2012
Social Responsibility
Report for CNNIC

China Internet Network Information Center
(CNNIC)

Contents

Time Frame of Report

2012

Serial Number of Social Responsibility Report

The second Social Responsibility Report of CNNIC.

Release Cycle

CNNIC Social Responsibility Report is annual report, usually released before the end of February next year.

Report Data Speciation

The report data does not include financial audit data.
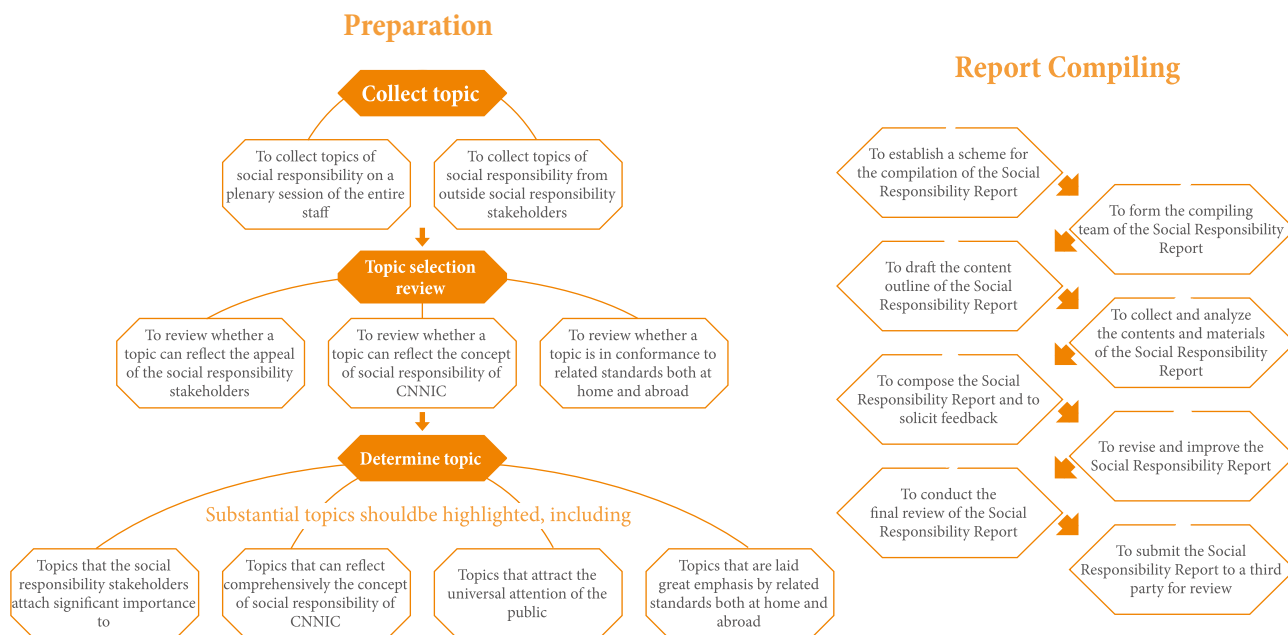
Organization Scope

Within the scope of China Internet Network Information Center (CNNIC)

Reference Standard

Compiling Guidelines for China Corporate Social Responsibility Report (CASS -CSR2.0), International Standard of Social Responsibility ISO 26000 and Sustainability Reporting Guidelines by "Global Reporting Initiative".

Note: CNNIC, as the national Internet network information center, differs from enterprises in terms of nature and social responsibility and thus has selective reference to China Corporate Social Responsibility Report for the compilation of this report.

Compiling Process

Preparation

Collect topic

To collect topics of social responsibility on a plenary session of the entire staff

To collect topics of social responsibility from outside social responsibility stakeholders

Topic selection review

To review whether a topic can reflect the appeal of the social responsibility stakeholders

To review whether a topic can reflect the concept of social responsibility of CNNIC

To review whether a topic is in conformance to related standards both at home and abroad

Determine topic

Substantial topics shouldbe highlighted, including

Topics that the social responsibility stakeholders attach significant importance to

Topics that can reflect comprehensively the concept of social responsibility of CNNIC

Topics that attract the universal attention of the public

Topics that are laid great emphasis by related standards both at home and abroad

Report Compiling

To establish a scheme for the compilation of the Social Responsibility Report

To form the compiling team of the Social Responsibility Report

To draft the content outline of the Social Responsibility Report

To collect and analyze the contents and materials of the Social Responsibility Report

To compose the Social Responsibility Report and to solicit feedback

To revise and improve the Social Responsibility Report

To conduct the final review of the Social Responsibility Report

To submit the Social Responsibility Report to a third party for review

Access Method

For electronic version of the report, please log in CNNIC official website (www.cnnic.cn or www.中国互联网络信息中心.中国) to download.

The year of 2012 has been a turning point to carry on the "Twelfth Five-Year Plan" and has been a crucial year for China in the aspects of adjustment of economic structure, transformation of development mode and steady progress of economy. The Internet industry of China witnessed a dynamic momentum in 2012. Adhering unswervingly to the strategic policy of "providing efficient and application-oriented services through secure & stable Internet infrastructure for public interests", CNNIC made brilliant achievements in 2012. CNNIC took various measures to improve the service level of domain name registration with the implementation of the real name registration system, made endeavors to improve users' satisfaction, and created a sound and orderly Internet environment. It also promoted vigorously the cooperation in terms of network fundamental resources application, played a positive role in many fields such as registration & development of new gTLDs, public cloud DNS, and internationalized email address. Moreover, it made steady progress in the node construction of national domain name and completed the construction of many domain name nodes globally so as to further enhance the security and availability of domain name service. In addition, it spared no effort in carrying out research on Internet and cutting-edge technologies, and obtained valuable results. Last but not least, CNNIC participated in international communication and cooperation of Internet with an open mind, won the bid for an industrial conference with international influences and established an international environment advantageous to the development of China's Internet.

In 2013, CNNIC will continue to adhere to the vision of "World-class Network Information Center" and dedicate to the guideline strategy of "Responsibility to the Country, Benefits to the Society and Harmony among People". CNNIC will regard the national public interests as its own responsibility, give impetus to the operation of network fundamental resources, conscientiously uphold netizens' rights as well as the public interests, continue to promote the level of national domain name service and create a sound Internet order. It proceeds to reinforce the capacity of scientific research and provide substantial support for the sustainable development of national network fundamental resources. CNNIC keeps on enhancing the level of research on Internet and cutting-edge technologies so as to achieve more valuable results. It continues making efforts to build an open environment for international communication, while helping China extend influences and gain more say in the international Internet community. Meanwhile, committed to the good faith and solicitude, CNNIC lays much emphasis upon employee development and strives to increase employees' happiness.

Summarizing the past is for the sake of a brighter tomorrow. In the following year, CNNIC will make persistent efforts and aspire higher. With high expectations for Chinese Internet, CNNIC will go to the greatest length to fulfill its mission of "Responsibility to the Country, Benefits to the Society and Harmony among People"!

HUANG Xiangyang

February 2013

CNNIC Summary

About CNNIC

China Internet Network Information Center (abbreviated as CNNIC) is established on June 3, 1997 upon the approval of the competent departments of Chinese government to undertake the responsibilities as the national Internet network information center.

In light of the policies of "providing efficient and application-oriented services through secure and stable Internet infrastructure for public interests", CNNIC, as an important constructor, operator and administrator of infrastructure in Chinese information society, is responsible for operation, administration and services of fundamental Internet resources, undertakes R&D and security work of fundamental Internet resources, conducts research on Internet development and provides consultancy, and promotes the cooperation and technological exchange of global Internet in an effort to become the "professional, responsible and service" world-class network information center.

Introduction to Relevant Institutions

IPv6 Open Exchange and Application Validation Center (6pilot)

6pilot, a platform for application and popularization of IPv6 initiated by CNNIC, is dedicated to the research, test and popularization of next generation Internet (IPv6) technology, business, and application. Adhering to the principle of "Internet promotes application, and application promotes research", 6pilot will encourage cooperation among participants of Internet industry chain including research institutes, ISPs, ICPs, manufacturers of Internet device, and application developers. 6pilot aims at building a win-win cooperative promotion platform for open exchanges and application validation, and providing incentives to the transition process to IPv6.

Security Alliance of National Domain Name

On March 27, 2012, with Communications Security Bureau of Ministry of Industry and Information Technology (MIIT) as the supervising organization, National Domain Name Security Alliance (hereinafter referred to as the "Alliance"), initiated by National Domain Name Security Center of CNNIC, was formally established in Beijing. 28 organizations from the national domain name registry and domain name registrars became the first members of the Alliance. The Alliance would, by integrating all the chains of the whole domain name industry and forming a linkage mechanism of prevention and emergency treatment for domain name resolution security, improve the security of national domain names. CNNIC would assume the responsibility of Secretariat of the Alliance.

DNSLAB

DNSLAB, launched by CNNIC, is devoted to the technology research on Internet infrastructure and aims to accelerate cooperation among the competent government departments, research institutes, colleges & universities and the industry of Internet, striving to build up an open research environment for win-win cooperation. DNSLAB will carry out multi-disciplinary and prospective theoretical and application technology research in such areas as e-government/business study, data mining technology,Internet of Things, etc. With an open framework, DNSLAB will make persistent efforts in the research on open topics for the sake of realizing academic output in three key areas of Internet (namely, data analysis, technology system of infrastructure resources, and security assurance of network fundamental resources), and improving the comprehensive capacity and technical influence of Chinese research on basic Internet techniques.

CILAB

The CNNIC-ISC Joint Lab on Internet Technologies (CILAB) was co-founded by CNNIC and the Internet Systems Consortium (ISC) on February 8, 2010. CILAB is dedicated to the technology development and infrastructure construction of Internet industry. The mission of CILAB is to make significant contributions to the international internet community by means of software development, standard & policy making, expertise training, and technical innovation.

CCARL

On October 29, 2009, CNNIC-Cisco Addressing Research Lab (CCARL) was co-founded by CNNIC and Cisco Systems, Inc. in Beijing. CCARL will carry out extensive cooperation in related fields including address allocation, address administration, address identification, address security, IPv6 technology, develop new algorithms, protocols and tools by resorting to such methods as analysis, modeling and design, and provide solutions for next generation Internet. The research results of CCARL will facilitate the transition to next generation Internet in China.

Anti-Phishing Alliance of China

On July 18, 2008, Anti-Phishing Alliance of China, jointly established by domestic banks and security institutions, e-commerce sites, domain name registries and domain name registrars, and experts and scholars, was officially inaugurated in Beijing and is the only arbitration organization in China to address the problems of phishing. National Computer Virus Emergency Response Center and National Computer network Emergency Response Technical Team/Coordination Center of China (CNCERT/CC) are the third-party authentication institutions of Anti-Phishing Alliance of China. CNNIC would assume the responsibility of Secretariat of Anti-Phishing Alliance of China.

CNNIC Social Responsibility System

CNNIC Organizational Culture System

CNNIC Mission
Important constructor, operator and administrator of infrastructure in Chinese information society

CNNIC Vision
World-class network information center

CNNIC Strategic Policy
Provide efficient and application-oriented services through secure
& stable Internet infrastructure for public interests

CNNIC Function Positioning

Operation, Management and Service organization
of national network fundamental resources

Research, Development and Security center of
national network fundamental resources

Research and Consulting Services driving force
for Internet development

Platform for Internet open cooperation and
technical exchange

CNNIC Organizational Culture
Earn trust with inner respect:
practical work, positive initiative,
solid credibility, and collaborative effort

Social Responsibility of CNNIC
Be dedicated to the responsibilityto the country,
benefits to the society, and harmony among people

Brand Value of CNNIC
Professional, responsible,service

Social Responsibility Strat-
egy of CNNIC

Social Responsibility Strategy of CNNIC

CNNIC, with its concept of Social Responsibility as the core, subdivides social responsibility into ten specified ones. Public social responsibility of CNNIC refers to such social responsibility assumed by CNNIC to each social responsibility stakeholder, and specific social responsibility refers to the social responsibility assumed by CNNIC to one specific social responsibility stakeholder
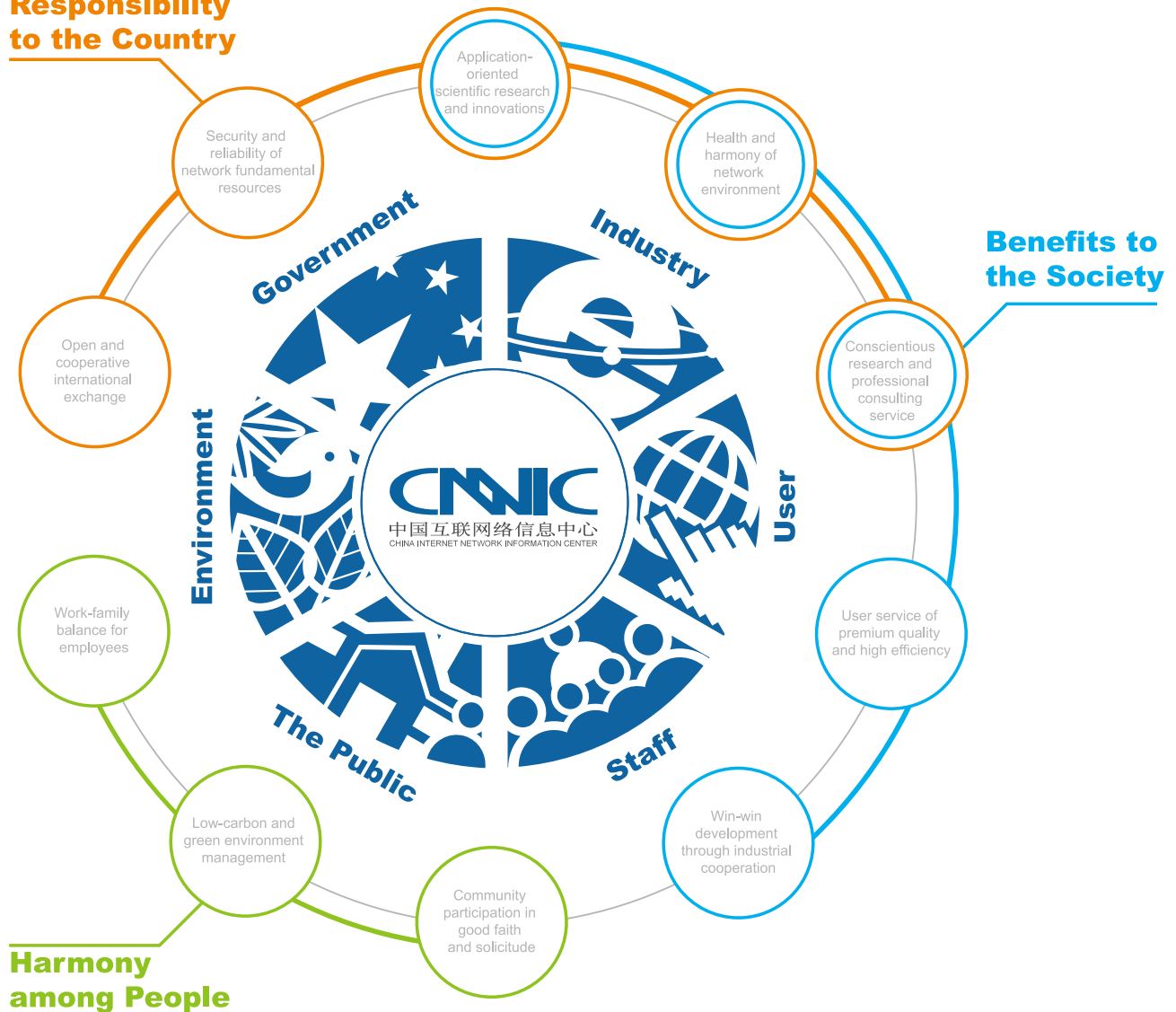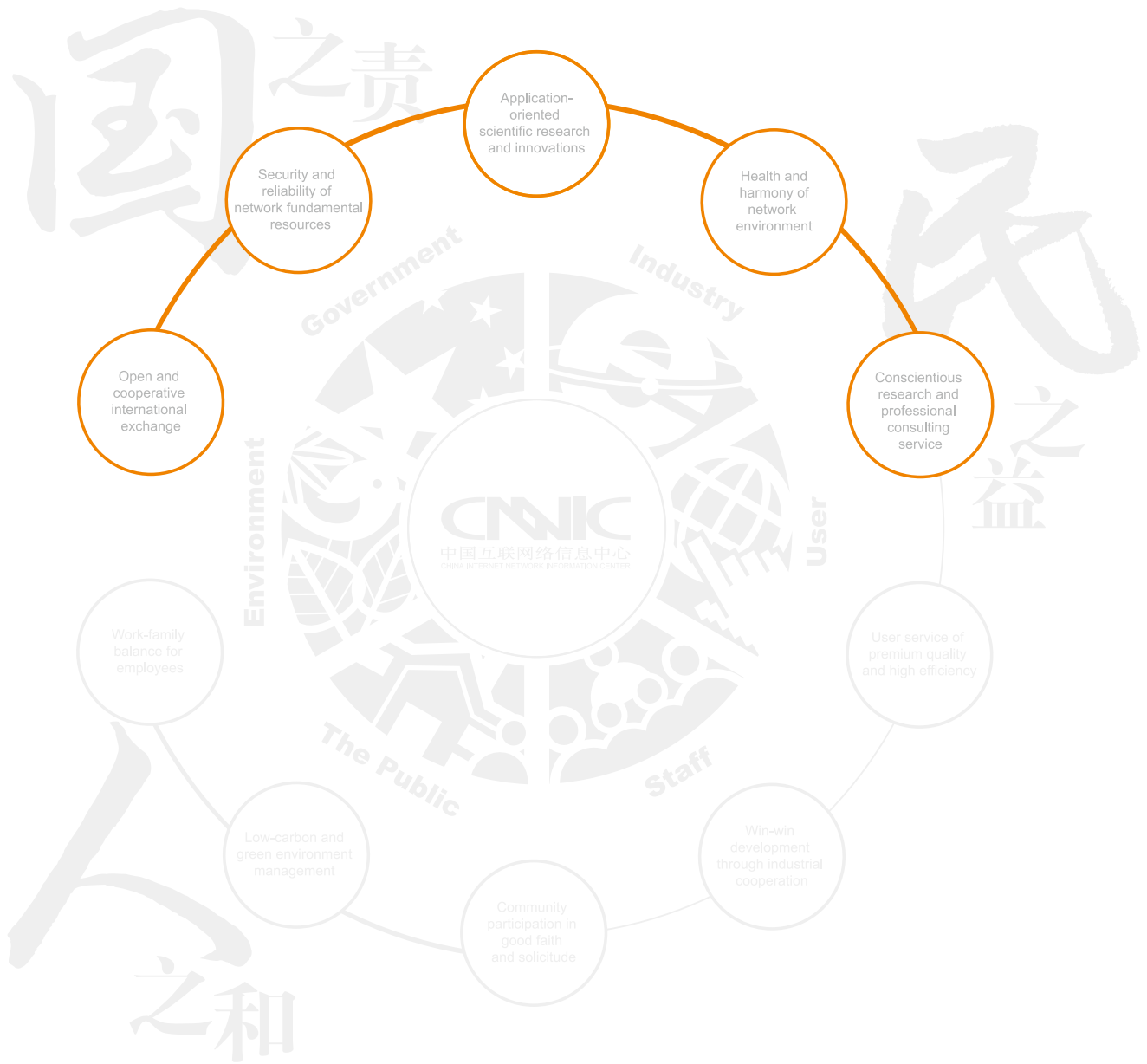

Public Social Responsibility

■ Security and reliability of network fundamental resources

■ Health and harmony of network environment

■ Application-oriented scientific research and innovations

■ Conscientious research and professional consulting service

■ Open and cooperative international exchange

Specific Social Responsibility

■ Win-win development through industrial cooperation

■ User service of premium quality and high efficiency

■ Work-family balance for employees

■ Community participation in good faith and solicitude

■ Low-carbon and green environment management

Undertake Public Responsibilities and Jointly Develop with China's Internet

Application-oriented scientific research and innovations

Security and reliability of network fundamental resources

Health and harmony of network environment

Open and cooperative international exchange

Conscientious research and professional consulting service

Government

Industry

Environment

User

Work-family balance for employees

User service of premium quality and high efficiency

The Public

Staff

Low-carbon and green environment management

Win-win development through industrial cooperation

Community participation in good faith and solicitude

CNNIC
中国互联网络信息中心
CHINA INTERNET NETWORK INFORMATION CENTER

Security and Reliability of Network Fundamental Resources

The services of national fundamental internet resources were provided stably and safely

The quality of service operation was stably improved

The service of fundamental domain name resources constitutes the basic service provided by CNNIC for the users and the Internet economy. In 2012, CNNIC continued to make great efforts in the improvement of operation quality of fundamental domain name resources service, gradually cut down the total cost of service management and further improved the operation efficiency and quality by upgrading database storage and optimizing network structure and work processes. The management of disaster recovery of the domain name service system and the continuity of services witnessed a remarkable improvement, and RPO (Recovery Point Objective) increased by nearly 70 times compared with the same period last year.

The resolution of national domain names in a year reached 598.069 billion times, representing a 10.3% growth over 2011, and the number of registrations of national domain names and WHOIS hits kept climbing, which indicated that the applications of Chinese Internet were expanding. The availability indexes of registration, WHOIS and resolution services in SLA (Service-Level Agreement) reached 100% for 36 consecutive months. CNNIC laid a solid foundation for the development of Chinese network information economy while fulfilling its national and social responsibilities.

Service security was constantly fortified

In 2012, CNNIC continued to strengthen the construction of operation and management system, laid emphasis on the scientific and standardized management of operation security, improved its ability to deal with operation emergencies, implemented supervision of the protection measures for the service operation security, emergency drill for service operation security, reform and reinforcement of security domain registration and the special operation for the service operation security for the 18th National Congress of the Communist Party of China, timely reported the information of the security of domain name to relevant entities, and increased the professionalism of pre-alert of service operation security of domain name, prevention of service operation accident and emergent response to accident, in order that the security of national domain name service was continually ensured.

CNNIC took initiatives in conducting cooperation with ICANN and introduced the L-root mirror of the global top-level nodes into China, and provided L-root mirror service in Beijing. This was the third root mirror of global top-level nodes introduced to and maintained in China by CNNIC following I root and F root, which increased the total number of root mirrors in China to five. The introduction of these root mirrors not only further improved the customer experience of Chinese netizens, but also increased the stability of domain name service infrastructure in China in the prevention of unexpected disasters.
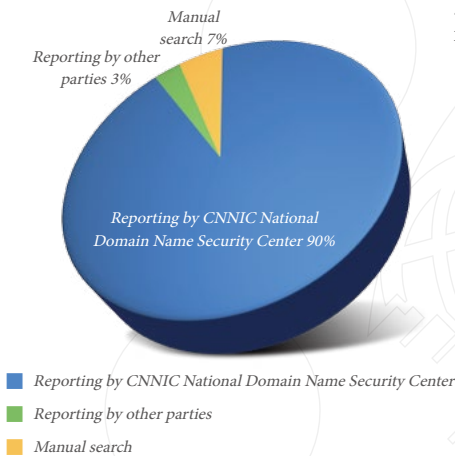
Efforts were made to ensure the security and reliability of the domain name service system on the basis of the stable operation

In 2012, the second phase project of the security monitoring platform of national domain name went into practice and deployment was made in 39 major cities in China covering the core business networks of three operators (China Telecom, China Unicom and China Mobile). The security monitoring platform of domain name is an internationalized, multi-dimensional and distributed platform of national level which was established according to the characteristics of domain name system and which conducts data collection and monitoring & analysis. This platform conducts accurate control, monitoring & pre-alert, census & analysis and supporting work for the domain name system of the Internet, especially the domain name service system of Chinese Internet.
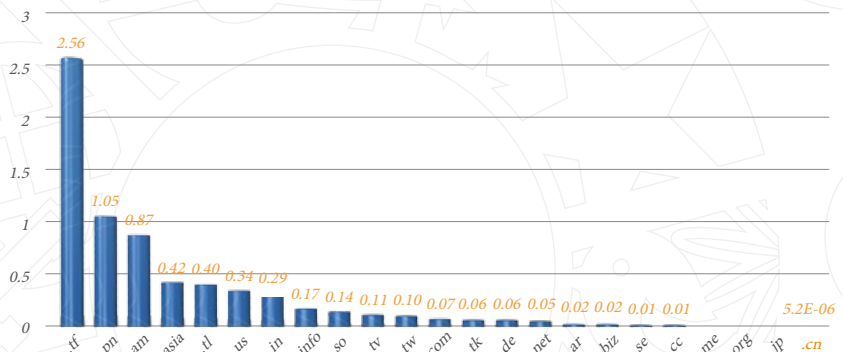
CNNIC National Domain Name Security Center completed the research of key testing technologies of inappropriate applications such as sensitive information, pornographic information, online gambling and phishing and the development and deployment of system by employing the technical measures such as DNS data mining, statistical machine learning and heuristic rule and by taking advantage of its own data resources of domain name registration and resolution. Now, the number of domain logs analyzed by the system a day exceeded 2 billion, and 4967 domain names with inappropriate information were identified and reported in 2012.

Statistics of reporting of inappropriate information sources in 2012

Manual search 7%

Reporting by other parties 3%

Reporting by CNNIC National Domain Name Security Center 90%

■ *Reporting by CNNIC National Domain Name Security Center*

■ *Reporting by other parties*

■ *Manual search*

According to the census of the testing system of National Domain Name Security Center in CNNIC, 1 in 20 million of the websites with .CN domain name were found to have pornographic information, and this ratio was much lower than that of the websites with .com and .net used by Chinese users; therefore, .CN domain name was the most secure and reliable domain name in China.

Ratio of domain names with pornographic information (%)

2.56	1.05	0.87	0.42	0.40	0.34	0.29	0.17	0.14	0.11	0.10	0.07	0.06	0.06	0.05	0.02	0.02	0.01	0.01			5.2E-06
.tf	.pn	.am	.asia	.tl	.us	.in	.info	.so	.tv	.tw	.com	.tk	.de	.net	.ar	.biz	.se	.cc	.me	.org	.jp	.cn

Guarantee of security during major events

On March 5, 2012, CNNIC was involved in the supporting work for the Fifth Session of the Eleventh National People's Congress and Fifth Session of Eleventh National Committee of the Chinese People's Political Consultative Conference by ensuring the secure and stable operation of top-level national domain name system during that period. During the 18th National Congress of the Communist Party of China, CNNIC made deployment to ensure the security, assigned people to fix bugs and stand by, ensured the smooth communication with people responsible for handling emergencies, clearly divided the work to ensure security responsibility among people and implemented the daily reporting system, so that the work of ensuring the network and information security was successfully completed.
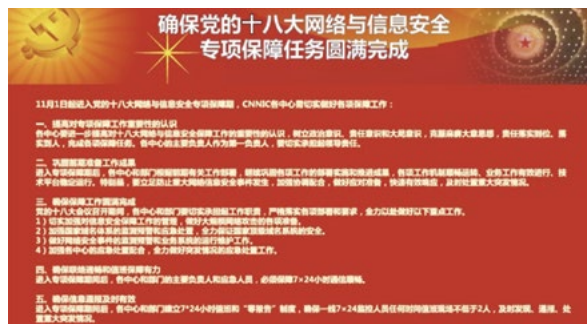
Security and Reliability of Network Fundamental Resources

The construction of the operation platform of the national fundamental internet resources was in steady progress

The construction of the operation platform of the national fundamental internet resources was in steady progress.

The scale of resolution platform of national domain names continuously increased

As the new technologies and businesses of mobile Internet, smart terminal, cloud computing and Internet of things develop rapidly in recent years, higher standards have been set up for the infrastructure of resolution service of national domain name. Meanwhile, the openness of .CN domain name to individuals for registration and availability of a large number of social networking applications posed a big challenge to the operation load and security of resolution service of domain name. CNNIC always regarded the establishment of a stable and efficient resolution platform of .CN domain name as the fundamental work for the implementation of national responsibilities, and it made great efforts to make the resolution network of domain name "stronger" and "smarter" in response to the changes in customer demands and the industry.

In 2012, CNNIC continued to steadily promote the nodes construction for the platform of national domain name but in a more mature way and at a larger scale. The number of domain name nodes totaled 30 by the end of 2012; 22 nodes were in China, covering all Chinese operators, and 8 were outside China, distributed in Asia, North America and Europe with the service provided all around the world. The constant expansion of scale of domain name service nodes further improved the online experience of the vast number of Internet users adopting the national domain names.

Schematic Diagram of National Domain Name Top-level Nodes
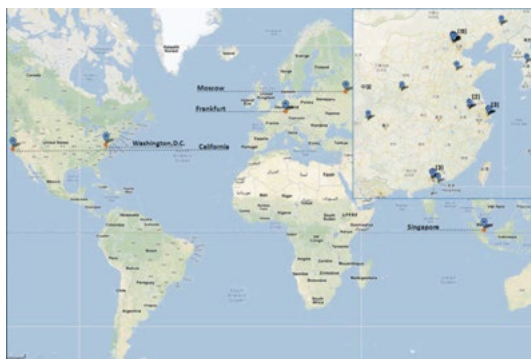
CNNIC continues building resolution platform of domain name by abiding by the principles of reasonable planning and hierarchical management, and aims to set up 50 national domain name service nodes by 2015 which will be distributed all around the world, in order to provide the worldwide Internet users with excellent experience with the national domain name and meet the standard of the world -class registration and management center.

National Domain Name Service Nodes (China Telecom in Nanjing)

Efforts were made in the construction of domain name service nodes for the sake of public interests

While taking the responsibility of construction, operation and management of national domain name basic services, CNNIC kept improving its capability of providing services for the public interests. It launched CDNS and SDNS in 2011 and 2012 respectively. At the end of 2012, CNNIC completed the renovation and expansion of cloud resolution service nodes, creating a "5+1" node system of resolution service. The average daily cloud resolution reached 8.0215 million times in 2012. By building these domain name service nodes for the public interests, CNNIC further improved the overall security of the domain name resolution service system and effectively elevated the overall level of public service system of the Internet.
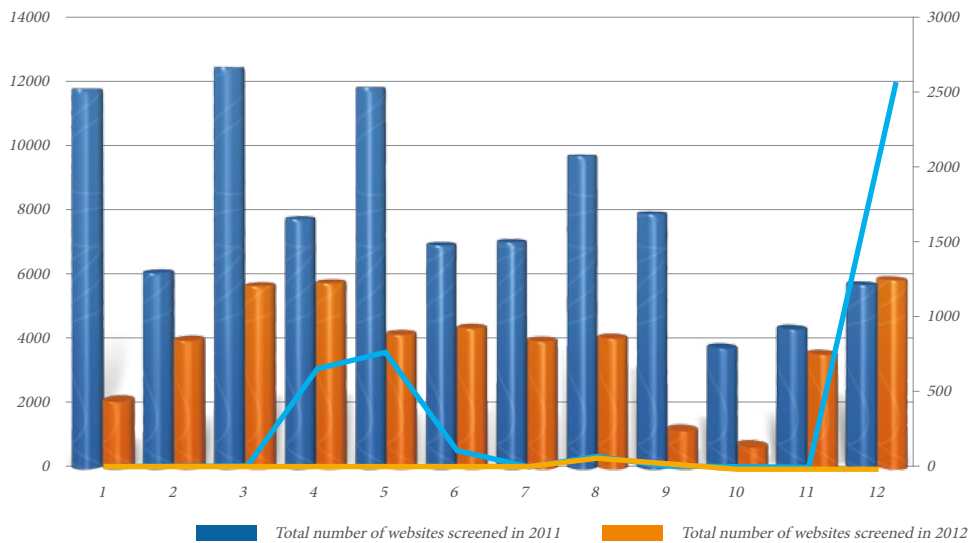
Health and Harmony of Network Environment

The management of domain name abuse was further improved

In order to ensure the authority and standardization of management of domain names abuse, CNNIC and the Public Security Department jointly established a mechanism combining the identification and the punishment of the domain name abuse, and thus ensured the standardization of management of domain name abuse.

Until December 31, 2012, 45,899 websites were screened and 5,700 websites were found to have inappropriate information and 121 were punished. The websites that were illegal and violated relevant regulations were ordered to be closed. All these efforts reduced the channels of spreading inappropriate information on the Internet, enabled the general public to have a safe and green Internet environment and ensured the healthy and stable development of Chinese Internet.

Number of Websites Screened for Inappropriate Information, for which Resolution Ceases

Legend: ■ Total number of websites screened in 2011 ■ Total number of websites screened in 2012

In 2012, CNNIC enhanced cooperation with the security organizations inside and outside China and it monitored 169,000 malicious domain names infected with zombie virus and started to monitor the access to the domain names infected with Rustock. Solid foundation was laid for the study and handling of the malicious domain names infected with zombie virus.

| Year	Number of monitored Conficker-infected domain names (in 10,000)	Number of monitored Rustock-infected domain names
2012	16.9	5897
2011	16.5	2193
2010	15.4	——

Anti-phishing had remarkable results

On July 18, 2008, CNNIC called upon domestic banks and security institutions, e-commerce sites, domain name registries and domain name registrars, and experts and scholars to establish Anti-Phishing Alliance of China (hereinafter referred to as "APAC") in Beijing to address phishing and Internet fraud crimes that happen frequently. CNNIC would assume the responsibility of Secretariat of Anti-Phishing Alliance of China. The number of APAC members increased from 43 at the beginning to 492 in 2012.

Number of APAC Members in 2012
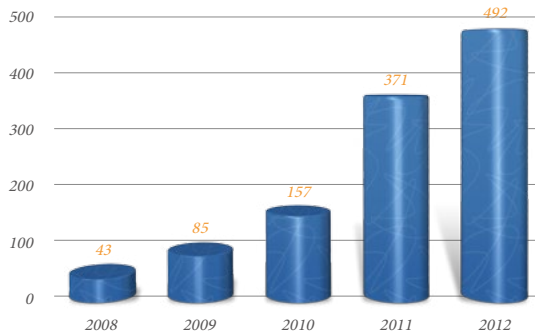
Comparison between the Handling of Phishing Websites in 2011 and 2012
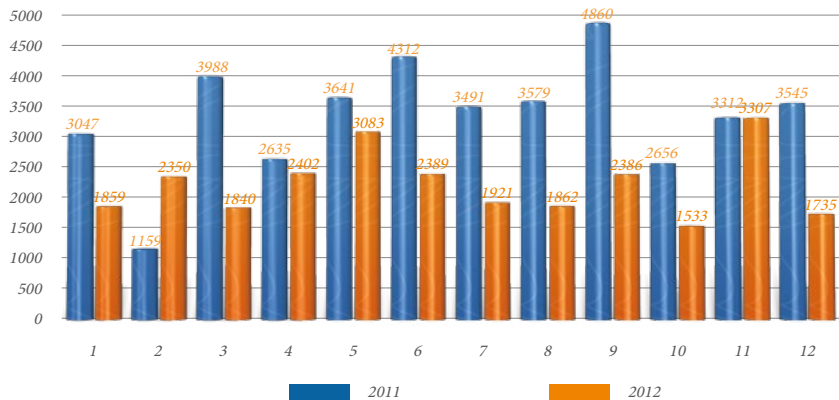
In 2012, APAC identified and handled a total of 26,672 phishing websites with the accumulated number amounting to 102,539.

Through the in-depth cooperation with suppliers of browsers, search engines and anti-virus software both at home and abroad, APAC forwarded the data of phishing website for processing in order to provide the maximum protection for the netizens when they visited the websites in the main segments. By the end of December 2012, APAC forwarded for processing a total of 66,242 phishing websites.

APAC published on a regular basis the information about the handling of the phishing websites and their new forms and trends to the general public in the monthly reports.

From April 25 to April 27, 2012, representatives of the Secretariat of APAC attended the Anti-Cybercrime Summit of APWG held in Prague. APAC and the participating guests exchanged information about the Chinese phishing websites in 2011 and the first half of 2012, anti-phishing technology and data sharing of APAC laboratory, collaborative processing and technological research on phishing websites, and legislation against cybercrimes in China. APAC and peers from this industry deeply and friendly exchanged information on phishing data sharing, collaborative processing of phishing websites and research on anti-phishing technology. In the meeting, APWG recognized APAC's contribution to the anti-cybercrimes and expressed thanks to APAC for the data it provided in the monthly report.

APAC held an industrial seminar participated by people from the banking and the securities industry on May 31, 2012. Representatives from the banking and the securities industry, suppliers of browsers and anti-virus software and National Domain Name Security Center conducted in-depth discussions about the Internet security issues such as the threats posed by phishing websites, summarized the anti-phishing experience, explored the security strategies, shared anti-phishing data and studied the Internet security technology, in order to jointly strengthen the anti-phishing force in China.

The annual meeting of members of APWG in 2012 was held in Puerto Rico from October 22 to October 25, 2012. The representatives from the Secretariat of APAC attended the meeting upon invitation and the work done by APAC was widely recognized and highly evaluated by peers from this industry. APAC established connection and cooperation with many overseas domain name registrars and network security organizations.

The annual meeting of APAC of 2012 was held in Beijing on December 5 with more than 200 attendees, including representatives of competent authorities and alliance members as well as experts from the Internet industry and the law industry. The Vice Chairman of APWG, Foy Shiver, attended this meeting upon invitation for the first time. He shared with others the situation of the phishing websites and network security both in Asia Pacific and around the world, as well as the experience and technology of handling with the phishing websites outside China.

The anti-attack DNS network grows more mature

In 2012, the anti-attack device SDNS-D developed by CNNIC was successfully deployed both in the primary node of the top-level nodes of national domain name and the service nodes of CDNS and SDNS, and was widely applied in the registration service organizations in Beijing, Shanghai, Shenyang, Xiamen, Ningbo and Mianyang, etc., boasting excellent anti-attack capability. CNNIC will expand its deployment, so as to more effectively identify attacks, give protection and build a comprehensive anti-attack DNS network.

SDNS-D adopted reconfigurable hardware FPGA (Field-Programmable Gate Array). The data plane based on FPGA and the control plane based on X86 structure form a perfect combination of excellent functions and performances and deployment flexibility. In addition, the census and patented algorithm of cleaning using FPGA made real-time census and variety of cleaning methods a reality, and attack identification with maximum likelihood was achieved based on the weighted cleaning with packet characteristic.

Application-oriented scientific research and innovations

Application-oriented Scientific Research and Innovations

Open access authentication and management platform of the Internet

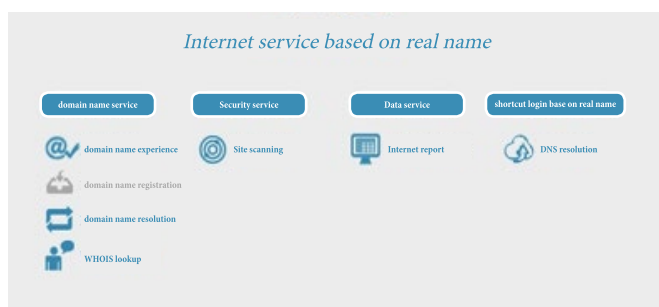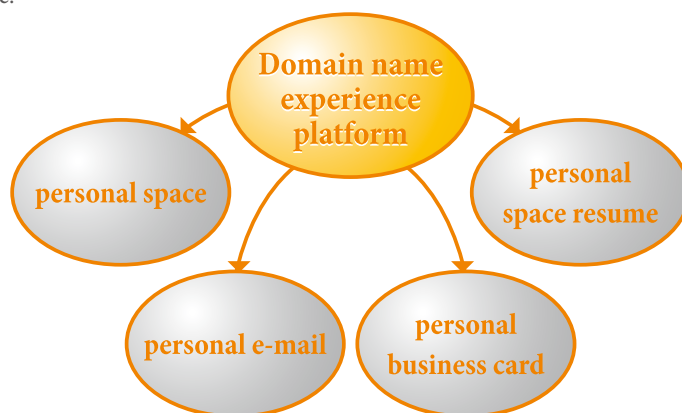CNNIC developed an open platform of access authentication and management for the Internet called CyberSpace to provide authentication and management required for various applications on the Internet and establish service access based on it. At this period, CyberSpace emphasizes on the experience of domain name throughout its life-cycle including the application for domain name and setting of personal space, etc.

```
          Domain name
          experience
           platform
   ┌──────────┼──────────┐
personal    personal    personal
 space      e-mail    space resume
           personal
          business card
```

Internet service based on real name

| domain name service | Security service | Data service | shortcut login base on real name |

@✓ domain name experience   ◎ Site scanning   🖥 Internet report   ☁ DNS resolution

📇 domain name registration

🔁 domain name resolution

👥 WHOIS lookup

After being launched as a separate new business, CyberSpace will consolidate the existing services of CNNIC provided for the public walfare to form an integrated service platform and an open API system.

DNS resolution service provided for the public interests

From 2011 to 2012 CNNIC started to provide cloud DNS service (CDNS and SDNS) for the public good.

The CDNS released by CNNIC is the first free CDNS provided by a ccTLD registry all over the world. Since it was launched in June 2011, CDNS not only provides more secure and more convenient resolution service for ccTLD users, but also offers beneficial supplementation and new demonstrations for the maintenance and operation management of China's existent domain name system.

智能DNS路由服务，跨越网络鸿沟，提供无边界高可靠解析服务。

Application-
oriented
scientific research
and innovations

Application-oriented Scientific Research and Innovations

DNS resolution service provided for the public interests

As a free public service for domain name introduced by CNNIC, CDNS is dedicated to building an open platform for DNS resolution and an incubation platform for Internet DNS application. Meanwhile, CDNS provides adequate protection for the whole DNS service system as an important complement of our national security system.

Following CDNS, SDNS as a free public resolution service (recursive resolution) was officially provided by CNNIC to the end users of the Internet on June 29, 2012. By leveraging the following three technological advantages, namely high-performance resolution software system independently developed by CNNIC, reliable wide area service cluster and professional operation monitoring platform, SDNS increased the resolution speed of Internet users, reduced the possibility of or even avoided the accidental suspension or hijacking of DNS service, and therefore effectively improved Internet users' experience.

The launching of SDNS further increased the overall security of service system of domain name resolution, elevated the level of public service system of the Internet and promoted the healthy and orderly development of the security system of network.

CNNIC built independent "5+1" resolution node based on BGP+Anycast technologies in 2012. Meanwhile, the advanced anti-attack device and flow cleaning device developed by CNNIC on the basis of its 15 years of experience in operation and management of national domain name, and Zebra and Zlope, the high-performance resolution software with independent property right, were equipped in the DNS resolution platform so that CNNIC could better provide secure resolution service of domain name for the users of DNS resolution service.

Distribution of SDNS Nodes

IDC of Russia

China Unicom Beijing

China Telecom Beijing

Yizhuang Data Center for local backup

China Mobile Shanghai

HKIX of Hong Kong

Application-oriented Scientific Research and Innovations

Visual and convenient navigation service in Chinese

Open data platform of the Internet that can be shared

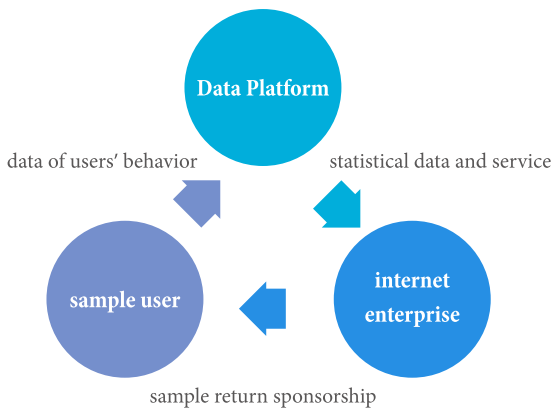Application-oriented scientific research and innovations

Visual and convenient navigation service in Chinese

The navigation website of Chinese domain names went online in March 2012. The Chinese domain names are categorized by the web address navigation and placed in the order of importance, so that the netizens can find and use them very conveniently. Web database is built to enable the netizens to find the websites they want to login into by searching. Reminders about error in the flow replace current reminders about the error in the resolution of Chinese domain name. Specifically, if the Chinese domain name that a netizen tries to have access to cannot be resolved, reminders about the error will be shown, and the website searching result and web address navigation will be available according to the Chinese domain name that the netizen has keyed in.

Open data platform of the Internet that can be shared

CNNIC opened the data platform of China's Internet for free (www.cnidp.cn) to the general public in 2011 and it was widely used and recognized by the general public. In 2012, CNNIC further improved the functions of the platform and strengthened real-time and authoritative annotation of the data on the platform, in order to provide better and a wider range of data and services and provide reliable data and decision-making reference for the research on Internet industry, enterprise operation and even industry management.

Undertake Public Responsibilities and Jointly Develop with China's Internet

Application-oriented
Scientific Research
and Innovations

Internationalized multilin-
gual e-mail

Internationalized multilingual e-mail

CNNIC held a press conference in Beijing on June 19, 2012, during which an e-mail was sent from an internationalized multilingual e-mail address for the first time in the world to the people from the Internet industry in Beijing, Hong Kong, Macao, Taiwan, Singapore, Malaysia, Germany, Australia, Canada and America, etc. This was another event of historical significance following the sending of the first e-mail from China to the world and it represented the official implementation of a new standard in the Internet industry. The application of multilingual e-mail will promote the overcoming of Internet language barrier and narrow the digital gap.

The international standard SMTP Extension for Internationalized E-mail (RFC6531) was made by the technical experts of CNNIC after ten years' hard work under the lead of Chinese Academy of Sciences and CNNIC and with the assistance given by scientists of many countries, and it was officially published by IETF on February 18, 2012, becoming the fourth IETF international standard published by CNNIC in the multilingual field of the Internet following RFC3743 RFC4713 and RFC5336. Based on this standard, CNNIC completed technical realization in cooperation with COREMAIL, an e-mail service provider. The successful sending of the world's first e-mail from a multilingual e-mail address on June 19 symbolized that the new standard, new technology, new application and new service were officially available in the real world.

The world's first e-mail sent from a multilingual e-mail address

E-mail is one of the most popular applications on the Internet, and the technical standard of multilingual e-mail address will accelerate the commercialization of multilingual email address and multilingual domain name. More and more netizens of non-English-speaking countries and regions will be able to send and receive e-mails in their native languages, which will benefit the netizens and better represents the openness and variety of the Internet.

**Application-oriented Scientific Research and Innovations**

Service for the New gTLD

The application of ever-changing big data technology

Service for the New gTLD

The Internet Corporation for Assigned Names and Numbers (ICANN) started to accept the application for New gTLD from the general public on January 12, 2012. As a national domain name registry, CNNIC has taken part in the program of New gTLD since 2011 and undertaken the application for top-level Chinese domain names including ".公司" and ".网络". Also, CNNIC assisted the China Academy of Telecommunication Research of MIIT in the submission of application for ".信息" and made efforts for the maintenance of critical resources of top-level Chinese domain names. In addition to studying the relevant policies of ICANN and protecting the interests of Chinese communities, CNNIC has completed the research, development and validation of the SRS registration system, WHOIS system, data hosting system and the monthly report system of registrar, laying a solid foundation for the country's operation and management of New gTLD.
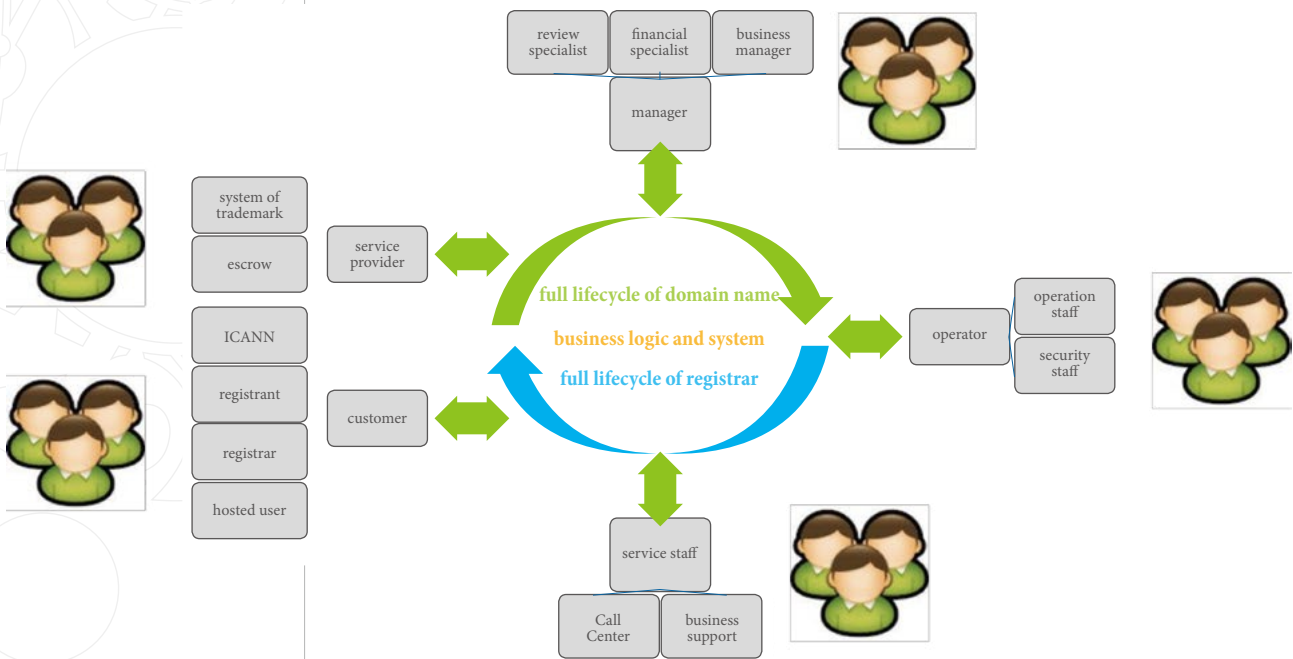
The application of ever-changing big data technology

With the rapid development of the technologies of Internet and cloud computing in recent years, the omnipresent devices are generating data every second, billions of users are exchanging a great deal of data every second, and the data to be processed is explosively increasing. There are higher requirements in the respects of timeliness and validity of data processing due to the business requirements and competitions.
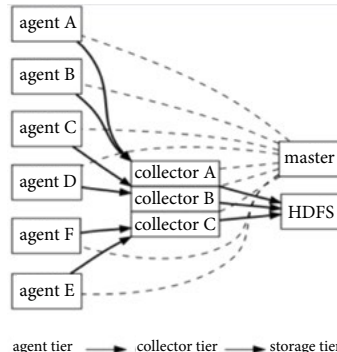
In 2012, CNNIC conducted acquisition, analysis and mining of big data of resolution in the monitoring and analysis of domain name service, ensured the dissemination and synchronization of big data in DNS data management, visualized the Internet survey data in the data platform, attempted to conduct business intelligence analysis of the business data in BOSS system, and conducted analysis of the data with abnormal flow in DNS server and anti-attack devices. All these efforts were applications of big data technology for the purpose of providing more stable and secure services of fundamental resources of the Internet for the users.

Application-oriented
Scientific Research
and Innovations

Technology of verification
of registered information

More applications of DNS
technology and resolution

Application-
oriented
scientific research
and innovations

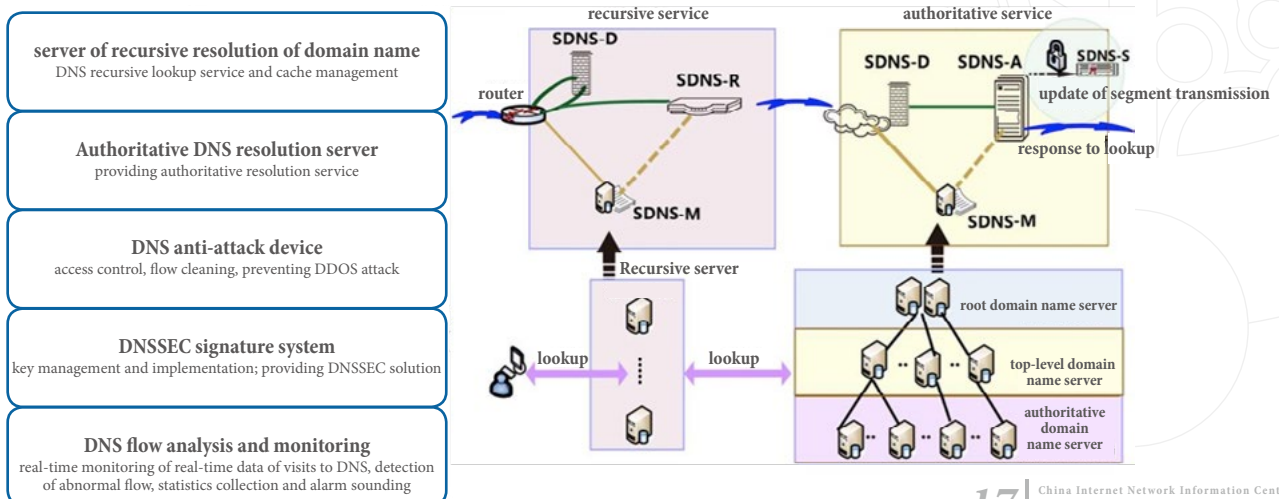## Technology of verification of registered information

The real-name verification of registration for national domain name, the prevention mechanism of inappropriate domain names, and the protection mechanism of registered information for domain name have been improved in recent years. Meanwhile, the corresponding technical measures of management of domain name registration have been in place. In order to strengthen the authenticity verification of registered information, increase the efficiency of information verification and help the government departments to establish standards of information validation, CNNIC introduced to the registration system the automatic verification technology of identity card and the authentication technology based on biometrics in 2012, making a major breakthrough. Now the submission and review of the information of the registrant, as well as the review and record of the application for domain name, may be completed in several minutes in the system on trial, and the domain name resolution may be available immediately. Meanwhile, the registrant may log into the registration system of national domain name via the video identification of human face. The system has witnessed a qualitative leap in the aspects of efficiency and user experience and will promote the rapid development of applications of national domain name.

More applications of DNS technology and resolution

CNNIC was devoted to the research and development of technology and products in DNS and IP fields, and it made many achievements in the key technologies and research fields on name and address protocol, data management, service and security and application analysis, developing a set of resolutions for DNS industry.

Name and address protocol	**Website address:** Ipv4/v6 protocol, transition, coding, allocation, location and origin tracing, etc **Domain name protocol and application:** DNSv6 extension, security protocol, ENUM, ONS, Chinese domain name and IDN, etc
Data management	**Information validation:** biometrics, third-party data comparison, automatic verification of identity card, intelligent review of domain name, etc **Management of registered information:** data association mining, data service for Internet governance, automatic entrance for record of domain name, data hosting and recovery, etc
Service and security	**High-performance resolution technology:** domain name cache management, resolution software architecture **Anti-attack technology:** Monitoring of attack flow, FPGA reconfiguration, basic hardware architecture platform **Monitoring technology of resolution security:** Detection of multi-dimensional information, quantification of security indexes, data storage and mining, visualization **Security technology of resolution system:** root server, DNSSEC deployment
Application analysis	**Application detection technology:** plural detection object processing, application feature extraction, consolidation of multiple features, class imbalance learning **Trusted application of domain name:** sign of user trust sign of service trust, sign of behavior trust, application of multilingual domain name

In 2012, CNNIC provided professional and independently developed DNS security solutions to the industry and the People's Liberation Army with its rich experience in the management of domain name registration and professionalism in the technologies of DNS field. Including basic business solution of domain name, authoritative DNS resolution solution, telecommunication-level DNS resolution service solution, DNSSEC solution, New gTLD solution and domain name security service plan. These solutions covered all the key factors regarding registration resolution service, attack pre-alert and security protection, and the online services will further confirm their feasibility.

server of recursive resolution of domain name
DNS recursive lookup service and cache management

Authoritative DNS resolution server
providing authoritative resolution service

DNS anti-attack device
access control, flow cleaning, preventing DDOS attack

DNSSEC signature system
key management and implementation; providing DNSSEC solution

DNS flow analysis and monitoring
real-time monitoring of real-time data of visits to DNS, detection of abnormal flow, statistics collection and alarm sounding

Conscientious Research and Professional Consulting Service

A faithful narration of the development process of China's Internet

CNNIC had conducted "Survey and Statistics Collection of the Development Status of China's Internet" on a regular basis since 1997 to record the constant changes of China's Internet, and the survey was conducted twice a year and had been conducted for 30 times. The survey had recorded the brilliant achievements made in the Internet industry in the past 15 years and the authority and objectiveness of the data obtained from the survey has been widely recognized in and out of China. The data of CNNIC is a major source of Internet statistics used by international organizations and Chinese government and has become an important basis of decision-making of Internet enterprises regarding investment and operation.

According to the 30th Statistical Report on the Development Status of China's Internet published in July 2012, mobile phone had overtaken desktop computer to be the top 1 Internet terminal in China, which confirmed and announced to the public the advent of the mobile Internet era in China, and encouraged and assured those enterprises that invested in and attached great importance to the mobile Internet and the government departments that strengthened the management and service of mobile Internet.

Scene of the conference for the publishing of the 30th Statistical Report on the Development Status of China's Internet

Undertake the projects in many fields entrusted by the government

In 2012, CNNIC continued to undertake or take part in the projects entrusted by the Ministry of Industry and Information Technology, the State Internet Information Office, Ministry of Commerce and other government departments of various regions, which included the provision of regular materials, survey and research, training and legislation. CNNIC reinforced its support for the government departments in various ways and became a helper of the government departments in their making policies of Internet in all aspects.

Project	Impact/Significance
Provided the materials about development status of e-commerce of China in 2012 on a monthly basis	Helped the Ministry of Commerce learn the fast-changing e-commerce market
Provided 18 report of the development status of Internet about 16 provinces and municipalities including Shanghai, Guizhou, Chengdu and Foshan	Helped the Internet administration departments learn the development status of local Internet industry
Conducted the evaluation of China's online retail market of 2011	Helped the Ministry of Commerce learn the development level of China's online retail market
Conducted research on the development trend of online retail	Helped the Ministry of Commerce learn the development prospect of online retail so it can make far-sighted policies
Assisted the Ministry of Commerce in the collection of e-commerce statistics of 2011 and gave training to the commerce departments of various places on the methods of survey and collection of statistics	Ensured the scientific approach was adopted in data collection and promoted the effective implementation of e-commerce statistics collection of China
Conducted research in the development of the industry of Internet culture of Sichuan Province	Provided basis for the making of policies for the development of industry of Internet culture in Sichuan Province
Prepared the 2nd economic census report: report of the development of Internet industry	It was the first comprehensive and systematic summary of the development status quo of China's Internet industry and helped all social circles to have a better understanding of China's Internet industry.
Drafted Administration Rules of Online Retail	It would help the standardized development of China's online retail market once completed.
Drafted Broadband Speed Testing Method – User's Online Experience Standard together with other entities	It would help to measure the broadband speed for Chinese users and learn the real broadband speed in China once completed.

Constantly intensify support for the application of information technology in scientific research

As the critical entity that supported the application of information technology in Chinese Academy of Sciences, CNNIC completed the evaluation of the application of information technology in Chinese Academy of Sciences in 2011 and were preparing the report on the evaluation of application of information technology and its development in Chinese Academy of Sciences in 2012. Until now, CNNIC has conducted evaluation of the application of information technology in Chinese Academy of Sciences for five times, prepared 3 reports on the development of application of information technology in Chinese Academy of Sciences, and conducted survey on the resources of information technology in Chinese Academy of Sciences once. All these work helped the information technology staff at various levels of Chinese Academy of Sciences to understand fully and objectively the status of informatization and to make reasonable and feasible decisions in the respect of informatization.

Propel comprehensive research on Internet policies

Over the year of 2012, CNNIC proactively conducted the research on Internet policies, paid close attention to the development of the world's Internet policies, especially the latest policies regarding IPv6 and NewG, and attended the meetings held by international Internet organizations and international forums such as ITU, ICANN, IETF, ISOC, APNIC and IGF, where CNNIC learned the international policies, took part in the making of policies, voiced opinions on behalf of China, fought for its rights and interests, and maintained a good relationship with the international Internet organizations. CNNIC tracked and analyzed the latest information in the Internet industry and relevant policies and updated the contents in the column of "Research on Internet Policies" on its Chinese and English websites in a timely manner so as to provide information service for the general public.

Over the last year, CNNIC kept close track of the medium- and long-term development plans of Internet, IPv6 technology and next-generation Internet, mobile Internet, Internet of things, e-government, e-commerce and information network security as well as the latest laws and regulations regarding Internet governance and regulation and real-world practices in the main countries and regions of the world, and provided to relevant departments suggestions and supports concerning policies based on our national conditions and the experience of other countries, manifesting the responsibility, obligation and public interests undertaken by CNNIC as the national Internet information center.

In order to do a better job for the public interests and assume its social responsibility, CNNIC, together with experts of the industry in and out of China, prepared and published for the first time Research Report of the Development of IP Address and Domain name Technology of the Internet based on the latest technological development of the fundamental resources of Internet such as IP address and domain name, especially the latest technological development of the IPv6 and next-generation Internet, IDN and multilingual e-mail address, DNSSEC and domain name security as well as the application of these new technologies in the emerging fields of Internet of things, cloud computing and big data, and will make the reporting regular and systematic so as to reflect the latest progress, analyze the characteristics and predict the development trend of IP address and domain name technology for the reference by the managers, researchers and workers in the Internet industry.

Conduct the research and development of the technology of Internet of things

The problems of information silo and inability of information sharing were more and more prominent with the development of technology of Internet of things. As the national Internet information center, CNNIC paid attention to the sharing of information in the Internet of things as early as 2004 and was the first to suggest using the two-stage uniform sign management service technology in Internet of things to solve the problems of inconsistency of rules of mass signs and barrier of sharing of cross-industrial information in the Internet of things. Based on such technology CNNIC established the Service Platform of Signs Resolution of Internet of Things in 2012 by leveraging its advanced DNS infrastructure and professional technologies. Various industries and fields can share information by using the positioning resolution service provided by the platform.

CNNIC was also actively involved in the formulation of standards of Internet of things organized by China Communications Standards Association (CCSA), China Standardization Working Group on Sensor Networks, RFID Standardization Work Group, and Working Group of Basic Standards of Internet of Things, etc, paid close attention to the activities of the working groups of international organizations such as IETF working on the standards of Internet of things, and made its contribution to the building of Internet of things where interconnection and intercommunication in the real sense are possible.

Conscientious Research and Professional Consulting Service

Lead the research and development work of DNSSEC technology

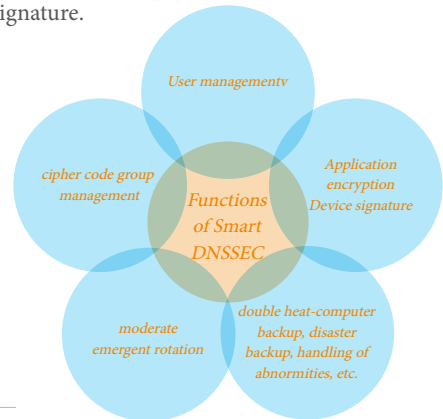Devoted to the research and development of high-performance WHOIS technology
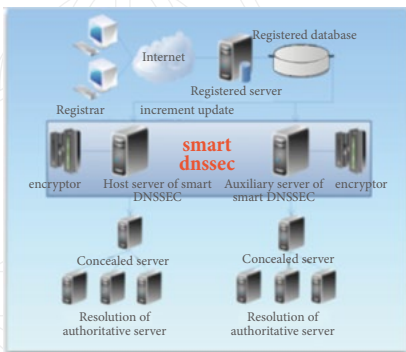
Lead the research and development work of DNSSEC technology

DNSSEC technology is an important technical measure to enhance the security of DNS protocol and ensure the accuracy of DNS resolution for users. As an important constructor, administrator and operator of national top-level domain, CNNIC was the first in China to conduct technical pre-research and testing of DNSSEC technology. In 2012, CNNIC conducted tests of DNSSEC applications by using the DNSSEC simulation platform and conducted research on the impact of the implementation of DNSSEC technology on the infrastructure of China's Internet and the feasibility of implementation, accumulating valuable experience for the implementation of DNSSEC technology in national domain name system and even various parts of China's domain name system. Meanwhile, the technical team of CNNIC conducted research on the supporting technology of DNSSEC with independent intellectual property rights while studying the advanced foreign technology to obtain a niche in the field of international DNSSEC research and application.
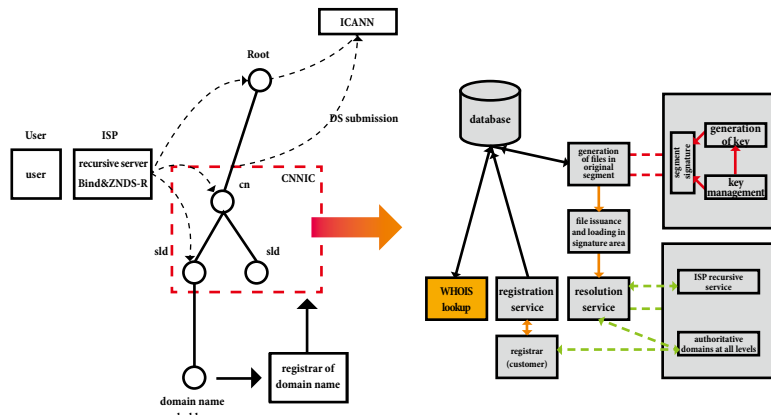
DNSSEC aims at providing data origin authentication and data integrity validation for DNS resolver, and the authoritative server of BIND widely used on the Internet does not support the automatic key rotation after signature.

To beef up the security of zone data, solve the problems of key exchange and rotation in DNSSEC deployment and realize the automatic deployment and stable operation of DNSSEC, CNNIC developed the new Smart DNSSEC system to drive BIND and relevant encryption hardware devices to realize the functions of key generation, key backup, key rotation, zone data signature, zone data load, zone data re-signing, emergent rotation and disaster backup in the DNSSEC deployment and support dynamic modification of parameters during system operation. This system provides a set of simple and complete automatic deployment plans for the users who need DNSSEC deployment and can meet the requirements of DNSSEC deployment in all kinds of settings.

Devoted to the research and development of high-performance WHOIS technology

CNNIC developed high-performance WHOIS server in 2012, shortening the lookup response time of WHOIS service by an order of magnitude. Meanwhile, CNNIC has been devoted to the research and development of next-generation WHOIS technology and standards. In 2012, CNNIC submitted the draft of standards of next-generation WHOIS to WHOIS working group which is entitled Domain Name Registration Data Access Protocol Response Format defined in JSON.

In August 2012, CNNIC was awarded the project of next-generation WHOIS system by ICANN which was called Restful WHOIS after beating the other 10 odd bidders in the top-level Internet domain name industry. The open-source software of next-generation WHOIS system developed in this project will become important basic software of the world's domain name industry. It showed CNNIC's willingness and capability of contributing advanced technologies to the world's Internet industry as well as its determination to be committed to public interests and play a leading role in the standardization of service.

Open and Cooperative International Exchange

## Promote the cooperation among enterprises, universities and research institutes through the open laboratory

In consistency with the development trend of Internet (openness, cooperation and sharing), CNNIC conceived and organized DNSLAB at the end of 2011 to accelerate cooperation among the competent government departments, research institutes, colleges & universities and the industry of Internet so that they can conduct research on basic technologies of Internet, share resources and complement each other. In a year since its establishment on December 30, 2011, project management system and working mechanism of DNSLAB kept improving, the project application procedure was gradually simplified and the project review procedure was standardized. Until the end of 2012, CNNIC had cooperated with nearly 20 scientific research institutes, colleges & universities and famous enterprises of the industry, and it solicited from the society a total of over 30 topics in 2 rounds and granted 19 topics in 2012 after the organized face-to-face review by experts and various forms of argumentation and communication. 21 were sent for publication or published for phase I project, and it is expected that nearly 70 intellectual properties including theses and standards, nearly 10 software prototype systems and over 10 patents or software copyright will be generated in two rounds of projects in this year.

| Phase I Topics	Cooperating Entities
Data analysis and visualization research in complete lifecycle of domain name	Scientific Data Center of Computer Network Information Center (CNIC) of Chinese Academy of Sciences
Theoretical research on large-scale wireless network scheduling based on optimized decomposition	Institute of Computing Technology of Chinese Academy of Sciences
Research on statistical methods of e-commerce transactions based on fixed sampling frame	Tsinghua University
Research on the construction of marketing system of new media and measurement methods	Tsinghua University
Research on the trusted sign service in Internet of things	Fudan University
Research on the key technologies of integrated signage network system	Beijing Jiaotong University
Research on the protection of privacy on the Internet	Beijing University of Posts and Telecommunications
Research and realization of the technology of preventing inappropriate application of domain name based on the records of domain name resolution	Shandong University
Research on the credit evaluation mechanism of domain name system	Institute of Computing Technology of Chinese Academy of Sciences
Phase II Projects	**Cooperating Entities**
Research and realization of the analysis system of visualization of DNS log	Supercomputing Center of CNIC
Research on DNS geolocation technology and customer scale estimation methods based on measurement	Harbin Institute of Technology
Research on energy-conserving route protocol of next-generation Internet	Tsinghua University
Research on mobile intelligent management and transmission optimization technology for multiple-interface terminal in wireless convergence network environment	University of Science and Technology of China
Model and key technologies of security architecture of cloud storage	Joint Lab (SmartSecuri – University of Science and Technology of China)
Development of multi-source data analysis and mining platform	Datatang.com
Research on detection and anti-attack theories and methods of abnormal DNS flow	Academy of Mathematics and Systems Science of Chinese Academy of Sciences
Research on theories and methods of intelligent detection of phishing	Asia University
Research on key technologies of content-addressable of future Internet	Beijing University of Posts and Telecommunications
Statistics of scale of China's websites	Internet Society of China
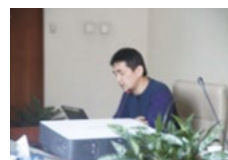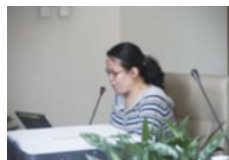
Undertake Public Responsibilities and Jointly Develop with China's Internet

Open and Cooperative International Exchange

Cooperate with organizations in and out of China with an open mind

Open and cooperative international exchange

Cooperate with organizations in and out of China with an open mind

In 2012, CNNIC actively participated in various activities held by ICANN and the discussions of relevant policies. In the year, CNNIC joined many working groups under ICANN and became an observer of GNSO, member of working group of Trademark Clearinghouse (TMCH) and voting member of NTAG after application. With the development of new generic top-level domain, CNNIC joined the VIP working group of ICANN in 2012 to promote the research work of IDN project together with the peers from other countries and regions.

As China's impact on the world's Internet industry mounted up, China exerted increasingly substantial influences on the international organizations such as ICANN. CNNIC won the bid for holding ICANN meeting of 2013, and this meeting to be held in Beijing in Spring will attract the leaders of domain name industry in and out of China and create new opportunities for China's Internet community to have more influences in the world.
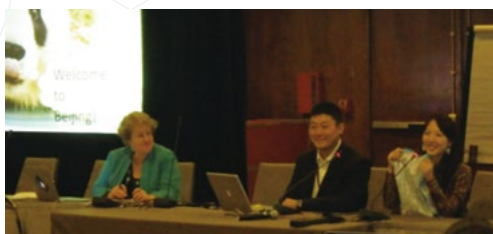
CNNIC won the bid for holding ICANN meeting 2013

Representatives of ISC visited CNNIC

At the beginning of June of 2012, CNNIC invited Joao Damas, the Vice President of Internet Systems Consortium (ISC) and the American leader of the joint lab, Shane Kerr, the leader of Bind10 project (a next-generation domain name server project) and Mounira Ruma, Customer Service Director of Asia-Pacific region, to attend the mid-year work conference of CILAB in Beijing, where they summarized the work done by CILAB in the first half of the year and made work plans for the second half of the year.

During the meeting, both sides discussed and were determined to further promote the F-root mirror deployment in China and the cooperation on the building of service nodes of .CN in North America, and they agreed to jointly provide training on domain name and IP technology in China. Both parties communicated about their cooperation on the global projects such as BIND 9, BIND10 and DHCP. As it was agreed in the meeting, CNNIC will send more Chinese engineers to take part in these projects. As for technological research, both parties will have more cooperation in the field of technological standards of the Internet.

At the end of August of 2012, representatives of CNNIC attended the 34th meeting of APNIC where they learned the advanced experience in IPv6 deployment and discussed with other organizations from Asia-Pacific region about address management in the post-IPv4 era and some issues of IPv6 deployment. During the meeting, CNNIC won the bid to hold the 36th APNIC meeting held in August of 2013 together with BII. The holding of APNIC meeting in China in 2013 will provide a high-end platform for sharing experience and communication for the people involved in China's IPv6 industry deployment as well as promote the development of China's IPv6 address allocation and even the whole IPv6 industry deployment.

In 2012, CNNIC served as the vice team leader of TC1WG4 (new technology and international standard group) in China Communications Standards Association (CCSA) and vice group leader of WG1 (general group) in TC10 (Ubiquitous Network), as well as joined the domestic organizations such as China Standardization Working Group on Sensor Networks, RFID Standardization Work Group, and Working Group of Basic Standards of Internet of Things, playing an active role in promoting the formulation of new technological standards of Internet of things.

In 2012, CNNIC actively took part in the academic exchange activities organized by China Computer Federation and Chinese Institute of Electronics, became a committee member of YOCSEF after application, held successfully YOCSEF Club once, and invited peers from academic circle of China to visit CNNIC to know about the scientific research work of CNNIC.
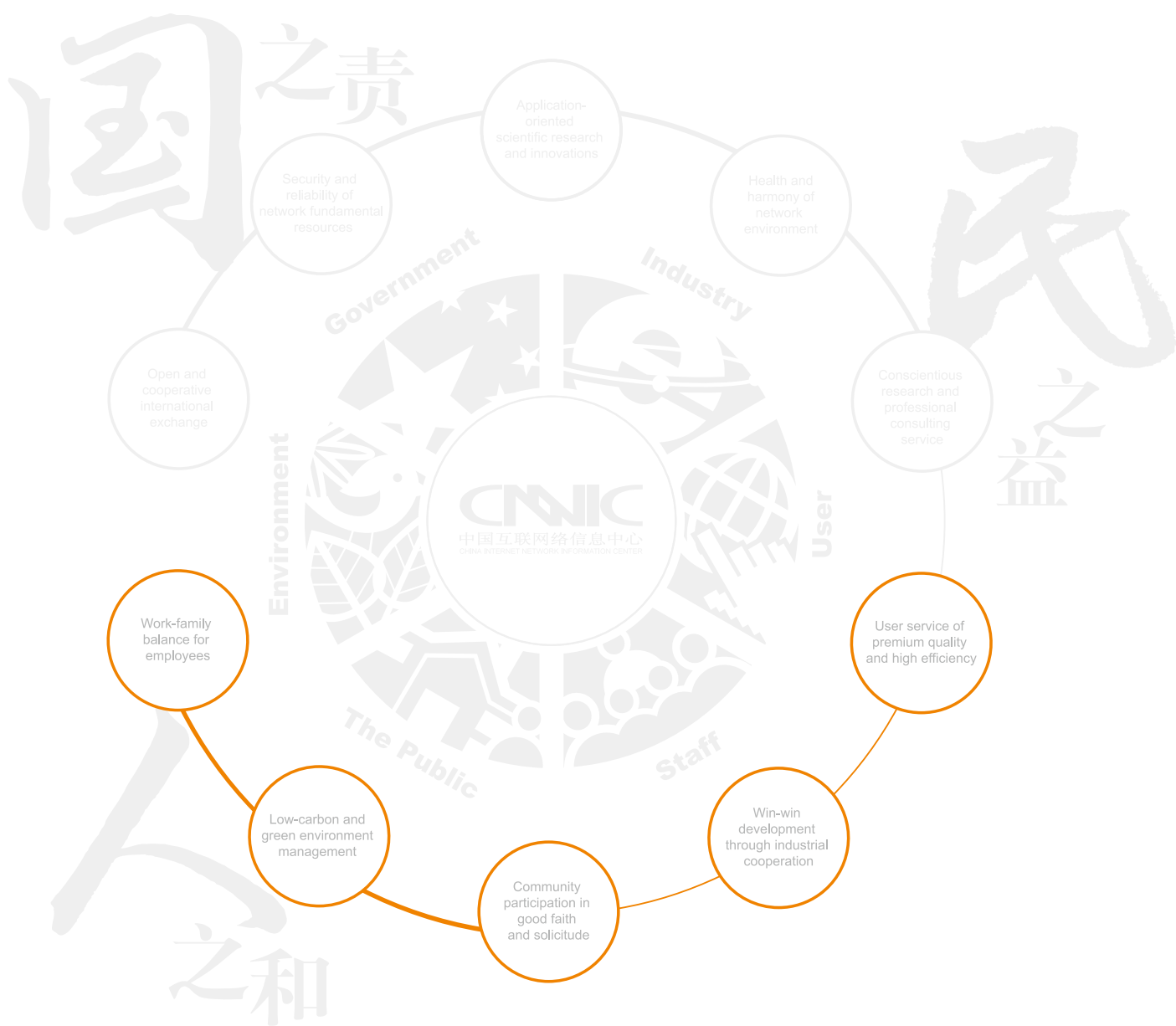
CNNIC visited LANIC in 2012, and held the China-Laos Internet Management Training in Kunming in December by giving training on fundamental resources of Internet and their management to 15 representatives of the Ministry of Communication of Laos and LANIC. 4 representatives from Jordan, Mongolia and Vietnam were also invited to join the training, which strengthened the friendship between NICs of the five countries.

Scene of the 34th APNIC Meeting

2012 China-Laos Internet Management Training

Fulfill Specific Responsibilities and Grow with Social Responsibility Stakeholders

Application-oriented scientific research and innovations

Security and reliability of network fundamental resources

Health and harmony of network environment

Government

Industry

Open and cooperative international exchange

Conscientious research and professional consulting service

Environment

User

Work-family balance for employees

User service of premium quality and high efficiency

The Public

Staff

Low-carbon and green environment management

Win-win development through industrial cooperation

Community participation in good faith and solicitude

Win-win Development through Industrial Cooperation

Provide impetus to the industrial development with high-quality research data and service of Internet

Offer better service for more industries by extending research fields and service modes

CNNIC has been committed to the notion of serving the industry with its Internet research. It will make continuous contributions to the network transformation of both Internet enterprises and traditional enterpris.

Internet enterprises

In 2012, CNNIC finished a number of vertical research reports about Internet. It continued the annual research about mobile Internet, e-commerce and search engine; moreover, it had started researches on online payment and Internet security. Together, it provided more reference for decision making of enterprises in the vertical fields of Internet.

Training materials for marketing

Weekly information for traditional enterprises

Traditional enterprises

In 2012, CNNIC gave incentives to traditional enterprises for their transformation and upgrading toward Internet by conducting a number of Internet application researches in these enterprises, sending them manuals about the methods and skills of using Internet regularly each week, and providing them on-site training about Internet marketing in Shenzhen, Guangzhou, Nanjing, Chengdu, Shenyang, Zhengzhou and other cities.

Promote development in the industry with innovated service modes

CNNIC has been exploring new service modes for users in the industry. Based on China Internet Data Platform released in early 2012, CNNIC held Internet Data Mining Competition. This innovated mode, combining "enormous primary data provision and data mining competition", collected the wisdom of all competitors, brought about great amounts of research achievements about the actions of Internet users, enabled talents for data mining and Internet to stand out, and provided practical platform for potential practitioners such as students.

Benefit more countries, enterprises and users with enhanced spreading and sharing

CNNIC attached greater importance to the spreading and sharing of research achievements on Internet in 2012. Besides introducing to the world the research results of each Statistic Report on Internet Development in China, CNNIC made endeavors to enhance the vividness of research reports about the vertical fields of Internet and released the translated versions of these reports. It strengthened the spreading of all Internet research results via network channels such as official websites, blogs, and microblogs, and traditional media such as newspapers and magazines so as to make these results more popular and easier to be acquired by more countries, enterprises and users. It enabled the international Internet community to be more familiar with the Internet development in China, and benefited the development of the industry and the decision making in enterprises.

Win-win
Development
through Industrial
Cooperation

Promote IP industry
with a developmental
view

Promote IP industry with a developmental view

Promote the transition to IPv6

With the overwhelming development of Internet into IPv6 in China, CNNIC has been actively pushing forward the plan and deployment of IPv6 network in different industries. On June 6, 2012, CNNIC announced the establishment of the IPv6 Open Exchange & Application Validation Center which aimed at providing free IPv6 experimental access, application validation environment, and technical consultation and training about IPv6. This center shoulders the mission of building a cooperative and win-win platform for open exchange and application validation in the progress of IPv6 development and accelerating the transition to IPv6 in China.

It is a sophisticated and systematic project for Internet to transit into IPv6. Excellent transition technology and management & control system need to be designed for different situations to ensure the availability and credibility of the next generation Internet based on IPv6 technology. In 2012, CNNIC, as a major participant and drawing upon its technical advantages and experience in the management of Internet fundamental resources, assumed the National Key Technology R&D Program of "Research and Application Demonstration of IPv6 Transition Mechanism and Control System" of Ministry of Science and Technology.

Provide high-quality service and training of IPv6

CNNIC took initiative in providing technology support and service for local governments on their informatization toward IPv6 in 2012. In response to the invitation by Guangdong provincial government, CNNIC participated in next generation Internet development research of Guangdong. And technicians from CNNIC provided their research reports of Expert Opinion on the Development Plan of IPv6 in the 12th Five-Year Period of Guangdong based on the current status and future demand of the development of Internet in Guangdong. In the report, strategies and plans were proposed for the establishment and development of next generation Internet in Guangdong.

On July 23, 2012, CNNIC, together with Guangdong Internet Society, hosted a training session on IPv6 technology. It was a free training course about basic technology of IPv6 delivered to the members of Guangdong Internet Society and CNNIC Allocation Alliance in Guangdong. It also provided support for the enterprises engaged in Internet in terms of nurturing and upgrading IPv6 talents in Guangdong. At the end of October, CNNIC and APNIC held in collaboration an IPv6 technology training session with more in-depth and detailed contents.

Organize IPv6 industrial exchange

On June 6, 2012, as the annual World IPv6 Day, CNNIC held the 2012 Summit of China IP Address Allocation Alliance in Zhuhai, Guangdong Province. Representatives in the summit conducted multi-level discussions on the extensive allocation and commercial use of IPv6 for the purpose of stimulating the development of IPv6 in China.

Win-win Development through Industrial Cooperation

Optimize registration service system with an earnest attitude

Optimize registration service system with an earnest attitude

Further standardize the service of registrars

CNNIC strengthened the supervision on the behavior of domestic domain name registrars in their popularizing national domain names to users in 2012. In particular, CNNIC carried out supervision and punishment strictly toward actions that may harm the interests of users such as cheating and threatening users in the name of government and false declaration of the actual registration time. With these efforts, actions of domestic domain name registrars had been standardized soundly, which in turn expedited the development of Internet in China.

Upgrade the overall service quality of registrars

To optimize service quality and provide more convenient service, CNNIC set up a supporting post for review and approval. It was dedicated to handling and reviewing operation problems for registrars and users and also had real-time tracing and dealing progress feedback. The post enabled one-stop solution for review and approval, strengthened communication and interaction between registrars and users. The efficiency and quality of the service had thus been effectively promoted, and the satisfaction degree of registrars and users had been greatly leveled up.

CNNIC finished the regulation of audit standard and the compilation of operational manual of information verification. It provided registrars with standard audit criteria and operation instruction, displaying its fulfillment of the responsibilities and the supervision toward national domain names.

Assist registrars in the popularization of knowledge on domain name

CNNIC held a series of meetings to popularize domain name knowledge and train registrars in different regions in 2012. By October 2012, CNNIC had held such meetings in 20 provinces, over 60 first-tier, second-tier, and third-tier cities (including 4 municipalities directly under the central government). Netizens in China had been taught knowledge of Internet domain name and their understanding of the industry of Internet had remarkably enhanced.

Share experience and help registrars establish customer care system

Quality of services provided by different registrars is different, and after-sale service is particularly unsatisfactory for some registrars. Therefore, CNNIC sorted out all materials ever since it started providing customer care service, and established a document system about customer care. CNNIC sent such documents to registrars to help them establish customer care system and promote their service level.

Attach importance to professional training and raise the general level of the industry

To ensure that the registrars keep pace with the latest standard and policies about audit, CNNIC organized 11 trainings and career talks to registrars in the whole year where 118 persons attended. With the spreading of operation knowledge, thousands of employees in registrars benefited. Training and dissemination of new standards ensured that the audit policies were communicated to registrars and users in time.

Actively communicate the social responsibility

CNNIC strengthened its communication with registrars about social responsibility in 2012. Leaders of CNNIC introduced social responsibility of CNNIC and shared their experience and achievements in fulfilling the duties on the annual registrar meeting held in early 2012. After the meeting, CNNIC handed out questionnaires about social responsibility to all registrars and would improve its daily work with the results of the research.

User Service of Premium Quality and High Efficiency

Exquisite user service oriented at users' needs

Create a special web page of "Public Service" on CNNIC website to popularize professional knowledge

In 2012, CNNIC built a special web page of "Public Service" where all necessary information about daily business had been sorted out, including service information for users, tools and forms, and rules in the business. It became convenient for users to look up and understand information.

The service mechanism of "first-be-inquired responsibility system" is introduced for the sake of whole-course tracking of and thorough solutions to the problems of users

For problems raised by users related to CNNIC, our center had improved mechanisms of personnel management and handover, as well as other mechanisms and channels that could accelerate settlement of problems through coordination both inside and outside CNNIC, so as to ensure that all problems raised by users would be attended to, considered, tracked and settled in the first time with one-stop service.

With the establishment and implementation of "First-be-inquired Responsibility System", and the implementation of one-stop service provided by CNNIC, our center received fewer complaints from users toward registrars. By the end of December 2012, the number of complaints declined to 33.

Better public message service won wide recognition by users

Ever since the introduction of the public message service in 2011, users had been active in communicating and interacting with CNNIC through the channel of public message. The center received 1,226 public messages in 2012. In the meantime, in order to know clearly of users' demand and resolve their problems, CNNIC called 561 users and talked directly with them in response to their messages, and it won public recognition.

Improve innovation on initiative service and optimize customer care channels

With the transformation from passive service toward initiative service, CNNIC had been carrying out initiative service and outbound call to users in 2012. User service had developed from single function to multi-function with multi-business and innovative service. It had become an organic body integrating customer support, care and revisit, market investigation, data analysis and supervision channel.

CNNIC had continued its care and revisit to users of Chinese domain names to know comprehensively problems identified during registration and use of domain names, delve into users' demand, and raise users' degree of satisfaction and loyalty. By means of telephone interviews, CNNIC called a total of 18,969 Chinese domain name users corresponding to 46,549 Chinese domain names. As for customer care, CNNIC instructed and helped users to open domain name resolution in accordance with the actual situation of the users and the registered domain names. The center informed promptly users of the registered domain names of product trends and policies in order to ameliorate users' experience and satisfaction. It also accelerated the delivery and settlement of complaints by finding out the satisfaction degree of users toward service provided by registrars.

Internal customer service management targeting at superior quality and efficiency

Establishment of customer relationship management system (CRM)

In 2012, CNNIC established CRM system based on its original services in an effort to upgrade service quality, to enhance customer satisfaction, and to manifest CNNIC's core value of the brand, which is "professionalism, responsibility and service". The introduction and utilization of the system would more comprehensively and scientifically record and manage all information that customers communicated with CNNIC through telephone, email, public message, etc. It would provide detailed and actual data in helping CNNIC be better acquainted with the demand of customers, collect opinions and suggestions from customers, assist customers in tackling difficulties, and follow up the complaints from customers.

Accelerate the audit process of domain name

Adhering to the notion of "professionalism, responsibility and service", CNNIC innovated energetically and built successfully an efficient domain name audit method combining automatic system audit with manual audit. Resorting to this new audit mode, CNNIC completed over 3.12 million Chinese and English domain name audits, with an increase rate of 224.68% compared with the same period of last year. The complaint about audit in a year remained zero, and the accuracy of audit attained 99.9%. On the premise of audit quality, CNNIC achieved rapid growth in the efficiency of domain name audit and promoted the competitiveness of CN domain name comprehensively.

Provide service from the perspective of domain name supervisor

CNNIC recruited 15 supervisors of the national domain name registration service in 2012. By far, 31 enthusiastic users of national domain name have joined the team of service supervisors.

CNNIC also made active efforts in inviting supervisors to attend different activities and had in-depth communication with them in 2012. In June, CNNIC invited many enthusiastic users of national domain name to participate in the symposium for the national domain name development. In the symposium, some users became supervisors of national domain name registration service, making great contributions to the supervision team. During the communication for a long time, the supervisors came up with many positive and constructive suggestions mainly concerning our core business, such as domain name registration policy, domain name publication and popularization, supervision and control of registration market, and thus gave impetus to and further improved our work.

Work-Family Balance for Employees

Protect employees' interests
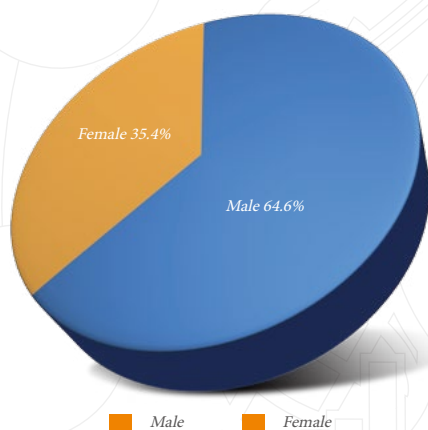
Staff composition

By the end of the reporting period, there were a total of 280 employees in CNNIC, 16 more compared with the number at the end of the previous year. Minority employees accounted for 5.4%, staff with master's degree or above 160, and deputy senior and above 37.

CNNIC maintained a relatively high proportion of female employees and a lower than average rate of employee turnover in the industry in 2012. Female employees accounted for 35.4% and voluntary employee turnover rate was 8.8%.

Table of Basic Indexes

Item	Data	Remark
Rate of concluding labor contracts	100%	Including employees of all sorts
Cover rate of social insurance	100%	Including employees of all sorts
Employee rate of joining the labor union	100%	Including employees of all sorts

Female-Male Staff Ratio

Minority – Han Nationality Ratio

Female 35.4%

Male 64.6%

Minority Nationality 5.4%

Han Nationality 94.6%

◾ Male   ◾ Female

◾ Han Nationality   ◾ Minority Nationality
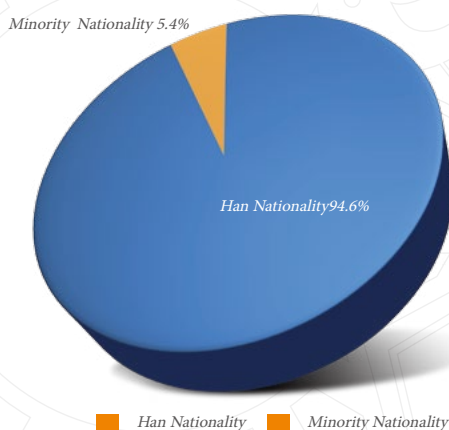
Improve working rights and interests

Conforming to Notice to Maternity Insurance Policy Changes for Employees in Beijing (No. 334 (2011) of Bureau of Human Resources and Social Security of Beijing), CNNIC paid employees' maternity insurance in Beijing in accordance with orders from superior supervisors. The previous management methods for public institutions had been canceled. As the maternity insurance for employees was incorporated into the social security system, the payment standard in maternity periods for most employees has been enhanced.

Conforming strictly to related national provisions, CNNIC prohibited discrimination toward religion, sex and culture. Forced labor was also forbidden. Payment systems for female and male were identical. CNNIC called upon the employees to participate in the "plan of mutual aid to the needy employees" which was welcomed by the needy employees.

CNNIC abode strictly by Special Rules on the Labor Protection of Female Employees (No. 619 Order of the State Council), according to which maternity leave for female employees has been extended to 98 days from 90 days. Female employees thus benefit greatly.

Fulfill Specific Responsibilities and Grow with Social Responsibility Stakeholders

Work-Family Balance for Employees

Express solicitude for the family of staff

Express solicitude for the family of staff

The first Open Family Day

June 3, 2012 was the 15th anniversary of CNNIC. On this special day, CNNIC held its first Open Family Day with the theme of "earning trust with inner respect in the family of CNNIC". In this event, families of our staff were invited to CNNIC to experience CNNIC culture. Over 100 family members attended our event. Led by several senior leaders including Director Huang Xiangyang, they together viewed the display of CNNIC development and visited machine rooms. They also participated in our parents-children campaign with enthusiasm. Over 50 colleagues from CNNIC volunteer team provided careful support and service for the family members despite the rain. The Family Day was widely favored and received many positive feedbacks. Staff obtained more understanding and support from their families, who in return took great pride in the career the staff was engaged in.

Group Photo of the Family Day

Micro-Bazaar

Micro-bazaar: a place for mutual help

It is important to bring into full rein both the power of the organization and the force of each employee of CNNIC. CNNIC opened "micro-bazaar" in 2012 to call upon people to help each other by accumulating "micro-power". Micro-bazaar offered a platform for giving and sharing. In the micro-bazaar, staff members shared their innovative ideas that helped them in the past, communicated the latest news about daily life, exchanged or gave for free their second-hand articles to colleagues in need. They even opened their heart and wrote down their hopes and expectations. Though it was not an activity of great scale, the love among colleagues was true, heartfelt and warm, and kindled their life like sparks of fire.

Abundant activities of culture and sports for employees' health

CNNIC paid great attention to all employees' health and encouraged activities of all kinds. CNNIC had established many sports associations, such as football, basketball, badminton, tennis, bowling, and gymnastics. CNNIC also participated enthusiastically in activities held by superior entities, such as broadcast gymnastics and Tai Chi Chuan.

CNNIC offered annual body check for all employees regularly and also invited doctors to provide health consultation and treatment for employees. It also endeavored to build a healthy working environment.

Promote involvement of employees

Team building was deeply rooted in employees' hearts

Team building should not only bring about happiness and relaxation, but also should find its way ever deeper into employees' hearts. In 2012, CNNIC designed and arranged a number of events by focusing on the inner motivation of the team and delving into trust, so as to offer employees a chance to bask in the relaxation of body, heart and soul in the midst of the hustle and bustle of daily work. These activities aimed at nurturing a healthy attitude of employees to appreciate themselves and accept others, increasing mutual understanding, and enhancing team solidarity. Events were held inside departments and among departments. Each single staff in CNNIC was deeply affected, was enthusiastic in getting involved and provided positive feedback in response.

Team Building Poster of Supporting and Service Center

Group Photo of Team Building of Operation and Management Center

Continuous strategic communication among all the staff members

The annual communication of all staff members remained an important approach for employee involvement. In the mid-year communication meeting for all employees in 2012, 328 suggestions were received. All suggestions were given feedbacks in the manner of discussion at the meeting and response after the meeting. Implementation of all suggestions from all staff in 2011 was followed up to ensure the commitment of 100% implementation.

During the strategic communication, CNNIC organized all the staff to attend the training for the sense of information security. By means of e-learning, involvement was enhanced, so was the security sense among all staff.

In 2012, CNNIC also invited specialists from professional social responsibility research institutes to deliver lectures on social responsibility. They exchanged opinions with CNNIC staff on hot topics such as the implementation of social responsibility.

Better involvement in the "Golden idea project"

In the past years Golden idea project focused on pooling the wisdom and efforts of everyone, while involvement indicated only proposing suggestions. In 2012, the project optimized the process of appraisal after collecting ideas widely. "Vote by the mass" was introduced to combine with the appraisal by experts this year; thus, the appraisal of ideas became more open and participative. The rate of vote among all staff amounted to 90%. The selected golden ideas manifested the heartfelt wishes of the majority.

Advent of the corporate magazine "We are CNNIC"

The corporate magazine We are CNNIC was born in 2012, the first publication that reflected the true feelings of people in CNNIC. The magazine aimed at expressing "authentic story and true feeling". It was written, edited and published by staff in CNNIC. In each issue, there would be about 20 articles which embody the thoughts and feelings about daily work and life. With true stories, simple narration, real thoughts and optimized management, this magazine serves as a mirror through which people in CNNIC know and communicate with each other.

We are CNNIC

**Work-Family
Balance for
Employees**

Support for staff develop-
ment

Support for staff development

Career concern plan for key staff

Career concern plan for key staff in 2012 provided support for personal development, career development, interpersonal relations, and job performance in the manner of "coaching". It helped plan and develop the potential of well-performed workers, and solved effectively bottlenecks and confusions confronted by them. In this way, their work efficiency was promoted and they took great pleasure in work. Structure and allocation of human resources were optimized, and performance and competitiveness of CNNIC as a whole was significantly enhanced. A total of over 40 primary-level key staff had been supported by the plan with the satisfaction degree over 90%.

Scene of Key Staff Training

Optional learning and navigation plan

CNNIC introduced the plan of optional learning in 2012 with the idea of "preferential development of talents". It advocated self learning and took a further step for the implementation of training policy. Staff could choose the most suitable training conforming to the needs of the post and personal needs. Choices included advanced study and exchanges both at home and abroad, attending different training courses, and study for an academic degree. Navigation plan for senior managers was proposed corresponding to the optional learning. The plan aimed at preparing management talents for the future development of CNNIC. Special projects were established in CNNIC to support studies mentioned above. In 2012, 2 were supported by navigation plan and 6 were supported by optional learning.

Micro-class – an innovated learning mode

Micro-class was opened in 2012. It was a study platform accessible to all staff who could sign in freely. Common problems in work, life and balance between the two were collected. It was a training mode aiming at breaking away from the traditional instillation mode and enabling the participants to discuss and develop collectively in a more open, plural, initiative and interactive way. Four modules – In-depth and Accordant Communication, Career Planning, Systematic Thinking and Presentation Skills, were chosen in the class. With the two platforms – online and offline platforms, resources were fully open to the public. Each class had been given repeatedly twice and

nearly 100 interested participants from all departments had been attracted in total. The micro-class had also become a new channel for interdepartmental study.

Poster of Micro-class

Community participation in good faith and solicitude

Solicit donations for Happiness Library for the west

CNNIC Staff launched the donation for "Happiness Library, Showing Love in 2012" in March 2012 at the 50th anniversary of the event of learning from Lei Feng.

The donation was initiated by China Population Welfare Foundation and Microsoft MNS China, and assisted by the family planning association in Zhongguancun. Staff from CNNIC responded and made donations enthusiastically. They contributed to 50 primary schools in Yuanlin County, Hunan Province to show their care and love for the study and life of teenagers in poverty-stricken areas in the middle and western China.

"Make donations for financially disadvantageous students to complete their study"

The fourth party branch in CNNIC donated in two batches, the first for 3 students and the second for 1 student. Refer to the image above for the donation

At the beginning of August 2012, CNNIC carried out donations with the theme of "making donations for financially disadvantageous students to complete their study". This event drew support from the platform provided by China Social Welfare Foundation – Qingquan Educational Fund. CNNIC could directly get in touch with the recipients. A total of over RMB 16,000 was collected for four impoverished students in Liaoning Province and Guizhou Province to help them complete their study.

On August 10, 2012, CNNIC invited high school students nationwide funded by Qingquan Educational Fund for a visit. Staff members communicated closely with these students to make them feel the love and solicitude from the society and to convey the love and responsibility of CNNIC.

Internet auditorium paid attention to Internet life of the community

Since the launch of Internet auditorium in September 2011, it has provided a number of public speech tours to disseminate knowledge on Internet for university students, Internet practitioners and webmasters of small and medium-sized websites. In 2012, the targeted audiences of the Internet auditorium extended to groups of people in need of knowledge about Internet such as senior citizens of communities, left-behind children in rural areas and migrant workers. The event received positive social responses. Neighborhood committee even sent a thank-you letter after the event and invited our volunteers to visit again their community and to provide more knowledge on Internet.
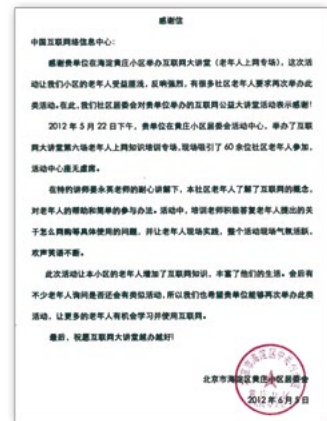
The public lecture held in the central elementary school of Sicheng Town, Lingyun County of Guangxi Province in November 2012 won welcome and appraisal from all students and faculty members of the school. The school and the publicity department of Lingyun County sent thank-you letters to CNNIC to appreciate the activity and to show their gratitude for the Internet auditorium in increasing public welfare for left-behind children in the old revolutionary base areas.

Celebration of International Children's Day with students and faculty of Chengxin School in Daxing District

Seven volunteers of CNNIC went to Chengxin School in Daxing District to celebrate International Children's Day with students and faculty there on June 1, 2012. On that day, volunteer representatives commended 190 outstanding students who won the 2011-2012 CNNIC Scholarship and awarded them with presents.

CNNIC has been sponsoring Chengxin School in Daxing District ever since 2007. CNNIC Scholarship was founded to award outstanding students. The website of the school (http://www.dxhope.cn) was built by CNNIC based on its own advantages to help the school with the publicity of public welfare. The school presented CNNIC with a plaque inscribed with "offering financial aid for education with selfless love" to show the gratitude for help.

Successful application for ISOC funding program for public welfare

CNNIC applied successfully for the funding program for the disadvantageous groups from Internet Society (ISOC) – "Improve Teaching Level of Chengxin School in Daxing District in Beijing with the Help of Internet". This was the first time that CNNIC obtained financial aid from an international program, and it would help improve the image and social influence of CNNIC in international Internet community. It also embodied the social responsibility CNNIC undertook for the public and the community.

Low-carbon and Green environment management

Recycle old computers

For computers that had been used for over five years, their performance would be assessed by special software. Parts of good performance would be assembled into office computers for reuse. In this way, the use of computer resources was maximized.

Avoid using paper cups

Entertainment rooms were set up in the office building for staff members to relax during working time. Using disposable paper cups would be detrimental to the environment in the long run. Therefore, a high temperature sterilizer was installed in each entertainment room to provide sterilization for cups.

Practice paper free office by internal information system

All the staff members utilize internal information system to circulate and review documents, issue regulations and rules and handle routine work, realizing paper free office. For documents for which printing is needed, double sided printing is advocated to save papers.

To effectively reduce travel expenses, external meetings are held in the forms of telephone conference and video conference unless face-to-face communication is required.

Look into the Future

The year of 2013 is a year to further implement the 12th Five-Year Plan. CNNIC will continue to fulfill its responsibility as the national Internet information center and its social responsibility by constantly improving itself.

Service quality will be attached great importance to. CNNIC will proceed to upgrade its national domain name service oriented at the users in 2013. On the one hand, to improve the registration efficiency, CNNIC will put much time and effort in registration audit and website filing of national domain name, and will, on the basis of the achievements in 2012 and through new technology and horizontal cooperation, spare no efforts to once again shorten the time needed for registration and open for use. On the other hand, CNNIC will delve into the application value. It will strive to bring into full play the service value of national domain name in traditional service of Internet, new technology and new application. Application and cooperation for national domain name will be extended to make it more useful and convenient.

Competence for scientific research will be enhanced further. CNNIC will step up its efforts in scientific research on national network fundamental resources in 2013. Scientific research will improve the operation and administration of national domain names, give incentives to the development of hardware of our network fundamental resources, and win over discourse power in emerging technologies in the field. CNNIC will also serve the entire industry by drawing upon its scientific research competence under the New gTLD background.

Research on Internet will be intensified. CNNIC will improve its capacity in big data analysis on the basis of current achievements on Internet research in 2013. CNNIC will give full play to its potential and advantages, keep pace with the progress of the society, meet the requirements for social development and formulate industrial research reports with better quality and broader contents.

A platform for international communication will be established with our efforts. The 46th ICANN spring meeting will be held in Beijing in 2013. As one of the sponsors of the meeting, CNNIC will spare no effort to hold a successful meeting to enhance friendship, promote cooperation and build a significant industrial platform for international communication.

Looking into 2013, CNNIC will fulfill the above tasks, serve the users, and meet the requirements of the industry and the country. We will make persistent efforts in public welfare projects and practice our concept of social responsibility of "Responsibility to the Country, Benefits to the Society and Harmony among People".

Honors of Social Responsibility awarded to CNNIC in 2012

Date: April 2012
Content: Award of Advanced Institution
Issued by: China System and Software Process Improvement Association

Date: December 2012
Content: excellent supervision supporting organization
Issued by: the Operation Supervision and Coordination Department of the Ministry of Industry and Information Technology

Date: December 2012
Content: "Two IETF international standards including SMTP Extension for Internationalized Multilingual Email" drafted by CNNIC won the third prize.
Issued by: China Communications Standards Association

Date: December 2012
Content: Award of Excellent Member
Issued by: China Communications Standards Association

Date: December 2012
Content: Thank You Letter
Issued by: Online News Coordination Bureau of the State Internet Information Office

Indexing of GRI

Overview table for the index system of social responsibility report of Internet service industry

As a national Internet information center, CNNIC has certain difference in its organization property and social responsibility with corporations. Therefore, social responsibility standards are referred to selectively.

Content		No.	Core index	Index
Part I **Preface** **Series P**	P1 Report standard	P1.1	Report timeframe	P0
		P1.2	Report organization scope	P0
		P1.3	Release range	P0
		P1.4	Data explanation	P0
		P1.5	Reference standard	P0
		P1.6	Reliability assurance	P40
		P1.7	Contact person answering the report and its contents and contact	P0
		P1.8	Report access way and extension reading	PO
	P2 Speech of executive	P2.1	Statement of organization and social responsibility	P1
		P2.2	Summary of performance and inadequacy of social responsibility	P1
	P3 Responsibility model	P3.1	Social responsibility model	P3-P4
	P4 Organizational profile	P4.1	Organizational name, property of ownership and headquarters	P2
		P4.2	Main products and services	P2
		P4.3	Operating region and operational framework	P2
		P4.4	Size of organization	P29
		P4.5	Organizational governance institution	P2
		P4.6	Board structure	Not applicable
	P5 Key performance table	P5.1	Comparison table for social responsibility performance	P9/P10
		P5.2	Data Sheet for key performance	Not available
		P5.3	Honor table during report period	P37
Part II **Responsibility management** **Series G**	G1 Responsibility strategy	G1.1	Concept of social responsibility	P4
		G1.2	Topic of core social responsibility	P4
		G1.3	Social responsibility plan	P36
	G2 Responsibility governance	G2.1	Governing bodies of social responsibility	P4
		G2.2	Organizational system of social responsibility	P4
		G2.3	Management system of social responsibility	Not available
	G3 Responsibility integration	G3.1	Promote supply chain partners to fulfill their social responsibilities	P26/P28
	G4 Responsibility performance	G4.1	Build index system of organizational social responsibility	P4
	G5 Responsibility communication	G5.1	Expectations of stakeholders to the organization and responses	P4/P27
		G5.2	Internal communication and exchanges for social responsibility involved by organizational senior leaders	P31
		G5.3	External communication and exchanges for social responsibility involved by organizational senior leaders	Not available
	G6 Responsibility research	G6.1	Carry out CSR subject research	P31
Part III **Market performance** **Series M**	M1 Shareholder responsibility	M1.1	Management system of investor relations	Not applicable
		M1.2	Growth	Not applicable
		M1.3	Profitability	Not applicable
		M1.4	Security	Not applicable
	M2 Customer responsibilities	M2.1	Management system of customer relations	P28
		M2.2	Promote product / service innovation	P12-P17
		M2.3	System and measure ensuring transparent tariff	Not applicable
		M2.4	Customer satisfaction survey	P26-P28
		M2.5	Customer satisfaction	P26-P28
		M2.6	Establish consumer dispute settlement mechanism	P27
		M2.7	Activity respond to complaint / incident	P20/P22
		M2.8	Customer complaint resolution rate	P27
		M2.9	Customer information protection	P12-P17
		M2.10	Authenticity, reliability and integrity of news or advertising information	P18/P19/P25/P27
		M2.11	Charges reminding mechanism	Not applicable
		M2.12	Mechanism forbidding unhealthy and immoral information	P9-P10
	M3 Partner responsibility	M3.1	Social responsibility evaluation and investigation of supply chain	Not applicable
		M3.2	Strategy sharing mechanism and platform	Not applicable
		M3.3	Procurement responsibility system and (or) policy	Not applicable
		M3.4	Integrity management philosophy and system security	Not applicable
		M3.5	Concept of fair competition and system security	Not applicable
		M3.6	Credit assessment rating	Not applicable
Part IV **Social performance** **Series S**	S1 Government responsibility	S1.1	Law-abiding compliance system	P29
		S1.2	Law-abiding compliance measures	P29/P35
		S1.3	Law-abiding compliance training	P31

Content		No.	Core index	Index
Part IV Social performance Series S	S1 Government responsibility	S1.4	Major law-abiding compliance negative information	无
		S1.5	In response to national policy	P9-P10
		S1.6	Total tax	不适用
	S2 Staff responsibility	S2.1	Compliance with national labor laws and regulations	P29
		S2.2	Labor contract concluding rate / collective contract coverage rate	P29
		S2.3	Cover rate of social insurance	P29
		S2.4	Percentage of employees joining trade union	P29
		S2.5	Prohibition of forced labor	P29
		S2.6	Days for annual paid vacation per capita	P29
		S2.7	Equal employment system	P29
		S2.8	Proportion of male and female wages and salaries	P29
		S2.9	Proportion of female managers	Not available
		S2.10	Employment rate or amount of the disabled employees	Not available
		S2.11	Occupational disease prevention system	Not applicable
		S2.12	Staff mental health system / measures	P32
		S2.13	Physical examination and health file coverage	P20
		S2.14	Staff training system	P32
		S2.15	Staff training strength	P32
		S2.16	Staff career development	P32
		S2.17	Democratic management and factory affairs disclosure	P31
		S2.18	Channel of staff comments or suggestions conveying to the high-level	P31
		S2.19	Investment to help needy staff	P29
		S2.20	Ensure work-life balance	P30
		S2.21	Employee satisfaction	Not available
		S2.22	Staff turnover rate	P29
	S3 Community responsibility	S3.1	Assessing the impact of operation on the community	Not applicable
		S3.2	Staff localization policy	Not applicable
		S3.3	Localized procurement policy	Not applicable
		S3.4	Donation guidelines or donation system	P33-P34
		S3.5	Total amount of donations (ten thousand Yuan)	P33
		S3.6	Policies and measures supporting volunteer activities	P33-P34
		S3.7	Data of employee volunteer activity	P33-P34
		S3.8	Mechanism preventing Internet addiction	Not applicable
		S3.9	Mechanism preventing pornographic information dissemination	P7/P9-P10
		S3.10	Fighting against spam and network fraud	P7/P9-P10
		S3.11	Mechanism protecting juveniles	P9-P10
Part V Environmental performance Series E	E1 Environmental management	E1.1	Establish the concept of environmental protection	P35
		E1.2	Environment protection training and mission	P35
		E1.3	Performance of environment protection training	P35
		E1.4	Green procurement	P35
	E2 Saving resources and energy	E2.1	Policies and measures supporting renewable energy development	Not applicable
		E2.2	Policies and measures supporting recycling economy	P35
		E2.3	Systems / measures saving electricity in office	P35
		E2.4	Amount of electricity saved and saving proportion in office	Not available
		E2.5	Water conservation systems / measures in office	P35
		E2.6	Amount of water saved and saving proportion in office	Not available
		E2.7	Systems / measures for saving paper in office	P35
		E2.8	Amount of paper saved and saving proportion in office	Not available
	E3 Emission and pollution reduction	E3.1	Actively respond to climate change	Not applicable
		E3.2	Greenhouse gas emissions or emission reductions	Not applicable
		E3.3	Systems / measures to office waste disposal	P35
		E3.4	Domestic garbage disposal systems / measures in office	P35
Part VI Postscript Series A	A1	Outlook	Planning of organization on social responsibility	P36
	A2	Report evaluation	Evaluation of report by social responsibility or industry experts, stakeholders, or professional organization	P40
	A3	Reference index	Adoption status of index required to disclose in this guidance	P38-P39
	A4	Feedback	Reader survey form and reader feedback channels	P41-P42

Third-Party Review

中国社会科学院经济学部
企业社会责任研究中心

Research Center for Corporate Social Responsibility Chinese Academy of Social Sciences

As an important infrastructure builder, operator and manager of China information society, and with the vision of developing into a "world-class network information center", China Internet Network Information Center (CNNIC) has established a responsible image by pushing forward each aspect of network fundamental resources, protecting users' interests and public welfare, implementing the concept of social responsibility of "Responsibility to the Country, Benefits to the Society and Harmony among People" into daily operation and daily work, and communicating actively with stakeholders. This is the second year that CNNIC has issued its social responsibility report. Structure, content and compiling procedure of the Report have been greatly improved.

In terms of structure, the Report followed general standards and requirements for international social responsibility report. In addition to basic elements for social responsibility report, the Report also gave prominence to characteristics in fulfilling the social responsibility of CNNIC. The body of the Report was divided into two parts: to develop with China Internet by undertaking the public responsibility and to grow with stakeholders by practicing its special responsibility. The Report disclosed systematically CNNIC's vision, system, performance and cases in fulfilling social responsibility.

There were five public responsibilities and five special responsibilities in CNNIC's social responsibility system in the Report. They are "security and reliability of network fundamental resources, health and harmony of network environment, application-oriented scientific research and innovations, conscientious research and professional consulting service, and open & cooperative international exchange", and "win-win development through industrial cooperation, user service of premium quality and high efficiency, work-family balance for employees, community participation in good faith and solicitude, low-carbon and green environment management" respectively. They were comprehensive in content, clear in structure and distinguished in feature.

Compiling was prepared in the procedure of "collect topics, review selected topics and determine topics". After the completion of compiling, the Report was reviewed by a third-party by invitation. The procedure for the compiling of the "Report" became more standard and ensured the quality and responsiveness.

In general, it is an excellent social responsibility report featuring reasonable structure, comprehensive content, and standard compiling procedure. To further improve the quality of the Report, it is suggested that CNNIC disclose more substantial topics and improve the comparativeness of data and the balance of information.

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December 28, 2012

To continuously improve the work of China Internet Network Information Center (CNNIC), we hope to get your feedback, which is very important for us to improve and enhance working quality. We hope you will take your time to give valuable advices for our work and the report.

Reader Feedback Form

How do you think about our work on public interest activities?

Your information			
Name		Organization	
Tel		E-mail	

Your comments				
How do you think about our work on public interest activities?				
☐ Very good	☐ Good	☐ General	☐ Bad	☐ Very bad
☐ Other suggestions or comments, please specify:				
Are you willing to participate in public interest activities with CNNIC? If you do, which of the following activities would you like to participate in?				
☐ Internet knowledge popularization	☐ Network service for traditional enterprise	☐ Open research on Internet technology	☐ Create a healthy and orderly Internet environment	☐ Participate in Internet special investigation research
☐ Other suggestions or comments, please specify:				
How do you think about our work on promoting the development of national ccTLD?				
☐ Very good	☐ Good	☐ General	☐ Bad	☐ Very bad
☐ Other suggestions or comments, please specify:				
How do you think about our work on helping the growth of Internet industry / enterprises?				
☐ Very good	☐ Good	☐ General	☐ Bad	☐ Very bad
☐ Other suggestions or comments, please specify:				
How do you think about our work on participating in international Internet community activities to promote international Internet position?				
☐ Very good	☐ Good	☐ General	☐ Bad	☐ Very bad
☐ Other suggestions or comments, please specify:				
How do you think about our work on serving Internet users?				
☐ Very good	☐ Good	☐ General	☐ Bad	☐ Very bad
☐ Other suggestions or comments, please specify:				
Which field do you expect to cooperate with CNNIC in the future?				
☐ Open research	☐ Technology research and development	☐ Security safeguard	☐ Statistical investigation	☐ International exchange
☐ Public interest activity	☐ Others, please specify:			
What is your advice and suggestion to CNNIC's work in fulfilling its social responsibility?				
What is your advice for CNNIC public interest activities?				
Please give your opinion and advice on other work of CNNIC:				

Reader Feedback Form

Comments and Suggestions to the Report

Your opinion on the report in general				
☐ Very good	☐ Good	☐ General	☐ Bad	☐ Very bad

Information disclosed in the report is				
☐ Very rich	☐ Rich	☐ General	☐ Not sufficient	☐ Little

Information quality disclosed in the report is				
☐ Very high	☐ High	☐ General	☐ Low	☐ Very low

Your opinion on the structure of the report				
☐ Very reasonable	☐ Reasonable	☐ General	☐ Bad	☐ Very bad

Your opinion on the layout of the report				
☐ Very reasonable	☐ Reasonable	☐ General	☐ Bad	☐ Very bad

Please give your opinion and suggestions for the social responsibility report released by China Internet Network Information Center

Contacts:

Public Relations Department, China Internet Network Information Center
Postal Address: 4 South 4th Street, Zhongguancun, Haidian District, Beijing
Postal Code: 100190
E-mail: pr@cnnic.cn

CNNIC

中国互联网络信息中心
CHINA INTERNET NETWORK INFORMATION CENTER

2012
Social Responsibility Report for CNNIC

China Internet Network Information Center (CNNIC)

Contacts:
Public Relations Department, China Internet Network
Information Center

Add: 4 South 4th Street, Zhongguancun, Haidian District, Beijing,
100190 China
Tel:86-10-58813000 **Fox:**86-10-58812666 **Web:**www.cnnic.cn