AR'08

Annual Report
2008

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Contents

CZ.NIC, an interest association of legal entities, is an open non-profit association, whose main activity is the administration of the .cz top-level national domain registry and of 0.2.4.e164.arpa (ENUM), securing the operation of the .cz top-level domain and public education in the field of domain names.

In 2008, the CZ.NIC Association celebrated 10 years since its founding. There were fifteen companies at its inception, the leading providers of internet services in the Czech Republic. The main reason for the creation of the association was the rapid growth in importance of the internet and the corresponding number of users and people interested in registering domain names with the .cz ccTLD. A strong and stable subject thus replaced the administration carried out until then by an individual.

For the duration of its existence, the CZ.NIC Association has come a long way and shown that it is a reliable partner for domain holders, registrars, and other subjects using the internet at work and in their free time, which is not only able to secure administration of the .CZ domain names and the 0.2.4.e164.arpa (ENUM) domains, but is also devoted to support new technologies, beneficial for the internet infrastructure in the Czech Republic, projects which increase the safety and stability of the internet, and a range of awareness-raising and educational activities.

Ladies and Gentlemen,
In 2008, the CZ.NIC Association recorded a year-on-year growth in domain numbers of 38%, despite strong competition in the form of other TLDs, in particular .eu. It proves the continuing interest and faith of end users in the .cz domain. Increasing demand for registration of .cz domains corresponds to the increasing number of registrars, not just Czech, but foreign too, especially in neighbouring Germany.

In my view, the most important event of the last year was the successful introduction of DNSSEC technology, which extends the system of domain names and increases its security. With this initiative, CZ.NIC is in step with registrars from Brazil, Bulgaria, Puerto Rico and Sweden.

The CZ.NIC Association is also carefully monitoring development in the field of IDN. Repeated research conducted among internet users, both individuals and companies showed a lack of interest in the introduction of IDN, just as in previous years. However, the situation is being monitored constantly and the system for managing domains is technically ready to introduce IDN registration.

The Expansion of activities the association works on is reflected in the slight increase in the number of employees. Awareness-raising and educational activities and support for projects beneficial for the local internet community is also envisaged in the strategy and concept of the association for the period from 2008 to 2011, which, in accordance with the status of CZ.NIC as an open association, has been published on its website.

Personally, despite the adverse economic impact which began to appear towards the end of 2008, I believe in the further successful development of the CZ.NIC Association and maintaining the current orientation to the advantage and benefit not only of domain name holders, but also other internet users in the Czech Republic.

Ing. Tomáš Maršálek
Chairman of the Board, CZ.NIC, z.s.p.o.

Word from the Executive Director of the Association

Ladies and Gentlemen,

After a successful 2007, a year of changes, a migration to a new registration system for the administration of the .cz domain, we knew that expectations from the domain holders and the public would be extremely high. We accepted the challenge that stood before us at the beginning of 2008 and set to work once more, not only on the actual registration system, but on other projects as well.

The successful migration to the new FRED registration system did not stop its development. In fact it was just the opposite: a team of CZ.NIC employees focused on its further improvement. Based on user requirements, the option to block domain name against implementing any changes directly in the system was introduced. With this simple method, the holder is 'insured' against errors by the registrar and themselves. Our efforts were rewarded during the year with two pleasant pieces of news: the first was that the number of domain names with .cz surpassed 500,000 and the second, no less interesting, was that our FRED registration system had been used in another country, specifically in Angola, Africa.

Probably the most important event of 2008 – partially connected to the improvement of the quality of the registration system – was the introduction of DNSSEC technology to Czech domains. The CZ.NIC Association was therefore able to react quickly to the weakness in the DNS system discovered by Dan Kaminsky. It is also worth noting that the Czech Republic thus became the fifth country in the world to introduce this advanced technology.

We have not only focused on technological matters, of course. In accordance with the newly adopted long-term strategy for activities, the association has developed numerous activities in the field of awareness and education. We premiered the professional internet and technology conference, where we sought to introduce the latest technological innovations to users in the Czech Republic, and let's not forget the second year of the ENUM Day conference. We also thought about how to attract and address young programmers, and so we organised

a competition for them, DIP – Develop, Innovate, Program (VIP in Czech) – which drew great interest. The new CZ.NIC Edition published its first book by Pavel Satrapa, about the new IPv6 protocol. And I cannot forget the introduction of the association's blog, which already has a regular following.

The problem of using diacritic marks is inherently linked to the administration of domain names, in other words internationalized domain names (IDN), i.e. the system in which it is possible to use letters from national alphabets as well. In order to stir up debate around the implementation of IDN in the Czech national domain, we prepared an informational website – www.háčkyčárky.cz (hacky and carky are the Czech names for the diacritics or accents) – with which we wanted to explain all the pros and cons to users for implementing IDN and also allow them to test their applications. We were interested to know whether and how this informational campaign would influence the opinions of the local internet community. In autumn we organised the traditional public opinion survey on the topic of IDN implementation. Just as in previous years, respondents in 2008, a range of individuals and legal entities, decided that they were not interested in introducing diacritics to the Czech national domain.

I firmly believe it is clear from my summary that the year 2008 will not be the 'poor relative' of the year before. It was undoubtedly a year packed with interesting events, which shifted the CZ.NIC Association another step forward. It just remains to hope that for the next year we can further develop all the projects we have started and continue to service the professional as well as lay internet community in the Czech Republic.
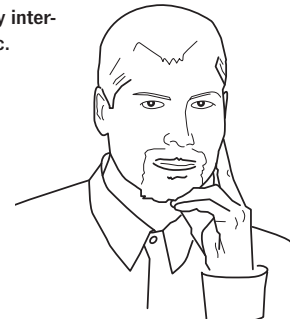
Ondřej Filip
Executive Director, CZ.NIC, z. s. p. o.

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With the development and successful implementation of our own registration system in autumn 2007, a goal was achieved that the association had set out in 2005. Its fulfilment preceded the launch of the system of .0.2.4.e164.arpa (ENUM) domain name registration, which allowed thorough verification of the functionality of the new registration system.

In June 2008, the association's collegium approved the concept for 2008 – 2011 activities. The association will be focusing mainly on further development of the .cz domain administration system. This is now on a global level, and its further development will continue with regard to international trends and the needs and interests of the local internet community.

Financial stability and a relatively conservative way of managing finances allow the association to continue supporting projects and services that contribute to more comfort in using the internet and increasing efficiency and stability of the internet in the Czech Republic. The CZ.NIC Association will therefore further support the installation and operation of anycast services or development of networked open-source projects. The association also carefully monitors the development of new technologies, which often need to achieve a critical number of users for their usefulness and applicability. ENUM is still one of these technologies, monitored with the support of IPv6 and multicasting.

The association also focuses on supporting projects which increase the safety and stability of the internet. The first step taken in this direction was the launch of DNSSEC technology in September 2008. Others include the creation of our own CSIRT (Computer Security Incident Response Team) and support in putting together a national security CERT/CSIRT for coordinating solutions to security incidents in computer networks in the Czech Republic.

The above activities may be focused mainly at the professional segment of the Czech internet public, even with a positive impact on every internet user in the Czech Republic, but the association will work on awareness and supporting education of the broader spectrum of the local internet community. This means publication of professional and popular articles, topical conferences, seminars and training courses, putting out publications and books or translations of quality resources from abroad about domains, internet infrastructure and new technologies especially. Support for education is connected with using the abilities and skills of students and graduates from vocational secondary schools and universities in the form of lectures, presentations, and even cooperation with individual students on projects the association deals within its work.

Development in Registration Numbers

Just as in previous years, the number of domain names in the ccTLD .cz increased in 2008. The year-on-year growth was over 35%, from 370 541 registered on 1 January 2008 to 501 422 domain names at the end of the year. During the year, two important milestones were reached – 400 000 domains were registered by 13 March 2008, and half a million registered domain names were achieved just before Christmas, on 22 December 2008.

The significant increase in the number of newly registered domains, which we observed in connection with the change to the registration system in autumn 2007, cont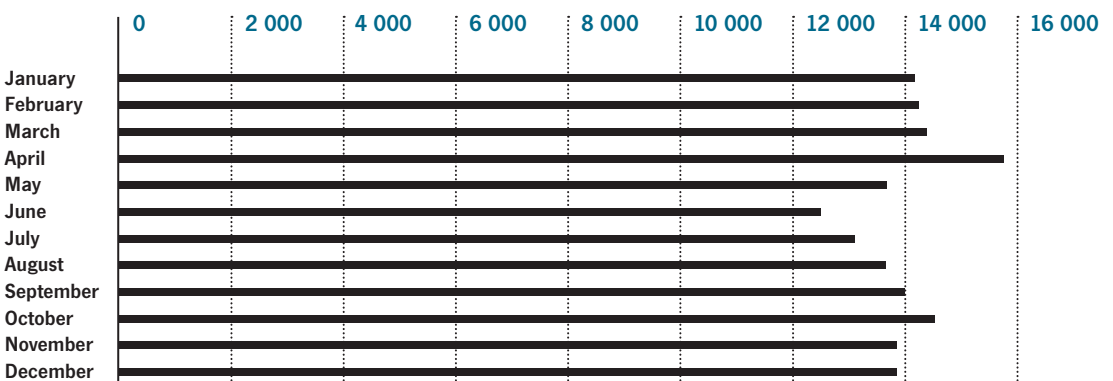inued in the following year. The number of new registrations was constant throughout the year and remained within the range of 12 464 in August to the value of 15 425 new domains, registered in March 2008.

Development of the number of .cz domain names in 2008

	250 000	300 000	350 000	400 000	450 000	500 000
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
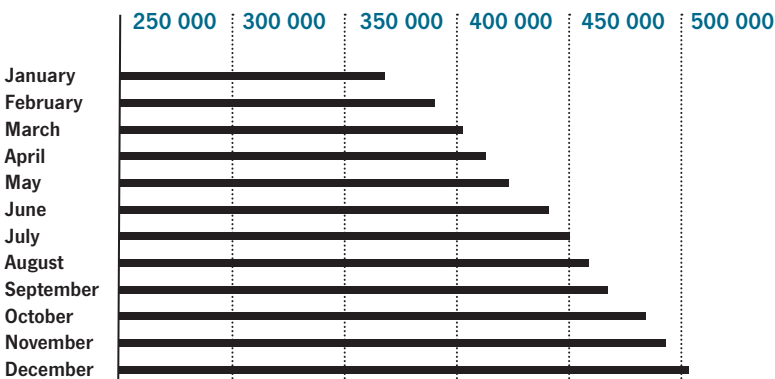
Number of new .cz domain names registered in 2008

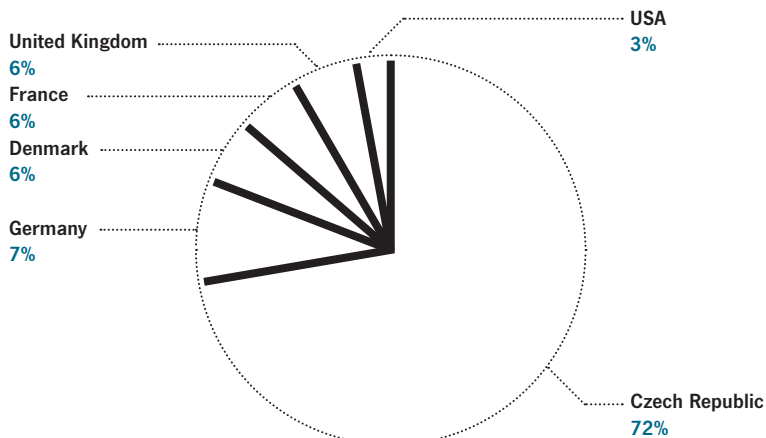|	0	2 000	4 000	6 000	8 000	10 000	12 000	14 000	16 000
January									
February									
March									
April									
May									
June									
July									
August									
September									
October									
November									
December									

Registrars

The number of registrars increased significantly in 2008. Thirteen new companies, 8 of which were from abroad, became registrars. The introduction of a standard registry from the implementation of an EPP server at the end of 2007 contributed to this fierce growth. By 31 December 2008, there were 31 registrars for the .cz domain names.
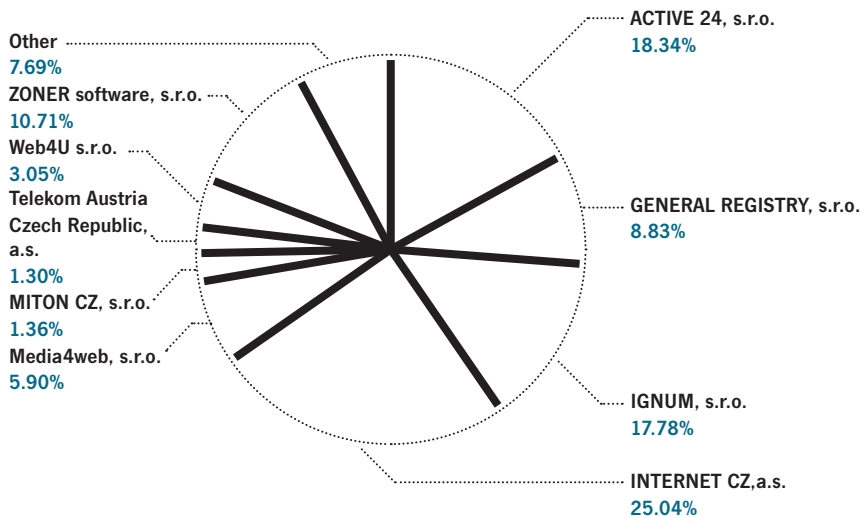
List of registrars as of 31 December 2008:

Registrars	(Registrars from)	Registrars	(Registrars from)
ACTIVE 24, s.r.o.	13.10.2003	KRAXNET s.r.o.	24.10.2003
Ascio Technologies inc.	1.10.2007	MarkMonitor Inc.	7.2.2008
Axtis s.r.o.	1.11.2008	Media4web, s.r.o.	24.10.2003
banan s.r.o.	1.8.2008	MIRAMO spol. s r.o.	13.10.2003
Český server .cz s.r.o.	5.2.2008	MITON CZ, s.r.o.	1.10.2007
e-internet.cz s.r.o.	15.7.2008	ONE.CZ s.r.o.	24.10.2003
EXPLORER a.s.	1.10.2007	OVH, Sas	1.11.2008
Gandi SAS	7.4.2008	Safenames Ltd.	18.2.2008
GENERAL REGISTRY, s.r.o.	13.10.2003	Telekom Austria Czech Republic, a.s.	13.10.2003
ha-vel internet s.r.o.	13.10.2003	TELE3 s.r.o.	14.11.2008
IGNUM, s.r.o.	13.10.2003	Telefónica O2 Czech Republic, a.s.	24.10.2003
Instra Corporation (Europe) Ltd	1.7.2008	WEB SOLUTIONS ApS	1.11.2008
INTERNET CZ, a.s.	13.10.2003	Web4U s.r.o.	24.10.2003
InterNetX GmbH	8.7.2008	WinSoft Company, s.r.o.	1.10.2007
IPEX a.s.	5.11.2003	ZONER software, s.r.o.	13.10.2003
Key-Systems GmbH	1.4.2008		

Registrars by country (as of 31. 12. 2008)

USA
3%

United Kingdom
6%

France
6%

Denmark
6%

Germany
7%

Czech Republic
72%

Share of registrars with over 5 000 domain names as of 31.12.2008 (%)

Other
7.69%

ZONER software, s.r.o.
10.71%

Web4U s.r.o.
3.05%

Telekom Austria
Czech Republic,
a.s.
1.30%

MITON CZ, s.r.o.
1.36%

Media4web, s.r.o.
5.90%

ACTIVE 24, s.r.o.
18.34%

GENERAL REGISTRY, s.r.o.
8.83%

IGNUM, s.r.o.
17.78%

INTERNET CZ,a.s.
25.04%

IDN in the Czech National Domain and the www.háčkyčárky.cz Project

Internationalized Domain Names (IDN) is a system, thanks to which domain names can include letters from the national alphabets. Its introduction – allowing registration of domains with diacritics – is not a simple process and may have negative effects, which are worth considering when thinking of introducing IDN, whether concerning the language itself or the protection of the safety and legal interests of domain holders and other subjects.
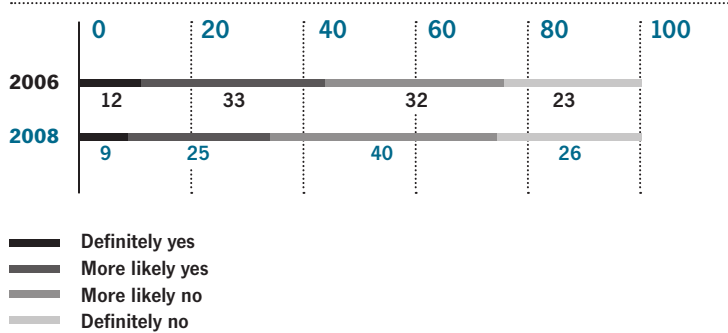
The CZ.NIC Association is technically prepared for the eventual implementation of IDN into the .cz national domain. However, IDN has not yet been introduced for .cz domains, because the community of internet users in the Czech Republic has not expressed interest, as shown in research from 2004, 2006 and 2008. The research in 2008 was implemented with two groups of respondents – internet users, between individuals and companies. Its results, in comparison with previous surveys showed a move in public interest away from IDN, for both groups questioned. In the companies group, the number against rose to 81%, and the number of subjects convinced of their negative opinion increased significantly. The growth of opponents to IDN among individuals was even stronger – a total of 66% of respondents were against the introduction of IDN. The results of the research are a decisive factor for accepting or rejecting IDN for CZ.NIC.

In May 2008, the new website **www.háčkyčárky.cz** was launched, which after the research was another method for CZ.NIC to communicate with the lay and professional public on the theme of IDN. The association gives information and supports discussion about whether or not to introduce IDN on the Czech internet via this website. Users can test their domain, whether they have access to an IDN address, they can send email to the address under the IDN domain, download from the **háčkyčárky.cz** zone or try all the diacritic variants of any .cz domain name.

A summary of results of individual surveys for both groups are shown in the following graphs.

Individuals (%)

	0	20	40	60	80	100
2006	12	33		32	23	
2008	9	25		40	26	

- Definitely yes
- More likely yes
- More likely no
- Definitely no

Companies (%)

	0	20	40	60	80	100
2004	3	21	35		41	
2006	4	16	36		44	
2008	5	14	29		52	

- Definitely yes
- More likely yes
- More likely no
- Definitely no
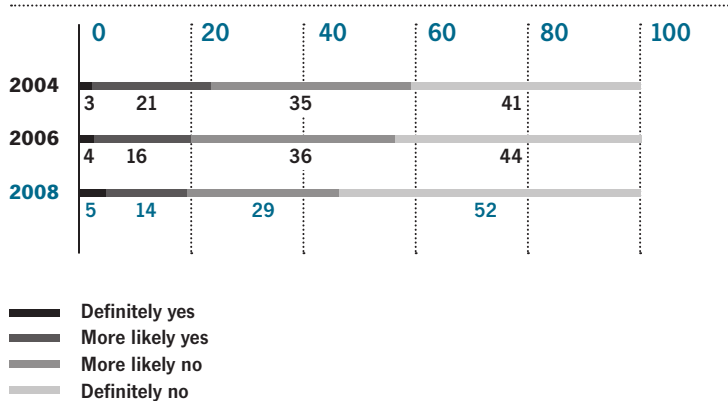
First Year of Commercial Operation

In January 2008 a year had passed since the launch of ENUM technology with full operation, allowing telephony via the internet without minute-by-minute charges. The success of the project is confirmed by the fact that at the end of the year over 4 500 domain names and 550 000 telephone numbers were registered. The number of registered domains and phone numbers make the Czech registry one of the largest in the world.

The price for administration of one record for one year in the 0.2.4.e164.arpa zone remained unchanged, at CZK 1 excl. VAT. Interested parties could use the services of 21 Czech and foreign registrars to register ENUM domain names for their telephone numbers. They could also get an ENUM domain directly via three telecommunications operators within their telephone services.

ENUM Promotion

ENUM found its users during the first year of operation, but all the same, as with every technological innovation, it is necessary for end users to show interest, not just professionals. Emphasis was put therefore on awareness and the ENUM system promotion, where the most important was the second annual ENUM Day, a one-day conference devoted to ENUM technology. Over 100 ICT professionals and enthusiasts took part in the meeting, attracted mainly by the chance to learn the practical uses of the ENUM system. ENUM promotion also took place in the form of lectures in schools and with the aid of marketing tools.

ENUM Federation

In cooperation with registries in Germany, Netherlands, Austria and Great Britain, preparations began to found the ENUM Federation for joint coordination of activities supporting ENUM. The foundation documentation for this association was signed in autumn, and one of its main tasks will be to create a global brand, which will clearly identify and propagate products and services the ENUM system supports on the market. Its users will therefore be confident that thanks to this they can call for free via the internet. The organisation will also support further international cooperation in the field of ENUM, largely of a non-technical nature.

List of registrars as of 31 December 2008:

ACTIVE 24, s.r.o.
CL - NET s.r.o.
Český server .cz, s.r.o.
EuroDNS S.A.
GENERAL REGISTRY, s.r.o.
Gransy s.r.o.
ha-vel internet s.r.o.
IGNUM, s.r.o.
Instra Corporation (Europe) Ltd.
INTERNET CZ, a.s.
IPEX a.s.
KRAXNET s.r.o.
MATTES AD, s.r.o.
Media4web, s.r.o.
MIRAMO spol. s r.o.
NETWAY.CZ s.r.o.
ONE.CZ s.r.o.
Safenames Ltd.
SW Systems s.r.o.
Web4U s.r.o.
ZONER software, s.r.o.

List of operators as of 31 December 2008:

CL – NET s.r.o.
IPEX a.s.
NETWAY.CZ s.r.o.

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The DSDng central registry system was designed as fully redundant. All hardware and software is provided in two independent locations both as far as internet connection and connection to electricity are concerned. Both locations, the SITEL Telehouse (Prague 10) and the GTS Telehouse (Prague 3) are connected to two different transformer stations and both have independent UPS systems. Both locations also include diesel generators for longer power blackouts.

The system is designed as heterogeneous – a failure of an individual hardware manufacturer cannot cause the central registry to fail. Each location contains servers provided by different suppliers and running on different architecture (Intel vs. AMD, 32-bit vs. 64-bit).

The central registry software itself is designed to enable swapping any part of the architecture with its copy running at the other server/location at any time. The PostgreSQL database is the critical element. It is always being replicated to the other location and when the primary location is down, the traffic is redirected to the replicated database without any limitation or impact on functionality. The redundancy systems run at all times and are designed to be able to take over and provide registry operation in a short time whenever any component fails.

Last year, the hardware to operate the PostgreSQL database was reinforced with the purchase of fibre channel disk arrays. This investment ensures increased data security, sufficient performance and disk capacity for the coming years.

The FRED (Free Registry for ENUM and Domains) central registry software was made available as open-source within the support for smaller registries. Smaller and starting registries can therefore operate their domain in a system designed for the Czech domain which thanks to its parameters and capacity is capable of handling much higher volumes of domain names than currently registered in the ccTLD. In 2008 the FRED system was deployed to operate the Angolan national domains (.co.ao and .it.ao).

The servers managing records for .cz domains are owned by the association and operated in several locations worldwide – among others Stockholm, Vienna, London, Frankfurt, California and of course, Prague.

The central registry system is ready for IPv4 and IPv6 operation and its current implementation for the .cz domain runs on both these protocols. All of the above DNS servers are (with the exception of the one in Stockholm) also run on IPv4 and IPv6.

DNSSEC

Couple of Words on DNSSEC – DNS Security Extension

The DNS protocol has been used for the internet since the mid 1980s. From the very start, just as for many other protocols of the then mainly academic network, it has lacked any security elements. The status of the DNS protocol is however relatively privileged, since the majority of other internet services count on it functioning correctly. In the past, a number of weaknesses were discovered in the DNS protocol. The most recent was discovered in 2008 by security researcher Dan Kaminsky. The aim of extending DNS called DNSSEC (DNS SECurity extension) is to provide verified information from the DNS.

DNSSEC works on the principal of digital signatures and is designed in such a way that it can not only return a verified positive response, i.e. for instance translate a name to an IP address, but it can also return a secure negative response, i.e. that it is not possible to translate the given name. DNSSEC can prevent just about all known attacks, which aim to fake DNS data.

Introducing DNSSEC into the Domain Administration System in the Czech Republic

Implementation of DNSSEC technology was decided upon in 2004 and work on its development was begun after launching our own .cz domain administration system in autumn 2007. The first specifications for the implementation of DNSSEC for .cz were published at the end of February 2008 and left to be commented upon by the general public. After incorporating comments the final version of the document was published at the end of April, thus starting the development of a new version of the system. The first domain zone signed was 0.2.4.e164.arpa (ENUM). Development was completed in mid-August, when the test version of the registration system with the implemented DNSSEC technology was handed over to the registrars. The actual signing of the .cz domain zone took place on 1 September 2008, which still was not the date of deploying DNSSEC, since the registration system did not allow signatures from the secondary zones and storage of DNSSEC user records at this date. The full operation of the DNSSEC technology for the .cz domain started on 30 September 2008. On this day the registration system was opened and some users commenced signing their zones immediately: for example one of the first was the company MAFRA with one of its most important domains from its family of news servers, lidovky.cz. And the number of signed domains has grown constantly since this time.

CERT/CSIRT

With the constantly growing number of internet users and the increase of internet's importance, the number of security incidents has also risen (abuse of the computer, network element or network for illegal purposes – e.g. spam distribution, breach of copyright laws, phishing, tapping of classified data) and so has their severity. For this reason, the need to create, formalise and make effective protection against these attacks has arisen. For this purpose CSIRTs (Computer Security Incident Response Teams) have been created.

The CZ.NIC Association, with its long experience of projects in the field of internet infrastructure, joined in the support of the activities of CSIRT Czech Republic. In 2008, representatives of the association were actively involved in the activities of the national CSIRT working group (CSIRT.CZ).

The CZ.NIC Association also put together its own CSIRT, whose activities were officially begun in June 2008. Data about the CZ.NIC CSIRT were published in October 2008 on the list of the Trusted Introducer organisation, which is a trustworthy centre for exchanging sensitive information and know-how of individual CSIRTs. The goal of CZ.NIC CSIRT is coordination and organisational support in solving security incidents within AS25192 and incidents concerning name servers for the .cz domain and 0.2.4.e164.arpa. The idea of the work is awareness-raising among the general public regarding the issue of safety, especially, and the coordination and organisational assistance when solving incidents.

Vision

After the successful introduction of its own registration system for domain name administration under the .cz national domain in 2007, the association, in accordance with the approved concept for 2008 –2011, began to focus more than ever before on educational and awareness activities.

The association concentrates not only on support of projects and services which directly contribute to increasing user comfort while using the internet, whether as a work tool or during free time, and increasing the efficiency and stability of the internet, but also on awareness-raising and educational activities, focused on both the professional and lay public.

Awareness-raising and educational activities are mainly in the form of seminars, conferences, training, publications of professional articles and presentations from association employees in a variety of Czech and international forums, as well as lectures at secondary schools and universities. Book publishing was begun, along with publication or translation of foreign resources within the newly founded CZ.NIC Edition. One of the next steps will be the inception of the CZ.NIC Laboratory, a research location, which will concern itself with research into the internet, internet protocols, analyses of network operations and designs for prototypes for further development within the association. The workplace will cooperate in particular with the IETF Association, which is the driving force in the creation of new internet standards. Cooperation with other registries within the CENTR Association, the ICANN Organisation and other internet research and development centres is also planned.

In the medium term, the association wants to form closer ties with Czech universities and other schools and involve their students in the projects and problems that they work on and come across.

Activities in 2008

The CZ.NIC Blog
The CZ.NIC Association joined in with the latest popular form of communication and in January 2008 launched its blog, which alongside the regular quarterly .news, is another medium the association wants to use for feedback from professionals and internet users. At the address blog.nic.cz, CZ.NIC employees talk about what is currently being worked on at the association, what is being planned, and what internet-related events take place.

The Internet and technology Conference 08
The latest internet trends and technologies were the topics of the one-day internet and technology conference 08, which was put on by the CZ.NIC Association in May 2008, not just for internet professionals, journalists and students, but for everyone interested in the latest information from the fast developing internet environment and internet technologies. The lectures were presented by a range of Czech and international guests. The most attention was garnered by contributions on IDN, the presentation about the IPv6 migration with an interesting overview of development of the forecast for using up IPv4 addresses over the last 15 years. Space was also given to borderline internet issues, where, among others, the sociological statistics about the Czech internet population were presented.

Czech Version of the Film Warriors of the Net
The animated film Warriors of The Net originated in 1999, to present the functioning of the internet in an understandable way to people who prior to this were used to communicating in real time via the telephone. Despite the passage of time, the film has not lost any of its magic and can still be useful, especially for the lay public. The CZ.NIC Association has therefore published a Czech version of this animated film, which shows how individual parts of the internet look and work, and what the internet is like 'inside'.

**Current Legal Issues of Domain Names
– Seminar for Professional Legal Public**
In cooperation with the Czech Law
Chamber, a second seminar took place in
May 2008 for lawyers, company solicitors
and judges, focusing on the current legal
issues regarding domain names. Partici-
pants were familiarised mainly with the
changes brought about by the introduction
of the new registration system, the latest
judicature of Czech courts in matters
related to domain name conflicts, and the
problem of IDN domain names and
the legal aspects of their introduction.
The seminar gained a very positive
evaluation and confirmed that it is viewed
by professionals as a relevant source of
information.

**D.I.P.: Develop, Innovate, Program – Compe-
tition for Programmers and Developers**
In 2008, the CZ.NIC Association announc-
ed the first competition for young
programmers and developers – D.I.P.
– Develop, Internet, Program (V.I.P. in
Czech), where applicants could submit
projects focusing on the development of
new open-source software or innovations
in software used in the field of internet
technologies, services or infrastructure.

Students from grammar schools, secondary
schools and universities entered the com-
petition with a total of 32 projects, from
which the five-member jury selected 12,
for which, according to the difficulty and
importance it handed out sums between
10 000 and 55 000 Czech crowns. The
selected entrants can work on their
projects until 15th January 2009, when
the professional committee will meet again
and evaluate the results of the work with
the criteria set by the competitors in the
designs. If they are successful in their work,
they may be among the projects selected to
share a total of 405 000 Czech crowns.

**CZ.NIC Edition: Publication on the IPv6
Internet Protocol**
Another direction of the awareness and
educational activities of the CZ.NIC
Association is CZ.NIC Edition, which
will publish professional publications
and books or translated quality foreign
resources. The first book published
at CZ.NIC Edition is the updated publica-
tion on IPv6 by Pavel Satrapa from the
Liberec Technical University. The book
has come about in a unique way – anyone
interested in the problems of the coming
internet protocol could contribute to its
final format, via commentaries on individu-
al passages. The book is freely available
for download from the association's
website, but it can also be ordered in
printed format – at a special price for
those who are connected via IPv6.

The CZ.NIC Academy
There are not many places where you
can get the latest relevant information
from the world of internet technologies
and infrastructure in the Czech Republic,
and also test them out. The CZ.NIC Acad-
emy became one of them in autumn 2008,
located in specially reconstructed space
for this purpose, in the same building as
the CZ.NIC headquarters.

The first courses were focused on
DNSSEC technology, extending DNS
and increasing its security.

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In a sense, the internet is a separate, special world, a fluctuating world of new opportunities and constant changes and innovations. CZ.NIC realises that it is necessary to monitor constantly both Czech and international trends in the field of the internet and internet technologies, so that it is able to react to them promptly and maintain optimum conditions for the activity of domain name registrars and the comfort of domain holders.

The CZ.NIC Association is further developing its system of domain administration, and in cooperation with the local internet community and other entities active in the internet environment and influencing it. The association also seeks to offer supplementary services, helping these entities to use the internet better and more effectively. In its activities, the association works closely not only with its most significant partners, i.e. domain name registrars, as well as industry and other specialist organisations, both Czech and international, domain name registries in Europe and elsewhere, and last but not least, public authorities.

Due to the significant technological and knowledge development that the association has gone through in the last four years, representatives of the association, both management members and employees, are welcome guests at Czech and international professional forums.

The Czech Republic

The Association of Public Telecommunications Network Operators (APVTS) – CZ.NIC is one of the associate members of the Association, which seeks to create optimum conditions for the development of activities of public telecommunications network operators in the Czech Republic and aims to protect and support an equal and open telecommunications market.

NIX.CZ
The biggest neutral Internet Exchange Point in the Czech Republic, or the umbrella association for Czech and foreign ISPS for the purpose of interconnecting their networks. The CZ.NIC Association is a member and takes an active part in seminars, workshops and other meetings organised by NIX.CZ.

Tuesday Business Network
An independent association, of which CZ.NIC is a member, offering the chance to meet and share experiences among technology companies, investors and IT professionals.

In their work, and also in connection with the extending environments of electronic communication in public administration, the association works closely with, in particular, **the Ministry of Industry and Trade of the Czech Republic, the Ministry of Interior of the Czech Republic, the Czech Telecommunications Office** and **the Office for Personal Data Protection.**

Due to the existence of disputes about domain names, cooperation between CZ.NIC and **the Arbitration Court** attached to **the Economic Chamber of the Czech Republic** and **Agricultural Chamber of the Czech Republic** and **the Czech Bar Association** is indispensable.

Abroad

CENTR (The Council of European National Top Level Domain Registries)
This is a non-profit organisation associating top level national and generic domain name administrators. It focuses mainly on European registries, but there are also representatives of other more distant regions – e.g. Canada and Japan. Representatives of CZ.NIC, a member since 2001, regularly participate in the Admin groups meetings (focusing on administrative and technical procedures in the registries), Legal & Regulatory (focusing mainly on issues connected with alternative dispute resolution, protection of personal data and other topics) and obviously technical workshops.

EURid (The European Registry of Internet Domain Names)
An association, which based on authorisation by the European Commission, administers the top-level .eu domain; CZ.NIC is an associate member and has a representative on its Board of Directors.

EuroISPA
The CZ.NIC Association has been a member of this European association for ISPs since 2008, which is the biggest ISP organisation in the world – with around 1500 members. Its objective is to represent ISPs within the legislative processes of the European Union and facilitate exchange of experiences between individual ISPs.

ICANN/ccNSO (Internet Corporation for Assigned Names and Numbers)
An international non-profit organisation founded in 1998, whose main objective is not only the administration and issuing of generic and national top-level domain names, but also the assignment of IP addresses. The CZ.NIC Association, as the administrator of the .cz national domain, delegates its representatives to regular meetings and its specialists participate actively in working groups.

IETF (Internet Engineering Task Force)
An organisation founded as early as 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. IETF approves and promotes internet standards, RFC documents, which govern the majority of internet operations. A range of Czech leading specialists from the academic, corporate and private sectors have also taken part in meetings.

RIPE NCC (RIPE Network Coordination Centre)
An independent non-profit organisation supporting the internet infrastructure. Among its key activities is the operation of RIR (Regional Internet Registry), which allocates internet resources and connected services (e.g. IP addresses) to its members. CZ.NIC, one of the members, takes part in regular meetings and also participates in other topical meetings and training held by the organisation.

Trusted Introducer
This is one of the activities of the **TERENA** organisation, which associates CSIRTs in Europe and represents a trustworthy centre for the exchange of sensitive information and know-how for the individual CSIRTs. CZ.NIC is a member and is listed as a registered CSIRT – alongside the Czech CSIRT of the CESNET Association and the emerging national CSIRT.CZ.

BIND Forum
An association supporting software development for DNS – BIND.

ISC (Internet System Consortium)
An organisation supporting internet infrastructure, and the operator of the F-ROOT server.

**Structure and Synergy of Members
and the Association**

The membership of the association is
composed of a whole range of companies
which make a significant contribution
to the functioning of the Czech internet;
among its members are representatives
of internet and telecommunications service
providers, domain name registrars,
publishers of internet and print media,
e-commerce businesses and companies
for whom the internet and domain names
are an important communication tool.

The CZ.NIC Association is a meeting place
for representatives of various activities and
services that can be found on the internet.
A broad spectrum of business activities of
the members and their participation in the
association's activities, whether in the form
of meeting at general assembly meetings,
working groups and seminars, email con-
ferences, or direct work within the associa-
tion, enriches and expands the knowledge
portfolio of the association and allows it
to continually improve the efficiency of its
management and react to the constant
development typical for the internet.

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

A legal entity fulfilling the general member-
ship conditions, including having head-
quarters in an EU Member State or with
an organisational unit in an EU Member
State, possession of at least one domain
name with the .cz ccTLD and payment of
an entry membership fee, can become a
member of the association. Association
members are split into three chambers –
the chamber of domain name holders, ISP
chamber and registrar chamber. Special
conditions for membership in individual
chambers are determined by the Statutes.
The chamber arrangement benefits the
association members, who can therefore,
together with other similarly focused
entities, better define and defend their
opinions, suggestions and interests, and
has also made the course and negotiations
of the association's bodies more efficient,
especially the collegium and general
assembly.

List of Members
As of 31.12.2008, the CZ.NIC Association
had a total of 57 members.

**Structure of the Membership Base
(state as of 31.12.2008)**

**ISP Chamber
15 (26%)**

**Chamber of
Domain Name
Holders
30 (53%)**

**Registrar chamber
12 (21%)**
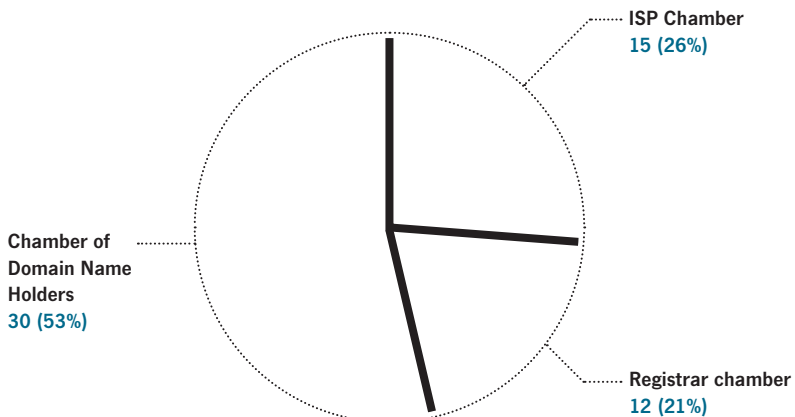
Registrar chamber:

Company name	ID
ACTIVE 24, s.r.o.	25115804
EXPLORER a.s.	26726653
GENERAL REGISTRY, s.r.o.	26027267
IGNUM, s.r.o.	26159708
INTERNET CZ, a.s.	26043319
IPEX a.s.	45021295
KRAXNET s.r.o.	26460335
TELE3 s.r.o.	26096960
Telefónica O2 Czech Republic, a.s.	60193336
Telekom Austria Czech Republic, a.s.	63080150
Web4U s.r.o.	26058774
ZONER software, s.r.o.	49437381

ISP Chamber:

Company name	ID
BT Limited, organizační složka	70802025
CASABLANCA INT s.r.o.	25079832
CentroNet, a.s.	26165473
CESNET z.s.p.o.	63839172
COOLHOUSING s.r.o.	14893983
ČD - Telematika a.s.	61459445
České Radiokomunikace, a.s.	27444902
Dial Telecom, a.s.	28175492
Dragon Internet a.s.	27237800
GTS NOVERA a.s.	61058904
Informační a bezpečnostní agentura s.r.o.	64051641
INTERNEXT 2000, s.r.o.	25352288
Qnet CZ s.r.o.	25518097
SkyNet a.s.	25346687
T-Systems Czech Republic a.s.	61059382

Chamber of Domain Name Holders:

Company name	ID
AliaWeb, spol. s r.o.	26117363
AUDITEL, s.r.o.	26775034
Com-Sys TRADE spol. s r.o.	16188781
Datahost s.r.o.	26390973
ekolo.cz s.r.o.	27141659
Equant Czech Republic, s.r.o.	49620037
i – registry s.r.o.	28451082
IBM Česká republika, spol. s r.o.	14890992
ICZ a.s.	25145444
INBES, spol. s r.o.	14502593
Internet Info, s.r.o.	25648071
Internet Mall, a.s.	26204967
Kanlux s.r.o.	25830163
LAM plus s.r.o.	25129619
MAFRA, a.s.	45313351
MARIAS s.r.o.	26136139
MEDIA FACTORY Czech Republic a.s.	26288311
Michal Krsek & partneři s.r.o.	27418570
MITE Infonet s.r.o.	25660292
Moonlake, s.r.o.	26238161
NextiraOne Czech s.r.o.	26175738
Pražský Účetní Servis s.r.o.	26740575
Q3, s.r.o.	26226073
Software602 a.s.	63078236
SuperNetwork s.r.o.	25492063
Trustica s.r.o.	26514362
Unie vydavatelů	15887081
Unisys s.r.o.	48109291
VIZUS.CZ s.r.o.	27155315
Webarium s.r.o.	26089602

Association Bodies

General Assembly
The highest body of the association is the general assembly, where all members of the association meet, split into three chambers – the registrars, ISPs and domain name holders. Every association member has the right to participate in a meeting of the general assembly.

Collegium
The collegium has a total of 21 members, of which 18 members are voted by the individual chambers of the general assembly and 3 members are nominated by state authorities. The functional period for collegium members is three years.

Collegium members from
1.1.2008 to 13.12.2008:
Collegium members representing the chamber of domain name holders:
JUDr. PhDr. Marek Antoš
Ing. Jan Hájek
Jan Hřebíček
Ing. Tomáš Maršálek
PhDr. Jan Pochman
Mgr. Markéta Švecová

Collegium members representing the ISP chamber:
Mgr. Ondřej Filip
Ing. Tomáš Košnar
Bc. Michal Krsek
Ing. Jiří Kysela
Ing. Michael Macek
Zbyněk Pospíchal

Collegium members representing the registrar chamber:
Ing. Petr Komárek
Bc. Martin Kukačka
Ing. Jiří Kubíček
Mgr. Jan Redl
Mgr. Karel Taft
Ing. Karel Umlauf

Collegium members nominated by state authorities:
Ing. Marek Ebert
The Czech Telecommunications Office
Mgr. Tereza Gáliková
The Ministry of Industry and Trade of the Czech Republic
JUDr. Marie Moravcová
The Economic Chamber of the Czech Republic

At the general assembly on 11.12.2008, the following were voted into the association collegium (effective as of 13.12.2008):
JUDr. PhDr. Marek Antoš
Mgr. Jan Redl
Chamber of domain name holders
Mgr. Ondřej Filip
Ing. Petr Kuneš
ISP chamber
Ing. Zdeněk Brůna
Marek Erneker
Registrar chamber

Board of Directors
The board is a statutory body, governing the association activities and acting in its name.

Board members from 1.1.2008 to 31.12.2008:
Ing. Tomáš Maršálek (*1970)
Chairman of the board
Mgr. Karel Taft (*1971)
Vice-chairman of the board
JUDr. PhDr. Marek Antoš (*1979)
Member
Bc. Martin Kukačka (*1980)
Member
Ing. Jiří Kysela (*1955)
Member

Supervisory Board
Association control body, which supervises the performance of the board and implementation of association activities.

Members of the supervisory board
1.1.2008 – 4.4.2008:
Ing. Michael Macek,
Chairman of the supervisory board
Ing. RNDr. Jiří Peterka
Member
Mgr. Jan Redl
Member

Members of the supervisory board
5.4.2008 – 21.6.2008:
Ing. RNDr. Jiří Peterka
Member
Mgr. Jan Redl
Member

As of 4.4.2008, **Ing. Michael Macek** stood down from his position as member of the supervisory board and at the collegium meeting on 19.6.2008, **Ing. Ondřej Fryc** has been elected member of the supervisory board, effective as of 21.6.2008, while **Ing. RNDr. Jiří Peterka** has been confirmed for another membership term.

Members of the supervisory board
21.6.2008 – 31.12.2008:
Mgr. Jan Redl
Chairman of the supervisory board
Ing. Ondřej Fryc
Member
Ing. RNDr. Jiří Peterka
Member

State and Development of Employee Numbers

The expansion of activities carried out by the CZ.NIC Association, alongside its main activity of operating the registry of the .cz national domain and the 0.2.4.e164.arpa (ENUM) domain, showed in the slight growth in the number of employees. At the beginning of 2008, 21 employees worked at the CZ.NIC Association. By 31.12.2008, there were 24 employees. During the year, 5 workers left the association and 8 new members of staff joined, mainly in the development section (4), in PR and Marketing (2), the helpdesk (1) and network administration (1).
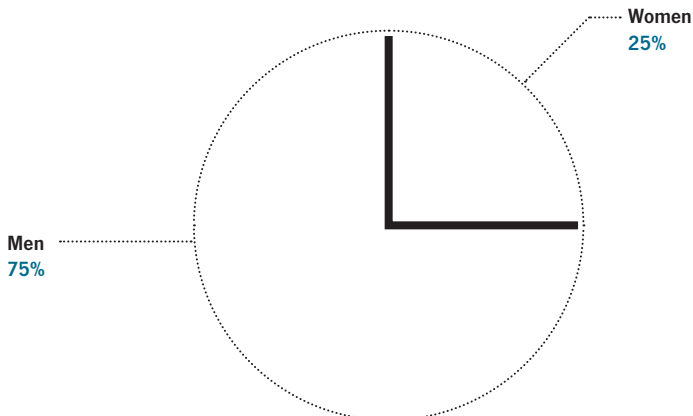
Due to the demanding nature of the new projects focused on new technologies, and also the further expansion and improvement of the registration system, the most employees work in the development section (7); the same number of employees is required for the 24x7 operation of the customer support helpdesk. The number of women rests at one third, and the average employee age as of 31.12.2008 was 30.79 years, which, in contrast with the previous year, was slightly lower.

The strength of the association lies in qualified and professionally able employees, who are necessary for fulfilling the association's objectives and its further development. All employees are constantly educated, with an emphasis on achieving maximum professional and personal qualities and their development. This personnel policy, combined with an attractive field, work with modern leading technologies and the chance to take an active part in forming the Czech internet leads to a dominance of staff with a university education.

The CZ.NIC Association gives the opportunity to gain professional experience even to new graduates of universities and secondary schools, who can get their first job here.

The development of salaries in 2008 reflected the needs of the association and its employees. The salary is created with a fixed tariff and a variable motivational component, which reflects the actual performance of each employee. Setting the amount of salaries, motivational components and any other benefits is governed by the principle of justice pursuant to valid legislation as well as conditions and developments in the telecommunications environment and the IT market.

**Women vs. Men
as of 31.12.2008**

**Women
25%**

**Men
75%**

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Employees by Age
as of 31.12.2008

35 years or older
4 (17%)

25 years or younger
3 (13%)

26 – 34 years old
17 (70%)
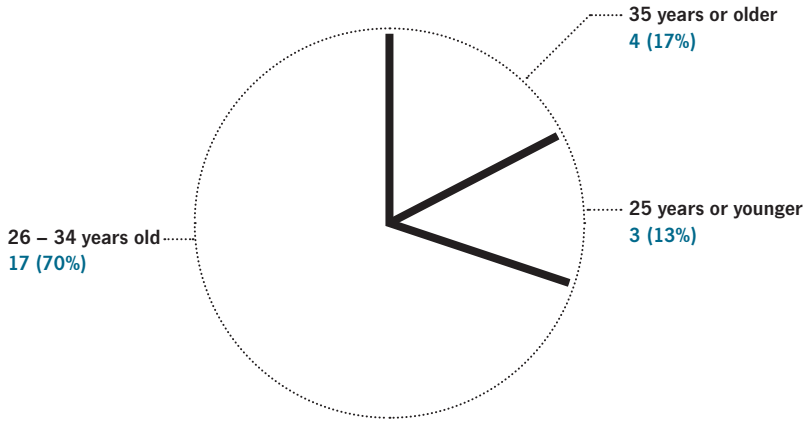
Employees by Education
as of 31.12.2008

Other
2 (8%)

Secondary
school
9 (38%)

University
13 (54%)
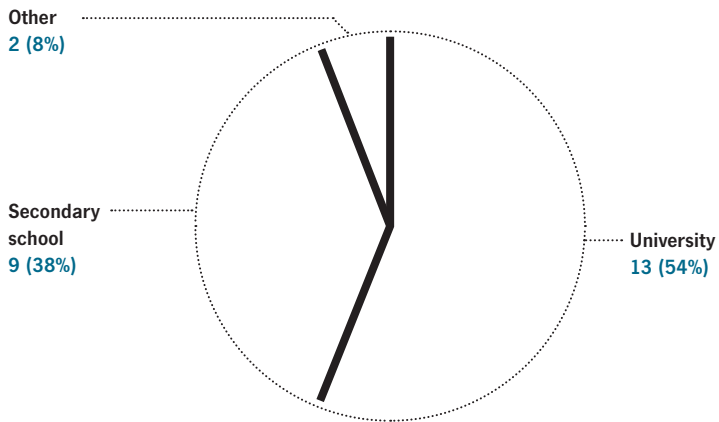
Organisational Structure

The clear and simple organisational structure corresponds to the number of employees and brings maximum efficiency in performing the activities of the association and its management.

Organisational Structure

Executive Director

Office/Legal Manager

ENUM/PR Manager

Operation Manager

Technical Manager

Development Manager

Marketing/PR

Helpdesk

Network Administrators

Developers

26
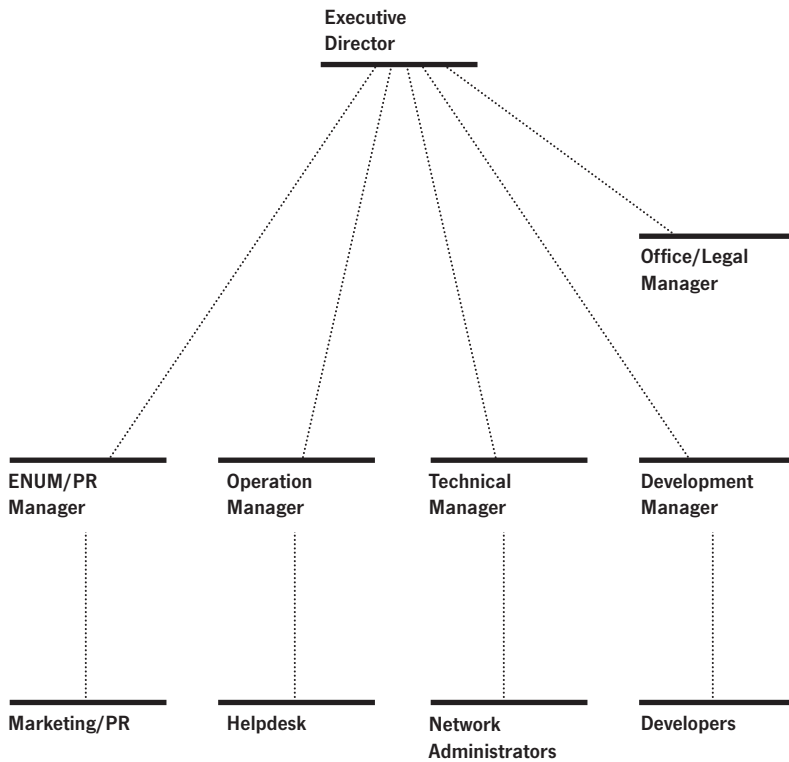
Selected Financial Indicators
(in CZK thousands)

	2003	2004	2005	2006	2007	2008
Revenues	140 712	137 632	139 167	133 050	155 848	119 376
Costs	140 288	139 669	106 557	117 618	132 369	50 418
Profit or loss after tax	424	-2 037	32 610	15 432	23 479	68 958

Balance Sheet

Assets
(in CZK thousands)

	2003	2004	2005	2006	2007	2008
Total assets	95 486	100 982	147 926	168 026	171 222	221 670
Fixed assets	8 627	6 347	3 044	10 156	8 381	8 135
Intangible assets		1 841	1 179	3 210	3 806	1 522
Tangible assets	8 627	4 506	1 865	6 946	4 575	6 613
Financial investment						
Securities						
Current assets	45 182	94 251	144 882	156 678	161 456	212 092
Inventories					55	103
Long-term receivables				106		715
Short-term receivables	390	880	852	2 872	1 018	1 051
Financial assets	44 792	93 371	144 030	153 680	160 383	210 223
Other assets	41 677	384	0	1 192	1 385	1 443

Liabilities
(in CZK thousands)

	2003	2004	2005	2006	2007	2008
Total liabilities	95 486	100 982	147 926	168 026	171 222	221 670
Shareholders' equity	8 051	6 014	38 624	54 056	77 535	131 002
Capital						
Capital funds						
Funds created from profit	7 627	7 627	7 627	7 627	7 627	7 627
Retained earnings		424	-1 613	30 997	46 429	69 908
Profit/loss for accounting period		-2 037	32 610	15 432	23 479	53 467
Liabilities	17 104	16 786	26 831	18 753	13 706	16 835
Reserves						
Long-term liabilities						193
Short-term liabilities	17 104	16 786	26 831	18 753	13 706	16 642
Bank loans						
Other liabilities	70 331	78 182	82 471	95 217	79 981	73 833

Profit and Loss Account

Profit and Loss Account
(in CZK thousands)

	2003	2004	2005	2006	2007	2008
Output and sales	139 805	136 250	139 020	131 864	147 564	108 671
Of which revenue and sales	139 805	136 250	139 020	128 952	144 740	108 671
Capitalisation				2 912	2 824	0
Production consumption and costs	127 252	124 497	82 074	94 067	88 668	19 509
Added value	12 553	11 753	56 946	37 797	58 896	89 162
Personnel costs	6 951	5 923	6 053	11 930	20 193	20 567
Depreciation of assets	2 440	4 294	4 944	4 900	6 042	5 851
Settlement of reserves						
Other operating income	463	421	-475	244	246	682
Other operating costs	394	598	321	516	435	393
Operating profit/loss	3 231	1 359	45 135	20 695	32 448	62 925
Other financial income	443	961	622	942	7 885	10 054
Other financial costs	685	2 719	115	81	7 077	4 129
Profit/loss from financial activities	-242	-1 758	507	861	808	5 925
Profit/loss from standard activities	2 989	-399	45 642	21 556	33 256	68 850
Extraordinary income						
Extraordinary costs	2 565	1 638		6 124	9 777	15 383
Extraordinary profit/loss	-2 565	-1 638		-6 124	-9 777	-15 383
Profit/loss after tax	424	-2 037	32 610	15 432	23 479	53 467

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**The chart below shows the development
of CZ.NIC, z. s. p. o. revenue between
2000 and 2008.**

	0	20 000	40 000	60 000	80 000	100 000	120 000	140 000	160 000

2000
2001
2002
2003
2004
2005
2006
2007
2008
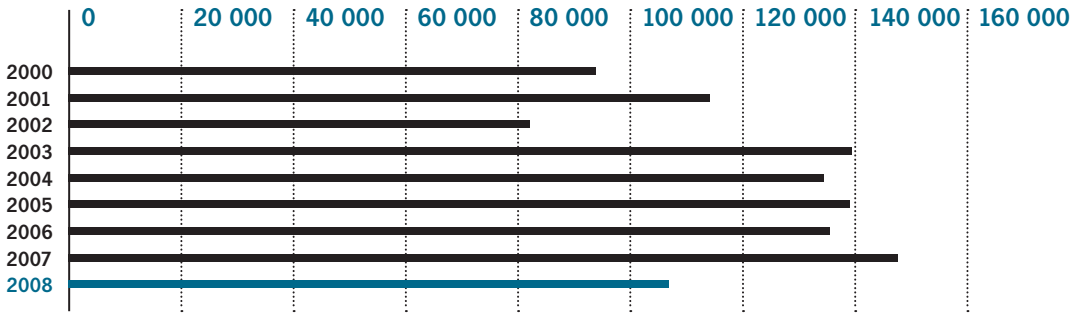
**Revenue
(in CZK thousands)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Revenue	93 319	116 517	82 302	139 805	136 250	139 020	128 952	144 741	108 523

Data on Facts between the Date of Final Accounts and General Assembly

No events occurred in the given time which would have had an impact on the data presented in the final accounts for 2008.

Independent Auditor's Report for members of CZ.NIC, Special-Interest Association of Legal Entities

We have audited the enclosed Financial Statements of CZ.NIC, zájmové sdružení právnických osob (special-interest association of legal entities), i.e. the Balance Sheet as of 31 December 2008, the Profit and Loss Account for the period form 1 January 2008 to 31 December 2008, and the Notes to Financial Statements, including the description of the significant accounting methods applied.

Responsibility of the Statutory Body of the Accounting Unit for Financial Statements
The statutory body of the Association is responsible for the compilation and true representation of the Financial Statements in accordance with the Czech accounting regulations. The responsibility of the statutory body encompasses the duty to propose, implement and secure internal audits regarding the compilation and true representation of the Financial Statements to ensure that the Financial Statements do not provide misstatements caused by deception or error, select and apply suitable accounting methods and provide accounting estimates that are adequate with respect to the situation concerned.

Auditor's Responsibility
Our task is to deliver a statement regarding these Financial Statements on the basis of our audit. We conducted our audit in accordance with the Act on Auditors and the International Auditing Standards, as well as with the relevant application clauses issued by the Czech Chamber of Auditors. These regulations require that we comply with the ethical standards and plan and perform the audit to obtain reasonable assurance that the Financial Statements are free of material misstatements.

The audit comprises the execution of audit procedures with the aim of obtaining evidence regarding the amounts and disclosures provided in the Financial Statements. The choice of the auditor's procedures depends on the auditor's discretion, including the consideration of risks that the Financial Statements may comprise significant misstatements caused by deception or error. When considering these risks, the auditor will reflect the internal audits relevant for the compilation and true presentation of the Financial Statements. The objective of the internal audits is to propose suitable auditing procedures, not to render a statement regarding the effectiveness of the internal audits. The audit includes verification of the applicability of the accounting methods used, adequacy of accounting estimates provided by the management and an evaluation of the overall presentation of the Financial Statements.

We are of the opinion that the information obtained forms a sufficient and suitable basis for the auditor's delivery of a statement.

Auditor's Statement
In our opinion, the Financial Statements present fairly and truly, in all material respects, the assets, liabilities, and financial position of CZ.NIC, zájmové sdružení právnických osob, as of 31 December 2008, and of the expenses, revenues and the results of its operation for 2008, in accordance with the Czech accounting regulations.

Malenice, on 11 June 2009

ADU.CZ s.r.o.
Zámostí 68, 387 06 Malenice
Czech Chamber of Auditors Licence No. 368
Report issued by Ing. Simona Pacáková on behalf of ADU.CZ s.r.o., Auditor, Czech Chamber of Auditors Decree No. 1825

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Headquarters

CZ.NIC, z. s. p. o.
Americká 23/525
120 00 Prague 2

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DIČ: CZ67985726
Tel.: (+420) 222 745 111
Fax: (+420) 222 745 112
www.nic.cz

The association is registered in the registry
of interest associations of legal entities at
the Prague Municipal Authorities, registra-
tion number ZS 30/3/98.

CZ.NIC – 24-hour customer support

Tel.: (+420) 222 745 111
Mail: podpora@nic.cz