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## Disclosure of Results of "FY2005 Survey and Assessment on Actual Radio Spectrum Usage"

On July 12, 2006, MIC received a report on the "FY2005 Survey and Assessment on Actual Radio Spectrum Usage" from the Radio Regulatory Council (Chair: Prof. HATORI Mitsutoshi, Chuo University), stating that the survey results are appropriate.

Thus, pursuant to the provisions of Article 26-2 paragraph (4) of the Radio Law (Law No. 131 of 1950), MIC discloses the survey results and the summary thereof at the following website (Japanese-language version):

<http://www.soumu.go.jp/>

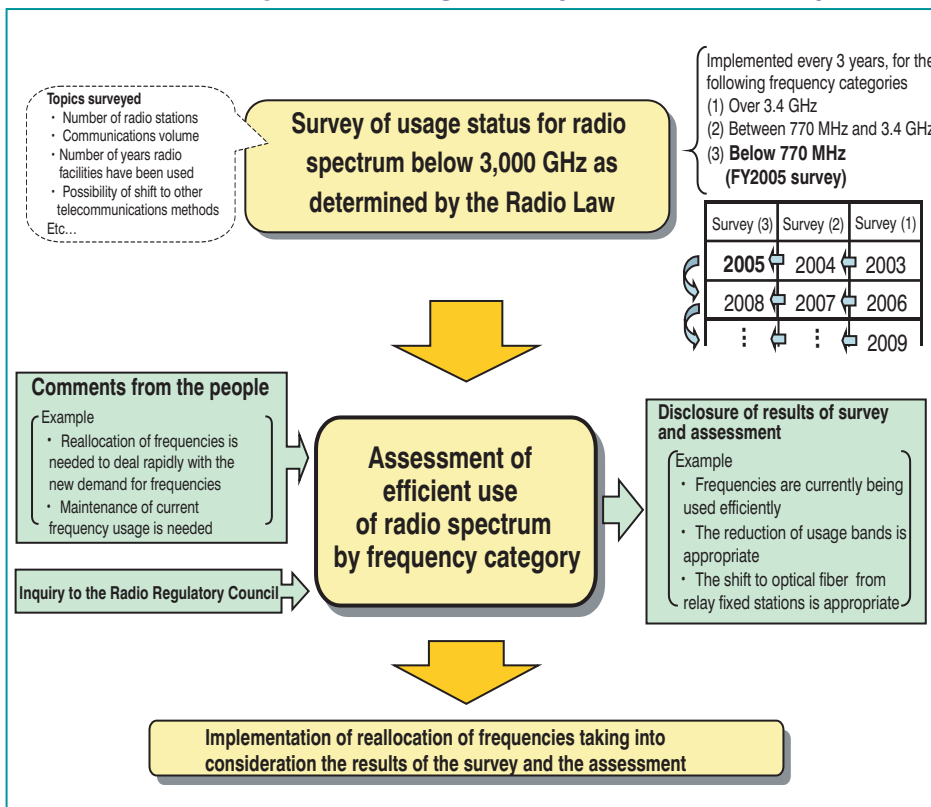
**[Reference]**  
**Radio Law (excerpts)**  
**(Survey, etc. of Actual Radio Spectrum Usage)**  
**Article 26-2.**

(4) The Minister shall, when the actual usage survey and assessment under the preceding paragraph are conducted, in accordance with the applicable MIC ordinance, publicize an outline of results of the actual usage survey and assessment thereof.

### CONTENTS

- Disclosure of Results of "FY2005 Survey and Assessment on Actual Radio Spectrum Usage" ..... 1
- Report from the Radio Regulatory Council about Rulemakings for Introducing UWB Radio Systems and Results of Public Comments ..... 4
- Interim Report from "Study Group on 'ICTs for Realizing Safe and Secure Society'" -- Contribution from ICTs to Safe and Secure Society -- ..... 4
- Brazil Adopts Digital Terrestrial Television Broadcasting System Based upon Japanese System ..... 5

### Outline of radio spectrum usage survey and disclosure system



**International Policy Division,**  
**International Affairs Department,**  
**Telecommunications Bureau,**  
**Ministry of Internal Affairs and**  
**Communications (MIC)**  
1-2, Kasumigaseki 2-chome, Chiyoda-ku, Tokyo 100-8926, Japan  
Fax: +81-3-5253-5924  
Tel: +81-3-5253-5920

**We welcome your comments via:**  
[http://www.soumu.go.jp/joho\\_tsusin/eng/contact.html](http://www.soumu.go.jp/joho_tsusin/eng/contact.html)

**MIC Communications News is available at:**  
[http://www.soumu.go.jp/joho\\_tsusin/eng/newsletter.html](http://www.soumu.go.jp/joho_tsusin/eng/newsletter.html)

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[http://www.soumu.go.jp/joho\\_tsusin/eng/presentation.html](http://www.soumu.go.jp/joho_tsusin/eng/presentation.html)

E-mail distribution of this newsletter is possible if desired.

## Outline of FY2005 survey of actual radio spectrum usage

### (1) Purpose

Approximately every 3 years, MIC carries out and discloses the results of a survey of actual radio spectrum usage and, taking into consideration comments from the public, assesses the efficiency of radio spectrum usage so as to contribute to the reallocation of frequencies in order to implement the most appropriate usage of the radio spectrum in response to technological progress in the future

### (2) Legal reference

Article 26-2 of the Radio Law

### (3) Survey target

Radio stations run by national and regional public bodies as well as private-sector broadcasters and operating as of March 31, 2005, in the frequency range below 770 MHz

### (4) Number of radio stations covered by the survey

Approximately 2.6 million stations (of which approximately 87,000 were targeted for sending out survey form)

### (5) Survey topics

Number of people with licenses, number of radio stations, communications volume, actual usage status, state of introduction of technologies for efficient usage of radio spectrum, possibility of shift to optical fiber etc...

### (6) Survey methods

- Survey implemented on targeted radio stations nationwide by catchment area covered by the 11 regional bureaus of telecommunications.

- Survey conducted based on information from PARTNER (Productive And Reliable Telecommunications Network for Radio stations) that manages license information, and the report of survey forms being sent out to licensees.

## Assessment methods and assessment topics

### Assessment methods

Frequency range below 770 MHz



Divided into 5 radio spectrum categories

Analysis



Assessment



Analysis of each system

Assessment of actual radio spectrum usage was implemented by dividing radio spectrum into 5 categories. In addition, with regard to the assessment of radio spectrum usage systems using frequencies in each radio spectrum category.

### Assessment topics

#### Status of radio station distribution

Assessment was implemented based on the results of the survey on the number of radio stations and transmitting device and estimating the number of radio station using a specified frequency range.

#### Status of radio equipment usage related to radio stations

Assessment was implemented from the points of view of the degree of efficient usage of the radio spectrum, on technologies used for radio equipments (digital technologies etc...), the status of radio facility usage (emergency power supplies, management system etc...) and so on.

#### Possibility of shift to other methods

Assessment was implemented from the point of view of the necessity of relevant radio spectrum usage based on the results of the survey on shifting to other telecommunication methods.

#### Other topics

Status of installation of a system for radio station usage, etc...

## Outline of assessment results

### (1) Below 26.175 MHz

Since, with regard to radio stations used for broadcasting, 100% of these would be able to shift to other telecommunications services within 1 year, it would be appropriate in planning terms to make them shift to other telecommunications services.

### (2) 26.175 MHz to 50 MHz

Since usage is based on terrestrial amateur stations as well as short-distance marine communications systems by small vessels, any shift to other telecommunications methods or shift to a different frequency range would be complicated. So, as long as there is no change based on the introduction of new services that use digitization technologies, it is unlikely that there will be any major changes from current conditions in the future.

**(3) 50 to 222 MHz**

1) With regard to analog emergency radio, as the spectrum is dispersed over frequency ranges other than the 150 MHz range, it would be appropriate, as soon as possible, to promote the regroupment into the 260 MHz range which has been designated for digital emergency radio, along with the move to digitization technology, so as to put in place more efficient radio spectrum usage.

2) With regard to the 90 MHz to 108 MHz (channels 1-3) and the 170 MHz to 222 MHz (channels 4-12) that are being used for terrestrial analog television broadcasting, the frequency allocation plan allows for their usage for other applications after July 24, 2011, at which date analog terrestrial broadcasts will be stopped. As for usage of these frequency ranges following the stoppage of analog broadcasting, public comments for a new usage system has been invited, and investigations of technological issues are under way by the Information and Communications Technology Sub-Council of the Information and Communications Council, with sweeping revisions

taking place. It is appropriate that a detailed investigation should be added to the next usage status survey on the radio spectrum below 770 MHz.

**(4) 222 to 335.4 MHz**

With regard to pager systems for telecommunications service using the 280 MHz range, there has been a large drop in the number of subscribers due to the penetration of cell phone-based mail, and so it is appropriate to consider the elimination of the spectrum attributed to this system, and to investigate future efficient usage of this frequency.

**(5) 335.4 to 770 MHz**

1) With regard to analog emergency radio, as the spectrum is dispersed over frequency ranges other than the 400 MHz range, it would be appropriate, as soon as possible, to promote the regroupment into the 260 MHz range which has been designated for digital emergency radio, along with the move to digitization technology, so as to put in place more efficient radio spectrum usage.

2) With regard to the 710 MHz to 770 MHz (channels 53-62)\* within the 470 MHz to 770 MHz spectrum (channels 13-62) that is being used for terrestrial analog television broadcasting, these have been designated to be used for mobile communications applications from July 25, 2011. The basic usage of this radio spectrum is based on FY2003 Information and Communications Council Report but investigations of technological issues are under way by the Information and Communications Technology Sub-Council of the Information and Communications Council, with sweeping revisions taking place. It is appropriate that a detailed investigation should be added to the next usage status survey on the radio spectrum below 770 MHz.

\* With regard to the spectrum between 710 MHz and 722 MHz (channels 53-54), the Frequency Assignment Plan determined that the use of this frequency band by broadcasting will be reviewed by 24 July, 2006.

## Report from the Radio Regulatory Council about Rulemakings for Introducing UWB Radio Systems and Results of Public Comments Thereon

On July 12, 2006, MIC received a report on draft "MIC Ordinances to Amend Each Part of the 'Regulations for Enforcement of the Radio Law,' the 'Ordinance for Regulating Radio Equipment' and the 'Ordinance Concerning Technical Regulations Conformity Certification of Specified Radio Equipment'" and draft MIC Notices to Amend Each Part of Relevant MIC Notices (hereinafter referred to as the "MIC

Ordinances, etc.") from the Radio Regulatory Council (Chair: Prof. HATORI Mitsutoshi, Chuo University). Through these rulemakings, introduction of ultra-wideband (UWB) radio systems for communications purposes using microwave band will be allowed.

During the period from May 18 through June 16, 2006, MIC invited public comments thereon.

During said period, MIC received 12 public comments thereon.

MIC will, paying due respect to the report from the Council and taking into consideration results of the public comment procedures, after amending part of the original MIC Ordinances, etc., promulgate those Ordinances and Notices.

## Interim Report from "Study Group on 'ICTs for Realizing Safe and Secure Society'" -- Contribution from ICTs to Safe and Secure Society --

Since February 8, 2006, MIC has been holding the "Study Group on 'ICTs for Realizing Safe and Secure Society'" (Chair: Professor Emeritus SAITO Tadao, the University of Tokyo). The Study Group has compiled its findings as an interim report.

In recent years, requests from society for realizing a safe and secure society are on the rise. Establishment of measures for addressing a variety of problems,

including food safety, security measures for children, and disaster mitigation measures against earthquakes, typhoons and tsunami, is required. The Study Group has been deliberating upon the following fields:

- i) Disaster mitigation measures/crisis management systems
- ii) Food safety and security
- iii) Daily life support for children, the elderly and people with disabilities

The interim report is available at: [http://www.soumu.go.jp/s-news/2006/060710\\_5.html](http://www.soumu.go.jp/s-news/2006/060710_5.html) (Japanese language version)

The Study Group will, based upon the interim report, deliberate upon i) identification of R&D themes for realizing a safe and secure society and ii) measures for realizing a safe and secure society.

## Brazil Adopts Digital Terrestrial Television Broadcasting System Based upon Japanese System

On June 29, 2006 (local time), the Minister for Internal Affairs and Communications of Japan, Dr. TAKENAKA Heizo visited Brazil, attended a ceremony as to adoption of a digital terrestrial television broadcasting system based on the Japanese system, and held a meeting with relevant ministers for promoting cooperation thereafter.

This is the first case where a digital terrestrial television broadcasting system based upon the Japanese system has been adopted in a foreign country.

### **Adoption of a digital terrestrial television broadcasting system based upon the Japanese system by the Government of Brazil**

i) The Government of Japan and the Government of the Federative Republic of Brazil have been talking about a collaborative scheme for introducing a digital terrestrial television broadcasting system in Brazil. As a result, the Brazilian government has decided to adopt

a digital terrestrial television broadcasting system based upon the Integrated Services Digital Broadcasting-Terrestrial (ISDB-T), which was developed by Japan. Henceforth, Brazil will, through collaboration with Japan, develop a "Nippon-Brazilian" digital terrestrial television broadcasting system by incorporating various technologies to be developed and proposed by Brazil.

ii) This is the first case where a broadcasting system based on the ISDB-T was adopted in a country/region other than Japan.

### **Implementation of cooperation related to digital terrestrial television broadcasting system**

i) The Government of Japan and the Government of the Federative Republic of Brazil have deliberated upon methods for implementing collaboration between the two countries on digital terrestrial television broadcasting system, and reached an agreement as follows:

Establishment of Joint Working Groups

Technical cooperation on ISDB-T Human resource development, etc.

ii) Stakeholders in the Japanese private sector have expressed their intentions to support the introduction of digital TV systems by providing technical information, offering exemption from payment of royalties, etc.

### **MIC's efforts toward the future**

i) MIC will i) support cooperative efforts of the private sector entities and the Association of Radio Industries and Businesses (ARIB) toward introduction of digital terrestrial television broadcasting system in Brazil, and ii) strengthen collaborative ties between the two countries in the ICT field, including broadcasting.

ii) MIC will make efforts to disseminate the ISDB-T system on a global basis, for contributing to the development of digital broadcasting.