

# Opening up the New Mobile Society

## — It's Our Consistent Responsibility and Mission

Simply put, the history of the mobile phone is synonymous with the history of DoCoMo. On the foundation that this legacy provides, we are now taking the first steps toward creating more history.

We are opening the door to the future, aiming to create a lifestyle infrastructure that will enable customers to use mobile phones with greater ease and security.

As a leader in the industry we are leveraging our experience, expertise, technology and pioneering spirit on an ongoing basis to create a new mobile communications era and to achieve our own growth.

Part One:

The Evolution of Mobile Phones as Lifestyle Infrastructure

Part Two:

Playing an Even More Useful Role in Everyday Life and Business

Part One:

## The Evolution of Mobile Phones as Lifestyle Infrastructure

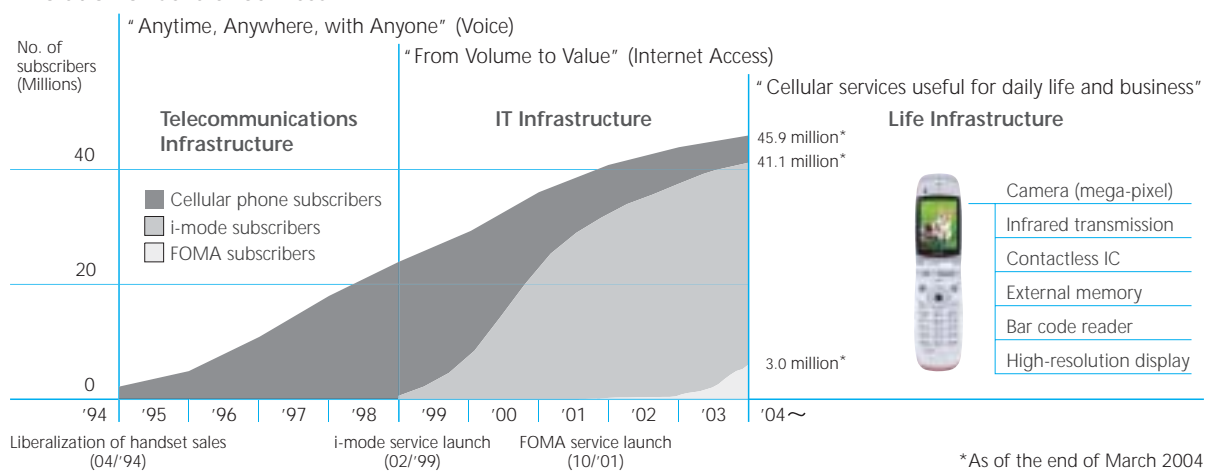
### Why Mobile Phone Use Has Spread So Quickly in Just Over 10 Years

Back in fiscal 1992, when DoCoMo first began operations, the percentage of the population using mobile phones in Japan (the penetration rate) was less than 2%. However, at the end of March 2004, the number of mobile phone subscribers in Japan, including PHS subscribers, was 86.7 million, for a penetration rate of 67.9%. Thus, at this point the majority of people in Japan use a mobile phone. That mobile phone use has spread this quickly in only a little more than 10 years is attributable to several catalysts stimulating their spread. These catalysts include the expansion of the service area, the decreasing size and increasing sophistication of handsets, the merger of mobile phone technology and Internet technology, and the provision of compelling content. We believe the creation of these catalysts has led to the rapid growth of mobile phone use, with usage going through several stages. As the leader in the mobile phone industry, DoCoMo has played a central role in driving this growth.

### ■ Stage One: Communications Infrastructure The Spread of Mobile Phones as Communications Infrastructure

The first stage in the spread of mobile phone use was the case of mobile phones as a voice communications infrastructure. Without question, a tool that enabled conversation “anytime, anywhere, with anyone” fulfilled a desire that many people had. Nevertheless, mobile phone penetration was slow initially, which was attributable to several problems that existed at the time. These included a limited service area, high rates and non-user-friendly handsets. Through aggressive investment, we accelerated the expansion of the service area. We then implemented a series of measures aimed at stimulating the spread of mobile phones. For example, we stopped requiring large security deposits, started allowing customers to buy their handsets rather than rent, and abolished new subscriber fees. These measures made it easier to get mobile phones into the hands of customers. We also devoted our energies to improving the user-friendliness of our handsets by making them smaller and lighter, and

### Evolution of Cellular Services



improving continuous standby time. At the same time, we encouraged customers to transition from analog handsets to digital handsets, which offer improved call quality and efficient spectrum use. As a result, our number of subscribers increased quickly, rising from around 1 million initially to 2.21 million in fiscal 1994, 4.94 million in fiscal 1995, and 10.96 million in fiscal 1996. This marked the end of the first stage of the development of the mobile phone industry in Japan.

### ■ Stage Two: IT Infrastructure The Expansion of Mobile Phone Applications as IT Infrastructure

If the mobile phone had not evolved beyond being a tool for having conversations, we believe today's mobile multimedia society would never have come into being. Under a new business concept, namely, a switch in emphasis from volume to value, we expanded mobile phone applications as a means of creating another growth driver besides voice communications. In other words, we added new functionality (data communications) to the basic functionality (voice communications) of mobile phones. Most importantly, the February 1999 launch of i-mode services served to propel us into a new growth stage. Our number of subscribers totaled 29.4 million at the end of March 1999, and over the next two years we added over 10 million subscribers. By the end of March 2004, our number of subscribers had surged to around 46 million, with i-mode subscriptions accounting for 41 million of this. Thus, i-mode subscribers account for around 90% of all subscribers at present. Thanks to the spread of our i-mode services, users came to feel Internet access closer than before. In so doing, mobile phones experienced the second stage of major growth as IT infrastructure.

### ■ Stage Three: Lifestyle Infrastructure The Further Evolution of Mobile Phones as Lifestyle Infrastructure

The rise in the mobile phone penetration rate has meant a slowdown in the rate of net subscriber growth, but we intend to continue developing our mobile phone business still further. Our 3G mobile communications service, FOMA, offers higher bandwidth content and faster downloads than mova, all for a lower rate. We therefore expect the use of data communications services to increase even further. At the same time, we are working to expand the range of mobile phone applications other than communications by taking the customer's perspective, with the aim of sparking further evolution in mobile phone technology. Our goal is to make mobile phones even more useful in everyday life and business; in other words, to turn them into lifestyle infrastructure. This is our mission in the third stage in the evolution of mobile phones. Leveraging the external interfaces built into our mobile phones, we are promoting bricks-and-mortar alliances that merge our mobile multimedia services with a variety of real-world commercial transactions. By doing so, we are working aggressively to create new services, with the goal of turning mobile phones into lifestyle infrastructure. Later in this section, we will discuss some specific developments in this area.

Part Two:

## Playing an Even More Useful Role in Everyday Life and Business

### ■ Revising Rate Structures

#### Revising Our Rate Structures to Enable Further Growth

To achieve further growth for mobile phones as lifestyle infrastructure, we think a new rate structure is needed, one that does not involve charging by volume. As we learned during stage one of the development of mobile phones, regardless of how much the customers consider mobile phones convenient and fun to use, they only have so much disposable income to use for communications. To enable our customers to use their mobile phones free from worries about the expense involved, we have taken steps to reduce costs by making our corporate activities substantially more efficient, and have revised our rate structure in three major ways.

#### 1. Nikagetsu Kurikoshi Services That Roll Over Free Talk Time

In November 2003, we introduced services in which unused allowances (free minutes and/or packets, including those under FOMA Packet Packs) are rolled over automatically for up to two months. The services are available to all FOMA and mova service subscribers.

#### 2. Expanded Discounts

We have revised the size of the discounts for our existing discount services. Specifically, we increased the size of discounts for our Family Discount packages in April 2004, and in July, we did the same for our Business Discount packages, which are aimed at corporate users.

#### 3. Flat-Rate Packet FOMA Services

We have introduced flat-rate packet FOMA services.

Beginning in June 2004, FOMA customers can have unlimited use of i-mode services for ¥3,900/month (¥4,095/month with tax), provided that the customer also subscribes to FOMA Plan 67 or higher. In May 2004, we offered lower monthly charges of FOMA's Packet Pack for customers still using i-mode services under a volume-based rate plan.

#### Expanding Data Communications Use through FOMA

Having positioned fiscal 2004 as a year for major growth in FOMA services, we aim to increase the penetration of FOMA services substantially. In addition, we intend to enable users to access a variety of high-level FOMA services,

#### FOMA New Rate Structures (1)

Revision of FOMA Packet Pack effective May 1, 2004

		Packet Pack fixed monthly charge			
mova		—	—	¥0.3 (¥0.315 including tax)/packet	
FOMA	Without Packet Pack	—	—	¥0.2 (¥0.21 including tax)/packet	← 2/3 of mova
	Packet Pack 20 ¥2,000 (¥2,100 including tax)	Packet Pack 10 ¥1,000 (¥1,050 including tax)	—	¥0.1 (¥0.105 including tax)/packet	← 1/3 of mova
	Packet Pack 40 ¥4,000 (¥4,200 including tax)	Packet Pack 30 ¥3,000 (¥3,150 including tax)	—	¥0.05 (¥0.0525 including tax)/packet	← 1/6 of mova
	Packet Pack 80 ¥8,000 (¥8,400 including tax)	Packet Pack 60 ¥6,000 (¥6,300 including tax)	—	¥0.02 (¥0.021 including tax)/packet	← 1/15 of mova

- Free usage allowance worth the same amount as fixed monthly charge is provided to subscribers.
- Communications allowances cover all FOMA communication types (voice communications, digital communications, packet communications, and Short Message communications).
- Communications allowance can be rolled over for two months.
- Packet volumes per communications will vary since FOMA service and mova service use different communication methods.

such as visual communications, in a comfortable and worry-free manner. To that end, we have expanded various discount rates and introduced flat-rate packet communications services as discussed previously. In the landline communications field, the introduction of flat-rate services has sparked a sharp increase in the number of broadband Internet users. Through similar synergies in the mobile communications field between access and the provision of compelling content, we believe the overall use of data communications will increase, even among customers who historically have used i-mode relatively infrequently.

## ■ Enhancing FOMA Services

### Fully Utilizing the Capabilities of FOMA

Our number of subscribers to our FOMA 3G services reached the 3 million level as of the end of fiscal 2003, vastly exceeding our initial target for the year of 1.46 million. We now aim for more than 10 million subscribers by the end of fiscal 2004. FOMA has caught up to mova (our 2G service) in a number of respects, including service area size, handset functionality, and content, and is now poised to take the

lead. Thanks to the introduction of flat-rate plans, we think the stage is now set for customers to fully utilize high-speed broadband data communications that are unique to FOMA.

### Expanding our Network

We have expanded the FOMA service area faster than we did for mova, and by the end of fiscal 2003 the FOMA service area covered 99% of the nation's population. We have also enhanced connectivity in indoor settings. By the end of fiscal 2003, we had placed FOMA equipment in around 1,600 indoor locations nationwide, up from around 150 a year earlier. We plan to increase this to around 3,800 by the end of fiscal 2004, and to continue meeting our customers' varied usage needs, we are doing our utmost to expand the service area and increase call quality within the covered area. With respect to our trunk communications network, we are working to transition, by the end of fiscal 2004, from the current ATM network, which processes both data packets and voice, to a more efficient IP router network, involving IP routers and optical transmission lines acting as relays. In addition, we plan to introduce High Speed Downlink Packet Access (HSDPA),

### FOMA New Rate Structures (2)

FOMA New Billing Plan (Launch of pake-hodai, flat-rate service effective June 1, 2004)

Billing Plan	Basic Monthly Charges (incl. tax)	Basic Monthly Charges + Packet Packs			
	[Communication allowance]	+Packet Pack 10 (incl. tax) [Communication allowance]	+Packet Pack 30 (incl. tax) [Communication allowance]	+Packet Pack 60 (incl. tax) [Communication allowance]	+pake-hodai (incl. tax) [Communication allowance]
FOMA Plan 39	¥3,900 (¥4,095) [¥750]	¥4,900 (¥5,145) [¥1,750]	¥6,900 (¥7,245) [¥3,750]	¥9,900 (¥10,395) [¥6,750]	—
FOMA Plan 49	¥4,900 (¥5,145) [¥2,050]	¥5,900 (¥6,195) [¥3,050]	¥7,900 (¥8,295) [¥5,050]	¥10,900 (¥11,445) [¥8,050]	—
FOMA Plan 67	¥6,700 (¥7,035) [¥4,050]	¥7,700 (¥8,085) [¥5,050]	¥9,700 (¥10,185) [¥7,050]	¥12,700 (¥13,335) [¥10,050]	¥10,600 (¥11,130)* [¥4,050]
FOMA Plan 100	¥10,000 (¥10,500) [¥7,350]	¥11,000 (¥11,550) [¥8,350]	¥13,000 (¥13,650) [¥10,350]	¥16,000 (¥16,800) [¥13,350]	¥13,900 (¥14,595)* [¥7,350]
FOMA Plan 150	¥15,000 (¥15,750) [¥11,650]	¥16,000 (¥16,800) [¥12,650]	¥18,000 (¥18,900) [¥14,650]	¥21,000 (¥22,050) [¥17,650]	¥18,900 (¥19,845)* [¥11,650]

· Communications allowances cover all FOMA communication types (voice communications, digital communications, packet communications and Short Message communications).

· Flat late service is only available with FOMA Plan 67, 100, 150.

\* Unlimited use of i-mode is available for a \* mark rate. An i-mode subscription (monthly charge: ¥150/¥157 incl. tax) is required.

which offers increased communications speed and improved transmission efficiency. We think this will also help lower packet communications network costs. HSDPA will enable higher transmission speeds, with the maximum speed averaging 3.6Mbps upon introduction and around 14Mbps eventually. This will make possible even more sophisticated and diverse FOMA services, such as rich video content downloads.

**Introducing New FOMA Handsets**

Since January 2003, we have introduced a series of new FOMA handsets that are smaller in size and have improved standby time. In February 2004, we began selling the 900i series, which finally brought FOMA handset functionality above that of mova handsets. This, combined with the provision of rich content for the 900i series, such as Chaku-motion and large-capacity i-appli, has caused FOMA subscriptions to surge. In fiscal 2004, we intend to enhance our product line-up by introducing wireless LAN compatible handsets, dual-mode FOMA/GSM handsets (which will enable international roaming) and handsets with built-in FeliCa\* chips.

\*FeliCa is a registered trademark of Sony. Felica is a contactless IC cards technology developed by Sony.

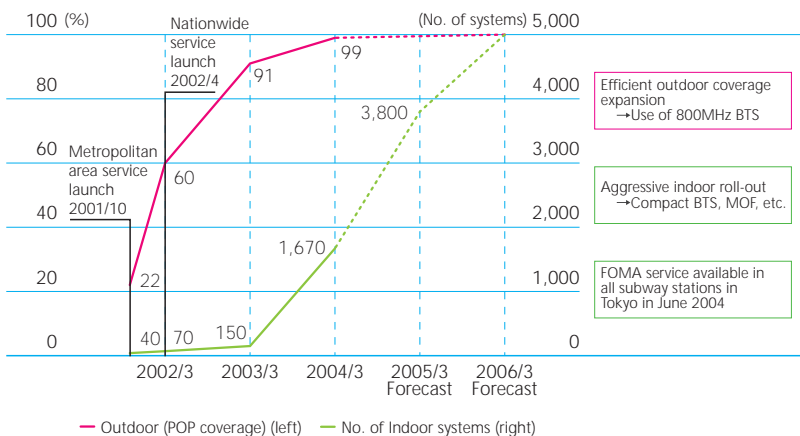
**■ Aiming to Create New Business Opportunities  
Bricks-and-Mortar Alliances: A Paradigm Shift to a New Era**

With the goal of making our handsets even more useful in daily life and business, we intend to foster a further evolution of mobile phone technology. In addition to our established communications infrastructure and IT infrastructure mobile phone services, we plan to provide new value-added services using built-in external interfaces such as infrared data transmission (IrDA) ports, bar code (QR code) reader functionality, and contactless IC cards. Life in society entails a variety of actions and transactions. Combining these with mobile communications tools can make social life more convenient and efficient. For example, let us consider the field of commercial transactions. By using a mobile phone with a built-in external interface, such as an IC card or an IrDA port, one can use a mobile phone to make a non-cash payment, just like a credit card. Mobile communications to date, including Internet connectivity in the form of e-mail and i-mode, have involved the virtual world. However, these new FOMA handsets will bring the real world closer through commercial transactions such as cashless transactions and ticket purchases, thereby enabling new growth for mobile phones. Moreover, the use of mobile phones for ID card and bar code reader purposes is also conceivable, and we think the use of mobile phones in a variety of everyday life settings will increase going forward.

**The Shift to Mobile Phones as Lifestyle Infrastructure Already Underway**

We are working to establish new applications for mobile phones in a variety of fields, including audiovisual communications (which will expand the possibilities of usage beyond face-to-face videophone communication), diverse cashless payment and personal identification functions, and seamless

**FOMA Coverage Expansion**



international communications (through the spread of 3G services and i-mode to overseas markets). By doing so, we will make everyday life and business society more convenient. As an extension of this, we hope to achieve new growth through win-win partnerships, i.e., revenue sharing with our partner companies. Next, we would like to discuss some examples of how such efforts are already under way.

### ■ Applications of Videophone Functionality Chara-den

A built-in standard on FOMA 900i series handsets, Chara-den is a function that is both convenient and fun. Through Chara-den, the user can replace his or her own image with that of an avatar, the movements and expressions of which the user can alter. This makes videophone conversations more fun, and can also be used in situations when the user does not want the person on the other end to see him or her.

### M-stage Visual Net

Underscoring the fact that being able to see each other's face is a basis for communication, M-stage Visual Net enables videoconferencing, allowing multiple parties to share information in real time. M-stage Visual Net can be used in a variety of everyday life and business settings. Leveraging the advantages of mobile communications, DoCoMo provides M-stage Visual Net as a FOMA service to enable users to actively participate in meetings regardless of their location.

### Remote Monitoring

In cooperation with Eizo Nanao Corporation, in October 2003 DoCoMo began offering a system that allows users to monitor live video from a remote location. This system involves a FOMA handset and the EIZO AirView\*, a small-sized live video camera. The user sets the EIZO AirView in

place, and views the video image via the screen of the FOMA handset. This technology has a variety of uses. For example, an individual user could monitor his or her residence or pet while away from home, while a corporate user operating a retail location could check on store operations and customer traffic. The EIZO AirView is less expensive than other live cameras, and enables easy set-up, with no telephone line installation required.

In addition, through the FOMA Future Project, we have installed visual controllers supporting FOMA in the residences of 1,000 people (chosen via a drawing), enabling them to experience remote operation of electric home appliances that utilize the audiovisual functions of FOMA handsets.

\*EIZO AirView is a registered trademark of Eizo Nanao Corporation.

### ■ Developing the Brick-and-Mortar Alliance Business

#### Utilizing Handset External Interfaces

Using the external interfaces of its handsets, DoCoMo provides a variety of commercial transaction related services. We are working aggressively to enable the use of its mobile phones as a form of personal identification and as an alternate method for making a variety of cashless payments, such as credit card and ATM card transactions, electronic money, prepaid cards (such as those for transportation tickets and commuter passes), and event and concert tickets. We are also working to create new opportunities for data acquisition through mobile phones, such as enabling them for use as bar code (QR code) readers.

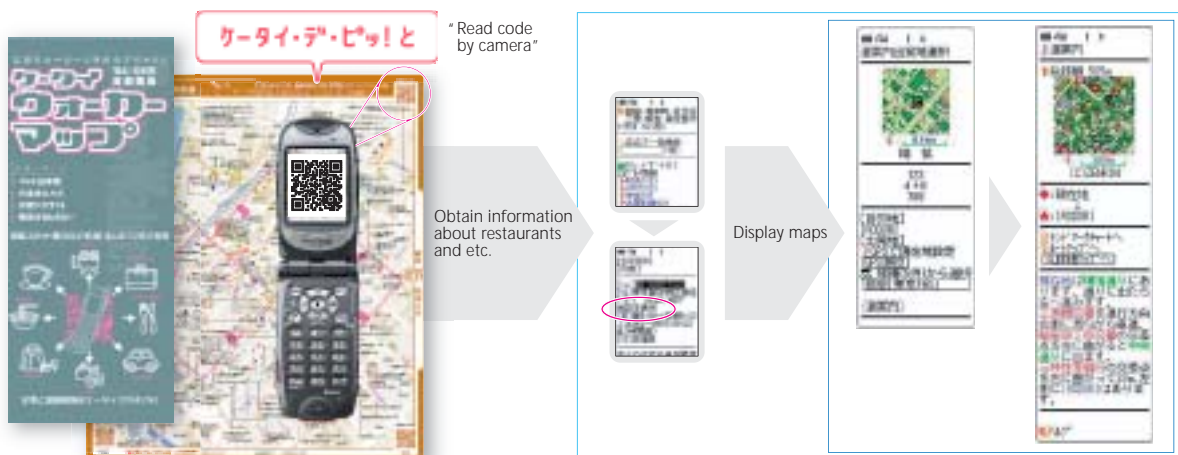
### 1. Uses for IrDA Ports

Tests of a system that will enable mobile phones users to shop without using either cash or a credit card began in June 2003. These tests are being conducted by DoCoMo along with Visa International and four credit card companies that issue Visa cards (Nippon Shinpan, Sumitomo Mitsui Card, UC Card and Toyota Finance), who hope to commercialize this service sometime in fiscal 2004. After downloading an i-appli application for payments based on the Visa Proximity Payments Messaging Specification and inputting his or her credit card data, the user can make payment by launching the i-appli application and sending the credit card data to the merchant's receiver via infrared data transmission. This system is advantageous for the merchant in that the infrared equipment the merchant needs for such transactions is less expensive than the equivalent contactless IC card or Bluetooth equipment. As of the end of fiscal 2003, around 20 million DoCoMo mobile phones had built-in IrDA ports.

### 2. Uses for Bar Code Reader Functionality

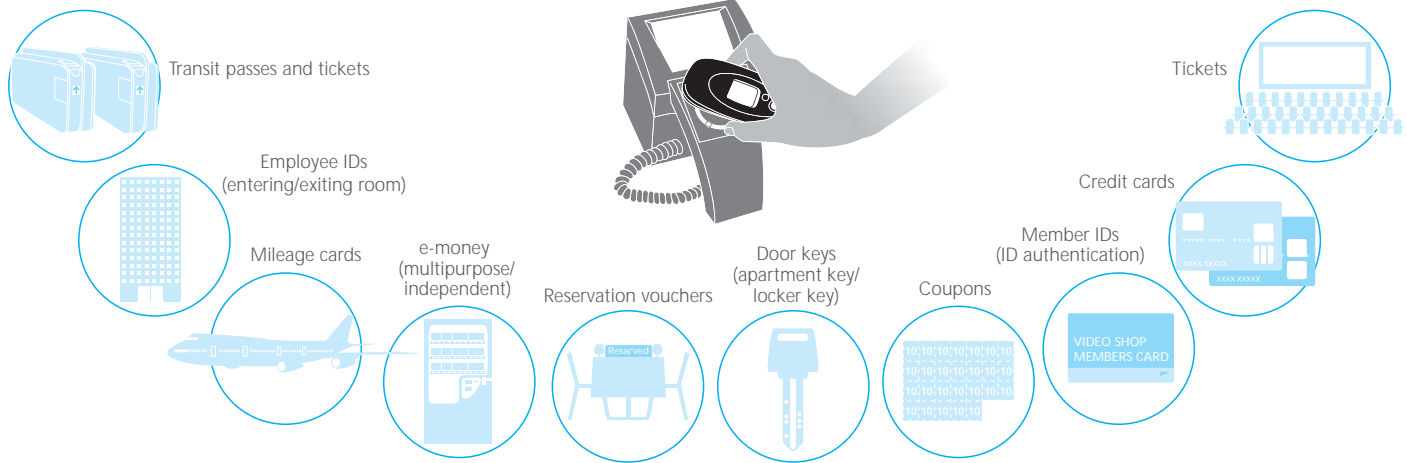
JAN codes and bar codes (QR codes) are two types of bar codes. A QR code can store several dozen to several hundred times more data than a JAN code (the conventional bar code) can in the same amount of space. There are a number of ways the ability to scan such codes would enhance mobile phone use. For example, by using a mobile phone to scan a bar code (QR code) printed in a book or magazine, or on a poster, the user could access an official i-mode site or Website more easily, without having to enter the URL by hand. This service would primarily benefit businesses involved in B-to-C. One example of this that has already been realized is the Mobile Walker MAP\*, a compact size map published by Kadokawa Shoten Publishing Co., Ltd. Each page of this publication has a map of a different area, along with bar codes (QR codes). By reading these bar codes (QR codes) using a mobile phone with bar code reader functionality, he or she can obtain information on the stores and restaurants in that area that a map

#### Service Example — Bar Code (QR Code)



\*The Mobile Walker MAP is provided by Kadokawa Shoten Publishing Co., Ltd.

### Various Usage Examples of i-mode FeliCa



alone cannot provide, such as related articles and photos.

This is beneficial for both merchants and users. For merchants, it increases advertising options. For users, it allows them to obtain the information they need through a simple operation. Other applications for bar code reader functionality include reading bar codes (QR codes) printed on business cards to more simply record personal information in the memory of the mobile phone. QR Factory, a software program for creating bar codes (QR codes), can be downloaded from our website free of charge:

[http://www.nttdocomo.co.jp/p\\_s/imode/make/barcode/index.html](http://www.nttdocomo.co.jp/p_s/imode/make/barcode/index.html)

As of the end of fiscal 2003, around 4 million DoCoMo mobile phones had built-in bar code reader functionality.

### 3. Uses for Built-in Contactless IC Cards

We think demand will be greatest for mobile phones with built-in contactless IC cards. FeliCa, a contactless card technical format developed by Sony Corporation, is currently used in a wide range of applications. These include Suica\*, a combination commuter pass and prepaid card issued by East

Japan Railway Company (JR East); Edy, a prepaid electronic money service offered by bitWallet, Inc.; various online credit services; as well as in employee ID cards and member ID cards. To build FeliCa technology (which was originally designed for use in IC cards) into handsets and promote the spread of FeliCa services, Sony and NTT DoCoMo together established FeliCa Networks, Inc., in January 2004. In December 2003, just prior to the establishment of FeliCa Networks, preview services were launched using FeliCa-enabled i-mode handsets, with 27 companies participating. Commercial services are set to begin in July 2004, which will enable customers to use their mobile handsets for a variety of purposes, including electronic money, ticket purchasing, commuter passes, member IDs, and personal IDs. All of these uses can be enabled by downloading i-appli applications onto a FeliCa-equipped i-mode handset. For example, after downloading the Mobile Suica\* i-appli, the user can enter or exit JR East train stations simply by lightly touching his or her FeliCa-equipped i-mode handset to the FeliCa sensor on the ticket gate. In addition, by accessing the Mobile Suica i-mode site, the user can purchase additional Suica credit as well as

check the usage records and remaining balances. Moreover, the user can conduct cashless transactions at stores within the station. A further benefit of using a FeliCa-equipped i-mode handset in this manner is that the user no longer has to carry around various plastic cards, such as a commuter pass and an employee ID, as the functions of all of these cards are contained in his or her handset.

\*Suica and Mobile Suica are registered trademarks of JR East.

### Enhancing Security

To enable use of mobile phones as lifestyle infrastructure in a worry-free manner, it is essential to enhance their security. In July 2003, DoCoMo began offering FirstPass, an electronic verification service that is simpler and more secure than the conventional password verification method. We have already launched handsets with lockout functionality (enabling the user to remotely lock the keypad when the handset is lost), fingerprint verification functionality, and automatic downloading of software bug fixes. In addition, we plan to introduce handsets with anti-virus functionality.

### Using FOMA for International Communications International Roaming/International Communications

Our number of subscribers to the FOMA WORLD WING (international roaming) service exceeded one million at the end of fiscal 2003. Our roaming service's destination coverage ratio was more than 97% at the end of June 2004, encompassing over 100 countries and territories. As 3G mobile phone services penetrate overseas markets, we expect an increase in international communication (including videophone communication). DoCoMo is working to roll out i-mode in overseas markets (i-mode services were available in eight countries as of the end of June 2004) and further expand the area in which international videophone services can be used (two countries as of the end of June 2004).

### Dual-Mode FOMA/GSM Handsets

By the end of fiscal 2004, we plan to introduce FOMA handsets that are compatible with GSM, the most widely used digital mobile phone format overseas. This will enable customers to take the same handset they use in Japan to other countries and use it there, making it unnecessary to obtain another handset especially for use overseas, as has been the case thus far. This is another way in which we are increasing convenience for our customers.

### International Services (as of June 30, 2004)

Services	Applicable to	Service description	Service areas
WORLD CALL	FOMA/mova	Users in Japan can make international calls with their DoCoMo mobile phone	Approx. 220 countries/regions
International video calling service	FOMA videophone	Users can communicate through videophone with 3G users in the U.K. and Hong Kong	U.K. (H3G UK), Hong Kong (H3G HK)
WORLD WING	FOMA	Users can use their own mobile phone number around the world by inserting a FOMA card into an overseas mobile phone.	Approx. over 100 countries/regions. Approx. 97.6% of areas in which Japanese stay are covered.
WORLD WALKER	mova	Users can use their regular mobile phone number when staying abroad.	Approx. over 100 countries/regions. Approx. 97.6% of area in which Japanese stay are covered.