We began publishing this report in 2006 with the goal of improving our CSR activities by sincerely disclosing our approach to CSR and our CSR activities to our stakeholders, and obtaining frank feedback about our initiatives.

We are committed to contributing to the development of an information and communications society through a dialog with our stakeholders. We welcome your comments and feedback.

Structure of This Report
This report focuses on KDDI’s CSR efforts of greatest interest to our stakeholders. We made special efforts to make this report as clear and concise as possible, and to include as much feedback from our stakeholders as possible. For example, in this report we included a dialog with our employees for the first time ever.

Scope of this Report

Organizations Covered
KDDI Corporation on a non-consolidated basis (including some activities of group companies)

Period Covered
Fiscal 2007 (April 1st, 2007 to March 31st, 2008)
Includes reports of some activities carried out after April 2008, and future outlooks (when the target period differs, this fact is clearly stated)

Referenced Guidelines
Global Reporting Initiative (GRI)*, Sustainability Reporting Guideline 2006
Ministry of the Environment, 2007 Environmental Reporting Guideline

* The Global Reporting Initiative (GRI) is an international organization founded in 1997 with the purpose of proposing and advocating international guidelines on sustainability reporting.

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KDDI is a comprehensive telecommunications carrier, single-handedly offering a wide array of telecommunications services ranging from fixed to mobile communications. We operate businesses that help people communicate and support many different social and economic activities. We have two major business fields. The first is our consumer business, which offers consumer users new lifestyle ideas using information and communications services, and the core of this business is au. Our second major field is our solutions business, which offers solutions for a wide range of corporate business issues utilizing information and communication technology (ICT).

**au mobile**

au is KDDI's mobile phone service. au services offer a unique combination of attractive design, content with high added value, and user-friendly pricing. au offers safe, secure, and user-friendly services intimately connected to our lives. It is the most familiar, personal tool in the ubiquitous networked society, where access to communications networks is available any time and from anywhere.

**Internet service**

We offer au one net internet service, including high-speed optical fiber, ADSL, and other services to match our customers' needs.

**Telephone service**

We offer telephone services using the proprietary KDDI network, including 'Metal-plus Phone' and 'HIKARI-one phone.'

**Services linked to cable television**

We partner with cable television carriers to offer customers telephone service, Internet service, and video delivery service using their cable television connections.

**Broadband services**

We offer safe and convenient broadband environments that match our customers' lifestyles. These include our HIKARI-one comprehensive broadband communications service, offering a triple package of high-speed Internet, telephone, and TV services all over a single optical-fiber line.

**Corporate solutions**

We offer a broad range of corporate solutions based on our high-quality, stable network which includes fixed communications spanning Japan and the globe, as well as mobile communications supporting new work styles.
At KDDI, we consider all our stakeholders to be customers. This includes the users of our services, as well as our suppliers, employees, shareholders and investors, and government institutions. Total Customer Satisfaction is a company-wide priority, aimed at achieving customer satisfaction in all our corporate processes.

I believe that improving the satisfaction of all our stakeholders based on this concept of TCS will enable us to meet the expectations of society and fulfill our social responsibility. For this reason, I want our employees to meet the expectations of society by continually thinking about who the stakeholders are for the duties they are assigned, and delivering satisfaction that exceeds their expectations while at the same time tirelessly maintaining a view toward the future.

The information and communications services that we offer are a means of communication. How these means are actually used essentially depends on our users. Information and communications technologies and services, however, are advancing and spreading at a dizzying pace, and our services are not always used in the way that we might wish. Part of this is due to the fact that the speed of technological progress and spread is outstripping the ability of sociological understanding and mechanisms to keep up; in such cases, I believe that it is vital to quickly provide feedback within the company, and strive to set up methods for providing services and social mechanisms. As of February 2008, KDDI applies filtering service to all new mobile phone service subscribers who are under 20 years of age, unless special circumstances apply. In addition, starting in fiscal 2008, we expanded our Mobile Phone Learning program from elementary students nationwide to include junior and senior high-school students as well, in order to enable safer use of mobile phones.

We remain committed to promoting sociological research and raising the awareness of society, as well as actively developing products and services that will promote security in our societies, health, and have other benefits, in order to offer safe and secure services.
Information and communications enable people to communicate information to far-away locations without moving themselves. In this sense, telecommunications help to reduce our impact on the environment. The popularization of telecommunications services, however, increases the amount of energy used by communications equipment, and increases the amount of power consumed by the communications industry as a whole. Global warming is an issue that affects all of humanity. At KDDI, we are actively committed to combating global warming by further enhancing our energy-efficiency initiatives, including developing energy-efficient communications equipment and introducing solar power generation.

Additionally, many different rare metals are used in mobile phones. We are highly committed to material recycling in order to ensure that these resources are not wasted. In fiscal 2007, we also collected paper resources (such as the user’s manuals included with our mobile phones) at over 2,500 au shops nationwide, and began programs to reuse these resources as recycled paper. We will now expand our environmental contributions, including the creation of frameworks to enable our customers to do more to help our recycling efforts.

KDDI’s goal is to enable every employee to find motivation and purpose in their work by creating environment that enables our employees to achieve a sense of accomplishment and maintain a high level of awareness. Our commitment to diversity is one vital measure for achieving this. In April 2007, we joined the NPO J-Win, which promotes diversity management, and in April 2008 we created a Diversity Development Department.

We are enhancing our efforts to create a diverse workplace that empowers women as well as the handicapped and older employees. We are also further enhancing programs that enable a wide variety of work styles matching our employees’ family situations, including childcare leave and home-care leave. We will also strive ambitiously to create diverse work styles that take maximum advantage of information and communication technology, including telecommuting and satellite offices.

Progress in information and communications is transforming the nature of communication. Until now, we have had two types of communication: one-to-one (1:1) communication, and one-to-many (1:N) communication via the media. Now, however, blogs and other telecommunications services are enabling individuals to publish information for the entire world, ushering in a computer and information society of many-to-many (N:N) communication.

New styles of communication are affecting the flow of information and people’s lifestyles, and could potentially transform the very natures of our society and economy. At the same time, these new styles of communication have the potential to resolve a wide range of social issues, including information disparity.

KDDI will be a key player in the coming ubiquitous networked society by offering new services that tie together fixed communications, mobile communications, and broadcasting. We also remain committed to designing and implementing a better future through the power of telecommunications, in order to help achieve a society in which technological progress and social progress advance in harmony.

Tadashi Onodera
President & Chairman
KDDI CORPORATION
KDDI's CSR

Contributing to achieve a safe, secure, and sustainable society through information and communications

KDDI's CSR

KDDI was created through the merger of companies with diverse values and corporate cultures. We are committed to realizing our basic philosophy, which defines the vision for KDDI, with a common focus on advancing our businesses by uniting our good corporate cultures.

KDDI is a comprehensive telecommunications carrier. As such, we believe that our corporate social responsibility (CSR) lies in supporting social and economic activities by offering telecommunications services.

This is the very definition of our corporate activities: our manifesto that each of our employees puts into practice, with a strong awareness of the social aspects of the telecommunications business.

KDDI's CSR: The relationship between the telecommunications business and society

Telecommunications are an essential element of social infrastructure for modern society. Meanwhile, that way in which we utilize telecommunications in the future has the potential to vastly affect the direction of society, as we deal with such social issues as risks posed to children by mobile phone and Internet use, as well as climate change and other issues affecting all of society.

At KDDI, we are aware of the huge impact that the telecommunications industry has on society, and strive daily in our business activities to contribute to the development of a prosperous and sustainable society through safe and secure telecommunications services.

KDDI's CSR

Manifesto

KDDI was created through the merger of companies with diverse values and corporate cultures. We are committed to realizing our basic philosophy, which defines the vision for KDDI, with a common focus on advancing our businesses by uniting our good corporate cultures.

- **Customer Satisfaction**
  - by providing with our services the value that customers expect;

- **A Happy Workforce**
  - by continuing to be the kind of dynamic company that inspires all its employees with a sense of worth and fulfillment;

- **The Confidence of Our Shareholders and Business Partners**
  - by justifying the trust placed in us by our shareholders, business associates and all with whom we have dealings;

- **The Advancement of International Community**
  - by bringing an ever-broadening array of communications to bear in serving the development of the global community.

KDDI's Manifesto

- **Ensuring customer satisfaction and trust**
- **Happy workforce and a dynamic company**
- **The confidence of our shareholders and business partners**
- **The advancement of international community**

KDDI's CSR

Total Customer Satisfaction

- **Management foundations**
  - (Corporate governance, compliance, information disclosure, risk management, etc.)

- **Contributions to the development of society**
- **Provision of secure and communication services**
  - (Conscientious business activities)

- **The sustainable development of society**

KDDI's CSR Framework

KDDI's CSR Framework
At KDDI, we consider all our stakeholders to be customers. This includes not only the users of our services, but also our suppliers, employees, shareholders, and government institutions.

We have additionally identified Total Customer Satisfaction (TCS) – the commitment to improving customer satisfaction of everyone from top management down to individual employees – to be the foundation of our business activities, in order to do what is really essential to improve our business for our customers, and create a stable, long-term relationship with our customers based on trust.

TCS is linked to the operations of every division at KDDI, and to every product and service that we offer our customers. It is a company-wide effort to review and improve every process from our customers’ perspective, thus improving customer satisfaction and building a foundation for CSR.

The basic concept of TCS
To maximize customer satisfaction, every operation is considered to be connected to the products and services, and every process is reviewed from the customer’s viewpoint. Targeting all stakeholders, from the top managers to the employees, each person makes it his or her own task to realize customer satisfaction on a company-wide basis. This is the mission undertaken by all persons of the KDDI Group, and the basic conditions required of all.

The TCS framework
In 2003, we created the KDDI CS Policy as a core policy for promoting TCS and corporate growth with a true customer focus. This policy documents missions and roles for improving customer satisfaction, and provides a decision-making and action guideline that applies to all officers and employees of the company.

We have also created a TCS Committee, headed by the company president. The TCS Committee is a cross-functional organization that discusses and makes decisions on issues based on customer feedback. The entire company is united in its efforts to improve customer satisfaction based on the plan-do-check-action management cycle.

CSR initiatives
In October 2005, we created a CSR Management Department (currently the CSR & Environment Management Department) in our General Administration Department. This department promotes CSR activities, and works actively to raise awareness within the company through in-house training and e-learning.

We are also working toward Challenge 2010, our medium-term targets set for 2010, which places an emphasis on enhancing CSR initiatives in order to achieve both qualitative and quantitative growth as part of our ambitious goal of growing in step with society.

KDDI’s Stakeholders
We will strive to satisfy our customers by living up to their trust and offering safe, secure, and valuable products and services.

We will build partnerships based on mutual trust, and carry out appropriate business activities through fair and open business dealings.

We will continue to be a vital company that provides motivation and purpose to all its employees.

We will comply with the law and maintain sound relations with government institutions.

We will collaborate and work in partnership with our local communities, and fulfill our roles as members of those communities.

We are committed to building a relationship of trust through integrity, fair disclosure of information, and by actively enhancing our communications.

We are actively committed to environmental conservation in order to maintain a prosperous society at harmony with the environment.

We will help build a better society through dialog and collaboration.

KDDI’s Stakeholders
(i.e. Customers)
Designing a More Prosperous Future with the Power of information and communications

KDDI’s Business Domains and Societal Challenges

The Potential of information and communications

The development of information and communications has enabled ubiquitous communication, allowing information to be transmitted anytime, anywhere, by anyone without the need for people to travel or physical objects to be moved.

Information and communications provide value that is essential for enriching our lives. Some examples are communication and collaborative work between people in physically distant locations; accessing huge volumes of information; publishing information worldwide; vitalizing social and economic activities and achieving innovation through the exchange of knowledge and information; and offering people means of communication for a wide range of situations.

This is especially true with the recent introduction of flat rates for packet communications. This has expanded the ways in which mobile phones can be used, turning them into personal gateways linking people with society. Mobile phones can now be used as media players, playing music, television programs, and other content; they can be used as eMoney; and they can be given GPS and other features. Information and communications technology (ICT) can also reduce environmental impact and help combat climate change, by reducing the movement of people and physical objects while keeping our economies vital.

Information and communications are thus making a huge contribution to the sustainable development of society.

KDDI’s Business Domains and Societal Challenges

This figure shows the main societal challenges relating to KDDI, and some examples of our initiatives for tackling these challenges. We believe that a sincere and continued commitment to overcoming these challenges will enable us to achieve our manifesto and improve the satisfaction of all our stakeholders.
While telecommunications make our lives more convenient, in recent years we have seen a continuing drop in the ages of mobile-phone users. Today, more and more children are using mobile phones. Children who have not learned how to make decisions about information are being put at risk when they access the internet and come into contact with harmful content or communicate with strangers.

Additionally, as telecommunications play an increasingly vital role in the lives of society, information and communication services may become unavailable to senior citizens and others who find it difficult to master the use of these devices.

As a comprehensive telecommunications carrier, we believe that it is our social responsibility to identify the positive and negative impacts of telecommunications, and help achieve safe, secure, and prosperous communication throughout society by responding to these societal challenges.
We invited opinion leaders Ms. One Akiyama and Mr. Ikuyo Kaneko for a frank discussion of daily operations and CSR at KDDI with six KDDI employees. This article reports on the dialog with employees regarding CSR.

Commitment to stakeholder satisfaction

Aonuma  I’ve had the privilege of heading the CSR Management Department from its establishment in 2005 until March of this year. This time, we began our discussion of CSR not as a new activity, but as a re-examination of what parts of KDDI’s corporate principles, and our total customer satisfaction (TCS) efforts correspond to CSR.

At KDDI, we consider all our stakeholders to be customers. We are committed to TCS – namely to improving customer satisfaction through all of our processes – and we believe that this will enable us to fulfill our corporate social responsibility. While I believe that our awareness has improved over the past two and a half years, it is sometimes difficult to expand the awareness of our ties to stakeholders beyond the bounds of our end users.

Matsushita  Until now, I haven’t been very aware of even the term “CSR.” My department’s job is customer service, and our fundamental mission is to provide services that satisfy our customers.

For this reason, I think that CSR means providing a sense of security and peace of mind by working on a daily basis to
satisfy our customers. The Customer Service Center receives about 1.6 million inquiries per month for au and broadband services combined. I think that how we communicate the feedback from these customers up the channels is also a key point for CSR.

Nakano I work in the international telephone service wholesale business. Although we aren’t directly visible to the public, I’ve always been interested in CSR. Back in the Edo Period, the Ohmi merchants used to say, “Win-Win-Win for the seller, the buyer and the society.” I believe this means that if the seller strives to win the approval of society and communicate his passion to his buyers, this will in the final instance benefit society. I believe that by approaching my work with this mindset I can help change the company and society in my own small way.

Akiyama I also think that the most important things are the mindset that each employee brings to his or her work, and whether there is a shared understanding of the corporate philosophy. In fact, many companies are recognizing this importance.

Paper Recycling Achieved by KDDI

Sato I first became aware of the term “CSR” in the fall of 2007, when we began recycling the user’s manuals for our mobile phones and other paper. Under this initiative, we collect user’s manuals that are no longer needed at around 2,500 au shops nationwide with the cooperation of our customers, and covert them into recycled paper. At first, we met with a bit of resistance within the company, partly because transporting the collected manuals is very costly, but many people agreed that we needed to think of the environment, and we were able to put the initiative into effect.

Kaneko I think it’s good to start with something familiar or personal, like you did. Start with something small and personal, and extend it from something that affects you to a company or societal initiative. For example, if KDDI were to make its au shops nationwide also serve as neighborhood paper-recycling collection stations, and the residents of neighborhoods that don’t usually recycle paper start coming, it would be fantastic for your image. I also think it would make it easier to convince people inside KDDI if you collaborate well with outside organizations – such as collaborating with NPOs to transport waste paper – and this would make the initiative go more smoothly.

Akiyama Nowadays it’s impossible for a company to fulfill its CSR on its own. It’s vital to get suppliers, NPOs, and others involved as well.

Sato I agree. I would like to expand this effort beyond our au shops and the customers who cooperate in the program, to places like paper companies, shipping companies, and paper recyclers.

Goto I work in the facilities construction department, and my job includes things like energy efficiency in ancillary communications equipment. When advancing environmental measures, costs are a problem at first. This is particularly true with things like solar power equipment, where it can take decades to recover the costs. But I have a sense that things have changed, and the company has started to focus on these areas as well.

Akiyama It’s certainly true that promoting CSR is costly. I believe that over the long term, however, it’s an investment. For example, listening to Ms. Sato talk about recycling just now, I get the sense that she’s glad they did it. This gives people pride in their work and motivation. The feeling that you’re doing something good for society through your work gives you enthusiasm about your job. If employees can’t get enthusiastic about their jobs, then they can’t do good work for those outside the company. CSR energizes a company.
Meeting Classroom Needs by Promoting Mobile Phone Learning at the Company-wide Level

Ishimatsu As an e-net caravan instructor, I get the opportunity to talk with school teachers about such topics as the proper use of the Internet. I’ve experienced a great deal of gratitude from the teachers. Teaching at actual schools gives me the chance to find out the real needs in the classrooms. For example, teachers would like us to talk more about clandestine school sites, which are a growing problem in Japan. I sense that we could be doing more to fill the gaps in knowledge between teachers, parents, and children.

Kaneko It’s important to see things as they actually are on site. If you can see things as they really are, even the suggestions of a single person can have a large impact.

Akiyama I let my child have a mobile phone, and it worries me greatly when I hear about underground sites and the like. Although this isn’t just the responsibility of telecommunications carriers, as an influential company I would like you to show some leadership in this area, including education.

Aonuma About 180 KDDI employees participate in the e-net caravan. Since fiscal 2008, our employees have also begun serving as Mobile Phone Learning instructors for junior and senior high-school students. The entire company is united in this commitment to learning the impact that our services have on society, and participating actively in their resolution.

Kaneko There are many challenges for society. Today, corporations are growing more influential, and society has become more complex. The attitude a company takes toward its businesses is thus crucial. I’m confident that if you can tie your observations to your company’s businesses, it will have a beneficial influence on society. To say it how today’s college students might put it, “Just making money is uncool.”

Forming a plane from the lines of individual efforts

Akiyama Listening to you just now gave me a very good understanding of your various on-site activities. When it comes down to it, the actual site is the best place to get information. One doubt I have, however, is whether these are “KDDI” efforts. I think the challenge is how to turn each of these individual efforts into lines, and extend them to form a plane.

Kaneko I also feel that not enough has been done to create a framework for these efforts, and link them to the company internally. It’s the job of the CSR & Environment Management Department to link points into planes, right? Why don’t you hold something like an idea contest, and create a framework that enables people to participate from their day-to-day activities?

Goto I’m sure the people doing the work will have a lot of ideas. It would be nice if a mechanism to facilitate this would spread within the company.

Aonuma In fiscal 2007, we implemented a “+α campaign.” When employees did something good, like volunteering, they would earn points. They could then use the points they had saved up, and have KDDI donate 100 yen per point. The final amount of money that we collected exceeded our expectations. I believe that creating a framework to allow employees who want to do something to get involved will also change our employees’ awareness.

Giving Dreams to the Children of the Future through Telecommunications

Kaneko KDDI’s Basic Philosophy states, “Earn the satisfaction and trust of our customers.” From our talk today and your actions, however, I believe that you apply this approach to everything, and not just your customers; for example for the children who are yet to be born. They’re your future customers, right?
At the beginning of the meeting, Mr. Kaneko commented that KDDI’s CSR was not at the level expected by society. As I listened to him speak, however, I understood this to be the expectations placed on KDDI. Ms. Akiyama’s statements gave me a renewed sense of that desire to offer services that make people happy. We should always have at least one part of our day-to-day activities that is always involved with CSR, right?

Kaneko The impression that I got today is that all of you here are very enthusiastic about your work. You all have ideas and aspirations. I think it would be fantastic if you could implement just one or two of these, and tie them into KDDI well. It was very encouraging for me to listen to you all today.

Akiyama What I would like to see from KDDI is leadership. Information and communications has transformed society, and I believe that it will continue to do so. There are many areas where information and communications can make a difference, from work styles, to environmental issues, to medicine. That is why I would like you to create dreams as you advance into the future.
Mobile Phones Are Becoming a Part of Our Culture

The number of mobile-phone subscribers in Japan has passed the 100-million mark. Today, there is nearly one mobile phone for every man, woman, and child in the country. The spread of mobile phones among young people in particular has been remarkable: 96% of high-school students, 58% of junior high-school students, and 31% of elementary-school students use mobile phones. While some children say that they now communicate more with their friends, this phenomenon has also caused issues, including incidents involving dating sites and online bullying via clandestine school sites. According to the National Police Agency, in 97% of the cases involving dating sites in 2007, the site was accessed via a mobile phone, and 85% of the victims were under the age of 18. While adults mainly use the telephone and email, children use mobile phones as their tools for linking to society via the Internet. Mobile phones are being used for longer and longer periods of time, and their users are growing younger. High-school girls use the Internet via their mobiles for an average of about two hours per day.

Amidst these circumstances, KDDI has searched for ways in which it can contribute to the sound development of youth, through a dialog with society. As a result, we decided to focus our efforts on two main initiatives: measures to restrict viewing of harmful content via filtering services; and improving the IT literacy of mobile phone users.

Uniting to Protect Children

KDDI participates in a filtering-service PR campaign that the Telecommunications Carriers Association has been running since 2006. As of end-March 2008, there are more than 3.4 million filtering-service users industry wide. Starting in February 2008 we have enhanced our measures, including requiring parental consent for all new subscribers under the age of 20. Meanwhile, others have voiced concerns that filtering service would impede access to good content or the development of new forms of culture, such as mobile-phone novels. The industry has responded to these concerns, one example being the

For the futures of 7.5 million people

About 7.5 million youth in Japan have mobile phones with Internet access. Children are starting to become connected to society via their mobile phones. In this article, we consider the future of information and communications services and the social responsibility of KDDI with regard to challenges that this poses to society.

Providing Children with Safer Communication Environments

*1 Estimate by the Telecommunications Carriers Association (materials from TCA presentation on October 31st, 2007)

*2 Cabinet Office, The Fifth Survey on Information Society and Japanese Youth

*3 National Police Agency, Status of Dating Site Incidents Prosecuted Criminaly in 2007

*4 Materials from presentation by the Telecommunications Carriers Association on April 23rd, 2008
establishment of the Mobile Content Forum (MCF) in April 2008. The MCF is a third-party institution whose mission is to objectively evaluate mobile-phone content. The best mode for filtering services to take is being considered in many different venues.

We are beginning initiatives to protect the environments in which children use communications. “We offer two types of filtering service: a white list of very safe sites, and a larger black list of viewable sites. Customers are given a choice of which type to use. We are also advancing improvements to make these services even easier to use,” says Yasuhiro Morita of the Consumer Business Sector.

Some junior and high-school students, however, are opposed to filtering services. Some parents cancel the filtering service at their request. “Mobile phones are networked tools,” says Shinnosuke Honjo, president of Onbetsu, Inc. and involved with school education, “but most parents give them to their children without being aware of this fact. Giving a mobile phone to a child who has not been taught to make decisions about information is the same as throwing a child who cannot swim into the ocean of the information society. It’s only natural that incidents should occur in such circumstances.” From his experience as a junior high-school principal, Honjo points to the importance of parental responsibility and better IT literacy for children. “It is adults’ responsibility to protect children. Mobile phones are a tool that will be indispensable in the coming society. We need to create an environment and provide services that children can use securely.”

In response to this situation, in 2006 KDDI began offering Mobile Phone Learning classes, which teach elementary-school children nationwide how to use mobile phones, and mobile phone etiquette. In April 2008, we expanded the program to include junior and senior high school students, and began teaching the risks that mobile phones entail through examples of incidents and the like. “Children only learn about how simple actions taken without much thought can get them involved in crime, or how they can hurt their families or friends, when they learn of real-world examples,” says Masashi Yamada, one of the Mobile Phone Learning employee instructors. “But I don’t just want to emphasize the risks. I also want to communicate the meaning of posting information to the Internet, and the importance of words. The mobile phone is you.”

It has been argued that we cannot overlook family and societal issues as the background to issues of children and the net society. “IT literacy alone isn’t enough to resolve issues involving children,” says Yoko Watanabe, chair of The Council on Net Society and Children. “It’s vital for parents and society to give children the fundamental ability to live in a changing society.”

In fiscal 2007, KDDI launched “JUNIOR net,” a site that teaches parents and children important rules for using mobile phones and the Internet, in a fun way. We also participate in e-net caravan, an initiative by relevant government agencies and six telecommunications industry groups that works to raise the awareness of parents and teachers. Currently, about 180 of our employees are registered as instructors. In fiscal 2007, KDDI employees gave 87 workshops nationwide, which were attended by a total of 9,388 people. Resolving the issues of children and the net society requires a steady, continuing commitment with the collaboration of a wide range of concerned organizations and individuals. We will continue with solid initiatives to create a safe communication environment for children.
Committed to Providing the Peace of Mind of 24/7 Access

What does KDDI do to ensure reliable access to information and communications services, anytime and anywhere? We showcase our efforts through the activities of four employees who help keep our services running.

A Customer Focused Approach to Offering the Security of 24-hour Access

"My goal is to provide our customers with pleasant service without the need to be aware of us," says Hiroko Arai. The Mobile Operations Center where Arai works operates 24/7, year round. The center monitors and controls communications traffic*1 nationwide in order to provide reliable mobile phone service. When an anomaly is found, the center identifies and resolves the issue via remote operation and in collaboration with regional technical centers.

"At my work, you never know what’s going to happen," says Arai. "That’s why every person must be able to respond to any situation. But I always get the feeling that the only reason I can solve on-site issues is because I have the backup of colleagues I can trust," she says, smiling. The center provides a wide range of training and workshops in order to teach new technologies and skills. The center also places an emphasis on emergency response, creating manuals and running simulation exercises with related departments.

"Our job is to be the last line of defense in ensuring quality of service," she says. "No matter how wonderful the service is, we can’t offer it to our customers if it’s not operated properly. But if we take the correct measures, we can be assured of improving quality. This is what motivates me in my work, and gives me pride."

*1 Traffic is the amount of data flowing over a communication network.

Vehicle – mounted satellite base stations – these are a powerful tool for keeping the communications network up in times of disaster or other emergencies.
Ordinarily, regional technical centers handle failures in mobile-phone base stations, in collaboration with the Mobile Operations Center. When a natural disaster or similar emergency occurs, however, it may not be feasible to recover a downed network in a short period of time, which could impede important communications by police, fire departments, and local governments. We developed the vehicle-mounted wireless base station as our ace in the hole for quick recovery of the communications network.

We began operating wireless base stations on the move in April 2006. Having nearly the same functionality as an ordinary base station, wireless base stations can be sent quickly to the site of a disaster or other emergency, and restore the network. We have used them as temporary base stations, sending them to the sites of typhoons, lightning strikes, and the like to quickly restore communications. We currently have 10 mobile wireless base stations nationwide, including vehicles with satellite communications capability.

"Allocating and operating vehicles and such are vital for quickly restoring communications," says Hitoshi Yoshida of the Operations & Maintenance Management Department. "But since we need people to operate the equipment, training is also important." For example, communications need to be configured in accordance with the locations and status of vehicle-mounted wireless base stations, but since configuration requires expert knowledge, it is necessary to create a regime capable of emergency response. The department is currently planning on expanding its training, with greater collaboration with related departments, in order to train personnel. "In the future, we plan to develop vehicle-mounted wireless base stations that are even more functional and easier to use. We want to further reduce recovery time by creating manuals that are easy for local staff to operate, and enhancing our regime," says Yoshida. "We want to ease the minds of people waiting to get through as quickly as possible."

There is another reason why reliable communications cannot be ensured during emergencies: the fact that communications traffic becomes concentrated in that area. After a disaster, the affected area is flooded with traffic as people call in to ensure that friends and family are safe. This sometimes overloads the processing capacity, bringing down the switching system. This increases the risk of developing into a large-scale outage, making it necessary to control (restrict) the amount of communications traffic to the affected area. Making the restrictions too strong, however, makes it excessively difficult to get through to the area. What is the optimum level of control?

Hideyuki Koto of KDDI R&D Laboratories’ Network Design Group researched this question. "Communications traffic is the result of user actions," says Koto. ’I began my research with the hypothesis that the amount of traffic following a disaster depends on the scale of the disaster." Koto says that it was difficult to extract required information from the huge amount of communication data following a disaster. Currently, however, he can successfully model traffic patterns during disasters, and is moving forward with ways to put this into practical use to control traffic.

"The action of communication is created by links between people," says Hajime Nakamura, leader of KDDI R&D Laboratories’ Network Design Group. ’The desire to make sure that your family is safe makes you call repeatedly. Learning about human psychology and how we communicate could help us turn communication networks into more people-friendly social infrastructure. This is another reason why I want to pay more attention to customer feedback,” he concludes.

KDDI remains committed to improving the reliability of our communications network in order to make people feel secure in the knowledge that they can connect anytime, anywhere.
Global warming is a problem shared universally by current and future generations. It is said that global warming will have severe impact on our societies and natural environments, including more natural disasters and rising sea levels. The Kyoto Protocol, which was adopted in 1997, aims for developed countries to reduce their emissions of greenhouse gases (CO₂ equivalent) by at least 5% from 1990 levels, and calls on Japan to reduce emissions by 6%.

In fiscal 2005, Japan’s emissions of CO₂ were 1,359 million tons. About 0.5% of these emissions (6,970,000 tons-CO₂) were from the communications and broadcasting field. As information and communication technology (ICT) develops, however, information and communications traffic is expected to increase as we become a ubiquitous networked society, where all the devices around us are connected to the network and anyone can access the network anytime and from anywhere. It is estimated that by 2012, power consumption for the ICT field as a whole, combining information and communications and broadcasting, will reach 73 billion kWh, and the reduction of CO₂ emissions is strongly required.

Amidst these circumstances, we created our second medium-term environmental conservation plan to help resolve the issue of global warming. We are working under this plan to reduce our CO₂ emissions, with a medium-term target of reducing emissions by 16% by implemented environmental measures for the expected energy usage levels of fiscal 2011. The measures are focused on making our business telecommunications equipment more energy efficient (this equipment accounts for about 97% of the CO₂ emissions at KDDI).

Striving for a 16% reduction

As we become a ubiquitous networked society, we expect the use of information and communications to increase. It is feared that this will increase energy consumption in Japan’s telecommunications field. Here we showcase KDDI’s initiatives to help resolve the issues of global warming shared by the entire planet.

Global Warming and ICT

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Medium Term Plan for Combating Global Warming

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Targets for Combating Global Warming in Our Second Medium Term Environmental Conservation Plan

Reduce energy consumption by 16% from expected fiscal 2011 levels, and achieve greenhouse gas emissions of 1,520,000 tons (CO₂ equivalent *2)

*2 The ratio of 0.555 kg/CO₂ is used as the CO₂ conversion factor.

Greenhouse Gas Emissions Reduction Target for 2011

Greenhouse gas emissions (10,000 tons CO₂ equivalent)

16% reduction

- Expected emissions based on current conditions
- Target: 1,520,000 tons
- Expected emissions if energy-conservation measures are put in place

FY 2006

FY 2011
Reducing CO₂ by Making Communication Equipment More Energy Efficient

One thing telecommunications carriers must keep in mind when implementing energy-conservation measures is that they cannot shut down their communication equipment, due to the need to provide reliable service at all times. For this reason, one effective solution is to develop and introduce highly energy-efficient equipment, and install it when communications equipment is first deployed or when it is upgraded. Peripheral equipment such as air-conditioning equipment accounts for a large proportion of total energy usage, and energy-efficiency measures for this type of equipment is also an effective way to reduce CO₂. At the same time, KDDI strives to improve the way that it operates its equipment, and to introduce new sources of energy moving forward.

KDDI is thus steadily advancing the energy-conservation measures that are the most effective overall based on our second medium-term environmental conservation plan, in order to reduce our energy usage while providing reliable service that meets demand for our services.

Measures to Conserve Energy through Business Communications Equipment

1. Introduction of highly energy-efficient communications equipment when installing new equipment
2. Upgrading existing equipment to high energy efficient replacements
3. Making air conditioning and other peripheral equipment more energy efficient
4. Reducing energy usage by revising the way that communications and peripheral equipment is operated
5. Introduction of solar power generation and other new energy sources

Developing energy efficient mid-sized base stations for au mobile phones

We install base stations for au mobile phones in many different locations, in order to ensure that connectivity is available everywhere. Until now, however, outdoor urban and suburban base stations have been relatively large, causing them to consume large amounts of power. We needed to improve the energy efficiency of au base stations. KDDI thus developed a mid-sized base station. This new base station is less than half the size and weight of conventional base stations, and consumes about half the power. We began introducing the new base stations in December 2007, with the goal of greatly reducing our energy usage.

Reducing CO₂ by introducing renewable energy

Switching to solar power and other forms of renewable energy is an effective way to reduce CO₂. In 2005, we began introducing large-scale solar power equipment on three communications buildings and other facilities. By fiscal 2007, this equipment was generating a total of 265,644 kWh of power. We are also installing solar power equipment on our mobile-phone base stations.

The Challenge of Reducing Society’s CO₂ Emissions

As society’s needs for telecommunications services continue to increase, the power consumption of telecommunications equipment is expected to increase. It is possible to leverage telecommunications services, however, to achieve a reduction to the CO₂ emissions of society as a whole that exceeds the increased emissions by telecommunications equipment, by doing things like: (1) dramatically improving the efficiency of energy used for social and economic activities; (2) improving the production efficiency of physical goods; and (3) reducing the movement of people and physical objects. Some examples of this are energy conservation through fine-grained building energy-management systems; downloading content via the Internet; and reducing the movement of people and physical objects via telecommuting.

According to Ministry of Internal Affairs and Communications estimates, by 2012 the communications and broadcasting field will account for 30 million tons of CO₂ emissions, while reducing CO₂ emissions by 68 million tons, thus reducing society’s CO₂ emissions by 38 million tons. Consequently, by developing and offering services that take advantage of the environmental benefits of telecommunications services, KDDI believes that it can help reduce the CO₂ emissions of society as a whole and help to combat global warming.

Shibuya Data Center *3 Wins ASPIC Environmental Contribution Award

With the support of the Ministry of Internal Affairs and Communications, the Ministry of Economy, Trade, and Industry, and others, our Shibuya Data Center won the Environmental Contribution Award for being the data center that most contributed to societal environmental measures in the ASP Awards 2007/2008, given by the NPO ASP-SaaS Industry Consortium (ASPIC).

*3 A data center is a facility that hosts customer servers, providing maintenance, operations, and other services.