vlastní kapitál
	v tis. Kč	v tis. Kč	v tis. Kč	v tis. Kč	v tis. Kč	v tis. Kč	v tis. Kč	v tis. Kč
Minulé účetní období								
Počáteční zůstatek k 1.1.po Kr.2021po Kr.	2021			193 520	165 185	23 663		382 368
Zvýšení	0	0	0	23 663		21 185		
Distribuce								0
Snížení	0	0	0	0		-23 663		0
Ostatní pohyby								0
Konečný zůstatek k 31.12.po Kr.2021po K	0	0	0	217 183	165 185	21 185	0	403 553

Běžné účetní období								
Počáteční zůstatek k 1.1.po Kr.2022po Kr.	0	0	0	217 183	165 185	21 185	0	403 553
Zvýšení	0	0	0	21 185	-1 022	12 929		33 092
Distribuce								0
Snížení	0	0	0	-1 385	1 385	-21 185		-21 185
Ostatní pohyby								0
Konečný zůstatek k 31.12.po Kr.2022po K	0	0	0	236 983	165 548	12 929	0	415 460

Sestaveno dne: 30.5.2023	Podpisový záznam statutámího orgánu účetní jednotky :
Právní forma účetní jednotky: zájmové sdružení právnických osob	
Předmět podnikání: provoz a rozvoj domény nejvyšší úrovně ccLTD CZ	

### PŘÍLOHA ROČNÍ ÚČETNÍ ZÁVĚRKY

K 31. 12. 2022

CZ.NIC, z.s.p.o.

CZ.NIC, z.s.p.o.

Účetní období od 01.01.2022 do 31.12.2022 (v tisících Kč)

#### 1 VŠEOBECNÉ INFORMACE

Název: CZ.NIC, z.s.p.o. (dále jen "sdružení")
Sídlo: Milešovská 1136/5, Praha 3 - Vinohrady
Právní forma: zájmové sdružení právnických osob
Obchodní rejstřík: Městský soud v Praze oddil L vložka 58624

Datum vzniku: 27.5.1998 Identifikační číslo: 67985726

Předmět podnikání: provoz a rozvoj domény nejvyšší úrovně ccTLD CZ,

provoz a rozvoj důvěryhodné, bezpečné a stabilní informační a komunikační infrastruktury,

vývoj a podpora rozvoje internetových služeb,

osvětové aktivity v oblasti domén a kybernetické bezpečnosti

Kategorie účetní jednotky: Střední účetní jednotka

Rozvahový den: 31.12.2022

#### Zápisy do spolkového rejstříku

V průběhu roku došlo k následujícím zápisům do spolkového rejstříku:

RNDr. Karel Taft, MBA, byl zapsán jako předseda představenstva

doc. JUDr. .PhDr. Marek Antoš, Ph.D., LL.M. byl zapsán jako místopředseda představenstva.

Ing. Tomáš Košňar byl zapsán jako člen představenstva. Ing. Martin Kukačka byl zapsán jako člen představenstva.

V souladu s rozhodnutím Nejvyššího soudu ČR, sp. zn. 27 Cdo 3549/2020, byly zapsány konkrétní obory činnosti sdružení (předmět podnikání).

#### Statutární a dozorčí orgány

Statutární a dozorčí orgány sdružení jsou k 31.12.2022:

Představenstvo:

Předseda: RNDr. Karel Taft, MBA

Místopředseda: doc. JUDr. PhDr. Marek Antoš, Ph.D., LL.M.

Členové: Ing. Ilona Filípková, Ing. Tomáš Košňar, Ing. Martin Kukačka

Dozorčí rada:

Předseda: Mgr. Jan Red

Členové: Ing. Jan Gruntorád, CSc., Mgr. Vlastimil Pečínka

Účetní období od 01.01.2022 do 31.12.2022 (v tisících Kč)

#### Organizační struktura společnosti

Sdružení má definovanou organizační strukturu – nejvyšším orgánem sdružení je valná hromada, tvořená všemi členy sdružení, kteří jsou rozděleni do tří komor. Následuje kolegium, které je složeno ze členů, fyzických osob, volených jednotlivými komorami valné hromady. Statutárním orgánem sdružení je představenstvo, kontrolním orgánem dozorčí rada. Působnost jednotlivých orgánů je definována stanovami sdružení.

#### 2 ZÁKLADNÍ VÝCHODISKA PRO VYPRACOVÁNÍ ÚČETNÍ ZÁVĚRKY

Přiložená účetní závěrka byla připravena v souladu se zákonem č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů (dále jen "zákona o účetnictví") a prováděcí vyhláškou č. 500/2002 Sb., kterou se provádějí některá ustanovení zákona č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů, pro účetní jednotky, které jsou podnikateli účtujícími v soustavě podvojného účetnictví, ve znění pozdějších předpisů, ve znění platném pro rok 2022 (dále jen "prováděcí vyhláška k zákonu o účetnictví").

#### 3 OBECNÉ ÚČETNÍ ZÁSADY A POUŽITÉ ÚČETNÍ METODY

#### a) Zásady vedení účetnictví

Účetnictví je vedeno v souladu s účetními předpisy platnými v České republice. Částky v účetní závěrce a v příloze jsou zaokrouhleny na tisíce českých korun, není-li uvedeno jinak.

#### b) Dlouhodobý nehmotný majetek

Nakoupený dlouhodobý nehmotný majetek je oceňován v pořizovacích cenách, které zahrnují cenu pořízení a všechny náklady s pořízením související.

Účetní odpisy dlouhodobého nehmotného majetku jsou vypočteny na základě pořizovací ceny a předpokládané doby ekonomické použitelnosti příslušného majetku. Účetní odpisy jsou kalkulovány ve shodě s odpisy stanovenými zákonem o daních z příjmu.

#### c) Dlouhodobý hmotný majetek

Nakoupený dlouhodobý hmotný majetek je oceňován v pořizovacích cenách, které zahrnují cenu pořízení a veškeré náklady s pořízením související. Dlouhodobý hmotný majetek vytvořený vlastní činností se oceňuje vlastními náklady. Účetní odpisy jsou kalkulovány ve shodě s odpisy stanovenými zákonem o daních z příjmu.

Náklady na opravy a údržbu dlouhodobého hmotného majetku se účtují přímo do nákladů. Rezerva je tvořena na významné opravy, které bude podle odhadu vedení třeba provést v budoucích účetních obdobích. Technické zhodnocení každého jednotlivého dlouhodobého hmotného majetku přesahující 80 tis. Kč za účetní období je aktivováno.

Dlouhodobý hmotný majetek, jehož doba použitelnosti je delší než jeden rok a pořizovací cena nepřevyšuje 80 tis. Kč za položku, je účtován do nákladů při jeho pořízení.

#### CZ.NIC, z.s.p.o.

Účetní období od 01.01.2022 do 31.12.2022 (v tisících Kč)

#### d) Dlouhodobý finanční majetek

Dlouhodobý finanční majetek je při nabytí oceněn v pořizovacích cenách. Součástí pořizovací ceny jsou přímé náklady s pořízením související (např. poplatky a provize makléřům a burzám).

#### e) Krátkodobý finanční majetek

Krátkodobý finanční majetek tvoří cenné papíry k obchodování, dlužné cenné papíry se splatností do 1 roku držené do splatnosti, vlastní akcie, vlastní dluhopisy. Krátkodobý finanční majetek je oceněn pořizovací cenou. K rozvahovému dni společnost přeceňuje krátkodobý finanční majetek reálnou hodnotou. Toto přecenění je v daném účetním období zachyceno ve výnosech, resp. nákladech souvisejících s krátkodobým finančním majetkem.

#### f) Zásoby

Nakupované zásoby jsou oceněny pořizovacími cenami s použitím metody váženého aritmetického průměru. Pořizovací cena zásob zahrnuje náklady na jejich pořízení včetně nákladů s pořízením souvisejících (náklady na přepravu, clo, provize atd.).

Výrobky a nedokončená výroba se oceňují kalkulovanými vlastními náklady. Vlastní náklady zahrnují přímé náklady vynaložené na výrobu, popř. i přiřaditelné nepřímé náklady, které se vztahují k výrobě. Nepřímé náklady se přiřazují na jednotky ks.

Opravná položka k pomalu obrátkovým a zastaralým zásobám či jinak dočasně znehodnoceným zásobám je tvořena na základě analýzy obrátkovosti zásob a na základě individuálního posouzení hodnoty zásob.

#### g) Pohledávky a závazky

Pohledávky se oceňují při svém vzniku jmenovitou hodnotou. Ocenění pochybných pohledávek se snižuje pomocí opravných položek na vrub nákladů na jejich realizační hodnotu, a to na základě individuálního posouzení jednotlivých dlužníků a věkové struktury pohledávek.

Dohadné účty aktivní se oceňují na základě odborných odhadů a propočtů.

Pohledávky i dohadné účty aktivní se rozdělují na krátkodobé (doba splatnosti do 12 měsíců včetně) a dlouhodobé (splatnost nad 12 měsíců), s tím, že krátkodobé jsou splatné do jednoho roku od rozvahového dne.

#### h) Peníze a peněžní ekvivalenty

Peněžní prostředky (hotovost, bankovní účty, ceniny) jsou oceněny ve jmenovité hodnotě.

#### i) Vlastní kapitál

Ostatní kapitálové fondy jsou tvořeny z rozhodnutí valné hromady, a to ze zisku sdružení.

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#### j) Účtování výnosů a nákladů

Výnosy a náklady jsou časově rozlišeny, tj. jsou zařazeny do toho účetního období, do kterého věcně i časově přísluší. V souladu s principem opatrnosti společnost účtuje na vrub nákladů tvorbu rezerv a opravných položek na krytí rizik, ztrát a znehodnocení, která jsou ke dni sestavení účetní závěrky známa.

#### k) Přepočet cizí měny

Majetek a závazky v cizí měně jsou přepočítávány na českou měnu v kurzu platném ke dni uskutečnění příslušné účetní operace, vyhlášeném k tomuto datu Českou národní bankou ("ČNB"). A dále pak kurzem, skutečně použitým bankou pro konkrétní transakci (např. v případě pokladních transakcí či převodu peněz mezi bankovními účty).

Veškerá peněžní aktiva a pasiva, pohledávky a závazky vedené v cizích měnách byly přepočteny v rámci roční účetní závěrky kurzem zveřejněným ČNB k rozvahovému dni. Veškeré realizované a nerealizované kursové zisky a ztráty jsou vykázány ve výkazu zisku a ztrát.

#### l) Daň z příjmů

Daň z příjmů ve výkazu zisku a ztráty za dané období se skládá ze splatné daně a ze změny stavu v odložené dani. Splatnou daň z příjmů účetní jednotka vypočetla s použitím platné daňové sazby z hospodářského výsledku, upraveného o stálé a přechodné rozdíly.

Odložená daň zohledňuje všechny dočasné rozdíly mezi zůstatkovou hodnotou aktiva nebo pasiva v rozvaze a jejich daňovou hodnotou. Uplatňuje se zde sazba daně z příjmů právnických osob platná pro účetní období, ve kterém se očekává realizace odložené daně. Odložená daňová pohledávka je zaúčtována, pokud je pravděpodobné, že bude možné ji daňové uplatnit v následujících účetních obdobích.

#### m) Dotace

Dotace je zaúčtována v okamžiku jejího přijetí či nezpochybnitelného nároku na přijetí. Dotace přijatá na úhradu nákladů se účtuje do provozních nebo finančních výnosů. Dotace přijatá na pořízení dlouhodobého majetku včetně technického zhodnocení a na úhradu úroků zahrnutých do pořizovací ceny majetku snižuje pořizovací cenu nebo vlastní náklady na pořízení

Dotační programy jsou sledovány v oddělené evidenci prostřednictvím účetního softwaru tak, aby splňovaly požadavky jednotlivých poskytovatelů dotací.

#### n) Změny způsobů oceňování, srovnatelnost údajů z minulého a běžného období

Ve srovnání s minulým účetním obdobím nedošlo k žádným podstatným změnám způsobů oceňování, odpisování a účtování

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#### 4 DLOUHODOBÝ NEHMOTNÝ, HMOTNÝ A FINANČNÍ MAJETEK

#### a) Přehled dlouhodobého majetku

Přehled o stavu dlouhodobého nehmotného, hmotného a finančního majetku v letech 2021 a 2022 v pořizovacích cenách:

	Stav k 31.12.2021	Přírůstky	Vyřazení	Stav k 31.12.2022
Nehmotné výsledky výzkumu a vývoje	0	0	0	0
Software	7 124	0	0	7 124
Ocenitelná práva	10 799	0	0	10 799
Goodwill (+/-)	0	0	0	0
Jiný dlouhodobý nehmotný majetek	0	0	0	0
Nedokončený dlouhodobý nehmotný majetek	0	600	0	600
Poskytnuté zálohy na dlouhodobý nehmotný majetek	0	0	0	0
Pozemky	5 027	0	0	5 027
Stavby	82 086	2 368	0	84 454
Samostatné movité věci	105 174	12 880	-1 502	116 552
Jiný dlouhodobý hmotný majetek	0	0	0	0
Nedokončený dlouhodobý hmotný majetek	1 068	15 431	-15 248	1 251
Poskytnuté zálohy na dlouhodobý hmotný majetek	0	0	0	0
Oceňovací rozdíl k nabytému majetku	0	0	0	0
Celkem 2022	211 278	31 279	-16 750	225 807

Účetní jednotka nevykazuje žádný dlouhodobý finanční majetek.

Přehled o stavu opravných položek a oprávek:

	Stav k 31.12.2021	Odpisy	Prodeje, likvidace, vyřazení	Stav k 1.12.2022	Opravné položky	Účetní hodnota
Nehmotné výsledky výzkumu a vývoje	0	0	0	0	0	0
Software	7 124	0	0	7 124	0	0
Ocenitelná práva	10 546	13	-5	10 554	0	245
Goodwill (+/-)	0	0	0	0	0	0
Nedokončený dlouhodobý nehmotný majetek	0	0	0	0	0	600
Jiný dlouhodobý nehmotný majetek	0	0	0	0	0	0
Poskytnuté zálohy na dlouhodobý nehmotný maj.	0	0	0	0	0	0
Pozemky	0	0	0	0	0	5 027
Stavby	23 164	3 223	0	26 387	0	58 067
Samostatné movité věci	94 762	6 909	-1 502	100 169	0	16 383
Jiný dlouhodobý hmotný majetek	0	0	0	0	0	0
Nedokončený dlouhodobý hmotný majetek	0	0	0	0	0	1 251
Poskytnuté zálohy na dlouhodobý hmotný majetek	0	0	0	0	0	0
Oceňovací rozdíl k nabytému majetku	0	0	0	0	0	0
Celkem 2022	135 596	10 145	-1 507	144 234	0	81 573

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#### 5 ZÁSOBY

	K 31. 12. 2021	K 31. 12. 2022
Materiál	55 286	62 090
Nedokončená výroba a polotovary	0	0
Výrobky	1 064	1 064
Zboží	2 434	12 463
Celkem (Brutto)	58 784	75 617
Opravná položka k materiálu	1 784	3 855
Celkem (Netto)	57 000	71 762

Opravná položka byla stanovena na základě posouzení hodnoty zásob a je důsledkem zastarání vybraného materiálu pro výrobu.

#### 6 Pohledávky

	K 31. 12. 2021	K 31. 12. 2022
Krátkodobé pohledávky	22 811	31 777
Dlouhodobé pohledávky	1 537	2 616
Celkem	24 348	34 393

Účetní jednotka nevytváří opravné položky k pohledávkám, protože neeviduje žádné pohledávky po splatnosti.

#### 7 KRÁTKODOBÝ FINANČNÍ MAJETEK

Krátkodobý finanční majetek tvoří cenné papíry k obchodování , držené za účelem provádění operací na finančním trhu. Správa cenných papírů je zajišťována kvalifikovanými správci, specializovanými investičními společnostmi. Cenné papíry jsou ke konci účetního období přeěněny na reálnou tržní hodnotu.

Finanční majetek rovněž zahrnuje hotovost a finanční prostředky na bankovních účtech.

#### 8 ČASOVÉ ROZLIŠENÍ AKTIV

Náklady příštích období zahrnují služby hrazené předem, které jsou účtovány do výnosů období, do kterého věcně a časově přísluší. Jedná se především o předplacené servisní záruky a pojistné, členské příspěvky a nájemné placené předem.

#### 9 VLASTNÍ KAPITÁL

V roce 2022 bylo zjištěno, že v minulých letech nebyla zaúčtována řádná daň z příjmu právnických osob ve výši 1 022 tis. Kč, a proto byla zaúčtována proti jinému výsledku hospodaření minulých let.

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#### 10 Rezervy

Jednotlivé rezervy se v roce 2022 vyvíjely následovně:

	Zůstatek	Netto změna	Zůstatek
	k 31.12.2021	v roce 2022	k 31.12.2022
Na důchody a podobné závazky	0	0	0
Na daň z příjmu	0	0	0
Podle zvláštních právních předpisů	0	0	0
Ostatní	14 671	3 556	18 227
Celkem	14 671	3 556	18 227

Ostatní rezervy zahrnují náklady na nevyplacenou dovolenou a benefity, odměny pro management a statutární orgány a plánované mezinárodní konference.

#### 11 ZÁVAZKY

	K 31.12.2021	K 31.12.2022
Krátkodobé závazky	49 363	57 486
Dlouhodobé závazky	15 094	6 689
Celkem	64 457	64 175
Přehled o závazcích vůči orgánům státní správy:		
Přehled o závazcích vůči orgánům státní správy:		
Sociální zabezpečení	3 792	5 994
Sociální zabezpečení	3 792 1 796	5 99 <sup>4</sup> 2 733
Přehled o závazcích vůči orgánům státní správy: Sociální zabezpečení Zdravotní pojištění Daňové nedoplatky		

Jedná se o závazky vyplývající z daně z příjmů a DPH za období 12/2022.

#### 12 ČASOVÉ ROZLIŠENÍ PASIV

Výnosy příštích období zahrnují služby hrazené předem, které jsou účtovány do výnosů období, do kterého věcně a časově přísluší. Jedná se především o registrace doménových jmen.

#### 13 Deriváty

V rámci správy finančního portfolia jsou ve velmi omezené míře využívány měnové swapy. Jedná se o krátkodobé termínované operace realizované za účelem zajištění kurzového rizika pro cenné papíry denominované v zahraničních měnách (EUR, USD) K rozvahovému dni se finanční deriváty přeceňují na reálnou hodnotu a změny reálných hodnot se účtují do finančních nákladů, respektive výnosů.

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#### 14 VÝNOSY

Výnosy se člení následovně:

	2021	2022
Tržby za prodej zboží	54 530	50 954
Tržby za prodej vlastních výrobků	497	358
Tržby za prodej služeb	220 035	230 919
Změna stavu vnitropodnikových zásob vlastní výroby	0	0
Tržby za prodej vlastního majetku a materiálu	549	650
Ostatní provozní výnosy	9 329	3 627
Výnosové úroky	279	4 616
Finanční výnosy	43 495	70 838
Celkem	328 714	361 962

#### 15 OSOBNÍ NÁKLADY

	2021	2022
Celkový počet zaměstnanců	145	139
Počet členů řídících a kontrolních orgánů	8	8
Mzdové náklady	105 947	111 663
Sociální a zdravotní pojištění	34 586	36 588
Ostatní sociální náklady	3 533	2 646
Celkem osobní náklady	144 066	150 897

V roce 2021 a 2022 neobdrželi členové řídících, kontrolních a správních orgánů žádné zálohy, závdavky, zápůjčky, úvěry, přiznané záruky ani jiné výhody. Mimo stanovených odměn neobdrželi členové statutárních orgánů žádná jiná plnění.

1		
Mimořádné odměny členům statutárních orgánů	1 968	2 043

#### 16 MIMOŘÁDNÉ NÁKLADY A VÝNOSY

Společnost v účetním období neeviduje žádné mimořádné náklady a výnosy.

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#### 17 Daň z příjmů

Daňový náklad v jednotlivých obdobích zahrnuje:

	2021	2022
Splatná daň	4 734	4 506
Odložená daň - pohledávka	-418	-1 031
Celkem	4 3 1 6	3 475

#### 18 VÝDAJE NA VÝVOJ

Na vývoj bylo v roce 2022 vynaloženo celkem 5.369 tis. Kč, celá částka byla zaúčtována do nákladů. Sdružení uplatňuje v roce 2022 odčitatelnou položku pro výzkum a vývoj dle §34 odst. 4 v celkové výši 3.741 tis. Kč.

#### 19 VÝZNAMNÉ POLOŽKY VÝKAZU ZISKU A ZTRÁTY

Odměna statutárnímu auditorovi za audit roční účetní závěrky činí 90.000 Kč. Odměna daňovému poradci za zpracování DPPO pro rok 2022 činí 50.000 Kč.

Položka služby představuje náklady na marketing, pronájem datových center a kanceláří, cestovní náklady, poradenské služby a jiné režijní služby.

Ostatní provozní výnosy tvoří zejména přijaté dotace z grantových projektů v celkové výši 3.020 tis. Kč. Ostatní provozní náklady tvoří zejména poskytnuté dary na podporu Ukrajině v celkové výši 10.000 tis. Kč.

Ostatní finanční výnosy tvoří výnosy z prodeje cenných papírů. Dále pak dividendy, přijaté kupóny z dluhopisů a připsané úroky z termínovaných a spořících účtů, přijaté dary a kurzové zisky.

Ostatní finanční náklady tvoří především náklady na nákup cenných papírů a kurzové ztráty.

#### 20 PŘEDPOKLAD NEPŘETRŽITÉHO TRVÁNÍ SPOLEČNOSTI

Společnost vykazuje k 31.12.2022 kladný vlastní kapitál. Vzhledem ke kladnému vlastnímu kapitálu není pochybnost o předpokladu nepřetržitého trvání společnosti v budoucnu.

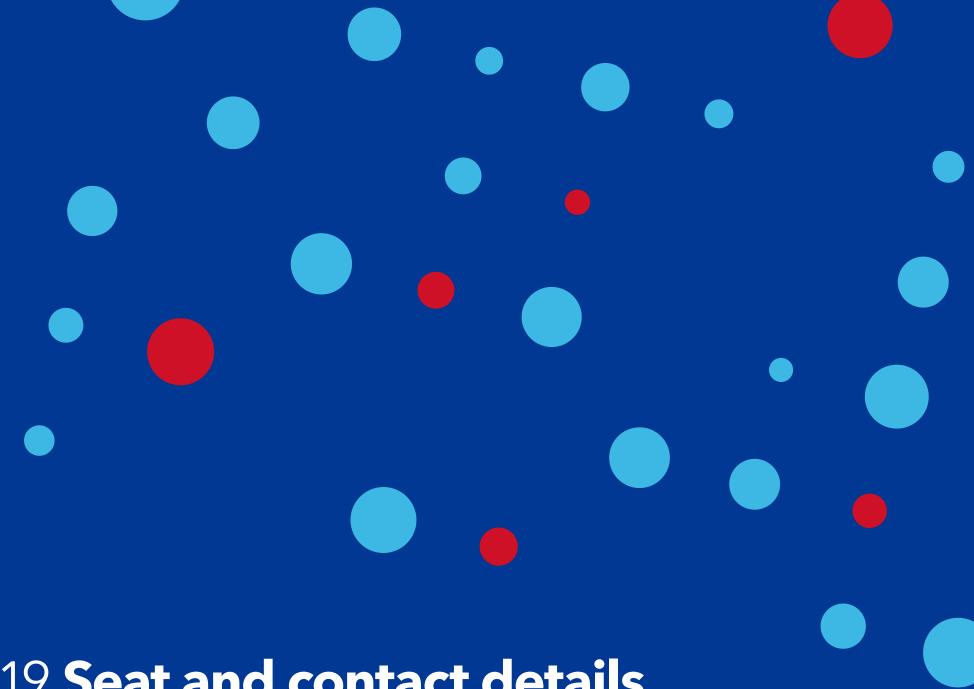
Účetní závěrka k 31. prosinci 2022 byla sestavena za předpokladu nepřetržitého trvání společnosti. Přiložená účetní závěrka tudíž neobsahuje žádné úpravy, které by mohly z této nejistoty vyplývat.

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#### 21 UDÁLOSTI PO DATU ÚČETNÍ ZÁVĚRKY

Mezi rozvahovým dnem a vyhotovením této roční účetní závěrky nedošlo k žádným událostem, které by měly významný dopad na účetní závěrku k 31. 12. 2022.

Sestaveno dne 30.05.2023



19 Seat and contact details

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The Association is incorporated in the Register of Associations maintained by the Municipal Court in Prague, File No. L 58624.

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