

Building a Safe and Resilient Society

As a provider of telecommunications services, DOCOMO pursues its mission of providing a communications environment that enables customers to use their mobile phones anytime and anywhere, and it strives to enhance customer security, safety, and comfort.

We set up the Network Division to spearhead our initiatives to ensure a consistently reliable network for customers by constructing and operating a total network service that includes communication devices and applications, securing communications during a disaster and guaranteeing the safety of radio waves used by mobile phones, and handling cyber security threats, which are becoming increasingly sophisticated and serious.

Provision of Network Services	63
DOCOMO's Disaster Preparedness	66
Radio Wave Safety	69
Information Security and Privacy Protection	70



Provision of Network Services

Basic Philosophy

DOCOMO is constantly improving its network services to consistently satisfy customers. Building base stations to expand our service areas offers connectivity to customers wherever they are, in the city, on the subway or in remote locations, or in relatively unpopulated areas. We also work to maintain a system that ensures connectivity around the clock, all year round, regardless of circumstances that may arise in the course of daily life or at special events.

We are improving connectivity during spikes in service demand and raising the reliability of our telecommunications services during network failures by implementing the network functions virtualization technology.

Overall Layout of DOCOMO's Network

The DOCOMO network comprises the radio access network, core network, service platform, various mission-critical systems, and the operation system.

Expansion of the Service Area

» Building Base Stations

We are building base stations to enhance voice communication and data transmission as well as to expand our service area. As for LTE, we are increasing the number of base stations capable of handling the faster communication speeds offered by PREMIUM 4G.

In research and development, we have maintained a workforce of between 900 and 1,100 researchers since the late 1990s and spent around 80 billion yen to 100 billion yen

annually since the year 2000. We continue to provide innovations as the backbone of sustainable development in our role as the leader in global mobile communications. Furthermore, we have built base stations for 5th generation (5G) mobile communications and began providing commercial service on March 25, 2020. We had built approximately 20,000 stations by the end of March 2022 and will continue to construct base stations to extend 5G coverage to 90% of the Japanese population by the end of fiscal 2023.

» DOCOMO's Approach to Installing Base Stations

Before building a new base station, we provide detailed information to local residents in accordance with prevailing laws and regulations as well as to those living in areas designated by DOCOMO's internal rules where such formal mandates do not apply. Some residents are concerned about the effects of electromagnetic waves, while others are ambivalent about the construction of antenna towers. We offer a thorough explanation for why the construction work is being carried out and place top priority on the security and safety of residents in the area.

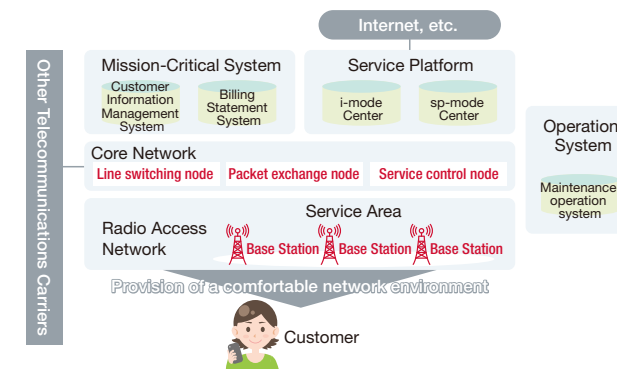
» Inspecting and Improving Reception Quality

We broadly solicit customer information on reception quality to ensure our coverage quality and expand coverage area.

We will continue to improve reception quality by using this feedback while building more base stations in an effort to ensure a more stable environment for our mobile phone users.

In fiscal 2021, we received 94,893 customer inquiries and opinions. We are striving to respond to them through the ongoing improvement of reception quality by conducting reception quality tests on vehicles and on foot throughout Japan. For customers who request better indoor reception quality, we offer them solutions, including an installment of DOCOMO repeaters that amplify signals or compact femtocell base stations that transmit them.

[DOCOMO's Network Layout]



» Ensuring the Quality of Communications Services during Large Events

Major events and exhibitions gather large numbers of customers in a single location. Local base stations may experience intermittent overloads causing spotty phone service when these customers use their mobile phones at the same time. We prepare for such potential problems by proactively implementing special measures. In addition, we are systematically expanding the facility capacity of our networks in response to customer usage status.

Examples	Details
Events such as fireworks and concerts	<ul style="list-style-type: none"> Disperse communication loads by installing mobile base stations and Wi-Fi access points Secure communication capacity by setting up base station facilities to cover the venue and modifying the software that controls the facilities
Response to the Tokyo 2020 Olympic and Paralympic Games	<ul style="list-style-type: none"> Implement measures such as upgrading equipment at athletic venues and other Games-related facilities (47 facilities and access routes) Set a period (61 days) during which construction and other work are restricted to ensure service stability Organize a team of approximately 1,000 DOCOMO employees, specifically for the Games, to establish a network maintenance system with around-the-clock operation

Provision of Network Services

DOCOMO's Disaster Preparedness

Radio Wave Safety

Information Security and Privacy Protection

» Enabling Communications in Remote or Relatively Unpopulated Areas

DOCOMO has drawn up its Basic Policy on Area Expansion to strategically develop base stations in remote or relatively unpopulated areas. Our service coverage ratio in Japan for both 3G FOMA and 4G LTE has reached nearly 100%.

We also respond to temporary spikes at locations such as tourist spots that experience intermittent surges in visitor demand. These measures have helped climbers make rescue calls when they are hurt or lost and have increased the number of lives saved.

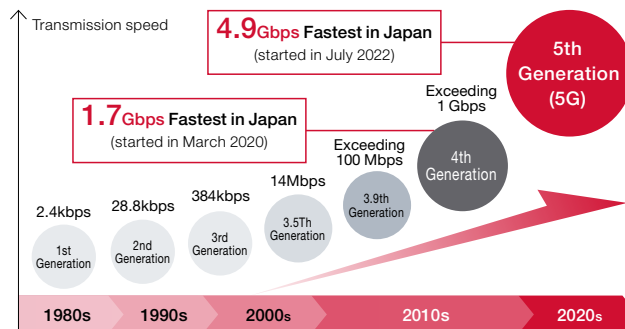
Examples	Details
During the Mt. Fuji climbing season	• Provide stable telecommunications services by installing a temporary base station at the summit
Mountain trails where radio waves are blocked by the surrounding terrain or foliage	• Install special antennas along mountain trails or compact base stations on the roofs of mountain huts
Using mobile phones in shinkansen tunnels	• Provide mobile phone service in all shinkansen tunnels in Japan

» Overseas Use of Mobile Phones

DOCOMO is enhancing its international roaming service so that customers can enjoy the convenience of using their mobile phones overseas. Our WORLD WING service allows customers to continue using the DOCOMO mobile phones they use in Japan within the areas covered by our overseas carrier partners while retaining the same phone number and e-mail address. We have been expanding the number of countries and regions covered by our LTE-based, high-speed communication, LTE international roaming services, and our VoLTE international roaming services that offer high audio quality. As a result, DOCOMO's mobile phones can be used in over 230 countries and regions as of April 30, 2022.

Seeking High-Speed, Large-Capacity Communications

Starting with the first generation (1G) based on analog transmission in the 1980s, a new generation of mobile communication systems has emerged each decade. Over the years, we have dramatically increased transmission speeds and network capacity and are promoting initiatives to realize even faster speeds.



Note: Only available in some areas. Communication speeds represent maximum technical specifications for sending and receiving and do not indicate communication speeds under actual conditions. Communications are provided on a best effort basis and actual speeds may vary depending on the communications environment or network congestion.

PREMIUM 4G

We continue to increase transmission speeds to realize the most convenient communication possible for customers. The maximum downlink transmission speed of PREMIUM 4G, a communication service using LTE-Advanced that began in December 2015, reached 1.7 Gbps as of March 2020, following the introduction of high-speed technologies such as carrier aggregation, 256 QAM, and 4x4 MIMO.

We are also monitoring customer traffic volume and expanding our service areas in major cities in Japan where traffic is concentrated. DOCOMO will strive to provide networks for enjoying various content such as video, music, and SNS by meeting the needs of each individual customer.

► Download speed (median speed) **210** Mbps

► Upload speed (median speed) **29** Mbps

Note: These are median speeds of Android and iOS as of the end of March 2022, measured by NTT DOCOMO in accordance with the guidelines on effective speeds by the Ministry of Internal Affairs and Communications.

Higher-Speed, Larger-Capacity Communications after Launch of 5G Services

DOCOMO started 5G commercial service on March 25, 2020. While fully leveraging the strengths of 5G, including high speed, large capacity, low latency, and massive device connectivity, DOCOMO will continue to be a leading global innovator in realizing ever higher speeds, with its know-how in network operations and leading-edge technical development capabilities cultivated for more than 20 years.

DOCOMO is focused on providing instantaneous 5G communication service that delivers the full benefits of 5G's high speed and large capacity by using three new frequency bands (3.7 GHz, 4.5 GHz, and 28 GHz) as segments of the broadband spectrum dedicated to 5G.

Offering 5G Services Using SA (Standalone) Architecture

DOCOMO has been offering 5G SA (Standalone) services to corporate customers since December 2021, with the introduction of 5GC (5G-Core), a core network device dedicated to 5G. In August 2022, DOCOMO also started offering 5G SA as an optional service for customers who subscribe to DOCOMO's 5G rate plans.

The 5G SA service is available on compatible smartphones and delivers up to 4.9 Gbps download and 1.1 Gbps upload speeds*.

For more affluent and convenient daily lives, we will work to further increase the speed of 5G SA and develop unique and innovative services and technologies through this network, including those for corporate customers that take advantage of network slicing, a key architectural feature of 5G SA.



Provision of Network Services

DOCOMO's Disaster Preparedness

Radio Wave Safety

Information Security and Privacy Protection

*Maximum speeds indicate fastest possible values based on technical standards and do not necessarily represent actual usage speeds. This is a best-effort service, and the actual speeds may vary depending on such factors as the communications environment and network congestion. For details, please refer to the DOCOMO website.

Seeking Even Faster Speeds

Since the launch of 5G services we have engaged in technical planning and R&D for the sophistication of 5G (5G Evolution) and introduction of 6G in the 2030s to seek even higher communication speeds. 5G Evolution and 6G are expected to require improved performance standards such as even higher speeds and larger capacity; expanded service areas including sea and sky; lower power consumption, cost, and latency; higher reliability; multiple connection of a large number of terminals to the network; and various types of network-based sensing. With these developments in mind, we are developing use cases that apply these advances and conducting technical studies.

Ensuring a Stable Network

» Network Surveillance and Response to Network Failures

DOCOMO strives to construct mechanisms for minimizing impact on its service when a problem arises in order to provide a reliable network that customers can depend upon anytime, anywhere.

Providing Year-Round Surveillance and Response for Network Facilities

DOCOMO maintains network operation centers in Tokyo and Osaka that ensure connectivity by conducting surveillance of our network facilities and equipment, such as base stations, as well as monitoring the status of our service to customers nationwide, around the clock throughout the year. When informed of an abnormality, operators promptly respond by remotely controlling network facility and traffic routes to prevent

any disruption in service. They also investigate the cause of the problem, and when the facility requires repairs due to physical or other damage, maintenance staff is dispatched to the site to quickly replace and repair the network equipment.

» Preventing Service Interruptions Caused by Network Facility Failures

DOCOMO maintains mechanisms for preemptively addressing potential failures in network facilities that could interrupt its service to customers.

For example, we have been operating commercial network communications, which adapt the network function virtualization technology, since March 2016. This has led to improved connectivity during network congestion caused by disasters and ensuring continued connectivity during facility failures.

Every day, we collect data on network facilities under normal operating conditions and are constantly analyzing the data. We analyze any anomalies as they arise to determine whether they may be warning signs of an impending failure, and we respond through such action as replacing faulty equipment in advance. In March 2019, we began deploying a remote-controlled, AI-supported surveillance system for identifying failures that had been difficult to detect by conventional methods. We are continuously exploring new technologies and fine-tuning our systems to further improve customer satisfaction.

[Incidents of Serious Facility Failures]

FY2018	FY2019	FY2020	FY2021
0	0	1	1

DOCOMO's Disaster Preparedness





Applying the Three Principles of Disaster Preparedness to Secure Communications in Times of Disaster

Mobile phones play a critical role in rescue operations, reconstruction, and confirmation of personal safety during disasters and emergencies.

Since its founding, DOCOMO has been continuously working to secure communications during disasters in accordance with its Three Principles of Disaster Preparedness: enhance system reliability, ensure essential communications, and rapidly restore communications services.

Applying lessons learned from the Great East Japan Earthquake, we formulated new measures for disaster preparedness and implemented them by the end of February 2012. In fiscal 2018, we announced and subsequently implemented a two-year project for additional measures amounting to 20 billion yen in fiscal 2018 to bolster preparedness against frequent natural disasters. Moreover, we are strengthening our disaster preparedness to be better able to respond to the increasingly diverse natural disasters anticipated in the future.


[Three Principles of Disaster Preparedness]

Three Principles of Disaster Preparedness	Enhance system reliability	<ul style="list-style-type: none"> Reinforce equipment structures <ul style="list-style-type: none"> Seismic measures (e.g., design that withstands an earthquake measuring a magnitude of 7 on the Japanese seismic scale) Measures against storms and floods (e.g., installation of waterproof doors, tide plates) Measures for fire prevention (e.g., installation of fire-proof shutters, doors) 	  <p>Base station Relay station</p>
	Ensure essential communications	<ul style="list-style-type: none"> 110, 119, 118 emergency calls Provide priority phone service to agencies dealing with essential communications during a disaster Control that separates voice calls and packet communication 	
	Rapidly restore communications services	<ul style="list-style-type: none"> Area restoration using emergency response equipment <ul style="list-style-type: none"> Mobile base stations Satellite-linked base stations Mobile power generation vehicles, portable generators, etc. 	 

[Initiatives for Disaster Preparedness]

Disaster-Related and Other Events

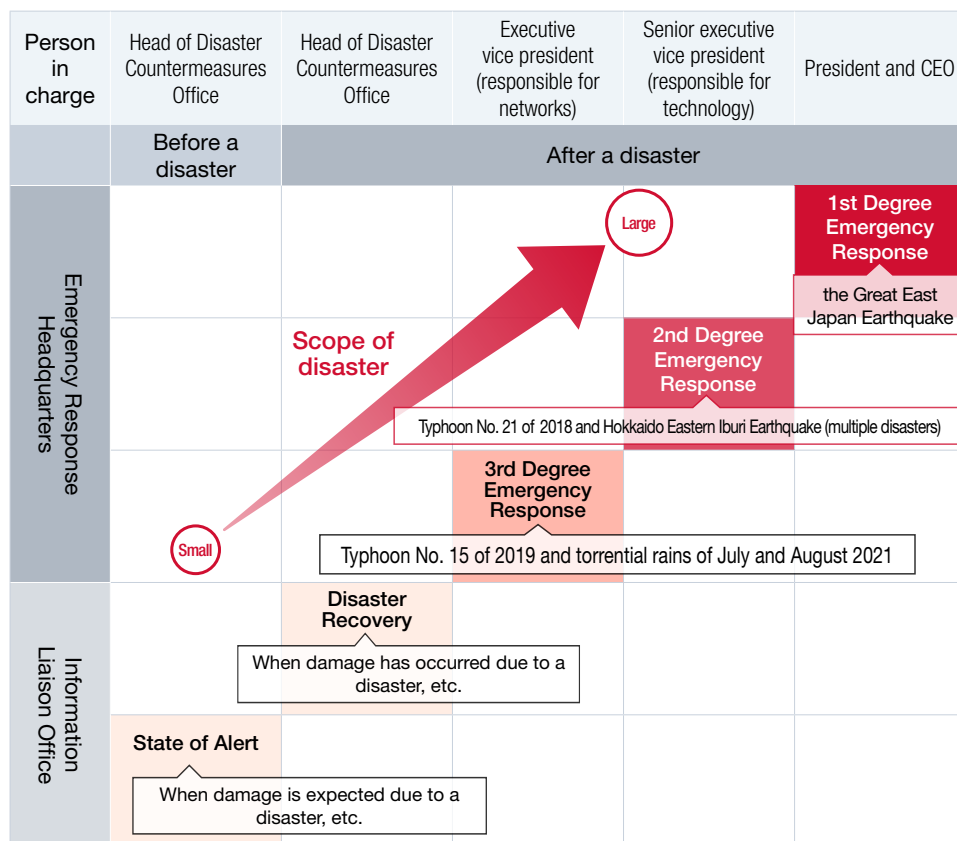
Initiatives for Disaster Preparedness

<p>Disruption of essential communications due to interrupted services</p>	<p>Large-zone base stations (emergency base station to prepare for major disasters)</p> <p>106 locations nationwide (prefectural government offices, etc.)</p> <ul style="list-style-type: none"> Preventing power outages (engine) Redundant transmission lines <p>First operation in the Hokkaido Eastern Iburi Earthquake</p> 	
	<p>Medium-zone base stations (base stations prepared for natural disasters)</p> <p>2,000 locations nationwide (disaster base hospitals, town halls, etc.)</p> <ul style="list-style-type: none"> Operate for 24 hours or more during a power outage Redundant transmission lines <p>Operated 62 stations during the torrential rains of July 2020</p> 	
	<p>Batteries run out during prolonged power outage</p>	<p>Reinforce emergency power sources</p> <p>14,000 locations nationwide (major public bodies, emergency shelters, etc.)</p> <ul style="list-style-type: none"> Can be used for at least 6 hours during a power outage <p>Used batteries at 1,000 locations in Typhoon No.10 in 2020</p> <p>*Including stations other than those that can use batteries for at least 6 hours</p> 
	<p>Interruption of transmission lines due to earthquake or torrential rains (fiber optic, etc.)</p>	<p>Use of multiple transmission routes</p> <p>1,200 buildings nationwide</p> <ul style="list-style-type: none"> Securing multiple routes for transmission Automatically switch to an alternative transmission line <p>Automatically switched to an alternative transmission line during the torrential rains of July 2020</p> 
<p>▶ Investment for disaster preparedness after the Great East Japan Earthquake Cumulative total: over 100 billion yen</p>		

Disaster Management System

Under the NTT Group Disaster Preparedness Plan, we stand ready with a system for efficiently conducting initial operations in accordance with the scope of disaster and recovery efforts. Our system is organized across departments so that it always facilitates an efficient response to disasters.

[Internal System at the Time of a Disaster]



Use of Emergency Base Stations in Response to the Magnitude of a Disaster

DOCOMO maintains emergency base stations to secure its networks in the event of a disaster. Depending on the level of damage, we implement measures such as setting up temporary base stations and remotely adjusting the transmission angle of radio waves from base stations.

[DOCOMO's Emergency Base Stations]

	Mobile base station vehicles and portable base station devices	Medium-zone base stations	Large-zone base stations
Key feature	Respond to diverse natural disasters Mobile base stations (vehicles and portable devices) that provide pinpoint relief for specific areas	Respond to diverse natural disasters Base stations that boost the capacity of existing stations to provide coverage for surrounding areas during a disaster	Dedicated to major disasters Provides wide-area coverage only when operations at most other base stations in the vicinity have been disrupted
Operation Overview	Normal state 	Normal state 	Normal state
	Emergency 	Emergency 	Emergency
	Area size (radius) operation	Small (up to about 1 km)	Small (about 1 km) Medium (between 3 km to 5 km)
Emergency operation	Requires time to transport and install	Instantly activated by remote control	Instantly activated by remote control

» Large-Zone Base Stations

Large-zone base stations are specialized for emergencies to secure communications in heavily populated areas during widespread disasters and power outages. They provide 360-degree coverage across a seven kilometer radius, which is wider than that of a standard base station. Since 2011, DOCOMO has installed large-zone base stations at 106 locations around Japan, and all are compatible with LTE, which boosts capacity by about three-fold. During the Hokkaido Eastern Iburi Earthquake, which struck in September 2018, we activated a large-zone base station for the first time, helping to restore communications to a wide area of Kushiro City.



Large-zone base station that secures communications in densely populated areas in times of disaster

» Medium-Zone Base Station

Medium-zone base stations are built with foundations that are more robust than those of standard base stations and used as standard base stations under normal circumstances. They are able to cover adjacent areas by remotely expanding their service areas in the event of a disaster-related service interruption at neighboring base stations. To cover areas expected to suffer damage based on hazard maps, we had installed more than 2,000 medium-zone base stations in Japan. We also promote the nationwide deployment of medium-zone base stations to secure a means of communication in the suburbs of medium-size cities, disaster base hospitals, and coastal and mountainous regions. We activated 62 stations during the torrential rains of July 2020.

» Covering Areas Difficult to Access Rapidly

To diversify emergency recovery options in times of disaster, we are building shipboard base stations and fixed-line drone base stations to rescue people living in areas such as those difficult to access rapidly from maintenance sites.

As for shipboard base stations, we concluded the Mutual Cooperation Agreement Regarding Disaster Prevention and Disaster Response Activities with Shinnihonkai Ferry Co., Ltd. in April 2018 for prompt service recovery and to support victims in times of disaster. This was the first attempt in Japan to operate a base station aboard a passenger ship. The Shinnihonkai Ferry operates regular routes between major ports in Hokkaido, Tohoku, Hokuriku, and Kansai. Under our agreement, we will further strengthen the framework of cooperation for disaster response activities.

Drone relay stations allow us to secure communication areas by amplifying radio waves in airspace and to strengthen our emergency recovery system.



Drone relay station

Overview of DOCOMO's Response to Disasters

During the torrential rains of July 2020, which were designated as a specified disaster, transmission lines and power sources were interrupted due to river flooding and landslides, ultimately interrupting services at 124 stations. The DOCOMO Group worked in concert, deeply committed to maintaining and restoring communication services. As for emergency recovery activities, we secured vital communications by operating 62 middle-zone base stations, and we deployed our mobile radio vehicles as well as satellite equipment. Telecommunications equipment was restored two weeks after the disaster except in areas difficult to access.

In areas subject to the Disaster Relief Act, we support communications services for customers. We also lend mobile phones to local governments, provide free battery charging services, and install Wi-Fi access points at emergency shelters.



Responding in the wake of a disaster

In addition, we offered the Unlimited Data During Disaster service to allow eligible customers to collect information at emergency shelters without their having to worry about how much data they were using.

[DOCOMO's Principal Support for Areas Subject to the Disaster Relief Act]

Principal Support	Details of Concrete Support
Customers	<ul style="list-style-type: none"> · Activate unlimited data with disaster service · Free provision of mobile phone accessories · Special discount for purchasing mobile phones · Free of charge in place of some fees · Partial reduction in repair charges · Apply the mobile phone compensation service · Free mobile data recovery service · Free replacement of a phone · Relaxed subscription procedures · Free basic charge for DOCOMO Hikari, etc. · Free provision of some devices related to DOCOMO Hikari, etc. · Refund of basic charge for Hikari TV for DOCOMO · Extended fee payment deadline · Reissue of expired d POINTs
Local governments, etc.	<ul style="list-style-type: none"> · Lend mobile phones and satellite phones · Install multi-charger and Wi-Fi access points at emergency shelters

Working with National and Local Governments

The NTT Group Disaster Preparedness Plan was established to facilitate the appropriate implementation of preparedness and response measures as a designated public body under Japan's Disaster Measures Basic Law. Under the plan, we prepare for disasters during normal circumstances and offer emergency response in the event of a disaster. During a disaster, we cooperate with government institutions through measures such as lending mobile phones to local governments to maintain essential communications. In addition, DOCOMO signed agreements with Japan's Ministry of Defense, the Ground Self-Defense Forces, and the Japan Coast Guard to allow for rapid recovery and relief activities during natural disasters.

Under these agreements, DOCOMO lends satellite phones and mobile phones to use in disaster recovery activities, and its

emergency response equipment and personnel are quickly transported to affected areas by the Ground Self-Defense Forces and other public institutions.

In July 2019, the Cabinet Office and DOCOMO signed the Collaborative Agreement on Disaster Response, under which we mainly provide the necessary communication equipment for disaster response activities by dispatching staff from the Cabinet Office and sharing map information for the early restoration of communications services in disrupted areas. We will continue to enhance our disaster response capabilities through such efforts.

Useful Services Available in Times of Disaster

In the event of a large-scale disaster, we provide a Disaster Message Board Service for people to confirm the safety of those in affected areas where a high volume of calls may disrupt mobile phone service. To enable customers to use the message board efficiently in the event of an emergency, we offer opportunities to try the service on the 1st and 15th of every month.

We also provide an All Areas Disaster and Evacuation Information service for customers to receive area mail in remote locations via SMS.

Features of the Disaster Message Board Service

Someone in an affected area can easily post a message on the board to communicate their status, which can then be confirmed via the Internet from anywhere in the world.

Two input options:

(1) Select from the following four message templates

I am safe. There is damage.
I am home. I am at an emergency shelter.

(2) Enter comments (up to 100 double-byte characters or 200 one-byte characters)

Disaster Message Board

Features of the All Areas Disaster and Evacuation Information Service

- SMS notifications are transmitted to pre-registered users in specific areas or regions.
- Disaster and evacuation information from across Japan that has been transmitted in the previous three days can be reviewed on the webpage.

All Areas Disaster and Evacuation Information Service (in Japanese only)

Radio Wave Safety

Basic Philosophy

DOCOMO complies with related laws and regulations and ensures that the level of radio wave emissions from base stations and mobile phones remains below the limits specified in the Radio-Radiation Protection Guidelines. Emissions below these levels are recognized around the world as having no adverse effect on human health, so users need not be concerned about the safety of DOCOMO's mobile phones.

Consideration for Radio Wave Safety

» Radio-Radiation Protection Guidelines

The health effects of radio waves from mobile devices have been researched for over 60 years in Japan and abroad. The World Health Organization has published its recommended guidelines as a safety standard for the effect of radio waves on the human body, with the Radio-Radiation Protection Guidelines providing equivalent information in Japan. The guidelines are reviewed and amended as necessary to reflect the latest findings.

The guidelines were amended in September 2018 to ensure the safe use of radio waves for 5G, and the relevant laws and regulations were also amended accordingly. DOCOMO is fully committed to complying with the relevant laws and regulations and has ensured that the level of radio waves emitted by its base stations and mobile phones meets the requirements indicated in the guidelines.

Furthermore, it discloses the Specific Absorption Rate (SAR), the rate at which energy emitted by radio waves is absorbed by the human body, and incident power density for each mobile phone on its corporate website in its ongoing effort to ensure the safety of mobile phone use for customers.

Compliance Information on Radio Radiation Protection from Mobile Handsets

» Collaborative Research on Radio Wave Safety

Since 2002, DOCOMO has conducted experiments in collaboration with KDDI Corporation and SoftBank Corp. related to the possible impacts of radio waves on the human body at the cellular and genetic levels, and in 2007 we released a final report stating that the research had identified no impact. The report provided scientific evidence against the belief that radio frequency radiation could harm cell structure and function and possibly cause cancer, and it reconfirmed the safety of radio waves from mobile phones. The Ministry of Internal Affairs and Communications also engages in ongoing research on radio wave safety conducted by the Study Group on Bio-electromagnetic Environment, which has been active since 2008.

The Electromagnetic Environment Committee of the Association of Radio Industries and Businesses (ARIB) is currently conducting surveys and research on the safety of mobile phone radio waves to enhance public welfare associated with the use of radio waves. DOCOMO actively participates in these initiatives as a regular member in support of the ARIB.

Radio Wave Safety (in Japanese only)

» Effect on Medical Electronic Devices and Ongoing Measures

Japan's Ministry of Internal Affairs and Communications and the Electromagnetic Compatibility Conference have confirmed the effects of mobile phones and other wireless devices on the functioning of medical electronic devices, including heart pacemakers, and have widely published their safety guidelines. Accordingly, the DOCOMO Group seeks to develop user awareness of the required care by providing information in the mobile phone users' manual and via the DOCOMO website.

» Explanation of Radio Wave Safety in 5G

We recognize the importance of again explaining the safety of radio waves to our stakeholders following the launch of

5G service in March 2020 in Japan. The DOCOMO website offers evaluations and views of relevant domestic and international organizations on the safety of radio waves, as well as information on international guidelines that set radio wave safety standards, including those of the 5G band, on the human body. We disclose information including DOCOMO's view on radio wave safety and answers to frequently asked questions so users can confidently use 5G.

Frequently asked questions on radio wave safety (in Japanese only)

Information Security and Privacy Protection

Ensuring Information Security

» Information Security Policy Management

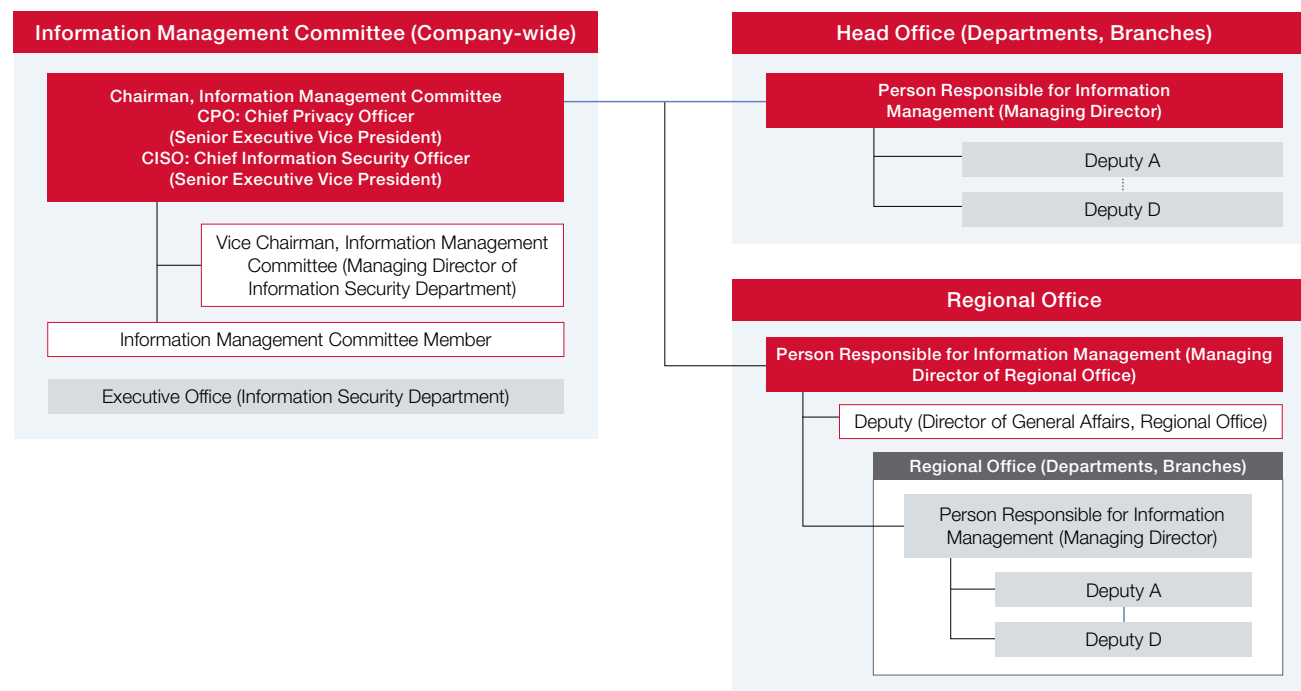
DOCOMO recognizes that proper management of information is a vital management concern. To offer secure services to customers, we have declared our Information Security Policy as a guideline for the DOCOMO Group's initiatives on information security, and we are committed to thorough compliance with this policy and the Privacy Policy. The Information Security Policy applies to information assets that consist of any we obtain in the course of our corporate activities and all information we possess for the purpose of our operations.

In this context, we set up the Information Management Committee, chaired by the senior executive vice president, who also serves as chief information security officer (CISO) and chief privacy officer (CPO), and an employee responsible for information management has been assigned to each worksite. By establishing a system for rapidly implementing information security measures, we are able to protect and appropriately manage all of the information assets we possess.

In the event of an information security incident, we obtain all relevant details including about its impact and inform the Information Security Department as well as the General Affairs and Human Resources Management Department of the head office. Moreover, a designated committee chaired by the president is set up to respond to the incident depending on the degree of impact.

The use without justifiable reason of secrecy of correspondence or confidential and/or personal information that has come to any employee's attention in the course of their duties, or the leaking or attempted leaking of the aforementioned, will be subject to disciplinary action in accordance with Company regulations.

[Information Management System]



(As of March 31, 2022)

» **Specific Security Measures**
Vulnerability Analysis

At each key stage in the system life cycle, from construction to operation, we address vulnerabilities in the in-house system by implementing major security measures in accordance with internal regulations. The division responsible for the system and the division supervising security monitor progress on the implementation of measures required to address vulnerable information. Through this process, we seek to prevent unauthorized access, destruction, leaks, and falsification related to our information assets and to minimize damage in the event of such incidents.

Information Security Training and Fostering Awareness

We provide ongoing education and training to enhance information security literacy among all employees to appropriately manage information assets. These efforts include an e-learning course for raising awareness of information security and cyber security. Education and training are provided in accordance with the learning program framework under the DOCOMO Information Security Training Guidelines. Top management, other managers, and employees are all required to participate in the program. In fiscal 2021, we conducted training and educational activities for the application of information management rules, response to relevant laws and regulations, and trends and measures related to information security risks.

We also have an Information Security Awareness Month every year to raise employee awareness through various initiatives.

Security Measures by Category

(1) Organizational Security

1. Establishment of the Information Security Policy
2. Enhancement of a system for information security
3. Formulation of basic guidelines for information security and establishment and application of regulations and manuals
4. Tracking and management of information assets
5. Implementation and application of audits and security checks

6. Implementation of measures to deal with accidents and violations

(2) Human Security

1. Mandatory written pledges regarding confidentiality
2. Mandatory information management compliance for outside contractors
3. Implementation of training and education for employees, contractors, and sales agents

(3) Physical Security

1. Restrictions on the number of information management terminals and continuous optimization of installed locations and authorized people
2. Rigorous control of the lending and checking out of portable equipment
3. Consolidation and special monitoring of terminals used to extract large amounts of customer information
4. Transition to paperless handling of documents such as customer applications
5. Entrance and exit control in locations handling information

(4) Technical Security

1. Access control, access-log retention, and periodic checks
2. Introduction of biometric identity confirmation for use of systems
3. Stricter customer information search parameters
4. Installation of encryption software for information system terminals and communication channels
5. Strict monitoring to prevent unauthorized removal of information from the office
6. Cyber-attack countermeasures and system surveillance

Information Security Policy

» **Major Initiatives for Fiscal 2021**

Information including personal data is rigorously managed in accordance with the Information Management Rules, detailed regulations, manuals established in line with the Act on the Protection of Personal Information, and other guidelines as stipulated by the relevant authorities. Such rules, regulations, and manuals also apply to DOCOMO's outside contractors and partner companies.

In addition, we are pushing ahead with initiatives to address changes in the environment surrounding information security, such as the revised Act on the Protection of Personal Information.

As for cyber-attack countermeasures, we set up an organization dedicated to implementing the necessary security measures to monitor attacks, make internal and external contacts, and carry out other actions at the time that an incident occurs. In fiscal 2021, we conducted drills before the opening of the Tokyo 2020 Olympic Games so that we would be prepared for possible cyber-attacks, reinforced our internal and external systems for preventing these attacks, and established a liaison system to strengthen cooperation with internal and external security-related organizations.

During Information Security Awareness Month in fiscal 2021, the senior executive vice president, who also serves as the chief information security officer (CISO), and the managing director of the Information Security Department, sent "heads-up messages" to employees, and we also held a seminar for executives on the latest trends in cyber security. In addition, we held e-learning courses on information security three times a year by job title and employee classification, covering such topics as the safekeeping of customer information. We also conducted annual drills simulating targeted e-mail attacks, during which we sent multiple simulation e-mails and took steps to maintain vigilance.

We seek to reinforce information security across the DOCOMO Group through these initiatives that promote maintaining and increasing each employee's understanding of information security throughout the year while also attempting to foster an awareness of compliance.

Protection of Data Privacy

» Establishing the Guidelines and Structure for Protecting Personal Information

DOCOMO believes that recognizing the importance of personal information and ensuring thorough protection represent a vital business responsibility.

We have disclosed our Private Policy, which clearly states our commitment to ensuring security and reliability for customers. In December 2019, we reformulated the policy based on the principles of action (P. 73) set forth in the Personal Data Charter (P. 73), revising its structure and wording to make it simpler and easier to understand, without changing the scope of personal data processing. In March 2022, we also revised the policy in response to the revised Act on the Protection of Personal Information. The policy applies to all Group companies to protect the personal information of our customers.

In the course of obtaining, using, or providing personal information or handling anonymized information, we comply with the Act on the Protection of Personal Information and other relevant laws and regulations and respond promptly to revisions under an established management system for protecting personal information. In addition, we appropriately and carefully handle the information in accordance with internal rules. Through our Privacy Policy, we inform our customers about the content of the personal information handled by the DOCOMO Group, statements requiring customer approval for the use of data, and policy on disclosure to third parties and other information. docomo Shops only collect and retain customer information required for signing telecommunications business contracts and information within the scope approved by customers after clearly stating the intended use of such information. Any information we provide to a third party is strictly limited to the scope approved by the customer.

We formulated the GDPR Compliance Manual in compliance with the EU General Data Protection Regulation (GDPR), which came into effect in May 2018 as a new framework for personal information in the E.U., setting out rules pertaining

to personal data. In April 2019, we also formulated the Information Management Regulations (Handling of EU Personal Data) as an internal regulation that stipulates the handling of personal information in the E.U.

In fiscal 2021, there were no incidents warranting administrative guidance or legal violations related to information leakage or complaints within the DOCOMO Group. DOCOMO reports on the occurrence of such incidents through its corporate website. The number of such incidents is shown in the table below.

[Number of Cases Involving the Leakage, Theft, or NTT DOCOMO Personal Data Charter Misplacement of Personal Information] (cases)

	2018	2019	2020	2021
Number of cases	0	0	0	0

[NTT DOCOMO Privacy Policy](#)

» Personal Information Management and Employee Education

The number of employees with access to systems that manage customer information is kept to the minimum, and the information accessible to each employee is specified and limited. Biometric authentication* is required to use the system, and access logs are regularly reviewed. Moreover, information is encrypted, rendering it useless in the event of unauthorized removal. We seek to ensure the accuracy and security of personal information by implementing these and other rational measures that address risks such as illegal access to personal information, and leakage, loss of, or damage to personal information.

Along with these measures, we provide training at least once a year for all employees and executives, including temporary staff, and an e-learning course suited to each career level to ensure that security management measures are being implemented and personal information appropriately handled.

Note: Biometric authentication confirms the identity of an individual by identifying physical characteristics such as fingerprints and facial as well as voice features.

» Use of Personal Data

Progress related to AI and IoT has led to the creation of diverse products and services that utilize big data. Initiatives in place to create new value are gaining momentum throughout society. Guided by its corporate philosophy of "creating a new world of communications culture," DOCOMO takes on the challenge of constantly innovating to realize an affluent future. We will leverage our customers' personal data and data on various products and experiences as well as technologies such as AI that produce diverse insights from the collected data. We will then generate and deliver new value to our customers and society as a whole.

Meanwhile, we believe our mission is to protect and pay due consideration to customer privacy as well as to comply with prevailing laws and regulations when using personal data that is particularly important to the customer. DOCOMO will continue to live up to the trust of its customers by handling personal data with a sense of responsibility.

In August 2019, we published the Personal Data Charter as a company policy on the use of data to ensure the continued provision of new value to customers and society by leveraging data while maintaining the optimal privacy protection for customers. We set out the six principles of action in the charter and use data in accordance with these principles. We also released Understand by Knowing! DOCOMO's Use of Personal Data, which clearly and simply explains how personal data is used through illustrations. Moreover, we provide the Personal Data Dashboard on our website, allowing customers to confirm the main items of their consent to the handling of personal data and to set and change their own settings to a certain extent.

We will continue our efforts to protect data privacy by pursuing the protection and appropriate handling of personal data.

[NTT DOCOMO Personal Data Charter](#)



» NTT DOCOMO Personal Data Charter

» Six Principles of Action of the NTT DOCOMO Personal Data Charter

NTT DOCOMO Personal Data Charter Behavioral Principles for Innovation Creation

Guided by our corporate philosophy of "creating a new world of communications culture," NTT DOCOMO is pursuing innovation toward the goal of realizing a richer future we have never seen before. Innovation, as we perceive it, is about connecting various goods and services that are relevant to people's everyday lives to deliver comfort and excitement that exceed customers' expectations. We also seek solutions to various societal issues to create a future where everyone can enjoy affluence beyond borders and across generations. From safety and security to health tips, education and all sorts of entertainment in everyday life, we will provide the optimal information catered to the needs of each and every customer as we take steps toward the future. We will also promote various business innovations that are consistent with these goals and other initiatives aimed at solving various social challenges.

We will work to create the future described above together with customers in harmony with society without being complacent with the status quo. We will aim to create new value and provide returns to customers and society by utilizing customers' personal data as well as data derived from various goods and services, adopting artificial intelligence and other new technologies that generates various insight and wisdom from such data.

When we utilize the valuable personal data of customers, we believe it's our mission to protect customers' privacy and ensure due attention to customers, as well as to abide by all relevant laws and regulations. Some customers may have anxiety or concerns about our utilization of their personal data. As we have always done, we will continue to handle personal data with responsibility going forward with a strong resolve to gain the trust and confidence of customers. We will value our "ties" with customers more than ever and listen to their voices with sincerity. What is most important for us is to constantly consider and communicate the new value that we can deliver to customers and society through the utilize of data and the optimal way to protect the privacy of each customer.

To realize "continual new value delivery to customers and society through the utilization of data" and "optimal privacy protection for customers," we will make decisions adhering to our behavioral principles set forth below when we handle customers' personal data in various scenes of our corporate activity.

Principle of Action

Value Communication with Customers and Ensure Transparency

- We will ensure transparency to promote customer understanding of how we collect and use personal data.
We will use plain language, information summaries and videos to simply explain how we collect and use personal data to promote customer understanding.
We will offer sufficient communication to eliminate customer's anxiety or concerns and ease their minds.

Consider Customer Benefits and Serving Society

- We will offer new value to customers and society by leveraging personal data.
Before using personal data, we will consider whether such use will benefit customers or contribute to society and will not use it in any way that may damage the trust of our customers.
We will pay due consideration to customer feelings when collecting and using personal data and will properly and legally conduct such activities.

Respect Each Customer's Desire

- In view of the fact that each customer feels differently about the use of personal data, we will take into account the nature of personal data and the way it is used and then offer options such as an opt-out that allows customers to personally decide on the use of personal data.
We will strive to provide options that are simple and easy to understand.

Pay Due Consideration to Customer Privacy in the Same Way as Collaborating with Partners

- In our effort to deliver new value to customers and

society through cooperation with partners, such as open innovation, we will not only comply with laws but also pay due consideration to customer privacy when providing personal data, de-identified, or statistical data to partners.
We will provide information to our partners in an appropriate manner while conforming to the nature of the information that is to be provided, for example, by confirming the reliability of the partner or limiting the use of or provision of information by each partner.

Implement Appropriate Security Measures to Protect the Personal Data of Customers

- We will protect customer information from leakage, theft, alteration, or other incident by adopting appropriate organizational, personal, physical, and/or technical approaches.
We will regularly assess information security and implement measures to mitigate security risks.

Maintain and Operate a System to Promote Customer Privacy Protection

- We will abide by the principle of Privacy by Design and pay due consideration to the privacy of our customers when developing new products or services.
We will rigorously pay consideration to privacy matters by continuing to conduct internal training, including education and information-sharing for those who handle the personal data of our customers.
We will maintain and operate a system for assessing the impacts on customer privacy that accompany the use of personal data by establishing an advisory body within the Company to conduct a privacy impact assessment.

The content and application of the Principles of Action is subject to continuous review and revision in order to maintain the trust of our customers.



Information Security Support for Partner Companies

Threats against information security have been increasing every year, including targeted malware attacks against organizations and unauthorized access made through the Internet. As one pillar for expanding its smart life business, DOCOMO is promoting collaborations with other industries to address social issues. With the increased sharing of information with partner companies, cyber-attacks targeting our partners may emerge as an information security risk for DOCOMO. We are further reinforcing information security by building an advanced information security system, conducting cyber-attack drills, and carrying out information security education to address information threats that have become more sophisticated and severe.

» Security Management at docomo Shops and Subcontractors

We provide training on information security at least once a year for docomo Shop staff and provide additional education resources through Security News, a compilation of security issues the shops are likely to experience. Also, since the risk of information leakage is highest at the point of sales, we conduct rigorous audits once every three months in addition to monthly self-inspections to ensure that information is being managed appropriately. We select subcontractors after confirming that they can responsibly handle personal information, and our outsourcing agreements include clauses on security management, confidentiality, conditions for recommissioning, and other issues related to the handling of personal information, for which we provide the necessary and appropriate supervision.

» Security Management at Partners

DOCOMO manages the efforts of partner companies by requesting that they comply with the Act on the Protection of Personal Information and follow guidelines issued by ministries

and agencies as well as public organizations. Other measures taken to protect personal information include obtaining customer consent prior to sharing their personal information with partner companies.