



Government  
Statistics

**Please respond to the survey by Friday, September 30, 2024.**

Ministry of Internal Affairs and Communications

## 2024 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.

(Address label)

We will send a ¥500 pre-paid book coupon to households that return the survey by the submission deadline as a token of our appreciation.

If you wish, please provide a telephone number below so that we may contact you if we have further questions about your survey answers.

— —

Please note the following before completing the survey.

- Regarding words marked \*, refer to the attached "Guide to fill the questionnaire" as necessary.
- In this survey, conventional mobile phones (nicknamed "galakei") should be separated from smartphones.
- Please give answers reflecting the situation in your household on August 31, 2024.
- Submit the completed survey to:  
Economic Research Office, Information and Communications Bureau, Ministry of Internal Affairs and Communications (MIC)  
2nd Bldg. of the Central Common Government Office, 2-1-2  
Kasumigaseki, Chiyoda-ku, Tokyo 100-8786, Japan  
\* You may respond to the survey online. For detailed information, please look at "Request for cooperation" enclosed herein.
- If you have any questions, please contact the survey firm at:  
"Communications Usage Trend Survey" Secretariat,  
Public Opinion Research Center (contracted by the MIC)  
5F, Kawabe Shinjuku-gyoenmae Bldg  
4-16-3 Yotsuya, Shinjuku-ku, Tokyo 160-0004, Japan  
Tel.: 0120-XXX-XXX (toll free) (Between 10:00 and 17:00, on weekdays)  
email: [r5tsusin@yoron-kagaku.or.jp](mailto:r5tsusin@yoron-kagaku.or.jp) Take care not to mislead.
- The MIC has contracted the survey firm above to conduct this survey.

<<Household-wide questions>> Questions on pages 1 to 3 are made to householders, etc.

### Q1 This question is about your household's ownership of information and communication devices.

Does your household own any of the devices 1 through 13 listed below? **Please circle all answers that apply. If you circled "3. TV receivers," please circle all answers that apply regarding the presence or absence of a tuner.** <sup>Note 1</sup>

(Do not count company-provided devices or devices that you own but have not used even once in the past year.)

- |   |  |
|---|--|
| 1. Fixed-line telephones  | 8. Wearable devices (glasses-type, watch-type information devices, etc.)                                       |
| 2. Fax machines   | 9. Internet-enabled home game consoles (PlayStation5, Nintendo Switch, etc.)                                   |
| 3. TV receivers → { a. with a tuner <sup>Note 1</sup><br>b. tunerless <sup>Note 1</sup> | 10. Portable music players that synchronize and play contents via a computer, etc. (iPod, etc.)                |
| 4. Mobile phones  | 11. Appliances available for internet connection (air conditioners, refrigerators, robot vacuum cleaners etc.) |
| 5. Smartphones  | 12. Radios (Wide FM <sup>Note 2</sup> )  |
| 6. Tablets (iPad, Galaxy Tab, etc.)   | 13. Radios (Others <sup>Note 2</sup> )   |
| 7. Computers  |  |

Regarding only radios, please circle relevant answers if your household owns them, **irrespective of whether your household**

Note 1: A tuner is a device that receives broadcasts.

TV receivers "with a tuner," with their built-in tuner, enable users to view TV broadcasts on their own. TV receivers in general are of this type.

"Tunerless" TV receivers do not enable users to view TV broadcasts on their own but require a connection to an internet streaming service.

Note 2: A wide FM radio can receive frequency modulation radio signals with a frequency of 90 megahertz or more. The others cannot do so. These options include a car radio.

## Q2 Here is a question about internet connection lines.

Which lines do your household use for connecting to the internet **at home**? **Please circle all answers that apply.**

Wired:	1. DSL*	Mobile line:	7. Mobile phone <sup>Note 2</sup> (such as an iPhone up to iPhone 4S, whose service is named "3G" or "FOMA")
	2. Cable TV (CATV)*		8. Mobile phone (LTE*, BWA*) <sup>Note 2</sup> (other than 7; such as a phone, whose service is named "4G," "Xi," or "WiMAX")
	3. Optical fiber (FTTH)*		9. Mobile phone (5G standards) <sup>Note 2</sup>
	4. Fixed wireless access (FWA)*		10. Home router <sup>Note 3</sup>
	5. Telephone (dial-up)		
	6. ISDN* <sup>Note 1</sup>	Others:	11. No internet connection

Note 1: If you use ISDN over an optical fiber connection, please circle 3 "Optical fiber (FTTH)."

Note 2: Circle 7, 8, or 9 also when using the internet by tethering to another device including a computer and a tablet. Note that tethering here refers to the cases where a stick device is connected to a computer or where a smartphone or another device is connected by Wi-Fi.

Note 3: A stationary router to connect to the internet via mobile line; Okudake Wi-Fi (e.g., home5G (DoCoMo), SoftBank Air (SoftBank), Speed Wi-Fi HOME 5G (WiMAX), Rakuten Turbo 5G (Rakuten Mobile))

## Q3 Concerning the use of internet services using television.

(1) Does your household own any of the following devices? **Please circle all answers that apply.**

**As for whether a device is connected to the internet, circle any answers that apply.**

	Connected to internet or not
1. TV receiver (including a TV receiver with or without a tuner)	Yes · No · Unknown
2. DVD/Blu-ray disc recorder (adapted to digital broadcasting)	Yes · No · Unknown
3. Tuner for receiving cable TV	Yes · No · Unknown
4. Tuner for receiving Internet Protocol TV services (including Hikari TV and au Hikari)	Yes · No · Unknown
5. Own none of 1 to 4 devices	

(2) **To households that circled "Yes" for any of 1 to 4 in Q3 (1):**

**For what purposes does your household use internet services? Please circle all answers that apply.**

1. Acquire information related to broadcast programs being watched
2. Use the hybrid casting function <sup>Note</sup>
3. Use broadcasters' free/paid video distribution services (including TVer,, NHK plus and Hulu)
4. Use paid video distribution services (including Amazone Prime Video and Netflix)
5. Use free video-sharing services (including YouTube)
6. Online gaming
7. Others

Note: The hybrid casting function refers to a service that indicates information and content transmitted via the internet on TV and other displays. If "Hybrid cast" is displayed on the screen when you push the "d" or "data broadcast" button on your remote TV, recorder or tuner controller, the hybrid casting function is available.

## Q4 Concerning an environment for receiving 4K/8K Super Hi-Vision satellite broadcasting signals in your household

On December 1, 2018, 4K/8K Super Hi-Vision satellite broadcasting <sup>(Note 1)</sup> was launched. Which 4K or 8K broadcast programs <sup>(Note 2)</sup> are available for viewing at your household at present? **Please circle all answers that apply.**

(This question is designed to check the TV viewing environment at your home. **Irrespective of whether you view 4K/8K satellite broadcast programs**, answer whether each of the following is available for viewing (Note 3).)

- |  |                                   |
|--|-----------------------------------|
| 1. 4K programs "NHK BSP 4K"                  | 3. 8K programs "NHK BS8K"         |
| 2. 4K programs "Shop Channel 4K" or "4K QVC" | 4. None are available for viewing |

Note 1: Special receivers are required for viewing 4K/8K satellite broadcast programs, including TVs with built-in 4K/8K tuners, external 4K/8K tuners and 4K/8K set-top boxes. These receivers, excluding some, are accompanied by remote controls with 4K/8K buttons.

Note 2: Ordinary “NHK BS,” “Shop Channel,” and “QVC” that are not under the TV viewing environment mentioned in Note 1 do not fall under 4K/8K broadcast programs.

Note 3: Display a television schedule and check if any program in the schedule is available for viewing.

## Q5 Concerning your household's members and income

(1) Please indicate the number of people, including yourself, in your household.

people	(children aged less than six) people
--------	---

(2) What was your household's combined annual income last year? Please circle the **one** best answer.

1. Less than ¥2 million	4. ¥6 million to less than ¥8 million	7. ¥15 million to less than ¥20 million
2. ¥2 million to less than ¥4 million	5. ¥8 million to less than ¥10 million	8. ¥20 million and over
3. ¥4 million to less than ¥6 million	6. ¥10 million to less than ¥15 million	

<<Questions for household members>>...Following Questions are made to household members.

- ◎ **Those aged 6 or more** who live together with the householder may answer the following questions.  
The householder may fill out answers for younger children or others who may find the questions difficult.
- ◎ If there are five or more household members aged 6 or more, we will send additional questionnaires.  
Please report to the contact on survey details specified on the cover.

Please indicate the gender and age of each household member who is 6 or older.

**As responses without such indication are classified as invalid, be sure to make the indication.**

	A (Householder)	B	C	D
Gender (circle either male or female)	Male • Female	Male • Female	Male • Female	Male • Female
Age (fill in the person's age)	____ years old	____ years old	____ years old	____ years old

## Q1 This question regards all your household members' internet use in the past year.

Have you used the internet (including sending or receiving email or messages, searching information, using social networking services (SNS), browsing websites, online shopping, etc.) in the past year?

Internet use here means that the internet was used irrespective of device types, purposes (business or private) or locations.

Please circle the **one** best answer.

1. Yes
2. No

A	B	C	D
1	1	1	1
2	2	2	2

Note 1: Internet use includes all internet use irrespective of what device has been used, whether the internet has been used for public or private purposes or where internet use has taken place.

Note 2: “Sending or receiving email or messages” excludes Short Message Service (using telephone numbers).

**Please go to Question 6 (Page 8)**

**Q2 This question on individuals' internet use status is for those who circled "1. Yes" in Q1.**

(1) What are the **devices for your internet use**, no matter whether you own them?

**Please circle all answers that apply.**

1. Computer
2. Mobile phone
3. Smartphone
4. Tablet
5. TV receiver <sup>Note</sup>
6. Home game console (PlayStation5, Nintendo Switch, etc.)
7. Other devices

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7

Note: TV receivers (option 5) 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 6 if you used the internet on the screen of a TV receiver via a home game console.

(2) How often do you use the internet?

**Please circle the one best answer.**

1. Use at least once a day
2. Use at least once a week (but not every day)
3. Use at least once a month (but not every week)
4. Use at least once a year (but not every month)

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4

(3) Where do you use the internet?

**Please circle all answers that apply.**

1. Home (including work from home and online lessons at home)
2. Workplaces (including use of the internet by teachers, instructors, etc. at a school.)
3. Schools (including students who use the internet in classrooms)
4. Public facilities (government offices, libraries, community centers, etc.)
5. While commuting on public transport
6. Hotels or other accommodations / Restaurants, coffee shops, etc.
7. Other locations

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7

(4) Do you have anyone to easily consult with about how to use the internet?

**Please circle all answers that apply.**

1. Relatives
2. Friends
3. Neighborhood community associations
4. Administrative organizations such as municipal offices
5. Mobile phone shops
6. Electrical appliance retailers
7. Other private service providers
8. Others
9. Have nobody to consult with
10. Do not need to consult with anyone

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10

**Q3 This question on purposes of internet use is for those who circled “1. Yes” in Q1.**

**(1) What internet functions or services have you used in the past year?**

**Please circle all answers that apply.**

	A	B	C	D
1. Sending and receiving email	1	1	1	1
2. Browsing and posting on, and opening and updating of, websites and blogsites	2	2	2	2
3. Using SNS (including free call services) (Facebook, X/formerly Twitter, LINE, mixi, Instagram, Skype, etc.)	3	3	3	3
4. Using online conference systems for business purposes	4	4	4	4
5. Using video posting / sharing sites (Youtube, Niconico Douga, etc.)	5	5	5	5
6. Using online gaming	6	6	6	6
7. Using search services (using Google Search, Yahoo! Search, etc.)	7	7	7	7
8. Browsing news sites of newspaper companies and TV stations	8	8	8	8
9. Browsing news app and sites	9	9	9	9
10. Browsing websites of fact-checking organizations and relevant bodies	10	10	10	10
11. e-learning (online lessons, supplementary school lectures/exercises, language lessons, etc.)	11	11	11	11
12. Using online diagnosis	12	12	12	12
13. Financial transactions (banking, securities, insurance, etc. transactions over the internet)	13	13	13	13
14. Buying/exchanging goods and services (excluding digital content)	14	14	14	14
15. Buying/exchanging digital content (including video-streaming services such as Netflix, Hulu, etc.)	15	15	15	15
16. Buying and other transactions on internet auction and flea market applications	16	16	16	16
17. Using e-Government, e-Local Government services (online applications, online reports, and online notifications)	17	17	17	17
18. Others (using forums or web album, etc.)	18	18	18	18

**If you circle Option 3, please answer Question 3 (2) on this page.**

**If you circle any of Options 13 to 16 and are aged 15 or older, please answer Question 3 (3) on next page.**

**If you circle Option 17, please answer Question 3 (4) on next page.**

**(2) To people who circled 3 to Question 3 (1) (i.e., people who use SNS(including free call services)):**

**For what purposes do you use SNS?**

**Please circle all answers that apply.**

	A	B	C	D
1. To communicate with current friends	1	1	1	1
2. To find information on topics of interest	2	2	2	2
3. To expand exchanges	3	3	3	3
4. To announce my own information or creative work	4	4	4	4
5. To gather or provide information during emergencies or disasters	5	5	5	5
6. To find old friends	6	6	6	6
7. To kill time	7	7	7	7
8. Others	8	8	8	8

(3) **To people who are aged 15 or older and who circled any of “13. Financial transactions,” “14. Buying/exchanging goods and services,” “15. Buying/exchanging digital content,” “16. Buying and other transactions on internet auction and flea market applications” to Question 3 (1):**

**What payment methods have you used when purchasing goods or making financial transactions on the internet?**

**Please circle all answers that apply.**

1. Credit card (excluding use for payment on delivery) <sup>Note</sup>
2. Payment on delivery
3. Payment at bank / post office branch or ATM
4. Payment at convenience store
5. Payment by internet banking / mobile banking*
6. Payment by addition to communication charges / provider charges
7. Payment by electronic money (QR code payment (~Pay etc.), Rakuten Edy, Suica, etc.)
8. Others

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8

Note: This option includes payments by debit cards (cash cards).

(4) **To people who circled 17 to Question 3 (1) (i.e. Using e-Government, e-Local Government services: online applications, online reports, and online notifications):**

**What procedures have you used?**

**Please circle all answers that apply.**

1. Application for a My Number card
2. Application for My Number card points
3. Using the My Number portal site
4. Filing a tax return (e-Tax)
5. Using the health insurance certificate of a My Number card
6. Vaccination procedures (including vaccination reservation and certificate issuance)
7. Procedures at municipal offices
8. Registration of an account receiving public funds
9. Confirmation of pension information (using Nenkin Net (Pension Net))
10. Passport application procedure (renewal procedure and notification of loss)
11. Others

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11

**Q4 This question on concerns about using the internet is for those who circled “1. Yes” in Q1.**

**(1) Do you have concerns about security, etc. during your internet use?**

**Please circle the one best answer.**

	A	B	C	D
1. I'm concerned	1	1	1	1
2. Feel rather concerned	2	2	2	2
3. Feel rather unconcerned	3	3	3	3
4. I have no concerns	4	4	4	4

**(2) To people who circled “1. Feel concerned” or “2. Feel rather concerned” to Question 4 (1):**

**What specific concerns do you have about security, etc.?**

**Please circle all answers that apply.**

	A	B	C	D
1. Leak of personal information and internet use history	1	1	1	1
2. The reliability of electronic payments	2	2	2	2
3. Computer virus infections	3	3	3	3
4. Come across or spread illegal/harmful information	4	4	4	4
5. Come across or spread information of uncertain authenticity	5	5	5	5
6. The extent of security measures to be implemented	6	6	6	6
7. Concern about trouble with others on social media, etc.	7	7	7	7
8. Self or others close to me becoming addicted to the internet	8	8	8	8
9. Concern about the risk of being targeted by fictitious billing or scams through the internet	9	9	9	9
10. Receiving spam e-mails	10	10	10	10
11. Others	11	11	11	11

**Q5 To people who circled “1. Yes” in Question 1, please answer this question regarding the implementation of security measures, etc.**

**(1) Have you experienced any of the following when using a computer, a mobile phone, a smartphone or a tablet?**

**Please circle all answers that apply.**

	A	B	C	D
1. Loss or theft of device	1	1	1	1
2. Infection by a computer virus	2	2	2	2
3. Receive spam / fraudulent email	3	3	3	3
4. Breach of personal information security (phone number, email address, location information, etc.)	4	4	4	4
5. Phishing <sup>Note</sup>	5	5	5	5
6. See ad displays connected to Web browsing history	6	6	6	6
7. Come across or spread illegal/harmful information	7	7	7	7
8. Come across or spread of information of uncertain authenticity	8	8	8	8
9. Others	9	9	9	9
10. None of the above	10	10	10	10

Note: 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.

(2) **What specific security measures do you take for your internet use?**

**Please circle all answers that apply.**

	A	B	C	D
1. Keep software updated to the latest version	1	1	1	1
2. Subscribe to security services provided by mobile telecom	2	2	2	2
3. Install anti-virus software	3	3	3	3
4. Take any measures against spam	4	4	4	4
5. Check terms and conditions and use only reliable applications	5	5	5	5
6. Set a password lock on my devices	6	6	6	6
7. Refrain from entering personal information	7	7	7	7
8. Do not connect to unknown Wi-Fi networks	8	8	8	8
9. When the information accuracy cannot be ascertained, check the information provided by fact-checking organizations or by TV stations and newspaper companies	9	9	9	9
10. Others	10	10	10	10
11. I have not taken security measures.	11	11	11	11

**Q6 This question on ICT skills is asked to all people.**

**Can you perform the following operations with computers, smartphones, tablets or any other terminals?**

**Please circle all answers that apply.**

	A	B	C	D
1. Copying files, copying and pasting letters and charts	1	1	1	1
2. Sending e-mails with pictures or documents being attached	2	2	2	2
3. Simple computation, such as addition and subtraction using spreadsheet software including Excel	3	3	3	3
4. Preparing documents by using presentation software, including PowerPoint	4	4	4	4
5. Connecting printers and cameras to computers	5	5	5	5
6. Using the internet to download and install software	6	6	6	6
7. Exchanging data between computers and other devices (including smartphones)	7	7	7	7
8. Creating computer programs by using programming languages	8	8	8	8
9. Posting, viewing or reading photos, videos, or comments on SNS	9	9	9	9
10. Can't perform any of Operations 1 to 9	10	10	10	10



**Q7 This question concerning the use of mobile services is asked to all people.**

**(1) Do you own any of the devices listed below?**

**Please circle all answers that apply.**

1. Mobile phone
2. Smartphone (5G standards)
3. Smartphone (Pre-5G standards)
4. Own neither

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4

**(2) To people who circled "1. Mobile phone," "2. Smartphone (5G standards)" or "3. Smartphone (pre-5G standards)" in Question 7 (1)**

**For a mobile terminal that you primarily use, which mobile phone service provider do you use?**

**Please circle the one best answer.**

Mobile phone	1. Using services of a so-called major mobile service provider <sup>Note</sup>
	2. Using services of a so-called discount mobile service provider <sup>Note</sup>
Smartphone	3. Using services of a so-called major mobile service provider <sup>Note</sup>
	4. Using services of a so-called discount mobile service provider <sup>Note</sup>

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4

Note: Major mobile service providers are NTT Docomo, KDDI, Okinawa Cellular (including UQ Mobile) Softbank (including Y! mobile) and Rakuten Mobile. Discount mobile service providers are providers other than major mobile service providers.

**(3) Concerning the mobile terminal circled in Question 7 (2):**

**① How much monthly installment before consumption tax do you pay for the terminal?**

**Put relevant figures in the box or circle a relevant alternative.**

1.	<input type="text"/>	Thousand yen or more	*Put "0" if the amount is less than 1,000 yen.
2.	No such payment after completion of installment payments		
3.	No such payment after a lump-sum payment		
4.	No such payment after a purchase on a "no-installment payment" (0 yen in lump-sum payment) basis		
5.	Others		
6.	No idea		

A	B	C	D
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6

**② How much did you pay for mobile services before consumption tax in the latest month (excluding an installment payment for the terminal and a payment for content)?**

**Put relevant figures in the box or circle a relevant alternative.**

1. <input type="text"/> Thousand yen or more	*Put "0" if the amount is less than 1,000 yen.
2. No idea	

A	B	C	D
2	2	2	2

\*If you use a data share plan (to share data capacity among multiple persons), specify a per capita amount.

Question 8 is for those who meet all the following conditions:

(i) Aged 15 or older

(ii) Those who circled "1. Yes" (used the internet within the past year) in Question 1

## Q8 Engagement in telework

(1) Do you work for a company or other organization (including public institutions and organization)?

(This includes part-time and casual workers, but excludes self-employed individuals.)

Please circle the **one** best answer.

1. Yes
2. No

A	B	C	D
1	1	1	1
2	2	2	2

(2) Have you engaged in telework<sup>Note 1</sup> using the internet in the past year?

Please circle **all** answers that apply.

1. Engaged in telework at home
2. Engaged in telework at a satellite office <sup>Note 2</sup>
3. Engaged in telework while out of office (mobile work <sup>Note 3</sup> )
4. Conducted telework for workation <sup>Note 4</sup>
5. Not engaged in telework

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5

Note 1: Telework refers to working at a location different from the primary location of work.

Note 2: "Satellite office" refers to an office space located in a place different from the primary location of work.

Note 3: "Mobile work" refers to working while out of office for the purpose of sales and other activities.

(3) To people who answered 5 to Question 8 (1):

① Would you like to engage in telework?

Please circle the **one** best answer.

1. Would like to engage in telework
2. Would not like to engage in telework

A	B	C	D
1	1	1	1
2	2	2	2

② Why do you not engage in telework using the internet?

Please circle **all** answers that apply.

1. There is not a telework system at the employer
2. The employer cannot make adequate labor management
3. Work is not suited to telework
4. Impedes office / internal communications
5. The atmosphere at the employer is not favorable for telework
6. It is unclear whether telework is allowed at the employer
7. Have not moved to digital documents
8. The telework business environment (including satellite offices) has not been developed
9. There is no adequate ICT systems required for telework
10. Others

A	B	C	D
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10

**\*If each respondent's gender or age is not specified on Page 4, the response may be invalid. Please make sure to enter such information.**

This completes the survey questions. Thank you for your participation.

## Glossary

Refer to the following explanations of the words marked \* in the questionnaire

Index	Term	Definition
B	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.
C	Cable TV (CATV)	Refers to the application of cable TV cabling for internet access.
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	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.
I	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.
O	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.

Ministry of Internal Affairs and Communications

**2024 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.

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

Please note the following before completing the survey.

- Please give answers reflecting the situation at your company **on August 31, 2024** except where noted otherwise.
- Submit the completed survey to: Economic Research Office, Information and Communications Bureau,  
Ministry of Internal Affairs and Communications (MIC)  
2nd Bldg. of the Central Common Government Office, 2-1-2 Kasumigaseki,  
Chiyoda-ku, Tokyo 100-8786, Japan

**\* You may respond to the survey online.**

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

- If you have any questions, please contact the survey firm at:  
"Communications Usage Trend Survey" Secretariat,  
Public Opinion Research Center (contracted by the MIC)  
5F, Kawabe Shinjukugyoenmae Bldg  
4-16-3 Yotsuya, Shinjuku-ku, Tokyo 160-0004, Japan  
Tel.: 0120-XXX-XXX (toll free) (Between 10:00 and 17:00, on weekdays) Take care not to misdial.  
email: r5tsusin@yoron-kagaku.or.jp
- The Ministry of Internal Affairs and Communications has contracted the survey firm above to conduct this survey.**
- Regarding words marked\*, refer to the attached "Guide to fill in the questionnaire" as necessary.

**Q1 Please answer questions about internet connection at your company.**

**What internet access connection or connections does your company have?**

**Please circle **all** answers that apply.**

1. Telephone (dial-up)	6. BWA access service*
2. ISDN* Note	7. DSL*
3. Cable TV*	8. Leased line*
4. Optical fiber* (FTTH)	9. Others
5. Fixed wireless access (FWA)*	10. No internet access

Note: If you use ISDN over an optical fiber connection, please circle 4 "Optical fiber (FTTH)."

**Please go to Question 3 on next page.**

**Q2 The following questions concern your company's provision of information via the internet.**

**(1) Does your company have a Website? Please circle the **one** best answer.**

1. Yes	2. No
--------	-------

**Please go to Question 3 on next page.**

**(2) To companies that answered 1 to Question 2 (1) (i.e. companies that have a Website):**

Japan has established the JIS standard on the accessibility of Web content (JIS X 8341-3:2016) to make Websites accessible for everyone, including elderly people and persons with disabilities.

Regarding your company's initiatives for the accessibility of Web content, please circle the one best answer.

1. We have conformed to the standard (including relevant international standards, hereinafter the same applies).  
(Please circle one of the two conformity levels → a. Conformity level at AA or higher b. Conformity level at A)
2. We have failed to conform to the standard, or have implemented initiatives to conform to the standard while remaining unaware of whether we conform to the standard.
3. We have implemented some accessibility initiatives that are not necessarily designed to conform to the standard.
4. We are aware of the standard or what the accessibility is, but have implemented no relevant initiatives.
5. We had not been aware of the standard or what the accessibility is.

**Q3 The following questions concern your company's use of cloud computing.**

**(1) Does your company use cloud computing (the cloud)<sup>Note</sup>? Please circle the one best answer.**

Note: cloud computing services include SaaS\* (Software as a Service) provided by application service providers (ASPs)\*

- |                                      |                                       |
|--------------------------------------|---------------------------------------|
| 1. Used company wide                 | 3. Not used, but plan to use          |
| 2. Used by some offices or divisions | 4. Not used, and have no plans to use |
|                                      | 5. Do not understand cloud services   |

Please go to Question 3 (3) on next page.

**(2) To companies that answered 1 or 2 to Question 3 (1):**

**① Which specific cloud computing services does your company use? Please circle all answers that apply.**

- |  |   |  |
|--|---|--|
| 1. File storage / data sharing           | 7. Sharing information with business partners   | 13. Order taking and sales   |
| 2. Data backups                          | 8. Sales support                                | 14. Purchasing   |
| 3. Internal information sharing / portal | 9. R&D related                                  | 15. Production management, distribution management, store management |
| 4. email                                 | 10. System development and Website construction | 16. Billing and payment systems                                      |
| 5. Schedule sharing                      | 11. e-learning                                  | 17. Authentication systems   |
| 6. Project management                    | 12. Payroll, financial accounting, HR           | 18. Others   |

**② Why do you use cloud computing services? Please circle all answers that apply.**

- |  |  |
|--|--|
| 1. Costs are lower than existing systems                             | 6. Improve operational stability and availability                        |
| 2. No need to have internal asset and storage systems                | 7. The same services are available irrespective of location or equipment |
| 3. Quick response capability, such as upgrading system capacity      | 8. Useful as a backup at the time of disaster                            |
| 4. Easy system scalability   | 9. Others  |
| 5. Reliability is higher (information leakage countermeasures, etc.) |  |

**③ What impact has cloud computing had regarding the reasons given in Question 3 (2)②?**

**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     |                           |

**(3) To companies that answered 4 to Question 3 (1):**

**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 | 6. Information theft and other security concerns              |
| 2. Cloud services would hinder corporate compliance                             | 7. No legal system in place                                   |
| 3. Increase in communication costs  | 8. Not necessary  |
| 4. Cannot customize applications to suit needs                                  | 9. Do not see the advantages, not convinced by the advantages |
| 5. Concerns about network stability   | 10. Others  |

**Q4 The following question concerns your company's introduction of telework.**

**(1) Has your company introduced telework<sup>Note</sup>? Please circle the one best answer.**

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

- |   |
|---|
| 1. Have introduced telework (a. Working from home b. Satellite office work c. Mobile work d. Workation) |
| 2. Not introduced, but have plans to introduce telework   |
| 3. Not introduced, and have no specific plans to introduce telework                                     |

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. Specific telework types include the following:

Working from home	"Working from home" includes not only full homeworking but also "partial homeworking" in which a worker works at home after going to the office or while visiting customers or attending business meetings.
Satellite office work	Working at telework facilities such as a share office, a coworking space and offices outside the office to which the worker belongs.
Mobile work	Working outside the office for sales and other business operations. In a mobile work type, a salesperson conducts business operations such as emailing and daily report preparation on public transportation, or at stations, cafes, etc. without returning to the office.
Workation	Workation, a combination of "work" and "vacation," means that workers take advantage of telework to spend time on personal vacation while working at places other than their usual workplaces and homes. There are two workation patterns: one giving priority to vacation and the other giving priority to work.

Please go to Question 4 (3) on next page.

**(2) To companies that answered 1 to Question 4 (1):**

**① What percentage of your employees used telework at least once in the past year?**

**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                 |

**② What were the purposes of introducing telework at your company?**

**Please circle all answers that apply.**

- |  |  |
|--|--|
| 1. Raise efficiency (productivity) of business processes | 8. Secure employment, prevent personnel losses   |
| 2. Improve creativity of business processes              | 9. Meet needs of employees including persons with disabilities, elderly persons and those engaging in nursing care or childcare                    |
| 3. Improve workers' work-life balance                    | 10. Conserve energy and electricity  |
| 4. Reduce long working hours                             | 11. Respond to COVID-19 (prevention of infections and business continuation)   |
| 5. Reduce office costs                                   | 12. Prepare for business continuity in the event of emergencies (earthquakes, typhoons, heavy snow, infection epidemics other than COVID-19, etc.) |
| 6. Shorten workers' traveling time and avoid congestion  | 13. Others   |
| 7. Increase customer satisfaction                        |  |

**③ What impact has the telework introduction had on the purposes given in Question 4 (2)②?**

**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     |                           |

**(3) To companies that answered 3 to Question 4 (1):**

**Please circle all reasons why you have not introduced telework?**

- |   |   |
|---|---|
| 1. Work is not suited to telework                   | 8. Concern about information security breaches            |
| 2. Difficult to advance work operations             | 9. Impedes handling customers and other external entities |
| 3. Do not see the advantage of introducing telework | 10. Too expensive   |
| 4. Difficult to assess employees                    | 11. Troublesome to introduce an HR system                 |
| 5. Impedes office / internal communications         | 12. Difficult to calculate wages                          |
| 6. Shifts burden to other employees                 | 13. Have not moved to digital documents                   |
| 7. No requests from union or employees              | 14. Others  |

**(4) To companies that answered 1, 2 or 3 to Question 4 (1):**

**What factors are required for diffusing telework further? Please circle all answers that apply.**

<Inhouse initiatives>	
1. Improving labor management	3. Upgrading information and communication systems
2. Improving work environment	4. Others
<National or local government initiatives or support>	
5. Telework diffusion and enlightenment campaigns (holding seminars, distributing leaflets, etc.)	8. Support for developing satellite offices and other telework facilities
6. Support or subsidies for businesses adopting telework	9. Support for operating satellite offices and other telework facilities
7. Matching between businesses adopting telework and local governments hosting business locations	10. Training personnel for diffusion of telework (holding seminars and training programs, etc.)
	11. Others

**Q5 The following questions ask companies that use the internet about their security measures.**

**(1) Has your company experienced any of the following cyberattacks in the past year?**

**Please circle all answers that apply.**

- |   |   |
|---|---|
| 1. Have received targeted emails <sup>Note 1</sup>                | 6. DoS (DDoS) attack <sup>Note 4</sup>    |
| 2. Discovered a computer virus* but not infected                  | 7. Website defacement                     |
| 3. There was at least one incidence of a computer virus infection | 8. Data breach due to theft or negligence |
| 4. Illegal access <sup>Note 2</sup>                               | 9. Other losses                           |
| 5. Used as a spam <sup>Note 3</sup> bot or zombie                 | 10. No particular losses                  |

Note 1: 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: Email sent in massive volumes indiscriminately without regard for any attribute the recipients.

Note 4: DoS attack is an attack where the attacker sends massive amounts of packets to a server to bring down a system or disrupt services.

**(2) What measures has your company taken for data security and anti-virus protection on ICT networks? Please circle all answers<sup>Note 1</sup> that apply.**

- |  |  |
|--|--|
| 1. Establish security policies   | 11. Maintain access logs   |
| 2. Security audits   | 12. User authentication by means of authentication technologies              |
| 3. Outsource security management   | 13. Encrypt data or networks   |
| 4. Training for employees  | 14. Line monitoring  |
| 5. Install anti-virus programs on computers and other devices (operating system, software, etc.) | 15. Install and maintain firewalls   |
| 6. Install anti-virus programs on servers  | 16. Use proxy servers, etc.  |
| 7. Apply security patches for operating systems  | 17. Install and maintain intrusion detection systems (IDS) <sup>Note 2</sup> |
| 8. Construct anti-virus walls at external access points  | 18. Install and maintain Web application firewalls                           |
| 9. Establish manuals on responding to viruses  | 19. Other measures   |
| 10. Control access with IDs, passwords, etc.   | 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).



**Q6 The following questions concern data collection/utilization at your company.**

**(1) In recent years, the collection or analysis of digital data has made it possible to create new values or solve problems. Has your company introduced IoT or AI systems or services to collect or analyze digital data? Please circle the one best answer.**

**Please circle the one best answer.**

- |   |                        |
|---|------------------------|
| 1. Have introduced                                    | 3. Have not introduced |
| 2. Have not introduced, but are planning to introduce | 4. Don't know          |

Please go to Question 6 (3) on next page.

**(2) To companies that answered 1 to Question 6 (1):**

**① What are purposes of digital data collection and analysis? Please circle all answers that apply.**

- |  |                                     |
|--|-------------------------------------|
| 1. Improvement of business efficiency/operations | 4. New business projects/management |
| 2. Business continuity                           | 5. Improvement of customer services |
| 3. Overall optimization of business operations   | 6. Others                           |

**② What are components of AI or IoT systems or services that your company has introduced? Please circle all answers that apply.**

- |   |                              |   |
|---|------------------------------|---|
| 1. Smart meters <sup>Note 1</sup> , energy management systems | 4. Non-contact IC cards      | 8. Cellular modules for automobiles <sup>Note 4</sup> |
| 2. Physical security devices <sup>Note 2</sup>                | 5. Sensors <sup>Note 3</sup> | 9. OCR <sup>Note 5</sup>                              |
| 3. Electronic tags (RFID tags)                                | 6. Industrial robots         | 10. Others (chatbot etc.)                             |
|   | 7. Surveillance cameras      |   |

Note 1: Smart meters are power management devices that measure consumption of electricity, gas, water, etc. digitally and have communication functions.

Note 2: Physical security devices are components of access control and video monitoring systems (including IC card verification devices, biometric identification devices and surveillance/security cameras).

Note 3: Sensors are devices that sense temperatures, pressure, locations, etc.

Note 4: Vehicle-mounted wireless modules for connecting vehicles with networks

Note 5: OCRs are devices that convert written text information on paper into electronic data.

**③ What impacts has the introduction of IoT and AI systems or services on the digital data collection and analysis purposes given in Question 6 (2)①? Please circle the one best answer.**

- |                       |                    |                             |
|-----------------------|--------------------|-----------------------------|
| 1. Very effective     | 3. Unchanged       | 5. No idea about any effect |
| 2. Somewhat effective | 4. Negative effect |                             |

**④ What is used for connecting your IoT or AI systems to networks? Please circle all numbers applicable to connection between the systems and access points<sup>(Note 1)</sup> if any access points are used for connection to networks, or between the systems and the internet if the systems are connected directly to the internet.**

- |   |                               |
|---|-------------------------------|
| 1. Wired networks <sup>(Note 2)</sup>             | 6. Nationwide 4G services*    |
| 2. LPWA (low power wide area)*                    | 7. Nationwide 5G services*    |
| 3. Nationwide/local BWA (broadband wires access)* | 8. Local 5G services*         |
| 4. Private BWA*                                   | 9. Other wireless lines       |
| 5. Wireless LAN (Wi-Fi)                           | 10. Not connected to networks |

Note 1: Including base stations and gateways.

Note 2: Including DSL (digital subscriber line) lines, cable TV lines, optical lines (FTTH (fiber to the home) lines) and fixed wireless access (FWA) lines.

**(3) To companies that answered 3 to Question 6 (1):**

**What are reasons for refraining from introducing AI or IoT systems?**

**Please circle all answers that apply.**

- |   |   |
|---|---|
| 1. Communications infrastructure for the IoT or AI introduction is insufficient.        | 4. The IoT or AI introduction and operation would be very high.       |
| 2. Legal infrastructure for the IoT or AI utilization and introduction is insufficient. | 5. There are no human resources to effectively use IoT or AI systems. |
| 3. Business models after the IoT or AI introduction are uncertain.                      | 6. Systems or services to introduce are not decided.                  |
|   | 7. Others   |

**Q7 The following questions concern personal data utilization at your company.**

**(1) Does your company utilize or plan<sup>Note</sup> to utilize personal data (customer information, registered information, etc.) for developing and providing services? Please circle the one best answer.**

Note: Data utilization in this question includes data provision to other companies (third parties).

- |  |                       |
|--|-----------------------|
| 1. Already utilizing positively            | 4. No plan to utilize |
| 2. Utilizing to some extent                | 5. No idea            |
| 3. Not utilizing but considering utilizing |                       |

**(2) To companies that answered 1, 2 or 3 to Question 7 (1):**

**For what purposes does your company utilize or want to utilize personal data?**

**Please circle all answers that apply.**

- |   |
|---|
| 1. Inhouse utilization for expanding or enhancing existing business operations and models <sup>Note</sup> |
| 2. Inhouse utilization for creating new business operations and models <sup>Note</sup>                    |
| 3. Providing data to other companies (selling data, etc.)   |
| 4. Others   |

Note: In all business stages including product planning, production, distribution/sales and after-sale services

**(3) Please circle all answers that apply about challenges and obstacles assumed at present and for the future regarding the treatment and utilization of personal data.**

- |   |  |
|---|--|
| 1. It is difficult to decide if specific data are persona data or not             | 5. Unclear cost-effectiveness  |
| 2. Personal data collection and management costs are increasing                   | 6. Shortage of human resources for treating (processing, analyzing, etc.) data |
| 3. Risks accompanying personal data treatment (data leaks, etc.)                  | 7. Others  |
| 4. Risks accompanying personal data treatment (repercussion from consumers, etc.) | 8. No particular challenge or obstacle   |

**Q8 This question concerns the usage of Telecommunications Relay Service<sup>Note1</sup> as public infrastructure.**


Note 1: Telecommunications Relay Service provides two-way communication between persons with a hearing disability, etc. and persons without such disability through specialized operators translating between sign language/written text and spoken language. This started in July 2021 as a public infrastructure service.

**(1) Please circle the one best answer regarding your company's activities and systems to enable employees (including persons with normal hearing) to handle inquiries received from persons with a hearing disability, etc. via Telecommunications Relay Service.**

1. We have developed company rules and manuals on handling such inquiries and have ensured that employees are informed about the outline of Telecommunications Relay Service.
2. Although we have not developed company rules and manuals on handling such inquiries, we have ensured that employees are informed about the outline of Telecommunications Relay Service.
3. We have neither developed company rules and manuals on handling such inquiries, nor ensured that employees are informed about the outline of Telecommunications Relay Service.

**(2) Do you employ a person (persons) with hearing disability, etc.<sup>Note 2</sup> and if so, have you registered for Telecommunications Relay Service as a corporate user so that the person (persons) can do their job using a telephone? Please circle the one best answer.**

Note 2: A "person with a hearing disability, etc." refers to a person who has difficulty communicating with other people verbally due to a hearing, speech, or voice disorder.

- 
1. We employ (are considering employing) a person (persons) with a hearing disability, etc. and have registered for Telecommunications Relay Service as a corporate user.
  2. We employ (are considering employing) a person with a hearing disability, etc. and are considering registering for Telecommunications Relay Service as a corporate user.
  3. We employ (are considering employing) a person with a hearing disability, etc. and are considered registration in the past but decided against it at that time.
  4. We employ (are considering employing) a person (persons) with a hearing disability, etc. but are not considering registering for Telecommunications Relay Service as a corporate user (or considered registration in the past but decided against it at that time).
  5. We don't employ a person with a hearing disability, etc.
  6. Others

**(3) This question is for businesses which chose either 1, 2 or 3 as their answer in Question 8(2).**

**What problems do you recognize in the way of your registering for Telecommunications Relay Service as a corporate user at the present time (or what problems did you recognize when you considered registration)? Please circle all answers that apply.**

1. Establishment of Company rules.
2. We do not assign (are not currently supposed to assign) a job using a telephone to a person (persons) with a hearing disability, etc. whom we employ (whom we plan to employ).
3. Introduction cost (including the terminal cost).
4. There is a lack of understanding within the company on the outline of the service and the significance of introducing it.
5. Others

## Q9 Concern general aspects of your company

Thank you for answering the above questions. 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	

As for F2-7, put monetary amounts or numbers of people.

\*Right-align monetary amounts in millions of yen.

	Survey item	Monetary amount or number of people								Unit
F2	Annual sales <sup>Notes1,2</sup>									million yen
F3	Operating profit <sup>Notes1,3</sup>									million yen
F4	Labor costs <sup>Note1</sup>									million yen
F5	Depreciation costs <sup>Note1</sup>									million yen
F6	Amount of fixed assets <sup>Note4</sup>									million yen
F7	Full-time employees <sup>Note5</sup>									employees

Note 1: Put monetary amounts for FY2023 (April 2023-March 2024). If it is difficult to specify amounts for the period, put those for the latest business year.

Note 2: 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.

Note 3: 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.

Note 4: Please fill in the amount of fixed assets as of the end of FY 2023. If it is difficult to identify the amount as of the end of FY 2023, please fill in the amount as of the end of the most recent fiscal year for which the figure is available.

Note 5: Full-time employees: This is the number of full-time employed people at your company as of August 1, 2024 or the nearest payroll deadline date. Full-time employed people are those employed indefinitely or for one-month or longer definite periods irrespective of whether they are called full employees, regular employees, part-timers, temporary employees, non-regular employees or contract employees.

**This completes the survey questions. Thank you for your participation.**

## Glossary

Refer to the following explanations of the words marked \* in the questionnaire

Index	Term	Definition
A	ASP	Short for Application Service Provider. An ASP is a business that provides customers with business applications over the internet.
B	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.
C	Cable TV (CATV)	Refers to the application of cable TV cabling for internet access.
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	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.
I	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	Leased line	A communication service that directly connects a specific network segment with a line reserved for the client's sole use.
	Local 5G	Local 5G communications systems are used by local businesses, local governments and others for their spot networks at buildings or premises.
	LPWA	Short for Low Power Wide Area. A wireless communications system featuring low power consumption, wide coverage and low costs.
N	Nationwide 4G services	Nationwide 4G services by mobile phone carriers
	Nationwide 5G services	Nationwide 5G services by mobile phone carriers
	Nationwide/local BWA	The nationwide BWA is a public data communication system provided by Wireless City Planning and UQ Communications. The local BWA is a communications system for the improvement of local public services, the resolution of digital divide problems and other purposes contributing to local public welfare promotion
O	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.
P	Private BWA	A broadband wireless access communication system for spot use at buildings or premises.
S	SaaS	Short for Software as a Service. SaaS is a mechanism that provides the functions of software applications to customers as needed over a network.