

Government

### Ministry of Internal Affairs and Communications

### 2016 Communications Usage Trend Survey Form <<For Households>>

© This statistics survey has been conducted in accordance with the Statistics Act. The privacy of information collected in this survey will be surely protected. Your accurate and complete answers are appreciated.

	Please note the following before completing the survey.
(affix address label here)	1 This survey asks about the communication devices and services you and your household regularly use and when you use them. (Please confirm your name with the address label on the left.) Anyone in your household may complete the survey form.
	2 Words defined in the Glossary are denoted with asterisks (*). Please refer to the Glossary as needed
	3 Please give answers reflecting the situation in your household on September 30, 2016.
We will send a ¥500 pre-paid book coupon to households the return the survey by the submission deadline as a token of appreciation.	Stratogy Burgay, Ministry of Internal Affairs and Communications
If you wish, please provide a telephone number below so that we may contact you if we have further questions about your survey answers.	<ul> <li>* The survey form may also be obtained and submitted online.</li> <li>For detailed information, please look at "Request for cooperation enclosed herein.</li> <li>5 If you have any questions, please contact the survey firm at:</li> </ul>
	"Communications Usage Trend Survey" Secretariat, Public Opinion Research Center (contracted by the Ministry of Internal Affairs and Communications) 4-8-6 Sendagaya, shibuya-ku, Tokyo 151-8509, Japan
	Tel.: 0120-377-363 (toll free) (Between 10:00 and 17:00, on weekdays
usehold section: Please give answers reflecting the Concerning ownership of communication devices This question asks about your household's ownership of devenument company-provided devices or devices that you own Does your household own any of the devices 1 through 11 listed For devices 3 through 11, please indicate the number of devenument separate answers for conventional mobile photall subsequent questions in the survey.	Tel.: 0120-377-363 (toll free) (Between 10:00 and 17:00, on weekdays  6 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.  he situation for your entire household.  vices with communication functions.  vn but have not used even once in the past year. d below? Please circle all devices that your household owns.  evices in your household.
Concerning ownership of communication devices This question asks about your household's ownership of dev Do not count company-provided devices or devices that you own Does your household own any of the devices 1 through 11 listed For devices 3 through 11, please indicate the number of dev Please enter separate answers for conventional mobile pho all subsequent questions in the survey.  1. Fixed-line telephones  8.	Tel.: 0120-377-363 (toll free) (Between 10:00 and 17:00, on weekdays  6 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.  he situation for your entire household.  vices with communication functions.  In but have not used even once in the past year.  Id below? Please circle all devices that your household owns.  Evices in your household.  In but household.  In the past year in your household.  The Ministry of Internal Affairs and Communications has contracted the survey.
Concerning ownership of communication devices This question asks about your household's ownership of dev Do not count company-provided devices or devices that you own Does your household own any of the devices 1 through 11 listed For devices 3 through 11, please indicate the number of dev Please enter separate answers for conventional mobile photall subsequent questions in the survey.  1. Fixed-line telephones 2. Fax machines	Tel.: 0120-377-363 (toll free) (Between 10:00 and 17:00, on weekdays  6 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.  he situation for your entire household.  vices with communication functions.  vin but have not used even once in the past year. d below? Please circle all devices that your household owns.  evices in your household.  ones (feature phones) and smartphones for this and
Concerning ownership of communication devices This question asks about your household's ownership of dev Do not count company-provided devices or devices that you own Does your household own any of the devices 1 through 11 listed For devices 3 through 11, please indicate the number of dev Please enter separate answers for conventional mobile pho all subsequent questions in the survey.  1. Fixed-line telephones 2. Fax machines 3. Mobile phones (includes PHS handsets) (how many?)	Tel.: 0120-377-363 (toll free) (Between 10:00 and 17:00, on weekdays  6 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.  he situation for your entire household.  vices with communication functions.  vin but have not used even once in the past year. d below? Please circle all devices that your household owns.  evices in your household.  ones (feature phones) and smartphones for this and  3. Internet-enabled home game consoles that display video on a television or other monitor (Wii, PlayStation, etc.) (how many?)  b. Internet-enabled home game consoles with built-in displays

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(1) Has anyone in your household used the Internet (including sending or receiving email, browsing Websites, etc. from a computer, mobile phone, or other device) in the past year? Please circle the one best answer.

1. At least one person has used the Internet

2. No one has used the Internet

- Note 1: Do not count the use of email functions, such as SMS,\* sending by an address without @ that are only used between mobile phones or PHS handsets for "sending / receiving email."
- Note 2: Count Internet use from <a href="mailto:any kind of device">any kind of device</a>, including computers, mobile phones, smartphones, or game consoles.
- Note 3: Count Internet use for any purpose, including use for work as well as for personal use. Count Internet use from any location, such as at home or outside
- Note 4: Count Internet use from <u>any location</u>, such as at home or outside your home.
- Note 5: Count Internet use from devices not owned by the household, such as computers in libraries or Internet cafes.

Please go to Question 5 on Page 4.

(2) To households that answered 1 to (1) above (i.e., households with at least one Internet user):

What device or devices have the Internet user(s) used to access the Internet?

Please circle all answers that apply.

- 1. Computers at home
- 2. Computers outside the home
- 3. Mobile phones (including PHS handsets)
- 4. Smartphones

- 5 Tablets
- Internet-enabled TV receivers
- 7. Other devices (game consoles, etc.)

Note: Internet-enabled TV receivers (option 6) includes both TV receivers that connect directly to the Internet and the use of the Internet on the screen of a TV receiver via a recorder, tuner, or similar device. Please circle 7 if you used the Internet on the screen of a TV receiver via a home game console. This distinction applies to all subsequent questions.

(3) To households that answered 1, 5, or 6 to (2) above (i.e., households where computers at home, tablets, or Internet-enabled TV receivers are used): What type of connection is used to access the Internet? Please circle all answers that apply.

○Wired:

- 1. DSL\* (ADSL, etc.)
- 2. Cable TV (CATV)\*
- 3. Optical fiber (FTTH)\*
- 4. Fixed wireless access (FWA)\*
- 5. Telephone (dial-up)
- 6. ISDN\* Note 1

○Wi-Fi: 7. Mobile phone (LTE\*, BWA\*)

(such as an iPhone 5 or newer model, whose service is named "4G," "Xi," or "WiMAX")  $^{\text{Note 2}}$ 

8. Mobile phone (other than 7; such as an iPhone up to iPhone 4S, whose service is named "3G" or "FOMA")  $^{\text{Note 2}}$ 

Others

- 9. Other
- 10. No Internet connection
- Note 1: If you use ISDN over an optical fiber connection, please circle 3 "Optical fiber (FTTH)."
- Circle 7 or 8 only when the Internet is used by tethering to another device including a computer and a tablet. Note that tethering here indicates the cases where a stick device is connected to a computer or where a smartphone or another device is connected by Wi-Fi.

#### Q3 Concerning losses associated with Internet use

To households that answered 1 to Question 2 (1) (i.e., households with at least one Internet user) and which used any of the following devices:

Have you  $\underline{\text{suffered}}$  any of the following  $\underline{\text{losses}}$  associated with Internet use  $\underline{\text{in the past year}}$ ? Please  $\underline{\text{circle all losses}}$  for each access device.

Please circle 7 if you have not suffered any losses.

		Computers (used at home)	Mobile phones (including PHS handsets)	Smartphones	Other devices (game consoles, etc.)
1.	Discovered a computer virus* but not infected	1	1	1	1
2.	Discovered a computer virus* and at least one incidence of an infection	2	2	2	2
3.	Received spam* / fraudulent emails*	3	3	3	3
4.	Phishing* Note 1	4	4	4	4
5.	Illegal access* Note 2	5	5	5	5
6.	Other (personal information security breach, defamation, etc.)	6	6	6	6
7.	No losses	7	7	7	7

Note 1: *Phishing* is a type of fraud in which the attacker fakes emails from a real corporation or a real corporation's Website in order to get the victim to enter his or her PIN or password.

### To households that answered 3 above (i.e., households who received spam or fraudulent email):

Supplementary Question: How frequently did you receive spam or fraudulent emails?

Please <u>circle the one best answer</u> for each access device.

	Computers (used at home)	Mobile phones (including PHS handsets)	Smartphones
10 or more a day	1	1	1
3 to 9 a day	2	2	2
1 to 2 a day	3	3	3
About 1 a week	4	4	4
Less than 1 a week	5	5	5

#### Q4 Concerning Internet security measures

#### To households that answered 1 to Question 2 (1) (i.e., households with at least one Internet user):

**Have you taken measures against viruses or illegal access** for devices that you use at home such as computers, mobile phones (including PHS handsets), smartphones, and tablets in the past year? Please **circle the one best answer**.

1. Yes 2. No 3. Don't know whether the measures have been taken or not

Supplementary Question: <u>To households that answered 1 above (i.e., households that have taken measures)</u>:

What measures have you taken against viruses or illegal access in the past year?

Please <u>circle all answers that apply</u>.

- 1. Installed or updated a security program
- 2. Signed up to or updated a security service from a provider or mobile telecom
- 3. Set a password on devices to prevent illegal access from outside or illegal use by outsiders
- 4. Did not connect to the Internet using an unknown or unsecured source
- 5. Set an administrator to check for changing the setting of device or installing suspicious software
- 6. Other measures

Note 2: Illegal access refers to access to a computer by abusing another person's ID and password (illegally using another person's account).

	e following services are available the se circle all answers that apply.	rough the use of an internet-enabled	<del></del>
	<ul><li>2. Web uses, such as browsing \</li><li>3. Online gaming*</li><li>4. Videophone</li></ul>	watch recorded programs on smartphor	al networking services*, online shopping, etc. nes or tablets via a network
For v	ouseholds that replied that they are which purposes do you use the Interrese circle all answers that apply.	e using "6. Internet-enabled TV receiventer net-enabled TV tuner?	ers" in Q 2 (2).
	<ul><li>2. Web uses, such as browsing \u00ed</li><li>3. Online gaming</li><li>4. Videophone</li></ul>	watch recorded programs on smartphor	al networking services, online shopping, etc. nes or tablets via a network
Does	your household have the experience se circle the one best answer.  1. Used the hybridcasting 2.	e using "6. Internet-enabled TV receive e of using the hybridcasting function Not used the hybridcasting function	*Note?  3. Neither used the hybridcasting function
Does Pleas Note: displa TV re	se circle the one best answer.  1. Used the hybridcasting 2. function  The hybridcasting function refers to a say. You can use this function by pushi	Not used the hybridcasting function but planning to do so a service that indicates information and ong the "d" button of the remote controlle	*Note?
Note: displa TV refunction	1. Used the hybridcasting 2. function  The hybridcasting function refers to a ay. You can use this function by pushicceiver is equipped with this function a	Not used the hybridcasting function but planning to do so a service that indicates information and ong the "d" button of the remote controlle and is connected to the Internet (The wo	3. Neither used the hybridcasting function nor planning to do so contents transmitted via the Internet on the broadcar or by switching to the data broadcast display if yo
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Government

Ministry of Internal Affairs and Communications

#### 2016 Communications Usage Trend Survey Form <<For Businesses>>

This statistics survey has been conducted in accordance with the Statistics Act. The privacy of information collected in this survey will be surely protected. Your accurate and complete answers are appreciated.

	Department / section of the respondent	
(affix address label here)	Name of the respondent	
	Contact phone number	

Please note the following before completing the survey.

- 1 Please give answers reflecting the situation at your company on September 30, 2016, except where noted otherwise.
- 2 Submit the completed survey to: ICT Economic Research Office, ICT Strategy Policy Division, Global ICT Strategy

Bureau, Ministry of Internal Affairs and Communications

2nd Bldg. of the Central Common Government Office, 2-1-2 Kasumigaseki,

Chiyoda-ku, Tokyo 100-8786, Japan

#### \*The survey form may also be obtained and submitted online.

For detailed information, please look at "Request for cooperation" enclosed herein.

3 If you have any questions, please contact the survey firm at:

"Communications Usage Trend Survey" Secretariat,

Public Opinion Research Center (contracted by the Ministry of Internal Affairs and

Communications)

4-8-6 Sendagaya, shibuya-ku, Tokyo 151-8509, Japan

Tel.: 0120-377-363 (toll free) (Between 10:00 and 17:00, on weekdays)

- 4 The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.
- 5 Words defined in the Glossary are denoted with asterisks (\*). Please refer to the Glossary as needed.

	What Internet access connection or co Circle 10 if your company does not have I	nternet access.	se <u>circle all allswers that apply.</u>
	1. Telephone (dial-up) 2. ISDN* Note 3. Cable TV* 4. Optical fiber* (FTTH)	<ul><li>5. Fixed wireless access (FWA)*</li><li>6. BWA access service*</li><li>7. DSL*</li><li>8. Leased line</li></ul>	9. Other 10. No Internet access
	Note: If you use ISDN over an optical fibe	r connection, please circle 4 "Optical fiber (	FTTH)."
Q2 (1)	The following questions concern your Does your company <a href="https://example.com/have a Website">have a Website</a> ? Please	company's provision of information via ease circle the one best answer.	the Internet.
	1. Yes	2. No	
Supp	olementary Question: To companies that he Please circle all answers that apply.	nave a Website: What is the purpose or a	pplication of your Website?
	<ol> <li>Publicize / promote products or events</li> <li>Provide periodic information</li> <li>Company profile / recruiting</li> </ol>		collect consumers' ratings and opinion Other
(2)	Does your company use private social m	andia services*2 Please circle the one has	et anewer
(2) Supp	olementary Question: To <u>companies that u</u> social media?	2. No  use social media services: For what purpo	
±	1. Yes blementary Question: To companies that u	2. No  use social media services: For what purpo  4. Company profile / re	ose or application do you use
Supp Q3	1. Yes  columntary Question: To companies that use social media?  Please circle all answers that apply.  1. Marketing 2. Publicize / promote products or everal. 3. Provide periodic information  The following questions concern your	2. No  2. No  4. Company profile / revents  5. Collect consumers' 6. Other  company's usage of e-commerce.	ose or application do you use ecruiting ratings and opinions
Supp	1. Yes  columntary Question: To companies that use social media?  Please circle all answers that apply.  1. Marketing 2. Publicize / promote products or everal. 3. Provide periodic information  The following questions concern your	2. No  use social media services: For what purpose  4. Company profile / revents  5. Collect consumers'  6. Other	ecruiting ratings and opinions  ele all answers that apply.  et 5. None of the above ters)
Q3 (1)	Demontary Question: To companies that use social media?  Please circle all answers that apply.  1. Marketing 2. Publicize / promote products or evaluation.  The following questions concern your Does your company use the Internet Note companies over the Internet  2. Sell to other companies over the Internet  Note: This question includes both purchases me protocol used on the Internet*) networks	2. No  4. Company profile / revents  5. Collect consumers' 6. Other  company's usage of e-commerce.  to make purchases or sales? Please circ  3. Sell to consumers over the Internet (with services intended for computation of the services)  4. Sell to consumers over the Internet (with services intended for computation of the services)  and over the public Internet and purchases made, such as TCP/IP leased lines*.	ecruiting ratings and opinions  ele all answers that apply.  et 5. None of the above ters) et (with services intended for
Q3 (1)	Demontary Question: To companies that usocial media? Please circle all answers that apply.  1. Marketing 2. Publicize / promote products or example 3. Provide periodic information  The following questions concern your Does your company use the Internet Note of the Internet 2. Sell to other companies over the Internet Note: This question includes both purchases may protocol used on the Internet*) networks of the Internet of companies that selections of the Internet of companies that selections of the Internet*)	2. No  4. Company profile / revents  5. Collect consumers' 6. Other  company's usage of e-commerce.  to make purchases or sales? Please circ  3. Sell to consumers over the Internet (with services intended for computation of the services)  4. Sell to consumers over the Internet (with services intended for computation of the services)  and over the public Internet and purchases made, such as TCP/IP leased lines*.	ecruiting ratings and opinions  Let all answers that apply.  Let 5. None of the above ters) Let (with services intended for the over TCP/IP (the communication)

(2) Does your company <u>use Internet advertising</u>? Please <u>circle all answers that apply</u>.

Circle 13 if your company does not use Internet advertising.

(Web advertising)	(Mobile advertising)
1. Text ads* Note 1	9. Picture ads*
2. Banner ads* Note 2	10. Content* ads
3. Rich media ads* Note 3	11. Email ads*
4. Sponsored ads* (editorial tie-ups, etc.)	
5. Contextual search ads*	(Other forms of advertising)
6. Contextual content ads* Note 4	12. Other Internet ads
(Email advertising)	
7. Newsletters	
8. Direct marketing ads* (targeted mailings, etc.)	13. Do not use Internet advertising

Note 1: Text ads are ads composed only of text.

- Note 2: Banner ads are images placed on Websites that advertise a different Website. When clicked, banner ads jump to the advertised Website.
- Note 3: Rich media ads use audio and images and either respond to mouse movements or display video with streaming technology.
- Note 4: Servers of *contextual content ads* analyze the context or keywords in the content on a Web page and display ads with the most relevance to the content.

Supplementary Question: To companies that use Internet advertising:

Why do you use Internet advertising? Please circle all answers that apply.

- Easy to measure advertising effects
   Able to target ads to the needs of individual consumers
   Inexpensive ad prices
   Able to provide information over a wide area
- Q4 The following question concerns your company's adoption of systems and tools that use wireless communication technology.

Has your company adopted the <u>following systems and tools that use wireless communication technology</u>? Please <u>circle the one best answer for each system or tool</u>.

System or tool that uses wireless communication technology	Introduction
RFID tags*     Ex: Production, inventory, or distribution management by means of identifying items	Adopted     Not adopted
Contactless IC cards*     Ex: Room access controls and cashless transactions by means of personal authentication	Adopted     Not adopted
New network-enabled devices (network cameras, sensors, etc.)      Ex: Security systems using network cameras or motion sensors	Adopted     Not adopted
GPS, mobile phone, or other location devices     Ex: Traffic management based on vehicle location information	Adopted     Not adopted

Supplementary question: To companies that have adopted systems or tools using wireless communication technology: Do you <u>analyze information collected</u> through your system or tool and use the results for purposes such as product development and marketing? Please <u>circle the one best answer</u>.

1. Using 2. Not using but planning to use 3. Neither using nor planning to use

Q5 The following questions concern your company's use of cloud computing\*. Does your company use cloud computing (the cloud) Note? Please circle the one best answer. (1) ください。 - 1. Used company wide 3. Not used, but plan to use ... 4. Not used, and have no plans to use 2. Used by some offices or divisions \_\_\_\_\_\_ 5. Do not understand cloud services Note: Cloud computing is a technology that provides, as a service, users with network-based computer assets when needed and in the amount needed via broadband or other Internet connection methods. An example is software as a service\* (SaaS) provided by application service providers\* (ASP). **→**(2) To companies that answered either 1 or 2 to (1) above: Which device or devices does your company use to access cloud services? Please circle all answers that apply. 1. Mobile phones Note / PHS handsets 3. Tablets 5. Other (PDAs\*, etc.) 2. Smartphones<sup>Note</sup> 4. Computers Note: Please give separate answers for conventional mobile phones (feature phones) and smartphones. →<sub>(3)</sub> To companies that answered either 1 or 2 to (1) above: Which specific cloud computing services does your company use? Please circle all answers that apply. 1. Server applications 8. Sharing information with business partners 14. Order taking and sales 2. File storage / data sharing 9. Sales support 15. Purchasing 3. Data backups 10. R&D related 16. Production management, distribution 4. Internal information sharing / portal 11. System development and Website management, store management 5. Email construction 17. Billing and payment systems 18. Authentication systems 6. Schedule sharing 12. e-Learning 7. Project management 13. Payroll, financial accounting, HR 19. Other To companies that answered either 1 or 2 to (1) above: **→**(4) Why do you use cloud computing services? Please circle all answers that apply. 9. Boost security against information theft, etc. 1. Costs are lower than existing systems 2. Initial investment is inexpensive 10. Improve operational stability and availability 3. No need to have internal asset and storage systems 11. Wealth of service options 4. Quick response capability, such as upgrading system capacity 12. Fast roll-out speed 5. Easy system scalability 13. Access services from anywhere 6. High service reliability 14. Access identical services from any device 7. Offered by system vendor 15. Can terminate use at any time 16. Other 8. Easy license management To companies that answered either 1 or 2 to (1) above:  $\rightarrow$ (5) What impact has cloud computing had on the purposes given above? Please circle the one best answer. 1. Very beneficial 3. Not very beneficial 5. Do not know the impact

2. Somewhat beneficial 4. Negative impact

'-·--**→** (6) To companies that answered 4 to (1) above:

Why does your company not use cloud computing services? Please circle all answers that apply

1. Considerable cost to retool existing systems when introducing cloud services

2. Cloud services would hinder corporate compliance

3. Increase in communication costs

4. Cannot customize applications to suit needs

5. Concerns about network stability

6. Information theft and other security concerns

7. No legal system in place

8. Not necessary

9. Do not see the advantages, not convinced by the advantages

10. Other

- Q6 The following question concerns your company's introduction of telework.
- (1) Has your company introduced telework\* Note? Please circle the one best answer.

(If your company has introduced telework, circle all answers of a, b, and c that your telework includes.)

- 1. Have introduced telework (a Working from home b Satellite office work c Mobile work)
   (Please answer questions (2), (3), and (4) below)
- Not introduced, but have specific plans to introduce telework
- ave specific plans to

  3. Not introduced, and have no specific plans to introduce telework

  (Please answer question (5) helow)

Note: *Telework* is a working arrangement where the worker works in a location physically separate from the company's building but with nearly the same work environment as in the company's building by means of communication networks. Depending on the worker's work location, telework is called working from home, <a href="mailto:satellite office work (where the worker works at an office that is not the original work place">mailto:satellite office work (where the worker, such as a salesperson, works using a mobile information device while out of the office).</a>

#### To companies that answered 1 to (1) above.

- (2) What percentage of your employees use telework? Please circle the one best answer.
- 1. Less than 5 percent
- 3. 10 percent to less than 30 percent 5. 50 percent to less than 80 percent
- 2. 5 percent to less than 10 percent
- 4. 30 percent to less than 50 percent 6. 80 percent or more
- (3) What were the purposes of introducing telework at your company? Please circle all answers that apply.
  - Raise efficiency (productivity) of routine business processes
  - 2. Improve creativity of creative, value-added business processes
  - 3. Provide healthy, comfortable lives for workers
  - 4. Reduce office costs
  - 5. Reduce workers' travel times
  - 6. Increase customer satisfaction
  - 7. Attract better employees

- 8. Support people who have difficulty using public transportation (physically disabled, older people, pregnant women, etc.)
- Counter global warming by lowering CO2 emissions through transportation alternatives
- 10. Conserve energy and electricity
- 11. Prepare for business continuity in the event of emergencies (earthquakes, super-flu outbreaks, etc.)
- 12. Other
- → (4) What has been the overall impact of telework on the purposes given in (3) above? Please <u>circle the one best answer.</u>
  - 1. Very beneficial
- 3. Not very beneficial
- 5. Do not know the impact

- 2. Somewhat beneficial
- 4. Negative impact
- ----- (5) To companies that answered 3 to (1) above:

Please circle all reasons why you have not introduced telework?

- 1. Work is not suited to telework
- 2. Difficult to advance work operations
- 3. Do not see the advantage of introducing telework
- 4. Difficult to assess employees
- 5. Impedes office / internal communications
- 6. Shifts burden to other employees
- 7. No requests from union or employees
- 8. Concern about information security breaches

- Impedes handling customers and other external entities
- 10. Too expensive
- 11. Troublesome to introduce an HR system
- 12. Difficult to calculate wages
- 13. Have not moved to digital documents
- 14. Other

- Q7 The following question concerns all <u>ICT<sup>Note</sup> education provided</u> by your company to employees.
  - Note: ICT is short for Information and Communication Technology. It is synonymous with IT.

Which of the following education programs does your company provide?

Please circle all answers that apply.

- 1. Internal ICT education / training programs
- 2. External ICT education / training programs
- 3. Provide financial assistance to employees who voluntarily enroll in ICT courses
- 4. Pay bonuses to employees who obtain ICT qualifications
- 5. Provide time to employees who voluntarily enroll in ICT courses
- 6. Test ICT abilities and skills
- 7. Other education and training
- 8. None of the above
- Q8 The following questions ask companies that use ICT networks (intranets, inter-company networks\*, the Internet, etc.) about their security measures.
- (1) Have any <u>security breaches occurred</u> in the past year in the use of ICT networks at your company? Please <u>circle all answers that apply. Circle 10 if no security breaches occurred.</u>
  - 1. Have received targeted emails\* Note 1
  - 2. Discovered a computer virus\* but not infected
  - 3 Discovered a computer virus and at least one incidence of an infection
  - 4 Illegal access\* Note 2
  - 5 Used as a spam\* bot or zombie

- 6. DoS (DDoS) attack\* Note 3
- 7. Website defacement
- 8. Data breach due to theft or negligence
- 9. Other losses
- 10. No breaches
- Note 1: Unlike spam that is sent to random recipients, targeted email, which often has virus attachments, is sent to a specific organization or person with the objective of stealing confidential information.
- Note 2: *Illegal access* means infiltrating a company or individual's computer system without permission and causing system failures or making use of the system without authorization.
- Note 3: DoS attack is an attack where the attacker sends massive amounts of packets to a server to bring down a system or disrupt services.

Supplementary Question: To companies that answered 1 to (1) above:

What happened as a result of receiving targeted emails? Please circle the one best answer.

- 1. Targeted emails reached an employee's device and there was at least one incidence of a computer virus infection
- 2. Targeted emails reached an employee's device, but there were no computer virus infections
- 3. Anti-virus programs and other measures blocked all targeted emails before reaching any device

- (2) What measures has your company taken for data security and anti-virus protection on ICT networks?

  Please circle all answers Note 1 that apply.
  - 1. Establish security policies
  - 2. Security audits
  - 3. Outsource security management
  - 4. Training for employees
  - 5. Install anti-virus programs on computers and other devices (operating system, software, etc.)
  - 6. Install anti-virus programs on servers
  - 7. Apply security patches\* for operating systems
  - 8. Construct anti-virus walls at external access points
  - 9. Establish manuals on responding to viruses
  - 10. Control access with IDs, passwords, etc.
  - 11. Maintain access logs

- 12. User authentication by means of authentication technologies
- 13. Encrypt data or networks
- 14. Line monitoring
- 15. Install and maintain firewalls
- 16. Use proxy servers\*, etc.
- 17. Install and maintain intrusion detection systems (IDS)\* Note 2
- 18. Install and maintain Web application firewalls
- 19. Other measures
- 20. No particular measures
- Note 1: Regardless of your answer to 3. "Outsource security management", circle all applicable answers even if the measures are implemented in part with the use of external suppliers or external services.
- Note 2: Includes intrusion protection systems (IPS).

#### Supplementary Question 1: To companies that answered 1 to (2) above:

Does your company's security policies have <u>rules on the use of smartphones in work operations</u>? Please <u>circle the one best answer</u>.

- 1. Prohibit all use
- 2. Permit use of only company-supplied smartphones
- 3. Permit use of personal smartphones for work operations
- 4. Permit the use of both company-supplied smartphones and personal smartphone
- 5. Have no specific rules

#### Supplementary Question 2: To companies that answered 1 to (2) above:

Does your company's security policies have <u>rules on the use of social media?</u> Please <u>circle all answers that apply</u>.

- 1. Prohibit opening accounts with company name
- 2. Obliged to open accounts with company name
- 3. Prohibit work-related posts

- 4. Prohibit use during work
- 5. Other rules
- 6. Have no specific rules

What measures has your company taken against targeted email? Please circle all answers that apply. 1. Training for employees 8. Line monitoring 2. Install anti-virus programs on computers and other 9. Use proxy servers,\* etc. devices (operating system, software, etc.) 10. Install and maintain intrusion detection systems 3. Install anti-virus programs on servers (IDS)<sup>Note</sup> 11. Share information between organizations and 4. Apply security patches for operating systems 5. Construct anti-virus walls at external access points divisions 6. Enhance access controls for servers and other devices 12. Install a sender policy framework (SPF)\* that store sensitive data 13. Other measures 7. Maintain access logs 14. No particular measures Note: Includes intrusion protection systems (IPS). What measures has your company taken for personal information protection? Please circle all answers that apply.

1. Obtained Privacy Mark certification\* 2. Established a privacy policy

3. Appointed a manager in charge of personal information protection

4. Minimized the personal information handled

5. Rebuilt systems and organizations

6. Enhanced internal training

7. Strengthened conditions on external supplier selection (e.g., has obtained Privacy Mark certification, etc.)

8. Other measures

9. No particular measures

The following question concerns issues associated with ICT network (intranets, inter-company networks, the Internet, etc.) usage and issues preventing ICT network usage.

What issues do you see associated with usage of ICT networks?

For companies that do not use ICT networks, what issues are preventing you from using ICT networks? Please circle all answers that apply.

1. Difficulties in establishing security measures 2. Rising operational and management costs

3. Lack of operational and administrative personnel

4. Difficulties in restoring operations after a fault

5. Concern about protection of copyrights and intellectual property

6. Concern about virus infections

7. Difficulties in achieving benefits from network adoption

8. Difficulties in quantifying benefits of network adoption

9. Concern about the reliability of authentication technology

10. Concern about the reliability of electronic payments

11. Low security awareness among employees

12. High communication charges

13. Low communication speeds

14. Other

15. No particular issues

<Questionnaire> The following question concerns the answering method for this survey. Would you like to respond to this survey online (via the Internet)?

Please circle the one best answer.

1. Yes 2. No 3. Don't know

The final questions concern general aspects of your company. You may attach a copy of your annual financial statement in lieu of completing the answers on this form if the financial statement contains the same information as the questions. Please underline the relevant sections in the financial statement. F1 What is the capitalization value (sum of investments and funds) of your company? Please circle the one best answer. 1. Less than ¥10 million 4. ¥50 million to less than ¥100 million 7. ¥1 billion to less than ¥5 billion 2. ¥10 million to less than ¥30 million 5. ¥100 million to less than ¥500 million 8. ¥5 billion or more 3. ¥30 million to less than ¥50 million 6. ¥500 million to less than ¥1 billion What are the **annual sales** Notes 1,2 of your company? Please indicate your annual sales to the nearest million yen. million Note 1: Please enter your FY 2015 sales (the year April 2015 through March 2016). If this is difficult to calculate, please enter the most recently calculated annual sales. Companies in the banking industry, please enter your income before tax; life insurance companies, please enter your insurance contributions, etc.; and non-life insurance companies, please enter your net premiums written. What is the operating profit Notes 1,2 of your company? Please indicate your operating profit to the nearest million yen. million Note 1: Please enter your FY 2015 operating profit (the year April 2015 yen through March 2016). If this is difficult to calculate, please enter the most recently calculated annual operating profit. Note 2: Companies in the banking industry, please enter your net operating profit; life insurance companies, please enter your basic profits; and non-life insurance companies, please enter your underwriting profit. What are the labor costs Note of your company? Please indicate your labor costs to the nearest million yen. million Note: Please enter your FY 2015 labor costs (the year April 2015 through March 2016). If this is difficult to calculate, please enter ven the most recently calculated annual labor costs. What are the **deprecation costs** Note of your company? Please indicate your deprecation costs to the nearest million yen. Please enter your FY 2015 deprecation costs (the year April million Note: ven 2015 through March 2016). If this is difficult to calculate, please enter the most recently calculated annual deprecation costs. What is the <u>amount of</u> your company's <u>fixed assets</u><sup>Note</sup>? Please indicate your deprecation costs to <u>the nearest million yen</u>. Please fill in the amount of fixed assets as of the end of ven FY 2015. If it is difficult to identify the amount as of the end of FY 2015, please fill in the amount as of the end of the most recent fiscal year for which the figure is available. How many full-time employees Note does your company have? Note: Full-time employees: This is the number of full-time employed people at your employees company as of December 1, 2015 or the nearest payroll deadline date. This definition includes people called temporary workers, day laborers, or parttime workers with employment contracts longer than one month and includes people employed on the date of the survey who worked 18 days or more in both October and November 2015. © This completes the survey questions. Please return the completed survey form in the enclosed

Thank you for your participation.

return envelope. No postage stamp is required.

# <For Households> Glossary

Index	Term	Definition
В	Blog	Short for Weblog. A blog is a regularly updated Website with sequential articles much like a diary and comments posted about articles.
	BWA	Short for Broadband Wireless Access.  BWA is a generic name for data communication services that use wireless (radio waves) in place of cables to convey signals. Examples include mobile WiMAX (UQ WiMAX from UQ Communications) and AXGP from Wireless City Planning.
С	Cable TV (CATV)	Refers to the application of cable TV cabling for Internet access.
	Computer virus	A program designed to damage or destroy a computer system. Computer viruses infect files via other files or email in order to reach and attack a computer system.
D	DSL	Short for Digital Subscriber Line. DSL permits existing phone lines to be used for high-speed Internet access with technologies that enables high-speed transmissions over phone lines. Variants include ADSL, VDSL, HDSL, and SDSL.
F	Forum	An Internet bulletin board service. When a user posts a message to a forum, all members of the forum can view the message. Other members can post replies to the original message.
	Fraudulent email	A type of scam involving sending fraudulent invoices randomly by email and demanding payment, or email with similar fraudulent demands.
	FWA	Short for Fixed Wireless Access. FWA is a system that involves installing an antenna at the subscriber's premises to connect wirelessly with the telecom's base station antenna.
Н	Hybridcasting function	A service that indicates information and contents transmitted via the Internet on the TV broadcast display. It can be used by pushing the "d" button of the remote controller or by switching to the data broadcast display if the hybricdcast-enabled TV is connected to the Internet.
I	Illegal access	Refers to infiltrating a company or individual's computer system without permission and causing system failures or making use of the system without authorization.
	Information appliance	Household electric appliances such as refrigerators or air-conditioner units with connectivity to the Internet or other networks.
	Internet auction	A service that acts as an intermediary, in the form of an auction, between people wishing to buy and sell goods over the Internet.
	Internet banking, mobile banking	A service that provides bank transfers, balances, and other bank procedures via the Internet essentially 24 hours a day. Mobile banking services allow users to access the same banking procedures from mobile phones and other mobile devices via the Internet.
	ISDN	Short for Integrated Service Digital Network. ISDN is a general name for a digital communication network that integrates telephone, fax, telex, data communications, and other services.
L	LTE	Short for Long Term Evolution. Also called 4G, LTE is a mobile communication standard for high-speed data communications. Examples include Xi from NTT Docomo, 4G LTE from AU and Softbank 4G LTE from Softbank.
0	Online gaming	Games that use the Internet so that multiple players can share in the same game experience.
	Optical fiber (FTTH)	A data communication service capable of very fast transmission speeds that uses optical fiber. Optical fiber is a cable made from glass fibers that is used as the transmission path for optical communications.
Р	P2P	Short for Peer to Peer. P2P is the sharing of files between many computers via the Internet.

Index	Term	Definition
	Phishing	A type of fraud in which the attacker fakes emails from a real corporation or a real corporation's Website in order to get the victim to enter his or her PIN or password.
S	Smartphone	A mobile phone with the additional functionality of a personal portable information device. In addition to voice calls, smartphones can browse the Web, send and receive email, and view and create documents. Smartphones have open-source operating systems, and users are free to add apps as they like.
	SMS	Short for Short Message Service. SMS are services that send and receive short text messages and other information between mobile phones.
	Social media	Media where users create and distribute information, such as blogs, social networking sites, and video-sharing sites. Social media are distinctive in having various mechanisms to encourage users to connect with each other and to see connections visually.
	Social networking service (SNS)	Services that create social networks through exchanges via the Internet. Representative services include Facebook, Twitter and LINE.
	Spam	Email for promotional or advertising purposes sent to users without their consent.
Т	Tablet	A flat portable information device that has a touch LCD panel for its visual display and is operated by finger touches. Leading tablets are Apple's iPad and Samsung's Galaxy Tab.
	Telework	Use of a communication network to work at a location different from the primary location of work. Telework includes working from home, satellite office work, and mobile work.
V	Video posting and sharing site	A Website on the Internet that allows users to post videos and share them for other users to view. Examples include YouTube, Dailymotion, and Niconico Douga.
	VOD	Short for Video On Demand. VOD is a service that steams video content as instructed by the user.
W	Wearable devices	Information devices which can be worn and carried. Examples include the glasses type and the watch type.

# <For Businesses> Glossary

Index	Term	Definition
А	ASP	Short for Application Service Provider. An ASP is a business that provides customers with business applications over the Internet.
В	Banner ads	A banner ad is placed on a Website and has an image promoting another Website.  Clicking on the banner ad takes the user to the banner's Website.
	BWA	Short for Broadband Wireless Access.  BWA is a generic name for data communication services that use wireless (radio waves) in place of cables to convey signals. Examples include mobile WiMAX (UQ WiMAX from UQ Communications) and AXGP from Wireless City Planning.
С	Cable TV (CATV)	Refers to the application of cable TV cabling for Internet access.
	Cloud computing	Cloud computing is a technology that provides, as a service, users with network-based computer assets when needed and in the amount needed via broadband or other Internet connection methods. An example is software as a service (SaaS) provided by application service providers (ASP).
	Computer virus	A program designed to damage or destroy a computer system. Computer viruses infect files via other files or email in order to reach and attack a computer system.
	Contactless IC card	An IC card with a built-in antenna that sends and receives data using weak radio waves emitted by an external reader. Data can be processed quickly just by bringing the IC card close to the reader. The operating principle is the same as RFIC tags.
	Contextual content ads	Contextual content ads automatically identify the keywords in a Website and what keywords are preferred by posting ad tags issued by the service operator in the Website.
	Contextual search ads	Ads displayed beside a search engine's search results that are linked to the search keywords entered by an ordinary user.
D	Direct marketing	A type of advertising that uses email sent to a specific user where the entire message is a form of advertising.
	DoS (DDoS)	DoS is short for Denial of Service. It is a type of attack where the attacker sends massive amounts of data to the target computer or router to disrupt the normal operation of the targeted business or organization's systems.
	DSL	Short for Digital Subscriber Line. DSL permits existing phone lines to be used for high-speed Internet access with technologies that enables high-speed transmissions over phone lines. Variants include ADSL, VDSL, HDSL, and SDSL.
F	FWA	Short for Fixed Wireless Access. FWA is a system that involves installing an antenna at the subscriber's premises to connect wirelessly with the telecom's base station antenna.
1	IDS	Short for Intrusion Detection System. An IDS monitors communication lines and notifies an administrator when it detects a network intrusion.
	Illegal access	Refers to infiltrating a company or individual's computer system without permission and causing system failures or making use of the system without authorization.
	Inter-company network	Refers to a communication network that connects to another or other companies.

Intranet  Refers to a communication network on the same premises or a comm network between the head office and branch offices or work sites of the company.  ISDN  Short for Integrated Service Digital Network. ISDN is a general name of communication network that integrates telephone, fax, telex, data communication network that integrates telephone, fax, telex, data communication service that directly connects a specific network segnine reserved for the client's sole use.  O Optical fiber (FTTH)  A communication service capable of very fast transmission speed optical fiber. Optical fiber is a cable made from glass fibers that is used transmission path for optical communications.  PDA  A computer smaller than a notebook with digital assistant functions to personal information, such as schedules, address books, and memos access functions to email, the Internet and local Wi-Fi networks via a ror PHS handset. The PDA category does not include notebook computer in the PDA category does not include notebook computer in the privacyMark System  Picture ads  Banner ads mainly posted on the top page of a mobile site.  PrivacyMark System  The PrivacyMark is a registered trademark that JIPDEC authorizes but use if they meet certain conditions regarding personal information protection of the protection of the protection of the Internet are or other internal network.  Proxy server  A proxy server is a computer placed at the boundary of the Internet are or other internal network. This computer connects to the Internet are computers in the internal network that cannot directly access the Internet and content data that can be read by radio waves when in the proximity of a the tag coming into physical contact with the reader.  Rich media ads  Ads that use audio and images and either respond to mouse movement video with streaming technology.	for a digital numerations, ament with a disthat uses disthet uses distance and remote mobile phone
communication network that integrates telephone, fax, telex, data communication network that integrates telephone, fax, telex, data communication services.  Leased line  A communication service that directly connects a specific network segine reserved for the client's sole use.  O Optical fiber (FTTH)  A data communication service capable of very fast transmission speed optical fiber. Optical fiber is a cable made from glass fibers that is user transmission path for optical communications.  P PDA  A computer smaller than a notebook with digital assistant functions to personal information, such as schedules, address books, and memos access functions to email, the Internet and local Wi-Fi networks via a ror PHS handset. The PDA category does not include notebook computer if they measure if they meat certain conditions regarding personal information prorectly as a set of predetermined conventions that allows computer communicate via a network.  Proxy server  A proxy server is a computer placed at the boundary of the Internet and or other internal network. This computer connects to the Internet as a computers in the internal network that cannot directly access the Internal network that cannot directly access the Internal network that cannot directly access the Internal network at the tag coming into physical contact with the reader.  Rich media ads  Ads that use audio and images and either respond to mouse movemen	ment with a  ds that uses d as the  manage , and remote mobile phone
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Protocol  A protocol is a set of predetermined conventions that allows computer communicate via a network.  Proxy server  A proxy server is a computer placed at the boundary of the Internet an or other internal network. This computer connects to the Internet as a computers in the internal network that cannot directly access the Internet as a computer single placed.  RFID tag  A tag containing an IC chip and antenna. The IC chip stores a unique other data that can be read by radio waves when in the proximity of a stag coming into physical contact with the reader.  Rich media ads  Ads that use audio and images and either respond to mouse movements.	
Proxy server  A proxy server is a computer placed at the boundary of the Internet an or other internal network. This computer connects to the Internet as a computers in the internal network that cannot directly access the Inter  R  RFID tag  A tag containing an IC chip and antenna. The IC chip stores a unique other data that can be read by radio waves when in the proximity of a the tag coming into physical contact with the reader.  Rich media ads  Ads that use audio and images and either respond to mouse movements.	
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	nts or display
S SaaS Short for Software as a Service. SaaS is a mechanism that provides the software applications to customers as needed over a network.	ne functions of
Security patch  A program distributed to repair another software program when a security patch discovered in the program.	ırity hole is
Social media  Media where users create and distribute information, such as blogs, s networking sites, and video-sharing sites. Social media are distinctive various mechanisms to encourage users to connect with each other a connections visually.	in having
Spam  Email sent in massive volumes indiscriminately without regard for any recipients. Spam has become a problem because of the traffic it places Internet.	
SPF Short for Sender Policy Framework. SPF is a technology that prevents of an email sender's address.	
Sponsored ads  The provision by a specific advertiser of some or all of a Website's cor	s falsification

Index	Term	Definition
Т	Targeted email	Unlike spam that is sent to random recipients, targeted email, which often has virus attachments, is sent to a specific organization or person with the objective of stealing confidential information.
	Telework	A working arrangement where the worker works in a location physically separate from the company's building but with nearly the same work environment as in the company's building by means of communication networks Depending on the worker's work location, telework is called working from home, mobile work (where the worker, such as a salesperson, works using a mobile information device while out of the office), or satellite office (where the worker works at an office that is not the company's office).