

MPHPT

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“Study Group on Business Model over Next-Generation Mobile Communications System” Compiles a Report

Widespread use of cellular telephone systems in recent years has exerted a huge influence on B-to-B and B-to-C e-commerce. In Japan this fiscal year, the world's first 3G (third-generation) mobile communications system (IMT-2000) service will be launched. Thus, business models offering more advanced application systems will emerge. In response to this, since July 2000 the “Study Group on Business Model over Next-Generation Mobile Communications System” has been held in order to study possibilities and challenges of various business models developing over IMT-2000. The study group compiled its findings as a report.

The outline of the report is as follows:

1. Goals in the report

Creation of new content and applications shall be promoted through encouragement new entries into the mobile commerce market over open IMT-2000.

A business environment will be prepared where players, e.g. the consumer electronics or the computer game industries that have solutions, can freely utilize the IMT-2000 arena, in order to stimulate creation and offer of novel and first-ever services.

In creating a new social order, in line with the development of a broadband era, policy measures for tackling newly emerging social problems shall be deployed in a rapid, flexible and ensured manner.

2. Basic concept

IMT-2000 is positioned at the next-generation followed by the second-generation (2G) networks and platforms, such as the existing PDC (personal digital cellular) or cdmaOne. The 2G systems is a “pioneering period” for exploring a new world of mobile Internet as well as a “penetration-oriented expansion period” by mobile carriers through their own efforts. However, from now on, the 3G systems will open a new stage, a “usage-oriented expansion period.” In this period, the relevant industries as a whole will be developed

through the shift to open methods, where any person can enter into business at their own risk.

Namely, IMT-2000 will play a central role for consumer electronics with IT, a hub linking financial, advertisement, computer game, broadcasting and e-commerce industries. Under the global standard, various business sectors dealing in such products as information service, portal sites, terminal equipment, etc. will form the first-ever novel markets.

The pursuit of IMT-2000 business methods means efforts to solve four problems of the G2 systems and simultaneously leads to the pursuit of IT rules governing the broadband era.

The study group will strive to identify the mobile Internet in the configuration it should be in.

3. Common specifications of content and disclosure thereof

i) Current status

- Competition encourages technological developments. On the contrary, specifications differing from carrier to carrier are obstacles in developing content and applications.

ii) Solutions

- Support free competition toward de facto standards.
- Ensure transparency in disclosure process of information among relevant

businesses (communications carriers, IT equipment manufacturers, content producers, etc.).

- Limit the government's role to the “closing the gap” and “bridging the gap.”

iii) Measures from now on

- Promotion of relevant technological

CONTENTS

- "Study Group on Business Model over Next-Generation Mobile Communications System" Compiles a Report ----- 1
- Outlook for Future Mobile Communications Systems ----- 2
- Toward Realization of Advanced Broadcasting Service with High-volume Digital Storage Function ---- 3

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development (starting from FY2001)

4. Maintenance of openness of mobile Internet access networks to other ISPs, etc.

i) Current status

- Each communications carrier offers its own Internet access.
- Each communications carrier poses restrictions on selecting portal sites.

ii) Solutions

- Open mobile Internet access networks to other ISPs, etc.
- Allow much freer selection of portal sites at terminal equipment.

iii) Measures from now on

- NTT DoCoMo shall prepare within two years an environment in which users could access centers of other ISPs, etc.
- In addition to posting of a listed portal site page, KDDI offers direct connection upon request of ISPs, etc.
- J-PHONE carries out a feasibility study on open connection with ISPs, etc.

5. Maintenance of openness of user IDs and billing commission service

i) Current status

- Communications carriers offer user IDs necessary for authentication, settlements and billing commission services, only for "official" sites selected by the communications carriers.

ii) Solutions

- Offer user IDs and billing commission service to eligible sites in compliance with fair and equitable standards.

iii) Measures from now on

- Introduction of the evaluation systems by a third-party institution

6. Establishment of appropriate rules to ensure the protection of proprietary information

i) Current status

- Raised awareness concerning privacy protection, caused by complicated business models, the increase in the number of relevant businesses, frequent occurrence of proprietary information leakage, etc.

ii) Solutions

- Construct a model coping with proprietary information in a well-balanced manner between "protection" and "use" of personal proprietary information, in view of the discussion

about the bill concerning access to proprietary information.

iii) Measures from now on

- Introduction of the evaluation systems by a third-party institution

7. Measures to cope with the evolution toward "personal terminal," etc.

i) Current status

- Prepare rules for users upon using UIM (user identification module) cards, which can be powerful in managing personal proprietary information, settlements, etc. over IPv6-based networks.
- UIM cards play important roles in collaboration for consumer electronics with IT.

ii) Solutions

- With regard to UIM cards vital for personal terminals, prepare rules among relevant businesses (communications carriers, IT equipment manufacturers, credit-card companies, etc.).

iii) Measures from now on

- Establish a study group.
- Make rules for regulating use of UIM cards.

Outlook for Future Mobile Communications Systems

Report from the Telecommunications Council

On June 25, 2001, MPHPT received a report entitled "Outlook for the Future Mobile Communication Systems" from the Telecommunications Council (Chair: Mr. Yoshihisa AKIYAMA, Chairman, Kansai Electric Power Co., Inc.).

The outline of the report is as follows: **[Backdrops]**

With the expanded penetration of mobile computing and the rapid evolution of IT, demands are arising for the realization of multimedia mobile communications including ultrahigh-definition moving picture transmission through ultrahigh-speed transmission and the totally IP-based network with higher security and reliability. A variety of R&D activities are carried out in Japan and foreign countries on future mobile com-

munications technology including the software defined radio (SDR) technology, which allows to flexibly change frequencies, communications methods, etc. simply by replacing or modifying software. At ITU, studies for the realization of future development of IMT-2000 and the systems beyond IMT-2000 have just started.

Taking those backdrops into account, toward the realization of the future mobile communication systems, MPHPT in December 2000 inquired of the Telecommunications Council about the "Outlook for the Future Mobile Communication Systems," that includes such urgent themes as i) basic concept of systems beyond IMT-2000, ii) R&D topics (on mobile communications technology,

networking technology, etc.), iii) items to be standardized, and promotion measures thereof.

[Outline of the report]

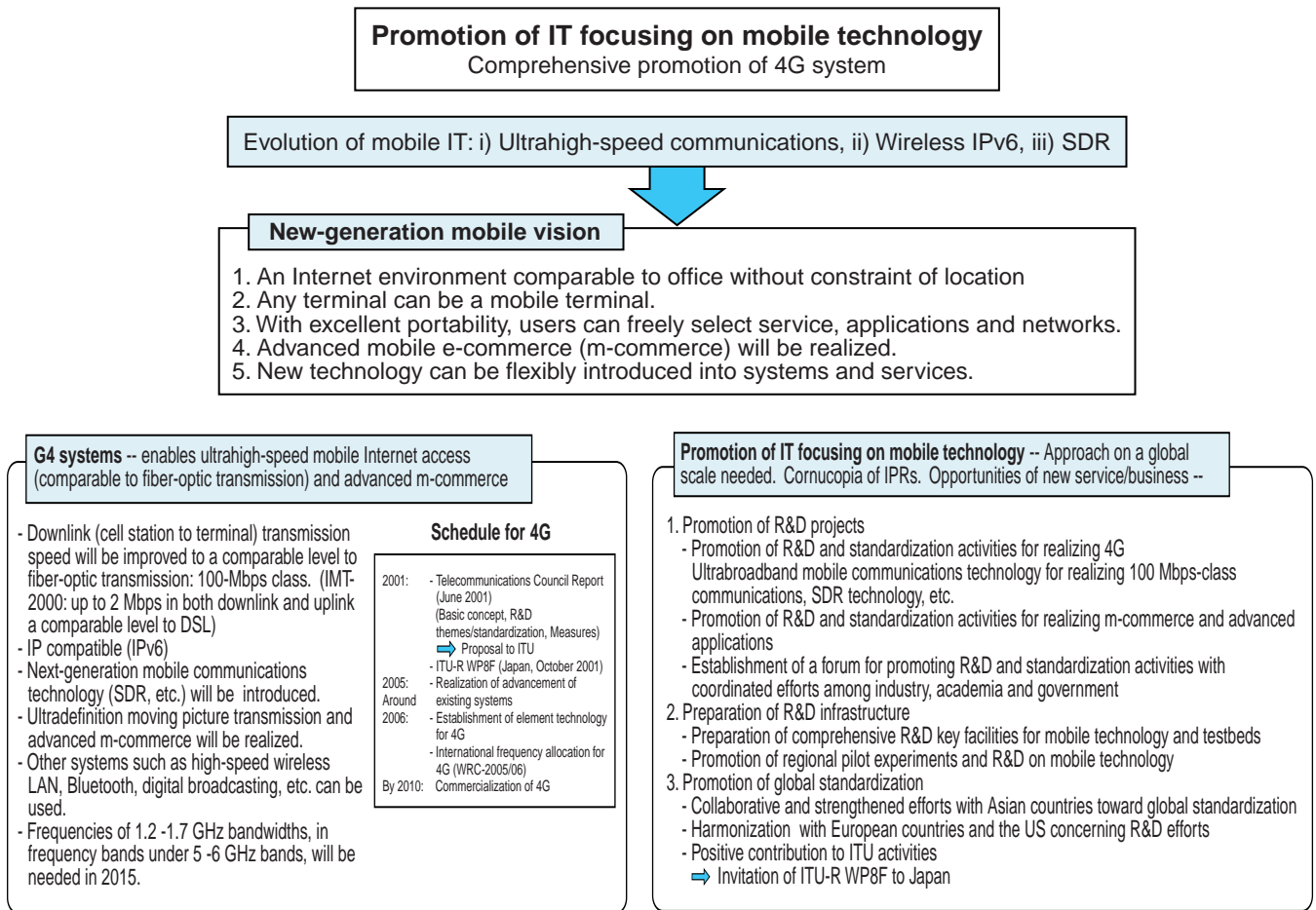
The report states that i) systems beyond IMT-2000 will enable ultrahigh-speed mobile Internet access (comparable with fiber-optic transmission: 100-Mbit/s class), ii) systems beyond IMT-2000 are regarded as systems that can realize advanced mobile commerce, iii) element technologies for systems beyond IMT-2000 shall be established by 2005, and iv) systems beyond IMT-2000 shall be put into practical use by 2010.

Furthermore, toward the realization thereof, the report proposes that i) promotion of R&D projects, ii) preparation

of R&D infrastructure, and iii) accelerated efforts in standardization activities for global standards take place.

MPHPT, taking the report into consideration, will take necessary measures for promoting R&D activities on systems

beyond IMT-2000 and global standards.



Toward Realization of Advanced Broadcasting Service with High-volume Digital Storage Function

-- Inquiry of the Telecommunications Council --

On June 25, 2001, MPHPT inquired of the Telecommunications Council (Chair: Mr. Yoshihisa AKIYAMA, Chairman, Kansai Electric Power Co., Inc.) of "technical requirements for digital broadcasting systems utilizing large-capacity storage functions."

1. Backdrops to the inquiry

As digital broadcasting can transmit a broadcast program with metadata prescribing contents of the broadcast program, digital TV receivers with a high-volume digital storage function can store the program and utilize metadata information for many advanced services such as automated program storage, scene re-

trieval, digest viewing, etc. based on advantages of digital broadcasting.

As for international standardization efforts, at the TV-Anytime Forum, in studying technological specifications for broadcasting system, progress is seen in deliberations on metadata, etc.

Along with recent trends in hard disk systems toward larger capacity, hard disk units for recording digital broadcast programs have already been put on the market. In other words, although an environment for realizing advanced service is prepared, at the same time, measures for protecting broadcast content from illegal copying are needed.

2. Outline of the inquiry

The inquiry was made taking those backdrops into consideration.

Major themes to be deliberated are as follows:

- i) Metadata specifications necessary for offering a variety of services through use of stored content
- ii) Access control system for protecting content stored in hard disk units from illegal viewing and unlawful copying
- iii) Transmission system, etc.

MPHPT will receive outcomes of the deliberations as a report around autumn 2002. MPHPT will amend relevant ministerial ordinances in line with the report.