



#### Social Issues and Recognition

In an advanced information society, information and communications services are the most important lifeline. The disruption of this lifeline due to factors such as natural disasters can be a major factor behind a downturn in society and the economy itself. KDDI has an obligation to support local communities in which people can live with peace of mind by continuing to provide reliable communications services 24 hours a day, 365 days a year.

#### **Building a Disaster-Resistant Communications** Environment

To create a management structure for dealing with largescale natural disasters, KDDI has formulated disaster response regulations and business continuity plans (BCP), and built a number of other initiatives including a disaster response framework. We have also entered into disaster management agreements with the Ministry of Defense, the Self-Defense Forces and the Coast Guard, collaborating with relevant organizations to further strengthen our disaster response.

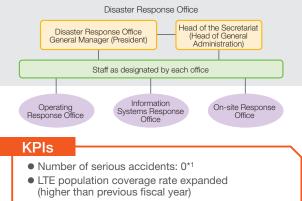
#### **Business Continuity Plan for Large-Scale Disasters**

KDDI's Business Continuity Plan (BCP) for Large-scale Disasters establishes a variety of countermeasures based on a policy of ensuring the safety of employees and their families, carrying out the Company's responsibility to continue telecommunications services as a designated public institution, and supporting our stakeholders. Specifically, the plan establishes specific rules for responding to a disaster, from initial mobilization to full restoration of services, as well as providing support for disaster-affected areas.

Risks and Opportunities for KDDI	
Risks	Opportunities
• Decline in KDDI's corporate value in the event telecommu- nications services fail due to factors such as natural disasters	• Contribute to society and the economy overall, and enhance KDDI's corporate value, by continuing to provide informa- tion and communications services even in the event of unforeseen circumstances

The effectiveness of the BCP is assessed through biannual disaster response training. The Company works to improve on any issues or problem areas identified through that training, and each year a PDCA cycle is employed in building a more solid foundation for disaster response.

#### Structure of Disaster Response Office



- Three-route core transmission lines of main communication stations: 100%\*2
- \*1 Following the guidelines of the accident reporting criteria of Japan's Ministry of Internal Affairs and Communications
- 2 For disaster preparedness, core transmission lines of main communica-tion stations are arranged with three different routes that can be switched

#### Facilities Countermeasures for Ensuring Communications Services during a Disaster Highlights

Multi-Route Core Transmission Lines and Route Distribution To ensure reliable communications, KDDI works to distribute its telecommunications equipment capacity, establishing redundant communications lines (terrestrial optical fiber) and a structure that uses automated switching to provide relief to the communications network during failures. In addition, submarine cables and other means are used to provide multi-route communications lines, ensuring a highly reliable communications network. In the event of trouble, bypass measures are implemented in an effort to relieve communications.

#### Strengthening of Disaster Resilience in Communication Stations and Telecommunications Facilities

KDDI has augmented deployment of mobile power supply vehicles and emergency power generators to enable rapid power supply to telecommunications equipment in disaster-hit areas. To ensure communications services in disaster affected areas, we have also increased deployment of wireless entrance lines as well as vehicle-mounted and portable base stations, and equipped around 2,200 mobile phone base stations with batteries capable of operating for more than 24 hours.

#### Deploying the au Disaster Recovery Support System

To quickly grasp the extent of damage during a disaster and formulate a precise recovery plan, KDDI has deployed the au Disaster Recovery Support System throughout its 10 technical centers nationwide. The system provides centralized management of regional damage information, conditions at key sites, and information on emergency shelters and evacuation routes. This information is provided in real time to provide a clear understanding of priority recovery areas, enabling us to provide effective recovery response even when damage is widespread.

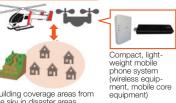
#### Deployment of Temporary Base Stations

To prepare for situations where it is difficult to provide mobile phone services from land or sea during a disaster, KDDI has

Helicopters and drones

stations that can provide temporary mobile phone services. We will be conducting proof of concept experiments in preparation for putting these drone stations into practical use.

developed drone base



Building coverage areas from the sky in disaster areas

## Cyber Security and Privacy Protection

Social Issues and Recognition	Risks and Opportunities for KDDI	
	Risks	Opportunities
Recent years have seen many incidents worldwide in which software virus infections caused by cyberattacks have led to leaks of import- ant confidential information, which has become a major social issue. The KDDI Group considers the personal information it retains for its customers and the business information it retains for its business partners to be extremely important assets that need to be managed with the strictest care.	<ul> <li>Loss of customer trust and the worsening of the financial position and earnings perfor- mance of the KDDI Group due to customer information leaks, compensation, etc.</li> <li>Even higher costs to put in place communications secu- rity and customer privacy protection systems</li> </ul>	• Potential to develop new markets by providing secure apps that enhance reliability and services to address cyber security on a global level in response to customer needs

#### Initiatives to Strengthen Information Security

Material Issue 2

As a telecommunications operator, KDDI complies in protecting the confidentiality of communications. At the same time, to protect customer information, we have established an Information Security Committee charged with preventing internal information leaks, and are also working to formulate and implement company-wide countermeasures to prevent unauthorized intrusions from external networks. The KDDI Group is also engaged in efforts to strengthen its compliance structure by establishing the KDDI Code of Conduct, a Security Policy and Privacy Policy, by distributing the Handbook for Protection of Customer Information, and through the establishment of a Business Ethics Committee. In addition, KDDI takes various security management measures from a technical, organizational, and human perspective, efforts that include controlling authorization for use of customer information systems used to manage personal information; strengthened monitoring of system use; preservation of access logs; and prohibitions against removal of internal data and the copying of information from

work computers to external memory devices. To educate employees on these measures, KDDI conducts ongoing training for all employees on communications confidentiality and the protection of customer information.

KDDI is also working with its outsourcers, in particular the au shops, striving to ensure improved store operations, inspections and education.

To ensure the security of customer information, apps for "au Smart Pass" are screened to verify that they behave in accordance with the KDDI Privacy Policy.

KDDI is also a member of the Japan Smartphone Security Association (JSSEC), an outside body, and is engaged in activities to strengthen security through that organization.

#### KPIs

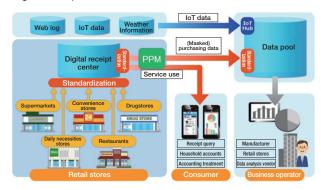
- Data security incidents: 0\*3
- Data security training for all employees: held at least once a year
- \*3 Data breaches, complaints, etc., that are illegal or may be subject to regulatory guidance

### Highlights Demonstration Test for Digital Receipts into Social Infrastructure

From February 13 to February 28, 2018, KDDI Research participated in experiments conducted by Toshiba Tec Corporation for a standard data format for digital receipts and a digital receipt platform compatible with the API. The tests were conducted as part of the New Industry Model Creation Base Development Project for Promoting IoT, organized by the New Energy and Industrial Technology Development Organization (NEDO) and the Ministry of Economy, Trade and Industry (METI). The experiments were designed to examine the standard specification for digital receipts formulated by METI, and to test the usefulness of a standardized digital receipt platform in the retail store environment across different industries and formats.

From the perspective of personal information protection, KDDI Research provided a Privacy Policy Manager (PPM) it had developed as a mechanism for enabling individual users to protect (mask) their own personal information when providing data.

#### Digital Receipt Platform



# Material Issue 3 Rewarding Workplaces for Diverse Talents

#### Social Issues and Recognition

Japan ranks last among the group of seven major industrialized countries for labor productivity, and it is said that for Japan to maintain its real GDP growth rate will require it to triple productivity growth. Given this situation, the Japanese government is working to enable diverse work styles under the banner of "realizing the dynamic engagement of all citizens." At the same time, it is working to avoid entrenched inequality, increasing the number of middle-income earners engaging in efforts toward work style reforms that can achieve a virtuous cycle of growth and distribution. Among the issues involved in achieving those reforms are addressing the inequities and differences in treatment between regular and non-regular employees, long working hours, and Japan's traditional single-track career paths.

#### Building a Stronger Workforce to Achieve Medium-Term Targets

With the goal of "Transforming into a Life Design Company," as set forth in our medium-term targets for the fiscal year ended March 31, 2017 to the fiscal year ending March 31, 2019, KDDI has established four frameworks, one of which is to "build a stronger workforce," including development of female leaders as a KPI and as a management strategy.

Beginning in the fiscal year ended March 31, 2017, KDDI launched a "Work Style Reform Promotion Committee," comprised of the general managers responsible for each business, as part of company-wide projects.

Four-part Framework for Achieving the Medium-Term Targets

Building a stronger	Introduction of talent management
	Shift of key personnel to strategically important divisions
workforce	Global human resource cultivation
	Utilization of diverse human resources

#### Risks and Opportunities for KDDI

Risks	Opportunities
Securing talented human resources as the working-age population falls due to declining birth rates and an aging society Securing and developing human resources with diverse values as KDDI enters new business fields to achieve integration of telecommunica- tions and life design	<ul> <li>Innovation through human resources with diverse values</li> <li>Efforts to manage and improve the health of all employees can lead to continuous improve- ments in productivity, reduced turnover and enhanced corpo- rate brand value</li> </ul>

KDDI also considers health of employees an important management issue, and in April 2018 we announced the KDDI Group Declaration of Health-focused Management in an effort to create a more vital company.

#### KPIs

- Promoting measures to hire 200 female line managers (by the end of fiscal year ending March 31, 2021)
- Usage rate of annual paid leave: 70%
- (by fiscal year ending March 31, 2021)Percentage of newly hired female graduates: 30%
- (by fiscal year ending March 31, 2021)
- Disability employment rate: statutory rate achieved
- Employees' smoking rate: below 18% (by fiscal year ending March 31, 2021)
   \* 27.2% achieved at the end of the fiscal year ended March 2018
- Employees receiving remarks at health exam: below 55% (by fiscal year ending March 31, 2021)
   \*58.1% achieved at the fiscal year ended March 2018

### Highlights Selected as a "Nadeshiko Brand" for the Sixth Consecutive Year

Based on the KDDI Group Philosophy, KDDI is working to promote diversity as a management issue.

Promoting gender equality and female empowerment leads to the solving of issues in international society and the sustainable development of companies.

KDDI believes that the participation of women in corporate decision-making leads to a stronger company, and we are focused on developing female leaders with a target of promoting 200 females to line manager positions, who have the authority to evaluate personnel, by the end of the fiscal year ending March 31, 2021. Progress toward this goal is reported at a biannual meeting attended by management. We are also working to expand programs to cultivate female managers and these programs will form the foundation for developing female leaders.

KDDI is striving to establish an environment and foster a climate in which diverse human resources can utilize their individual strengths to perform to the best of their abilities. As a major part of such efforts, we are focusing our efforts on cultivating female leaders, raising awareness and changing the behavior of management, and improving the working environment, so that women can continue to participate and advance in their careers even after going through life events such as giving birth and raising children.

#### Appointment of Female Leaders (as of April 1, 2018)

Number of Female Managers	301
Number of Female Line Managers	118
Number of Female Officers (Directors)	
Number of Female Directors (Outside Directors)	1

In recognition of these efforts, in March 2018 KDDI was chosen for the sixth consecutive year since the fiscal year ended March 31, 2013 as a "Nadeshiko Brand," a pro-

gram to select companies that proactively promote the advancement of women.



## Material Issue 4 ( An Energy-Efficient, Circular Economy

Social Issues and Recognition	Risks and Opportunities for KDDI	
	Risks	Opportunities
2015, the Paris Agreement went into force, calling for a global effort o hold the global temperature rise since the industrial revolution to ss than 2°C and to strive to limit the increase to less than 1.5°C. In corporate activity as well, companies are being expected to stablish numerical targets for reducing greenhouse gas emissions and response measures to address global warming.	• Regulations and policies of each country and region that influence the business activi- ties of corporations, such as energy-saving standards, carbon taxes and emissions trading	• Opportunity for business growth by building environ- mentally friendly base sta- tions, and providing services in each country and region that reduce society's environ- mental impact through the use of ICT

#### KDDI's Approach to Environmental Preservation

Based on the KDDI Group Philosophy and the KDDI Action Guidelines, we have established the KDDI Environmental Charter. The Charter consists of two layers: the Basic Principle, which is its highest concept, and the Code of Conduct for setting the direction of specific initiatives. We have also formulated the KDDI Action Guidelines on Biodiversity Conservation to multilaterally assess our contributions toward the preservation of biodiversity, and to promote activities across a wide range of opportunities. Since the fiscal year ended March 31, 2017, we also for-

mulated the KDDI GREEN PLAN 2017–2030, an environmental conservation plan that calls for climate action, the creation of a recycling-oriented society, and the conservation of biodiversity through the use of ICT services.

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#### KPIs

#### Overview of KDDI GREEN PLAN 2017–2030

- 7% reduction in CO<sub>2</sub> in FY2031.3 compared to FY2014.3 for KDDI (in Japan, non-consolidated)
- Build highly energy-efficient data centers in Japan and abroad
- Contribute to reductions in society's CO<sub>2</sub> emissions by providing KDDI's ICT services
- Maintain zero emissions from retired telecommunications facilities: Achieve final disposal rate of 1% or less\*1
- Maintain material recycling rate of 99.8% for used post-consumer mobile phones
- Actively promote initiatives using ICTs to conserve ecosystems
- Post-consumer mobile phones collected over 5 years (aggregated): 6 million (Target for FY19.3-FY23.3)
- \*1 Zero emissions is defined as having a final disposal rate of 1% or less

#### Highlights Improved Energy Efficiency at TELEHOUSE

The KDDI Group provides data centers under the TELEHOUSE brand in 12 regions, 23 cities and 47 bases around the world. The centers have built a track record about 30 years, and utilize that expertise in providing services to customers.

TELEHOUSE data centers employ the latest energy-saving equipment, working to reduce power consumption, achieve low PUE<sup>\*2</sup>, and provide significant reductions in CO<sub>2</sub> emissions.

In November 2016, KDDI Group's TELEHOUSE EUROPE commenced operation of North Two, its fourth data center at TELEHOUSE LONDON Docklands, with a total floor area of 73,000 m<sup>2</sup>, one of the largest in England. As an urban, multi-story data center, North Two is the first in the world\*<sup>3</sup> to deploy an indirect external air cooling system to achieve a PUE of 1.16 (design value), the highest-level energy efficiency for a data center operator.

\*2 PUE: Power Usage Effectiveness. An index representing the energy efficiency of data centers and other IT-related facilities. The closer the figure is to 1.0, the better the power efficiency.

\*3 As of November 2016, according to KDDI research

As a result, in June 2017 TELEHOUSE EUROPE was awarded the Data Centre Energy Efficiency Project of the Year for its energy efficiency, at the 2017 Data Centre Solution Awards, which recognize companies that have made innovative achievements in data center-related technology and services.



TELEHOUSE LONDON Docklands North Two





## Fulfilled Life Brought through ICTs

#### Social Issues and Recognition

Japanese society today faces a variety of problems, including a falling birth rate and advanced aging, and an emptying out of rural regions as population concentrates in major metropolises. The shrinking rural population also leads to the reduced vitality of regional economies and the decline of industry and culture. Expectations are that using ICT can help resolve these issues.

Meanwhile, smartphones and mobile phones are being used from a younger age, and a widening digital divide among seniors has become an issue. The need for information literacy education is increasing as a way of ensuring that children, in particular, can utilize these ICT devices properly without getting caught up in crime or other problems.

#### Risks and Opportunities for KDDI

 Social and economic risk of customers being caught up in crime or other problems through products and services provided by KDDI, including smartphones, mobile phones and the internet

#### Create new demand and contribute to business by providing devices and services that customers can use safely, securely and comfortably, and through awareness-raising activities

 Reduce the digital divide between regions through the use of ICT, and expand business opportunities for KDDI by revitalizing regional economies

Two Approaches to the Use of ICT

#### As a Leader of Regional Economy

Utilizing its wide-ranging advanced technologies and the expertise of its partner companies, KDDI works with regional governments and businesses, NPOs and local citizens, and many other stakeholders to support a variety of unique initiatives aligned with the distinctive character of each region.

As a Lifestyle Design Company Close to its Customers Using advanced technologies such as big data, ICT and IoT, KDDI aims to revitalize regional economies by conveying to its customers the unique appeal of products and services from areas around the country, creating a more vigorous nationwide flow of people and goods.

#### Improving Information Literacy

Through our KDDI Smartphone and Mobile Phone Safety Classes, KDDI works to enable children and senior citizens to use smartphones and mobile phones safely and securely.

Beginning in September 2017, we have also begun holding workshop-style classes for high school students, Raise Disaster Risk Reduction Literacy with Your Smartphone. The workshops offer information literacy and disaster preparedness education designed to teach students how to utilize information and communications services as a lifeline during disasters.



#### KPIs

- Response to Smartphone and Mobile Phone Safety Classes
  - Young people: Satisfied (Material): 99%,
  - Satisfied (Instructor): 98%,
  - Will reapply: 80%\*1
- Older people: Understood: 85%, Will use: 87%
- Ongoing support activities to help area revitalization (Shimamono Lab: 2 islands per year)
- Implement international cooperation projects<sup>\*2</sup> by KDDI Group: 2 and more projects
- \*1 Percentage of those who answered "definitely want to apply"
   \*2 Facilitating wider access to telecommunications, education that utilizes ICTs, etc. in developing countries

#### Highlights Approach to Supporting Regional Revitalization: Reviving the Mackerel: A Project to Streamline Aquaculture

Working with the city of Obama, Crowd Fishery Co., Ltd., the Obama Fisheries Cooperative Association and Fukui Prefectural University, KDDI is participating in the Reviving the Mackerel: A Project to Streamline Aquaculture, intended to utilize IoT to make fish farming more efficient. The project commenced operation in February 2018.

In recent years, Obama City has seen its mackerel catch drop significantly. By equipping the floating fish cages with IoT sensors that enable hourly measurements of water temperature, oxygen levels and salinity, Reviving the Mackerel: A Project to Streamline Aquaculture allows fishers to understand local conditions via a mobile line, without taking out their boats, even in rough weather or at night.

A tablet-based feeding log application is also being deployed to manage the location, volume and timing of feeding, in an effort to

turn the expertise of the fishers-based on experience and intuition-into data that can help streamline the fish farming process.

Obama City, Crowd Fishery and KDDI will continue utilizing IoT with the goal of regional revitalization and the growth of the fisheries business.



## Respect for Human Rights and Fairness in Business

#### Social Issues and Recognition

Material Issue 6 🐇

As value chains expand on a global scale, companies are taking a greater interest in respecting human rights, and in the impact our business has on the international community.

In particular, sexual harassment issues represent a major violation of human rights internationally, and in telecommunications, a similar violation of human rights can be seen on social media, through posting of photos, slander and personally damaging information.

With regard to fairness in business, companies are expected to respond in particular to issues such as anti-corruption measures, dealing with anti-social forces, and human rights throughout supply chains.

# Human Rights Initiatives Aimed at Fair and Honest Business Practices

KDDI makes efforts to eliminate discrimination based on race, creed, gender, social status, religion, nationality, age, sexual orientation, gender identity or mental or physical disability. We work to correct or eliminate labor practices that violate human rights, such as forced and child labor.

To promote these activities, KDDI has built a governance structure based on a variety of committees, including the KDDI Group Business Ethics Committee and Sustainability Committee. At the same time, we implement measures throughout the year to ensure employees understand and put into practice the KDDI Group Philosophy and the KDDI Code of Business Conduct. With our suppliers, we build partnerships based on mutual trust, and work to conduct business appropriately through fair

#### Highlights LGBT Initiatives

There are laws in Japan regarding gender change for people with gender identity disorder, and while there is a growing trend toward recognition of same-sex marriage in an increasing number of countries and regions outside Japan, understanding and support for such human rights in companies is still inadequate.

In light of this situation, since the fiscal year ended March 31, 2014, KDDI has promoted activities within the Company to raise awareness about LGBT issues, which has advanced understanding among employees and spread awareness throughout the Company.

KDDI is also working to advance initiatives such as the au "Family Discount" as part of its efforts to enlighten society as a whole.

#### Programs Applicable to Same-sex Partner Families and Spouses

On April 1, 2017, KDDI revised its internal regulations to include same-sex partners as spouses, making them eligible for all company programs.\*4

Risks and Opportunities for KDDI	
	Opportunities
<ul> <li>Damage to corporate brand value and impeding the sus- tainable development of society due to unaddressed human rights violations</li> </ul>	• The sound growth of KDDI's business through the achieve- ment of a society free of human rights violations and the building of business activity

and honest business dealings. We also use our CSR procurement surveys and other methods in asking that our suppliers ensure strict compliance with these practices.

#### KPIs

- Human rights violations: 0\*3
- KDDI Group Philosophy Study Session attendance: 100%
- Awareness raising of KDDI Code of Conduct (awareness raising measures carried out within the company): more than 12 times per year
- Responsible procurement survey response rate: 90%+
- Stakeholder dialogues with external experts: One or more sessions per year
- \*3 Human rights violations refer to cases in which human rights violations (such as workplace bullying including any kinds of harassment) resulted in disciplinary actions

Upon submission and acceptance of the required paperwork, same-sex partners can benefit from the same programs offered to other spouses of employees, including special payments, leave, as well as other allowances of an ongoing nature.

\*4 Applicable company programs: Housing allowance, unaccompanied duty allowance, special payment for marriage, special leave (mourning, marriage, maternity, childcare and family care), child-raising leave, use of company housing, etc.

#### Application of Same-sex Partnerships to au "Family Discount," etc.

Beginning in July 2015, KDDI expanded eligibility for a number of family-oriented services, including the au "Family Discount," to include families with same-sex partners when formal certification of the same-sex partnership is provided under local government ordinance.

LGBT Initiatives

Initiatives	Description
Establish Provisions in the KDDI Code of Business Conduct (Basic Principles)	Establish provisions to prohibit unjustifiable discrimination and harm to personal dignity on the basis of sexual orientation, gender, age, nationality and other personal characteristics, and publicize them widely both inside and outside the Company.
Conduct educational activities to promote understanding	Seminars and e-learning courses aimed at improving understanding of LGBT issues have been conducted on an ongoing basis since the fiscal year ended March 31, 2014.
Change the definition of spouse, and apply the change to company regulations	When KDDI recognizes an employee as having a same-sex partner, that employee is eligible for all company programs available to other employees with spouses.
Give consideration in the work environment	For transgender employees, it is recommended to use working names, conduct health checks on an individual basis, and provide gender neutral toilets.
Promote understanding of LGBT issues in society	<ul> <li>Participate in forums and other events related to LGBT issues, and introduce KDDI initiatives as examples</li> <li>Make donations to LGBT support groups</li> </ul>
Apply changes to au "Family Discount" and other services	Apply family-oriented services, such as the au "Family Discount," to include same-sex partners when formal certification of the same-sex partnership is provided.