Standards for web-based public e-mail service
Issued by the Internet Society of China (ISC)
(Trial Version)

1   General provisions

1.1   The e-mail service is a basic Internet application service. As a speedy, efficient and low-cost means of communication, e-mail facilitates the on-line exchange of information and communication between Internet users and offers companies additional business opportunities. However, the advantages of e-mail are being crippled by network misuse, for example spam. The security, reliability and quality of the e-mail service suffer from the lack of clearly-defined service standards. Faced with this problem, the Internet Society of China (ISC) has drafted the present standards by working together with network service providers and e-mail service providers, with the aim of setting up a standardized mechanism for the e-mail service in order to facilitate the growth of e-mail service providers and users and ensure a better quality service to netizens.

1.2   The present standards are applicable to public e-mail service providers such as members of either ISC or local Internet societies, as well as other entities that will observe the standards and wish to be supervised.

1.3   The present standards include provisions governing the e-mail service process as well as provisions and quality indicators related to system operation, maintenance and customer service.

1.4   E-mail service providers shall, as far as applicable, formulate their own detailed rules for implementation on the basis of these standards and bring into place a sound service quality control system.

1.5   The various indicators mentioned in the standards shall not be applicable to any that cannot be predicted, avoided or surmounted objectively.

1.6   As the enforcement organ of the present standards, ISC maintains the right to adjust the service index items to be measured and to modify the quality indicators according to the requirements of the e-mail service providers and users and changes in overall service quality. ISC is also responsible for the supervision and control of the implementation of the standards.

2   Definitions and abbreviations

2.1   E-mail

E-mail, as referred to in the present text designates the means whereby an electronic message is conveyed over the Internet; the message may include such contents as text, image, audio or video. Each mailbox used for sending and receiving e-mail has a unique e-mail address over the Internet. The typical format of an e-mail address is username@domain name.

2.2   Basic e-mail services

Basic e-mail services refer to the basic services related to an electronic mailbox offered to its users by an e-mail service provider, including:

2.2.1   a unique permanent e-mail account on the Internet,

2.2.2   the basic e-mail sending and receiving functions,

2.2.3   temporary storage of the e-mail at the server end,

2.2.4   an anti-spam function and the obligation to inform the user of the disposal of the spam.

2.3   E-mail value-added services

E-mail value-added services refer to the services other than the basic e-mail services provided by a service provider to its users based on their e-mail accounts.

2.3.1   anti-virus

2.3.2   instant message alerts

2.3.3   other e-mail value-added services

2.3.4   encrypted e-mail transmission

2.4   Internet information service providers

Internet information service providers are mainly service providers who provide Internet users with information and services for a fee, for example homepage development.

2.5   RAID

RAID (Redundant Array of Independent Disks) is a technology used to enable better storage performance than a single hard disk as well as to provide data redundancy.

2.6   POP/SMTP

POP (Post Office Protocol) is an electronic protocol that specifies the connection between a personal computer and an e-mail server on the Internet and for e-mail downloads.

SMTP (Simple Mail Transfer Protocol) is a set of rules which govern the transmission of mail from the source address to the destination address and which are intended to control the transit mode of mail.

2.7   Webmail

Webmail (hereinafter referred to as web) is an http-based accessible website that sends and receives e-mails and provides user profile management.

3   Qualifications and practice conditions for e-mail service providers

E-mail service providers are telecommunication service providers, telecommunication value-added service providers and Internet information service providers that allow e-mail users to send, receive or read e-mails in accordance with the law. They should have the necessary qualification certificates and satisfy the conditions of practice.

3.1   In order to engage in operational Internet information services, a potential e-mail service provider should file an application for a telecommunication value-added business licence for Internet information services with the telecommunication authority of the province, autonomous region or municipality concerned or with the competent administration of the information industry under the State Council. In order to engage in non-operational Internet information services, one should notify the telecommunication authority of the province, autonomous region or municipality concerned or the competent administration of the information industry under the State Council.

3.2   Other qualification certificates required under national or local law or by the telecommunication administration should be prepared.

3.3   The e-mail service provider shall have, in line with its scale of business, professional staff for system operation and maintenance, customer care, technical support and management.

3.4   The e-mail service provider shall, in line with its scale of business, equip itself with the appropriate network environment and hardware as well as a machine room to house the e-mail service equipment.

3.5   The e-mail service provider shall provide its service by using self-developed, purchased or rented e-mail system software that respects copyright, or by using open source systems.

4   Commitments of e-mail service providers

4.1   E-mail service providers shall ask their users to provide true information for their profile used to decide the owner of a mailbox. In cases where the information provided by the user is fictitious, false or incomplete, the e-mail service provider is entitled to deny the service.

4.2   E-mail service providers are obliged to respect the confidentiality of the e-mail address, e-mail content and personal information of their users. They shall not divulge any user information in any form to third parties without the consent of the users.

4.3   E-mail service providers shall only provide information and notification relevant to the e-mail service. They shall not distribute third-party commercial information to users without their consent.

4.4   If a service provider intends to terminate its e-mail service to users as a result of a change in the market, it shall inform its users well in advance and provide them with a free transit service for one month as from the date on which the termination takes effect (except in the case of *force majeure*).

5   Provisions governing the e-mail service process

5.1   The e-mail service provider shall specify the service functions, delivery time, tariffs, subscription fee collection method and payment schedule, as well as the details of the after-sale service available to anyone subscribing to the service.

5.2   The e-mail service provider shall establish with its users, in written form or in online agreements, the rights and obligations of each party before the service is provided.

5.3   When a user has a query concerning the service charge, the e-mail service provider shall offer every convenience required for checking and provide adequate explanations as long as the billing data are stored. For any dispute with a user, the e-mail service provider shall have the responsibility of maintaining all the relevant first-hand information and material until the dispute is fully settled.

6   Provisions governing system operation, maintenance and customer service

6.1   Provisions governing system operation and maintenance

6.1.1   To ensure the routine operation and maintenance of the e-mail system with a view to providing secure and stable services, the e-mail service provider shall set up an operation and maintenance system with dedicated professional operational and maintenance staff.

6.1.2   An effective and lasting monitoring and testing mechanism shall be established in order to identify any quality issue pertaining to the operation of the e-mail system.

6.1.3   Maintenance process and contingency measures in particular shall be defined in order to ensure the smooth operation of the system.

6.1.4   An e-mail system must be reliable and secure. Crucial data shall be backed up by RAID and other redundancy measures. User passwords shall be stored using an encryption algorithm. An operation log shall be kept intact and a session control/time-out mechanism created.

6.1.5   The e-mail system offered by a service provider shall be equipped with an anti-spam function.

6.1.6   The e-mail service provider shall inform the relevant users 24 hours prior to any system commissioning or network and software upgrades expected to affect the users in their use of the system.

6.2   Provisions governing customer service

6.2.1   The e-mail service provider shall set up a long-term, stable, convenient and effective customer service to ensure the service's regular use by the users. Special customer service units shall be set up to deal with users' queries and complaints concerning services and subscription fees.

6.2.2   The e-mail service provide the shall provide the service to its users through user-friendly approaches and channels, with a dedicated telephone number, mailbox and website for customer service.

6.2.3   The e-mail service provider has the obligation to inform its users of any potential problems and possible solutions associated with the use of the e-mail service.

7   Quality indicators for system operation and maintenance and customer service

7.1   Quality indicators for system operation and maintenance

7.1.1   System maintenance time: at least 5*8 hours

7.1.2   Average total failure time per month: a maximum of 400 minutes

Total failure time per month means the aggregate of all the durations of failure within a month.

Average total failure time per month = duration of service interruption caused by failures*(number of users affected/total number of users)

7.1.3   Average total commissioning time per month: a maximum of 500 minutes

Total commissioning time per month means the aggregate of all the durations when the use of the system is affected due to commissioning.

Average total commissioning time per month = duration of service interruption*(number of users affected/total number of users)

7.1.4   System availability rate: a minimum of 99%

System availability rate means the duration of system uptime each month in proportion to the total length of time of the month in question.

7.1.5   Annual uptime: a minimum of 300 days

Annual uptime means the total number of calendar days in a year when the users' use of the system is not affected by any failure.

7.1.6   Billing error rate: a maximum of $3*10^{e-5}$

Billing error rate refers to the number of user complaints on billing errors in proportion to the total number of users charged.

7.1.7   Retention of data and log backup

7.1.7.1 Data mainly refers to such information as users' e-mails.

The service provider shall keep the data of its users permanently under storage. When the data occupy more space than that specified by the service, the service provider is obliged to remind the user to remove the data before new data are taken up (unless otherwise agreed with the user).

The service provider may clear away the mail and other information of a user when the service to that user is terminated (unless otherwise agreed with the user).

7.1.7.2 Retention of log backup: 60 days

Retention of log backup means that a user's web log-on record as well as SMTP/POP sign-on and access record shall be kept for 60 days. When the service to the user is terminated, the service provider may stop keeping such information (unless otherwise agreed with the user).

7.1.8   E-mail system sending delay: an average of 10 minutes; a maximum of three hours

E-mail system sending delay refers to the duration required from the time at which a user completes sending a mail (i.e. from the complete receipt of the mail by the e-mail system) via a client or web page to the start of the transmission of the mail by the e-mail system to the target post office.

7.1.9   E-mail system receiving delay: an average of 10 minutes; a maximum of three hours

E-mail system receiving delay refers to the duration required from the time at which a mail is received completely from the source post office by the e-mail system to the time when the user is able to access the mail via the client or web page (i.e. the e-mail system has completed delivery of the mail to the mailbox of the user).

7.1.10   Mean uptime rate: 99%

This rate refers to the ratio between system uptime and system runtime.

7.1.11   Spam ratio

The average number of spam messages in proportion to the total number of e-mails received by one user.

7.1.12   Regular e-mail loss rate

The number of regular e-mails received intact from source post offices but failed to be delivered to the users' mailbox by the e-mail system in proportion to the total number of regular e-mails received intact from source post offices.

7.1.13   Users shall be required by the e-mail servers to do SMTP certification.

7.1.14   E-mail service providers shall turn off the open relay function of all their e-mail servers.

7.1.15   A service provider shall properly limit the frequency and total amount of e-mails that can be sent by a user in order to prevent abuse of the service by spam senders.

7.2 Quality indicators for customer service

7.2.1 Customer service time: a minimum of 5*8 hours attended service.

7.2.2 Response time to a user's e-mail: any query or complaint from a user received by the mailbox shall be answered within three working days maximum.

7.2.3 Average complaint processing time: any complaint from a user shall be dealt with within five working days.

7.2.4 Customer service hotline (including voice and messaging services) completion rate: a minimum of 80%

7.2.5 Customer service hotline (for complaint treatment) manual completion rate: a minimum of 20%

7.2.6 Rate of satisfaction for complaint processing: a minimum of 80%

7.2.7 Retention of billing data: 6 months

7.2.8 Response rate to e-mail complaints: a minimum of 80%

7.2.9 E-mail complaint processing rate: a minimum of 80%

8 Assessment of e-mail services

8.1 The Internet Society of China takes the customer satisfaction index (Class A, Class B, Class C and Class C−) as core indicators for assessing the quality of service of the service providers. Evaluation of customer satisfaction shall be conducted on a regular basis.

8.2 The evaluation group composed of the coordination group members and industry experts shall carry out a random examination annually on the implementation of the standards and shall investigate customer satisfaction in terms of service quality offered by the implementing organizations.

8.3 E-mail service providers shall be rated by the Internet Society of China according to their capacity and quality of service. The result of the rating shall be made available to the public.

9 Miscellaneous provisions

9.1 The interpretation of the standards lies with the Internet Society of China.

9.2 The standards shall take effect as from 1 September 2004.

Quality indicators	Class A	Class B	Class C
System maintenance time	7*24 hours	7*8 hours	5*8 hours
System availability rate	Minimum 99.99%	Minimum: 99.9%	Minimum : 99%
Billing error rate	Maximum $1.25*10^{e-5}$	Maximum $2*10^{e-5}$	Maximum $3*10^{e-5}$
E-mail system sending delay	On average 1 minute; maximum 1 hour	On average 5 minutes; maximum 2 hours	On average 10 minutes; maximum 3 hours
E-mail system receiving delay	On average 1 minute; maximum 1 hour	On average 5 minutes; maximum 2 hours	On average 10 minutes; maximum 3 hours
Anti-virus service	yes	yes	No
Customer service time	7*16 hours	7*8 hours	5*8 hours
Response time to e-mail users	Within 1 working day	Within 2 working days	Within 3 working days
Average complaint processing time	Within 2 working days	Within 3 working days	Within 5 working days
Spam ratio	30%	40%	50%
Customer service hotline completion rate	95%	90%	80%
Customer service hotline manual completion rate (complaint processing)	50%	30%	20%
Satisfaction rate for complaint processing	95%	90%	80%

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