

Arbetsrapport

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Förord

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Lena Moritz

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1 Priority Areas in Fiscal Year 2003 Budget

e-Japan 2002 Program: http://www.kantei.go.jp/foreign/it/network/0626_e.html

e-Japan Priority Policy Program-2002: http://www.kantei.go.jp/foreign/policy/it/0618summary/01_e.html

Upon requesting its budget for fiscal year 2003 in August 2002, MPHPT compiled a paper entitled "FY2003 IT Policy Principles," that outlines priority areas for IT policies.

MPHPT has systematically reviewed and reorganized its IT policy measures in line with the "e-Japan Priority Policy Program-2002." developed by the IT Strategic Headquarters in June 2002. As a result of the review, the FY2003 IT Policy Principles were classified into layered structures under the following recognition:

- i) it is necessary to further preparation of network infrastructures so as to be ready for IP and broadband features;
- ii) it is essential to develop promotion policy measures for raise the number of actual network users that is smaller than that of potential network users; and
- iii) it is vital to cope with such cross-cutting issues as security measures/privacy protection measures, bridging the digital divide, etc.

In order to make Japan the world's most advanced IT nation, priority fields are to be promoted strategically according to the recognition above. The priority fields included in the FY2003 IT Policy Principles are as follows:

1.1 Further preparation of network infrastructures

- i) Frameworks for new pro-competitive policy ready for IP and broadband features,
- ii) Advanced strategy toward IPv6, etc.,
- iii) Nationwide deployment of broadband networks (National Broadband Initiative),
- iv) Promotion of digitalization of terrestrial broadcasting,
- v) Promotion of effective use of radio spectrum, and
- vi) Preparation of an environment surrounding radio spectrum use, etc.

1.2 Promotion of network use

- vii) Promotion of digital content distribution,
- viii) Promotion of e-commerce,
- ix) Promotion of e-government, etc.,
- x) Promotion of e-local governments,
- xi) Development of human resources, and xii) Activation of local economies/support for venture businesses

3) Common/cross-cutting issues

- xiii) Study on frameworks for networked society,
- xiv) Promotion of security measures/privacy protection measures,
- xv) Promotion of strategic R&D,

- xvi) Promotion of international strategy,
- xvii) Bridging of the digital divide, and
- xviii) Promotion of consumer support measures

2 Radio Policy Vision

Mid- to long-term outlook of radio spectrum use and the role to be played by the administration

In recent years, as exemplified by cellular telephones and wireless LANs, radio spectrum use is drastically expanding in terms of quality and quantity, resulting in the serious shortage of available radio spectrums.

Furthermore, reflecting technological innovations in the IT field, demands by people for radio spectrums are increasingly diversifying and heading toward broadband wireless use.

Basic roles of radio spectrums include realization of comfortable and high quality of life, activation of industrial/economic activities, formation of a safe and disaster-tolerant society/national land, promotion of science and technology, etc. In these years, however, circumstances surrounding the radio administration are dramatically changing, i.e., expansion of mobile carriers and other industries utilizing radio spectrums, development of IP-based networks, remarkable technological innovations including software defined radios (SDRs), development of globalization such as international roaming of cellular telephone, a mutual recognition agreement (MRA), etc.

Against these backdrops, the mid- to long-term outlook of radio spectrum use is anticipated on socioeconomic roles of radio spectrum in the future, future perspectives of radio spectrum use, future trends in wireless technology, demand forecasts for available frequencies, etc. Thus, there are needs to develop the radio administration's policy goals and measures in the future, and to deploy the more strategic radio administration than ever.

To this end, on August 7, 2002, MPHPT inquired of the Telecommunications Council about the development of the mid- to long-term vision (Radio Policy Vision) in order to promote the radio administration from comprehensive viewpoints based upon the future outlook of radio spectrum use, the IT strategy, the international strategy, etc.

2.1 Scheme for deliberations and items to be deliberated

2.1.1 Scheme for deliberations

The Telecommunications Council will establish a "Special Department for Radio Policy" in order to deliberate on the Radio Policy Vision.

2.1.2 Items to be deliberated

- i) Domestic and foreign trends in radio spectrum use
- ii) Future outlook of radio spectrum use (roles, usage, technological trends, demands forecasts for frequencies)

iii) Future policy goals and measures of the radio administration

2.2 Schedule

The Telecommunications Council will compile its findings as a report by March 2003.

2.3 Summary

2.3.1 Basic roles of radio spectrum

- Realization of comfortable and high quality of life (broadcasting, cellular telephones, etc.)
- Activation of industrial/economic activities (wireless Internet, IC cards, etc.)
- Formation of a safe and disaster-tolerant society/national land (communications for disaster prevention, air traffic control, etc.)
- Promotion of science and technology (space development, etc.)

2.4 Changing circumstances surrounding the radio

- Expansion of industries utilizing radio spectrums
- Development of IP-based networks
- Remarkable technological innovations
- Development of globalization, Increasing requirements for user protection

2.5 Development of Radio Policy Vision

1. The mid- to long-term outlook

i) Socioeconomic roles of radio spectrum in the future, ii) Future perspectives of radio spectrum use, iii) Future trends in wireless technology, iv) Demand forecasts for available frequencies, etc.

2. Future policy

i) Formulation of a mid- to long-term frequency utilization plan and realization of optimal frequency reallocation, ii) Promotion of formation of high-speed wireless IT infrastructures, iii) Facilitation of international distribution of wireless terminals

2.6 Goals

1. Realization of higher quality of life and construction of a world's leading wireless IT society for activation of industrial/economic activities
2. Expansion of the wireless IT market and the fostering of the wireless IT industry with international competitiveness
3. Ensuring national security through use of various networks

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Frequency Assignment Plan for Microwave Bands to Be Amended

To date, higher frequencies are assigned for mobile communications. With regard to frequencies for mobile services, it is anticipated that microwave bands beyond 3 GHz bands will be used for future mobile services.

MPHPT decided to review the Frequency Assignment Plan pertaining to microwave bands, etc., in line with the two reports from the Telecommunications Council, "Technical Conditions for the Digital STL/TTL (studio to transmitter link/transmitter to transmitter link) for Television Program Transmission" (January 2002) and "Technical Conditions for 5GHz-Band Wireless Access System" (May 2002), based upon the report from the "Study Group on Use of Microwave Band for Fixed Communications Systems" (June 2001) and the "e-Japan Priority Policy Program" (IT Strategic Headquarters Decision of March 2001). MPHPT will promulgate and enforce partial amendments to the Frequency Assignment Plan in September 2002, upon reception of a report from the Radio Regulatory Council stating that the relevant amendments to the Frequency Assignment Plan are appropriate.

Note: "frequency assignment will be reviewed and frequency re-allocation carried out by FY2002 in order to ensure frequency for the fourth-generation wireless communications system, etc." e-Japan Priority Policy Program

1. Ensuring frequencies for 5 GHz band wireless access systems In order to introduce 5 GHz band wireless access systems, the 4.9-5GHz band, which is used for fixed microwave communications, shall be made available for wireless access systems while spectrums assigned for fixed services shall be limited to the current licensing period before the next re-licensing in 2007. Before 2007, the 5.03-5.09 GHz band, which is reserved for microwave landing system (MLS), shall be provisionally made available for wireless access systems.

2. Ensuring frequency bands for future mobile services

Based upon e-Japan Priority Program, in order to ensure frequencies for future mobile services, taking into consideration the report from the "Study Group on Use of Microwave Band for Fixed Communications Systems" (June 2001), i) 4 GHz and 5 GHz bands for fixed services for commercial telecommunications service shall be reserved within the next 10 years, ii) current assignments in the 4 GHz and 5 GHz bands shall cease prior to the re-licensing in 2012, and iii) those 4 GHz and 5 GHz bands shall be made available for mobile services for commercial telecommunications service.

3. Additional assignment of 6.5 and 7.5 GHz bands for general and public services to STL/TTL, etc. Frequency bands for broadcast auxiliary service shall be newly added to 6.5 and 7.5 GHz bands for fixed service of general and public services. Of fixed microwave links to be reallocated to ensure frequency bands for future mobile services, limited to cases where those links are difficult to be replaced with optical cables, the 6.5 and 7.5 GHz bands shall be made available for commercial telecommunications service so as to reallocate those links to these frequency bands.

4. Additional assignment of 5.8, 6.4 and 6.8 GHz bands for broadcast auxiliary service to commercial telecommunications service In order to further promote effective use of 5.8, 6.4 and 6.8 GHz bands allocated for broadcast auxiliary service, these bands shall be made available for fixed service for commercial telecommunications service after the completion (2012) of digitalization of terrestrial broadcasting.

3 Interconnection Rules in the IT Age (Report)

Since February 2002, MPHPT has been holding the "Study Group on Interconnection Rules in the IT Age" (Chair: Prof. SAKAI Yoshinori, Graduate School of Science and Engineering, Tokyo Institute of Technology) in order to deliberate upon the opening-up of Operations Support Systems (OSSs) and the relationship between interconnection charges and user charges. After a series of meetings, the study group has compiled its outcomes as a report.

3.1 Steps in the past

In line with the "Second Report on Desirable Pro-Competitive Policies in the Telecommunications Business Field for Promoting the IT Revolution," stating that a study group shall be established to investigate the opening up of OSSs and the approach to proper relations between user charges and interconnection charges (released by the Telecommunications Council on February 13, 2002), the number of meetings of the study group totaled to seven since its first meeting held on February 21, 2002.

So as to ensure transparency of its deliberation process, in June 2002, MPHPT made a draft report of the study group open for perusal upon inviting public comments. This report was compiled while paying due respect to such public comments.

3.2 Outline of the report

3.2.1 Opening up of OSSs

1. Matters related to OSSs

With regard to DSL services, OSSs with higher necessity to be opened are as follows:

1) Automatic notification system for the conformity confirmation result

Where confirmation of conformity is available through automatic matching, it is adequate to shorten the time period for reply through introduction of an automatic notification system for the conformity confirmation result. Where confirmation of conformity is not available through automatic matching, it is adequate to shorten the time period for reply through introduction of a function to automatically add information on some services (which cannot be shared; such as off-talk communications, signal monitoring, etc.) to the notification of the conformity confirmation result.

2) Automatic disclosure of subscriber's names

In cases where a subscriber's name does not match the name of principal, it is appropriate for NTT East and NTT West to reply by attaching the correct name of said subscriber thereto, so that interconnecting carriers can directly verify identity of said subscriber. However, in light of protection of proprietary information, NTT East and NTT West shall be required to set forth provisions in their tariffs that information on contractor's names of telephone services may be disclosed to interconnecting carriers and to conduct public awareness campaigns thereon. (In this case, NTT East and NTT West shall ensure methods for not disclose information on users who explicitly state their will.)

2. Matters related to optical services

With regard to optical services, OSSs with higher necessity to be opened are as follows:

- 1) Disclosure of detailed information on the schedule of additional interoffice transmission optical line facilities construction When expansion plans of optical line facilities become clear, it is appropriate that such plans be disclosed with detailed schedules containing data on the month and the year.
- 2) Disclosure of information on the number of interoffice transmission optical circuits to be interconnected in waiting lists Because such information is useful in responding to users when said users inquired rule-of-thumb dates when circuits are in operation, it is appropriate to disclose the information.
- 3) Disclosure of information on a specific plan such as floor expansion of buildings With regard to vacancy information on collocation, in addition to information disclosure on the Internet at present, when floor expansion of switch rooms, etc. is underway, it is appropriate to disclose information thereon.
- 4) Disclosure of information on estimated due completion dates for construction work of optical subscriber local loop NTT East shall construct an intracompany OSS that provides estimated due completion dates for construction work of optical subscriber local loop within designated buildings, areas, etc. for inquiry. Thus, it is appropriate that equivalent information to such data shall be disclosed to interconnecting carriers; however, NTT West is, in response to each inquiry from interconnecting carriers, making available the results of on-site investigations.
- 5) Disclosure of information on progress of construction work of optical subscriber local loop It is appropriate that NTT East and NTT West shall disclose information under control. (Specific matters of information to be disclosed are to be decided through continuous negotiations between NTT East/NTT West and interconnecting carriers.)

3. Underlying basis for cost sharing

Upon opening up of OSSs, the underlying basis for cost sharing is as follows:

1) Principles

The beneficiary-payment principle shall be applied to carriers including NTT East and NTT.

2) Calculation methods for development costs, etc.

Upon construction of systems for opening up OSSs, it is appropriate that NTT East and NTT shall disclose information on methods for selecting system developers and for calculating development costs, etc. to relevant parties.

3.2.2 Desirable relations between interconnection charges and end user fees

1. Case studies in foreign countries

1) Imputation rules in the U.S.

The imputation rules stipulate that that total charges per basket of unbundled network elements shall not exceed the service charges as provided through use of the basket of unbundled network elements in question.

2) Stack tests in the U.K.

Oftel (the Office of Telecommunication of the U.K.) imposes ex-ante nondiscrimination tests, stack tests, on BT (British Telecommunication plc) for avoiding hindrance of competition by setting a predatory pricing toward opponent carriers.

-- New tariffs > 1. retail costs + 2. interconnection charges --

2. Deliberations at the study group

1) Necessity of verification

With regard to interconnection charges, at present, the costs for interconnection are calculated by actual cost methods based on interconnection accounting results and a long-run incremental cost (LRIC) method based on an LRIC model. The actual cost methods are based, however, many different methods of calculation, for example, calculation from accounting results of the previous business year, calculation through forecasts of demands and costs during a given period of time in the future, etc. Furthermore, upon calculation of costs, the cost is allocated in accordance with accounting assumptions or premises. As shown above, there is no single just method for reasonably calculating the costs. Thus, it is recommendable that verification from various viewpoints would lead to fairer methods for calculating interconnection charges.

2) Object services

It is appropriate that verification shall be conducted in accordance with an order of priority based on analysis by market on progress of competition and possibility of unfair price setting. Accordingly, it is appropriate that object services of verification upon authorization of interconnection charges include, in particular, Internet-related services such as DSL services, etc. among leased and data services.

3) Unit to be verified

It is appropriate that NTT East and NTT West shall continue to conduct verifications to date. As for verifications upon authorization of interconnection charges in the days ahead, those verifications shall be conducted in line with more detailed service-by-service units.

4) Timing of verification

In order to make cost calculation fairer, it is appropriate that, upon authorization of interconnection charges, verifications on relationships with end-user fees shall be conducted.

5) Methods for verification

It is appropriate that verifications on whether operating costs of NTT East and NTT West are appropriate shall be conducted on a service-by-service basis.

6) Assessment for verification results

When implementing verifications, there is a need to consider the status of price competition in the market in question and trends in market shares.

Upon compensating for variation in the verification, it is not a realistic idea to impose an obligation to raise end-user charges that directly affect consumers. Thus, it is appropriate that interconnection charges shall, in principle, be lowered.

4 Satellite Broadcasting (Interim Report)

More information available at the Japanese web site: http://www.soumu.go.jp/s-news/2002/020719_2.html

On July 19, 2002, an interim report was compiled at the sixth meeting of the Study Group Concerning Satellite Broadcasting (Chair: Mr. TAGAYA Kazuteru, Vice-President for Education, Chiba University), established in March 2002 for deliberating on future directions of satellite broadcasting as well as how to diffuse satellite broadcasting services in the immediate future. The study group will continue to study related matters based upon the interim report, then compile its findings as a final report in around December 2002.

In this interim report, the following four points are compiled taking into consideration new circumstances surrounding Japan's satellite broadcasting that are brought about by the commencement of BS (broadcasting satellite) digital broadcasting and the 110 degrees east longitude CS digital broadcasting, and the enforcement of the Law Concerning Broadcast on Telecommunications Service:

- i) Status of satellite broadcasting as mass media and the direction of its development;
- ii) Desirable promotion methods of satellite broadcasting as a whole;
- iii) Desirable promotion methods of BS digital broadcasting; and
- iv) Desirable promotion methods of CS digital broadcasting.

4.1 Summary of the Interim report of the study group

4.1.1 Status of satellite broadcasting as mass media and the direction of its development

- i) Status of satellite broadcasting as mass media: Satellite broadcasting has different roles from those of terrestrial broadcasting to some extent.

Its relationship with cable TV includes tie-ups and competition simultaneously. Satellite broadcasting and broadband media can yield synergy.

- ii) Status of each satellite broadcasting: It is necessary to widen the scope of regulatory frameworks for facilitating operations of satellite broadcasting. Integrated tuners for receiving both the 110 degrees east longitude CS digital broadcasting/BS digital broadcasting shall be classified as one category.

Direction of its development: Common recognition that all broadcasting media will, basically, be digitalized was established. The most essential task is to diffuse digital broadcasting in the field of satellite broadcasting.

4.1.2 Desirable promotion methods of satellite broadcasting as a whole

i) Desirable methods for providing services: The most basic service is to provide acceptable service for viewers/listeners. To this end, it is vital to air high-quality content, etc. and smoothly offer new services.

ii) Desirable receivers and reception environment: It is essential to lower receiver/tuner prices and receivers/tuners contributing to diffusion of digital broadcasting. Furthermore, a reception environment surrounding condominiums, etc. shall be improved.

iii) Desirable public relations activities for viewers/listeners: It is anticipated that each broadcasters will make its compliance program public and relevant organizations shall provide viewers/listeners with correct and adequate information, etc.

iv) Desirable satellite operations: So as to operate satellites on a stable basis, it is necessary to study desirable back-up systems, etc. concerning the 110 degrees east longitude CS digital broadcasting.

v) Desirable methods for providing content: It is effective to utilize killer content, etc. It is also advisable that a copyright protection system be introduced through methods for copy control, etc. Other tasks: It is vital to cope with crosscutting problems in response to environmental issues, an ongoing aging society and internationalization.

4.1.3 Desirable promotion methods of BS digital broadcasting

i) Assessment on the progress of diffusion and desirable methods thereof hereafter: There is a need to improve services including content, lower receiver/tuner prices and promote awareness campaigns. Furthermore, showing incomparable advantages of the Hi-Vision broadcasting is needed. It is vital for stakeholders to take coordinated measures for raising public awareness.

ii) Desirable BS analog broadcasting in the future: With regard to the desirable termination of BS analog broadcasting and trends in the sense of viewers/listeners, it is vital that, taking into consideration the desirable future satellite broadcasting as a whole, after obtaining a conclusion based upon deliberations thereon, the Japanese nationals shall be informed of relevant measures to be taken.

iii) Desirable principle of excluding multiple ownership of mass media in the future: Relaxation of the principle of excluding multiple ownership of mass media shall be taken into consideration in order to prepare an environment under which killer and popular content can be provided. Desirable provisioning of services: The transmission capacity shall be changed flexibly according to formats and content of broadcast programming, so that advantages of digital broadcasting can be utilize to the fullest while combined and multifaceted services can be provided.

4.1.4 Desirable promotion methods of CS digital broadcasting

i) Assessment on the progress of diffusion and desirable methods thereof

hereafter: It is necessary to elaborately meet needs of viewers/listeners, improe/increase diversified broadcast programming incorporating advantages of digital broadcasting and enhance picture quality through use of broadband suitable for each broadcast program. In addition, it is essential to promote diffusion of the 110 degrees east longitude CS satellite broadcasting and expand the paid video distribution market as a whole.

ii) Desirable provisioning of services: Services utilizing advantages of digital broadcasting as far as possible are anticipated to be operational, thus, with respect to the 110 degrees east longitude CS satellite broadcasting, the flexible review of regulatory frameworks is recommended. Desirable business operations in CS digital broadcasting: It is necessary for each broadcaster to deliberate on their roles to play including operations of platforms. In addition, collaboration and cooperation among relevant broadcasters shall be considered.

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Telecommunications Council Compiles Report on "Desirable R&D Approach for Ensuring Technological Competitiveness Pertaining to Information and Communications Technology in Japan"

On August 7, 2002, MPHPT received a report on a "Desirable R&D Approach for Ensuring Technological Competitiveness Pertaining to Information and Communications Technology in Japan" compiled by the Telecommunications Council (Chair: Mr. Akiyama Yoshihisa, Chairman of Kansai Electric Power Co., Inc.).

This report contains the desirable R&D approach of Japan, which aims to become a creative nation built on a scientific and technological basis ("knowledge-emergent nation"), on information and communications technology positioned as core technology in the 21st century supporting all industries.

This report proposes the following seven basic strategies based upon recognition that Japan shall have a clear-cut strategy: 1. Promotion of "open-systems type R&D" toward establishment of technology with higher transparency, through a nondiscriminatory approach open to domestic/overseas researchers 2. Realization of an intellectually-invigorating competition that is diversified and multifaceted, by making Japan an attractive R&D forum for domestic/overseas researchers 3. Weighted investment of R&D resources by setting priority R&D areas, focusing on Japan's technological advantages such as mobile communications 4. Appropriate assessment of R&D and researchers, and fair allotment of resources as based upon the assessment 5. Strategic implementation of standardization activities, taking into consideration acquisition and management as well as diffusion of patents/intellectual property rights 6. Strengthening of object-oriented R&D and closer collaboration of industry, academia and government based on a common recognition 7. Market creation through ideas of excellent individuals and younger researchers

The report stresses that it is vital to promote strategies consisting of two axes: "competition" of R&D brought about by intellectual invigoration and mobilization among domestic/overseas researchers, and "concerted efforts" through open-systems type R&D. Furthermore, based upon these strategies, the report proposes the following specific promotion measures to be taken by the government:

- Implementation of open-systems
- Prioritized R&D areas, research institutes and R&D facilities
- Construction of "networks of intellectuals" through creation of human resource databases and utilization thereof
- Development of R&D basic guidelines
- Fostering of and support for human resources who will work for international organizations

In addition, this report makes proposals for the government, private research institutes and universities on their desirable roles and directions of R&D functions to be strengthened.

MPHPT will, based upon this report, further promote R&D in the information and communications field as well as exchanges of researchers, so that Japan can ensure technological competitiveness that leads countries around the world in the future.

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