

Reallocation of Spectrum in the Radio Act of Japan

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1 Introduction

Article 4 of the Radio Act specifies that “Any person who wishes to establish a radio station shall obtain a license from the Minister of Internal Affairs and Communications”,¹⁾ while Article 100 of that Act prescribes that “Any person who wishes to install the following equipment shall obtain permission from the Minister of Internal Affairs and Communications: (i) equipment that conducts high-frequency current at frequencies of 10 kHz or higher”, thereby declaring the need to have spectrum resources managed by the state. Because spectrum, a limited, scarce resource

1) At that time, processing for license application procedures for wireless facilities that have acquired Technical Regulations Conformance Certification (Radio Act Article 38-6) can be performed promptly and efficiently through simplification of the blanket license system and licensing procedures.

shared by the people,²⁾ need to be utilized for the benefit of all, issues concerning how to effectively and efficiently utilize them inevitably involve public characteristics.³⁾ Currently the following three issues surrounding utilization of spectrum have been the subjects of debate.⁴⁾

The first point is the intense changes in the environment surrounding spectrum. This involves firstly the diversification and high-level specialization of services (smart phones, digital consumer electronics, tablets etc.) and secondly, the accompanying increase in traffic.⁵⁾ The third issue concerns advances in use and application of white space on which demonstration experiments have been commenced. It is hoped that promoting use and application of new spectrum resources such as white

2) Because radio waves are mutually interfering, they are a limited and scarce resource due to considerations of space, time and frequency.

3) In addition to the scarce and limited characteristic of spectrum, they have another characteristic called “dispersion”. That is to say, because radio waves reach places outside the usage objective, from a public perspective, it is necessary to prevent interference through having uniform rules.

4) In order to facilitate fair and efficient usage of spectrum, up till now MIC have conducted their efforts based on various perspectives including laws and regulations, technical factors, market mechanisms etc. In terms of rules through laws and regulations there were (1) blanket license/establishment plan approval system, (2) introduction and expansion of stations not requiring licenses, and (3) the self-confirmation of technical regulations conformity (Radio Act Article 38-33) the scope of which has been expanded, in the licensing system/approval system and systems for controls on illegal wireless stations that comprise the spectrum monitoring systems. Further, in terms of technology-based approaches, there is the establishment of technical standards including (1) the determination of technical standards or (2) the determination of spectrum protection policies, (3) promotion of research and development into technologies for efficient use of radio waves and international standardization. In terms of utilizing market mechanisms, there is the spectrum auction system discussed subsequently. It is also important to work towards disclosure of information. Here, there are (1) spectrum usage conditions surveys (Radio Act Article 26-2 (1)) and (2) information disclosure of wireless stations and so on. On this point, currently there are investigations into raising the level of information referencing such as on wireless stations. In other words, the intention is to add a mapping functionality that looks at the variation in the number of wireless stations in each city, town and village, to the information referencing functions on wireless stations. in a comprehensive radio station management system from May, 2012 onward.

5) In line with the diffusion of smart phones, the increase in mobile communications systems is accelerating and data traffic in the mobile phones market increased approximately 2.2 times in one year.

space will assist in regional revival and lead to the creation of new services.

The second point of the discussion is the direction of growth and development in the usage of spectrum, that is to say, thinking that in what fields, with how much growth and development spectrum usage will go through from 2015 to 2020. In other words, as the first point concerns expectations for even faster, greater capacity mobile communications systems (LTE, IMT-Advanced, IEEE802.16m, etc.), the second point envisages an associated expansion in the wireless broadband environment (usage in rural areas, inside households, etc.). Further, owing to the realization of sensor networks, radio wave usage in the form of new usage formats such as ITS or smart meters. is expected to bring not only greater convenience to users, but a more relaxed, safe life for people in society. This point is the same for the advancement of digitalization of broadcasting (super hi vision, area One Seg, higher-speed relay systems etc.). At present, however, further increases in speed and capacity of mobile communications systems can not fully accommodate the rapid increase in traffic that is occurring in line with the diffusion of smart phones. Recent increases in traffic have been influenced considerably by smart phones and that being so, there is a high possibility that this increase will continue in the future. Viewing this rapid increase in traffic in the mobile phones market it is apparent that spectrum demand will increase in the future, and scarcity of the resource will increase as well. For that reason alone, attention is now focused on the spectrum auction system that is hoped to promote more efficient radio wave usage. The spectrum auction system operates by holding auctions to select licensees for specified frequencies of spectrum and to establish the party that bids the highest price as the party qualified to use those frequencies.⁶⁾ The spectrum auction system has been introduced

6) In the Act for Partial Amendment of the Radio Act Draft submitted to the 180th session of the Diet (ordinary session) of March 9, 2012, the frequency auction system is a “system for telecommunications services base stations (mobile phone base stations) that use specified frequencies, in which, from among those parties who have made application with a plan that conforms to the Establishment Policy prescribed by the Minister, the bidding establishment plan of the party that bids the highest amount (bidding or competition) is approved”.

in most countries, starting with most of the members of the OECD, and is now the main method for allocating frequencies. Further, it has been criticized that the “comparative examination system” which has been adopted as the frequency allocation system by the MIC (Ministry of Internal Affairs and Communications) encountered problems. When there are multiple applicants the merits of each applicant as a licensee is considered and the license granted on that basis which encountered problems due to substantial bureaucratic discretion in the allocation and a lack of transparency in the license granting process. For these reasons, frequency auctions, which aim to promote efficient usage of frequencies and bring more speed and transparency to the procedures for granting wireless station licenses have come into the limelight.

With this in mind, MIC set up the Panel Discussion concerning Spectrum Auctions (hereinafter “the Panel Discussion”) on March 2, 2002. The Panel Discussion was established based on the Basic Policy Concerning the “Path of Light (Hikari-no Michi, in Japanese)” concept.^{7),8)} The Panel Discussion comprised a total of fifteen meetings, and included an investigation into conditions overseas, four opportunities for comments from the public and hearings from 25 representatives from business and experts. The Panel Discussion proceeded to investigate issues surrounding the introduction of the spectrum auction system in Japan. The result was a proposal for the introduction of the spectrum auction system in Japan. Against this

7) MIC decision, December 14, 2010

8) The author was a member of the Study Group on Spectrum User Fees next period (2011–2013), “the Working Group on Discussion of Frequencies Needed to Realize Wireless Broadband Services” (a study group responding to the environment changes in the telecommunications market task force concerning ICT policy for the global age), and “the Panel Discussion concerning Frequency Auctions” but the opinions expressed in this paper are strictly those of the author, and do not in any way express any official opinion of the study groups, Working Group or Panel Discussion. Incidentally, there has been much assessment from a number of external experts concerning the scope of items allocated in the burden of expenses and transfer expenses etc. as a result of market surveys, for the objective of facilitating appropriate calculation of transfer expenses of a wireless station subject to “closing incentive measures”, provided in the Radio Act. This article reflects the opinions submitted by the writer for the “Appeal for Opinions concerning System Maintenance Plans for 3.9 G Mobile Communications System Diffusion” (October 21, 2011).

background, the Act for Partial Amendment of the Radio Act Bill (Radio Act Amendment Bill) was submitted to the 180th Session of the Diet (ordinary session) on March 9, 2012.⁹⁾

The aim of this article is to work out the current situation and issues pertaining to reorganization of spectrum policy toward introduction of the spectrum auction system, by taking a birdseye view of the determination of policy for allocation of the 700/900 MHz platinum bands from the 2010 amendments to the collection of spectrum user fees, and giving an overview of the flow of the policy in frequency allocation toward the proposals of the Panel Discussion.

In 2 and 3 below I will discuss reorganization of 700/900 MHz frequencies and then view this with the arguments over the radio law reform, in light of the spectrum auction system, before reaching some final conclusions.

9) The Act for Partial Amendment of the Radio Act presented amendments concerning the spectrum auction system on (1) devising bidding policy, (2) approval of base station establishment plans and (3) payment of guarantee amounts and money for the successful bid. Concerning (1), when determination through tender of a party who may apply for a license for a telecommunications services base station is accepted as exhibiting sufficient economic value for spectrum, this forms the content for devising the bidding policy concerning that base station. (2) means that when there is an application for approval of a base station establishment plan, it is held from amongst those appropriate in the light of the base station establishment policy. (3) means that parties who participate in bidding provide guarantee money in an amount prescribed under the base station establishment policy, and the party who receives approval for their base station establishment plan pays the amount for the bid to the government.

2 Reorganization of the 700/900 MHz Bands¹⁰⁾

1 Current state of spectrum usage and systems planning of frequency reorganizations

Spectrum auctions are an economic framework designed to efficiently and effectively use spectrum bands, that are a valuable shared asset of the people, in a format of maintaining and promoting transparent operation of systems. Against that background, there are the realistic requirements of how to cope with the ever-expanding demand for frequencies in recent times. From this perspective, the frequency strategies which will be faced in relation to the urgent and tight spectrum conditions become problematic. With regard to various services, and as there is increasing diversity in the usages of spectrum itself, it becomes increasingly important to maintain frequencies to meet this demand, as speedy allocation of spectrum leads to improvements in introduction of new services and further user conveniences, while contributing to social and economic development. It is extremely important to create transitional systems for reorganization of frequencies in order that spectrum capable to meet this demand is swiftly and smoothly provided.

There have been three available methods for transferring frequencies currently: (1) independent transfer, (2) transference through regulatory order for change of frequency and (3) methods that promote abolition of independent wireless stations through compensation funding (specific frequency termination support service). Among these methods, (1) is a method in which the term of usage for the existing system is prescribed,

10) For the allocation of 700/900 MHz band, approved carriers for the 900 MHz band were determined on February 29, 2012. <http://www.soumu.go.jp/menu_news/s-news/01kiban14_02000079.html> (last visited in May 2013)

Further, public comment concerning the Establishment Policy for the 700 MHz band was also presented on the same day. Also, on June 27, 2012, as inquiries concerning approval of establishment plans for the 700 MHz band were made to the Radio Regulatory Council, a report holding the original draft appropriate was submitted from that Council. (last visited in May 2013)

and the existing licensee performs the frequency transfer independently according to that usage term. As the existing licensee must pay the expenses required for the move, the approved usage term incorporates considerations of service life of the facilities and the effective term of the license and is usually from 5 to 10 years. (2) is a method of requiring transfer by issuance of a frequency transfer order issued by the state against the existing licensee pursuant to the provisions of Article 71 (1) of the Radio Act. Because this is a means of compulsion under the requirement of public interest, it can only be exercised to the extent that it does not create an impediment to the performance of the objectives of the wireless station. Actual cases of the application are the one when it is necessary for channel changes in line with amendments to international treaties, while the works required for the changes have been restricted to the small-scaled cases. (3) applies in the case that the prescribed usage term is shorter than the effective term of a license (not exceeding five years) when the existing licensee has applied to abolish a wireless station before the usage term expires. Taking spectrum user fee¹¹⁾ as fund of compensation, and it implement a method of redistributing spectrum by encouraging operators to independently abolish wireless bases through providing compensation (Article 71-2 (2)). Actual cases of application of this method have occurred when introducing the 5 GHz band wireless access system, in which the licensee of a telecommunications business fixed station using 5 GHz band received incentives to abolish the wireless station through provision of compensation.

As can be seen in the allocation of 700/900 MHz band, what is needed

11) Spectrum user fees were introduced for the objective of making a fair allocation of expenses for administration (administration of common benefits of radio wave usage) related to maintaining appropriate use of radio waves such as radio wave monitoring to the licensee of radio stations that are the beneficiaries. The spectrum user fees system is prescribed under paragraph 14 of the Radio Act Supplementary Provisions which requires a review be performed every three business years. In the 2010 business year investigation was conducted into the fees and administration of common benefits of spectrum usage for the next term (2011-2013 business year) looking toward the budget requirements of the following 2011 business year.

for construction of the wireless broadband environment going forward is, firstly, prompt implementation of spectrum reorganization. This is the reason why the methods of (1), (2), and (3) are in reality difficult to use. Here, in the report (report of November 30, 2010, hereinafter “Working Group Report”) titled Working Group on Discussion of Frequencies Needed to Realize Wireless Broadband Services, a discussion venue was provided for review concerning 700/900 MHz band frequency transfers, looking at responses to changes in the environment for task forces and in the telecommunications market concerning ICT policy for MIC and the global era. They proposed “conceivable methods for accelerating frequency reorganization through: (A). Not introducing new systems after the completion of the spectrum reorganization but instead facilitating rapid reorganization according to the development of new systems in broad areas while sharing existing system in a geographical/time-based manner”; and “(B). Users of transferred frequencies paying the expense of transferring the frequencies of existing systems”. However the following matters must be considered when introducing these methods. That is to say “(a). The amount of expenses required for rapid spectrum reorganization is expected to be quite large, as indicated by the estimated amount of transfer expenses of the 700/900 MHz band frequencies, (b). The function of incentives for paying expenses needed to be provided to the users of the transferred frequencies. (c). Methods for sharing and transferring the existing systems may differ and thus the transfer expenses may change depending on the planned commencement date of services and area developments”. Thus, in the Working Group Report it was decided that it was appropriate to introduce a policy of utilizing “market mechanisms” by having parties wishing to use the frequency after the transition submit an offer concerning the amount they could pay. Basically, a method has been introduced in which, when the state selects the users who will be qualified to use the frequency after the transfer, they may determine the carriers on the ground of the considerable amount that can be paid for the expenses required for the transfer and the time when service will commence.

It should be understood that in the background to the Report, there are three basic points about identified problems.

That is to say, firstly, when transferring frequency in the 700/900 MHz band, which is called the platinum band, the area development plans of the mobile service providers who receive the allocation are different for each firm and the timing for each transferring party differs among different users. When this point is considered, in order to promote smooth transfer of frequency, it could perhaps be best for the carriers to confer with each other about which regions and what way the transfers should be performed in.

Secondly, to facilitate swift performance of frequency transfers, these points should to be examined when the carrier operators are selected because it must be ascertained that the newly-entered carrier has the capacity to meet the costs.

Thirdly, while payment for expenses is necessary for existing system users to transfer smoothly, those paying the expense may be inclined not to comply if they believe they will not receive as much benefit in comparison to the existing methods. In that respect, it really is necessary to maintain the “economic incentives” that enable carriers to quickly commence area development and complete it.

2 Radio Act Amendments in 2011

Under the influence of Working Group Report, the Radio Act was amended in 2011.¹²⁾ As respects approval of the establishment plan, in order that a party wishing to newly establish a specified base station (mobile phone base station) can seek to commence service swiftly by paying the costs required for the frequency transfer of an existing wireless station, matters concerning payment of those costs were added in the prescribed matters of the establishment policy and also in the matters to be recorded in the establishment plans.¹³⁾

12) Promulgated on June 1, 2011.

13) The approval system for establishment plans is a system in which only carrier

The burden for costs for an attested establisher involved in frequency transfer, under Article 27-12 (2) (v) of the Radio Act, is prescribed as “measures on payment of expenses performed by a party seeking to establish a specified base station, in order to close ahead of term (author’s note: prior to completion of usage term) usage of the frequency concerned by a radio station currently using the frequency (author’s note: for which the usage term is prescribed)”.¹⁴⁾ The meaning of these provisions is that, in order to facilitate transfer of frequency prior to expiration of the relevant usage term as concerns existing wireless usage term prescribed for the frequency allocation plan, and also in order to enable a specified base station (e.g., mobile phone base station) to be established promptly, it is possible to make burden of costs be based on the establishment plan that has received approval for the attested establisher through agreement between the attested establisher and the operators of the existing system of wireless stations. In other words, these frequency transfer measures are not the measures which force frequency transfer prior to usage term completion on existing system wireless station operators.

Further, with regard to the content of expenditures incurred on performance based on an establishment plan by an attested establisher, the Minister has set the standards for investigation when performing approval based on the establishment policy, including (1) the minimum standards required as the condition (absolute examination standards) for approval of the amount that is the minimum amount that should be maintained as the amount for a party that has the ability to pay and the expense items that should be borne by the attested establisher; and (2), if the number of applicants exceeds the number that can be approved (restricted to those that conform to the absolute examination standards), approval can be performed

operators who have received approval for their establishment plan can have their application for a specified base station license.

14) For those among existing wireless system wireless stations that required a license/registration, their effective term is in principle 5 years, and after the effective term expires, relicensing/reregistration is possible. However, at that time, if the usage term of such wireless system expires prior to the effective term, the effective term of the relicensing/reregistration becomes that usage term.

in accordance with the degree of the ability to pay.

Matters that were added by the Act for Partial Amendment of the Radio Act, to prescribed matters for the above and the policy for implementation, comprise basically (1) the existing system of usage term for frequencies and (2) measures for allocation of costs paid by parties looking forward to establish a specified base station, related to terminating the usage prior to the expiration of frequency usage by an existing wireless station as well as other measures (incentive measures for termination). Among these, (1) involves closing and the contents of incentive measures and (2) is a method for payment of expenditures required for closing and incentive measures. Based on the amended Radio Act that prescribes the establishment policy for specified base stations, a frequency transferring party can have this performed with the burden of expenses on the party wishing to utilize that frequency. This is aimed to cope with the rapid increase in traffic in recent times. In order to facilitate rapid diffusion of 3.9G mobile phone systems, implementation is firstly from allocation of the 900 MHz band frequency (15 MHz band \times 2 allocated to one party). With the allocation policy for 900 MHz band frequency (examination method), the examination on the allocation is performed pursuant to “absolute examination standards (the minimum standards required for the applicant)” and “competitive bidding examination standards” (the same applies with respect to the 700 MHz band). The absolute examination standards are standards that fulfil the following requests: (1) there are plans for securing base station establishment locations, supplies of facilities and establishment worksite systems; (2) there are supplies of funding necessary for facility investment and plans to earn profits in a yearly term prior to expiration of the effective term of the establishment plan (10 years); (3) capability to supply funding applied for the minimum necessary expenses of transferring frequency of existing system wireless stations (120 billion Yen); and (4) realization of the speed increase for 3.9G mobile phones¹⁵⁾ within one year (end of 2018)

15) From the viewpoint of planning high-speed transmission systems greater than those been provided, the condition requires a system capable of not less than 75 Mb

from the term for frequency transfer of an existing wireless station. Among these standards, the one that “may provide funding for application to the minimum expenses necessary (120 billion Yen) for transfer of frequency of an existing wireless station” is significant (even if this amount is adhered to). That is to say, this is an attempt to embody the concept that as much as possible, payment of expenses of frequency reorganization involves “utilization of market mechanisms”.

3 Assessing the “Base Stations Establishment Policy”

(1) Introduction

Spectrum bands are a limited, scarce resource shared by the people and must be utilized for the benefit of the people as a whole. Radio waves, due to their physical properties, may be subject to crowding and jamming depending on the state of usage, thus they must be used according to a certain order that facilitates effectiveness. From that perspective, frequency transfer measures may be required not just this time but in the future as well, in line with technical developments and social and economic requirements. Especially considering the increase of the data traffic in the mobile phone market, it appears that demand for radio waves will undoubtedly increase, thereby increasing their scarcity.

In the light of these considerations, the following aspects of the system design are important for new frequency policy. Firstly, responsibility for payment for expenses associated with frequency transfer of existing systems (formerly, existing system users paid these expenses themselves). Secondly, the method of selecting new users (formerly, whether the performance of the frequency transfer exists or not is beyond consideration). Thirdly, the method of adjustments in the frequency transfer used between the new user and an existing system user (formerly, the state set the term of transfer uniformly). Fourthly, setting common conditions for the new user and existing system user (formerly, imposed when usage commences after the

per second.

completion of transfer). These points are now prescribed by uniform rules laid down by the government that cover the scope of expenses which a party will pay, the limits of the requirements/expenses,¹⁶⁾ term of transfer, examination methods etc.¹⁷⁾, in the “Policy for Establishment Plans for Specified Base Stations for Diffusion of 3.9G Mobile Communications Systems, based on Article 27–12 (1) of the Radio Act”,¹⁸⁾ (hereinafter, the “Establishment Policy”). This policy including these abovementioned points is of great importance, because from now on it can be assessed as having prescribed the basics for radio frequency policy going forward. It is worth considering several points on the Establishment Policy as follows.

(2) The Importance of Competitive Bidding Examination Standards

The Establishment Policy based on the Radio Act Amendment (each item of Article 27–12 (2), Article 27–13) places the liability of expenses in a frequency transfer on the party seeking to obtain the relevant frequency, showing a new basic way of thinking in radio frequency policy. According to the Establishment Policy, when there are a number of carriers who have cleared the absolute examination, the procedure for examination

16) In contrast to the minimum amount to be paid, which is part of the absolute examination standards, comprising a minimum requirement that the applicant must satisfy, the maximum amount is the maximum value when comparing the degree of the ability to pay at examination of competitive bids (if there are applications with an amount showing the ability to pay that exceeds this maximum, it will be deemed that the maximum amount has been offered).

17) The Establishment Policy is the policy that, in addition to responding to the rapid increase in traffic in recent years, implements allocation of frequencies of the 900 MHz band (15 MHz band × 2 allocated to one party) in order to facilitate a system for rapid diffusion of 3.9 G mobile phones systems, and controls frequency according to the burden of expenses on the party wishing to use that frequency based on the Radio Act Amendment. Examinations for allocation of frequencies is performed based on the absolute examination standards (minimum standards that applicants should satisfy) and the competitive bid examination standards (covered in more detail in this paper).

18) MIC Public Notice No. 513 (December 14, 2011). Policy for establishment of specified base stations using 700 MHz band (A public notice draft for partial amendment of the policy for establishment of specified base stations for diffusion of 3.9 G mobile communications systems) was, at the time of writing this paper, up for public comment (February 29, 2012).

of competitive bids is as follows: (1) degree of ability to pay for transfer expenses; (2) area coverage rate; and (3) systems for frequency transfer, incentives for use of wireless facilities by other communications carriers, the state of spectrum allocation and financial stringency, etc. Thus, if tentatively there were a number of operators clinging to the upper limit of ability to pay transfer expenses with their offers, the examination would proceed in sequence of (2) and (3) for selecting the carrier.

However, if this is the way it goes, as can be seen viewing (2) and (3) above, this centers around a relative examination-type operation. That is of importance for thinking behind calculation methods for transfer expenses, as this frequency transfer system incorporates frequency transfer utilizing market mechanisms and duties on conditions necessary in the establishment of a wireless station which was applied for area coverage rate previously subject to “relative examination”. This could be seen as hybrid examination standards. In reality, it is quite conceivable there would be multiple parties clinging to the upper limit of an amount for ability to pay for frequency transfer expenses, and this was foreseen at the system constructing stage. On this point, the aforementioned scheme (whether or not assessable as “utilizing market mechanisms”), is most interesting. Nonetheless, what is extremely important is the actual terms proposed in the “competitive bidding examination standards”. It is of consequence that business following the frequency transfer plan can operate as smoothly and swiftly as its the original plan, is very important, and frequency transfer itself may not be just “for its own sake”. Viewed like this, in the development of smooth, speedy business activity after bidding, it is urgent to apply the duty of the minimum necessary examinations and standards, and seen in this way, it can be considered that “competitive bidding examination standards” posted in the Establishment Policy are necessary.

From the viewpoint of competition policy, there appears to be some opinions concerning differences in frequency bands allocated to applicants among competitive bidding examination standards, which “priority should be given to an operator carrier who has lesser allocated frequency”.

Nevertheless, concerning matters related to closure incentive measures, fundamental solutions to facilitate a swift agreement format with the relevant licensees etc. and plans concerning organization of basic systems to facilitate smooth implementation are no less important. From the viewpoint spectrum bands are a limited, scarce resource belonging to the people and must be utilized for all the people, maintenance of fair competition should be viewed, to the utmost, as one of the elements related to the comprehensive consideration in light of whether this will promote smooth and swift usage of radio waves decision should be made.¹⁹⁾

(3) Legal Characteristics of Liability for Expenses of Frequency Transfers

In line with diffusion of 3.9G mobile communications systems, the 700/900 MHz band frequency transfer system makes the accredited establisher responsible for payment of expenses necessary for the frequency transfer in order to promote swift and smooth reorganization of frequencies and foster rapid introduction of mobile telephone systems. The nature of responsibility for expenses is different to loss compensation. Under the Radio Act, allocation of frequencies is subject to the gradual change of the prescribed usage terms for each wireless system when necessary. In the case of wireless systems, it should not be taken for granted that even if the usage term is prescribed, the licensee/registered party of the system would receive such loss compensation. Qualified applicants for loss compensation are limited to the case that, during the effective term of the licensee/registration of party, the effect of the license/registration is terminated.²⁰⁾

19) Further, the assessment items for “the scale of the number of contracts for telecommunications carriers who use the frequency of frequency bands allocated to applicants” should be understood in terms of the overriding principle that radio waves are a limited scarce resource shared by the people and must be utilized for “all” citizens. A narrow interpretation, for example focusing on a specified index like “the rate of growth in number of subscribers”, is not necessarily appropriate. The decision should be from a perspective that the beneficiaries of the radio waves that are a scarce, limited resource shared by the citizens, should be maximized.

20) As the usage term has been set beyond the usage term for licenses/registration of existing licensees and registered parties (in principle 5 years), in reality, cases of

For this reason, payments for transfer expenses of the system should be regarded as a legally-permitted special system that contributes to the smooth frequency transfers of existing wireless stations.²¹⁾ In the thinking on “loss compensation”, existing facilities and equipment are compensated with loss amortization in proportion to the number of years of service. On the contrary, under this scheme the so-called “new products” are supplied (when it comes to calculation of transfer expenses, amount for amortization of previous fiscal years is not considered). Further, whether compensation is made through real objects or payment of an appropriate price is determined based on consultations between the parties. Considering these points, it should be understood the payments for transfer expenses differ from loss compensation in legal characteristics and the Establishment Policy takes this as a premise.

The point that the legal properties of responsibility for transfer costs differs to loss compensation, if put in other terms, means that for frequency transfers, a mobile phone carrier may be unable to use that frequency if an existing licensee does not proceed the transfer. On this point, it is appropriate that depreciation and amortization expenses are not considered,²²⁾ although

receiving loss compensation would be extremely atypical. In other words, the effect of a license/registration is that during the effective term of the license/registration a wireless station may be operated using the specified frequencies, and this is premised on renewal of licenses/registrations, and as the system is premised on the license/registration being renewed, there is no protection enabling usage of that same frequency that extends even into the period after a renewal.

- 21) Under this transfer system, all expenses arising due to frequency transfers are naturally not paid by the attested establisher. The scope of the burden of expenses needs to be examined carefully from the viewpoints of whether there are “incentives” for the transfer of frequency for the existing licensees etc. and whether, for the attested establisher also, it is necessary that the burden of expenses promotes rapid and smooth transfer of frequencies. Accordingly, while there may be expenses that are related to frequency transfer that are outside the scope of the burden of expenses, what may be required to be paid by the attested establisher can be expenses for swift frequency transfer and swift commencement of mobile phone services. The Establishment Policy takes this point as a premise.
- 22) Under this system the attested establisher is responsible for expenses required for a frequency transfer in order to facilitate rapid introduction of mobile telephone systems and promote rapid and smooth frequency transfers. The scope of that responsibility, in cases of both 700 and 900 MHz frequency band reorganization, includes “all” expenses for acquiring wireless facilities anew and the construction

this may engender concerns with respect to taxation issues.²³⁾

(4) The Expenses Incurred by an Accredited Operator

As discussed above, from the perspective of swiftly establishing specified base stations (such as mobile phone base stations), the payment for expenses of an accredited establisher is performed to facilitate swift transfer of frequency of the existing wireless station. Because of this, parties who are likely to undertake the liability for expenses of an accredited operator are parties that can actually implement a frequency transfer. Specifically speaking, they are the operator of the existing wireless station using the frequency that will be used by the accredited operator.

Further, the items of the costs for which the accredited establisher is liable are in principle, the items of the costs arising from the existing wireless station where the frequency band, which will be used by the accredited operator after the transfer of frequencies is currently used²⁴⁾ To put it differently, the items of costs paid by an accredited operator are the cost items that arise from these wireless stations due to the transfer of frequencies, thus these paid cost items should be appropriate and necessary in order for the commencement of operations by the existing wireless station during the period of the frequency transfer. Expense items prescribed in the Establishment Policy show the scope of obligations actually imposed on an accredited establisher. Accordingly the scope is not just aiming at smooth frequency transfer of existing wireless stations, but also requiring reasonableness from the viewpoint of an accredited operator. Thus it is

costs, and this point is made clear in the Establishment Policy.

- 23) The issue from a tax perspective is that, except where the amount for the equipment concerned is very small, an amount equivalent to the amount for the equipment is received as a gift, and in principle this is subject to taxation, however as expenses arising due to amortization for depreciation are factored in over number of years, in this case, the total effect should be considered as being quite limited.
- 24) However, when an existing wireless station must exchange etc. equipment of a wireless station that comprises another party in communications of the existing wireless station, in order to actually maintain wireless transmission operations after the frequency transfer, that other wireless station also may also become eligible for expenses under measures supplementary to the closing incentive measures.

appropriate that the scope of liability for costs is within the scope directly necessary for transfer of frequencies of an existing wireless station, and is restricted to the scope that is appropriate and necessary for commencing operations and for maintaining the current situation of functionality of the frequencies during the stage of the transfer from the existing wireless station. For example, (1) maintenance and support expenses incurred by an equipment retailers. are necessary for maintaining operations “after” the frequency transfer and are not directly related to the frequency transfer, therefore they do not belong to the cost items which should be paid by the accredited operator.²⁵⁾

(5) How to Design “Incentives” for Frequency Transfers

Until now, at the MIC, policies that need to be worked with in planning for realization of wireless broadband have involved discussion on the kinds of measures that are necessary to realize speedy and smooth reorganization of frequencies, while issues of unsatisfactory points in frequency reorganization methods in the past have raised. Questions have been asked about necessary measures to expedite swift performance of the reorganization by facilitating (1) swift completion of transfer and (2) market entry of mobile phones even prior to completion of a transfer. This thinking reflects the background of the 700/900 MHz band frequency reorganization. Moreover, area development plans differ according to the

25) In the same manner, additional operating expenses (electricity charges and lease fees etc. for system operations of the frequencies comprising the transfer source during the period in which both systems including the system for the frequencies the source of the transfer and the system for the frequencies receiving the transfer are operating simultaneously) are necessary costs for systems operation for the frequencies comprising the transfer source and do not have a direct impact on the frequency transfer. Thus it is not appropriate that these comprise an expense item paid for by the attested establisher. Further, costs for implementing the operation (when it is necessary to stop the system for a defined period in order to change systems, expenses necessary for substitute equipment during the stoppage period (e.g. when using a security system, monitoring expenses etc. for the security personnel)) have been raised, however because these do not directly impact on the frequency transfer, in the same manner, it is not appropriate that these should be expense items payable by the attested operator.

mobile phone carrier, and the transferring side also may differ depending on the available timing of users. Thus it was considered that the basic matters of when, which region and what kind of transfer should be decided based on consultations between the parties as this would promote speedy transfer. Also, because it is necessary to have certainty on the ability to pay by the entering carrier in order to perform frequency transfers swiftly, this point must be examined when making the selection of carriers. Further, there are concerns about the burden of expenses that, while necessary for the smooth transfer by an existing system user, if the party undertaking the liability does not consider they obtain any merit in comparison to the previous methods, it may not be willing to assume the liability. In this respect, it is necessary to secure swift commencement and rapid completion of area development by the carrier, and this is recognized in the frequency reorganization scheme. In short, it is safe to say that the issue of how to devise “incentives” to frequency transfer has been well debated regarding the 700/900 MHz band frequency reorganization.

From this viewpoint, frequency transfer should not only work for smooth frequency transfer for existing wireless stations, but requires reasonableness for the attested operator too.²⁶⁾ When viewed from this position, it is appropriate that the scope of liability for expenses should be within the scope that is directly necessary for transfer of frequencies of existing wireless stations. With the current scheme, as its essence is to promote transfer premised on “agreement” between the new attested operator and the operator of the existing system of wireless stations, it is important to maintain incentives to reach such “agreement” on the “transfer”. That is to say, as concerns some expense items, if inclusion of these in transfer

26) From this perspective, even after approval of an operator, there needs to be investigation of whether or not actual expense payments are being performed appropriately and economically over the entire transfer period. Further, if there is a case in which it is accepted that due to the transfer to the new frequency band system there have been benefits from operating cost reductions due to technical improvements or due to improved usage performance, candidate operators should not be excluded from deducting amounts that can be appropriately demonstrated from the burden of expenses payable.

expenses would result in a disincentive against the transfer, the purpose of this transfer system would be frustrated. Accordingly, it can be said that it is appropriate the Establishment Policy restricts this scope to “the extent directly necessary for frequency transfer”.²⁷⁾

In the case when the attested operator facilitates the rapid transfer by paying transfer expenses exceeding “the extent directly necessary for transfer of radio frequencies of the existing wireless station” to the establisher of the existing system radio station, the payment premised on such “agreement” means that those expenses paid by the attested establisher are based on the discretion of those parties concerned. However metaphorically speaking, the current scheme is not designed to encourage what could be called “a good method of moving” for frequency transfers, and these transfers are merely a means but not an end. From this position, it should not result in an insufficiency of funding for facilities investment (establishment of a mobile phone base stations) due to excessive funds provided for closing incentive measures.²⁸⁾ Plans for the number of

27) Under this transfer system, unlike with the thinking on compensation for loss, all expenses arising due to frequency transfers are naturally not paid by the attested operator. The scope of the burden of expenses must not only be an incentive for frequency transfer for existing licensees etc., but it is also necessary that for the attested operator too, the burden of expenses promotes rapid and smooth transfer of frequencies. Accordingly, while there may be expenses that are related to frequency transfer that are outside the scope of the burden of expenses, it is considered appropriate that the attested operator can be required to pay expenses for swift frequency transfer and swift commencement of mobile phone services.

28) On the contrary, how would it be if at time of frequency transfer, in order to reduce their own transfer related costs, a mobile phone carrier requests a maker to provide extremely low prices for equipment when placing orders with the maker for the equipment necessary to change the system of the transferred frequency, and the maker has to accept this as unavoidable? As the background to this, if for example this maker delivers mobile telephones to this mobile phone carrier, for the maker it could be assumed that they would believe that if they did not accept the conditions for that deal in the future it could have an adverse effect on their deliveries of mobile phones. Looking into this problem however, as the mobile phones market has three companies competing it cannot necessarily be said that any specific mobile phones carrier occupies a monopoly position. Viewed from the position of a maker, as they are not delivering to just one company, it would be difficult to say that any company is abusing a “superior position”. It is a principle of the Antimonopoly Act that there is no interference in price negotiations between parties, so unless the price negotiated for delivery of items goes “below cost”, it would not automatically become a problem

facilities for each financial year and the locations of a mobile phone base station must be recorded in the establishment plan submitted by the carrier. The Minister has the authority to determine whether to approve that establishment plan, and if the attested operator fails to establish their mobile phone base station in accordance with the approved establishment plan without good reason, the Minister may revoke the approval. A lack of funds for facility investment arising due to excessive funding provided for closing incentive measures as mentioned above, does not constitute a good reason.²⁹⁾ In order to make this point clear, the Establishment Policy provides that in the establishment plan it should be mentioned separately that carrier has the ability to pay the expenses of the transfer for closing incentive measure, and that carrier has drafted the plan for the funding for facility investment. Further, the quarterly report should be issued by the attested operator, showing the current situation of implementation of closing incentive measures. Such examination before and after the transfer are of importance for the smooth and accurate implementation of the establishment plan.

3 Examinations for Authorization of Establishment Plans for Specified Base Stations for Diffusion of 3.9G Mobile Communications Systems

1 Specified Base Stations Utilizing Frequencies From 945 MHz to 960 MHz

As the paper shows, in addition to coping with the rapid increase in traffic in recent years, frequencies in the 900 MHz band have been allocated in order to facilitate rapid diffusion of the 3.9G mobile phone systems.³⁰⁾

under that Act.

29) The Establishment Policy also is premised on this. In order to avoid cancellation of their approval, an operator must maintain the funds necessary in order to establish the mobile phone base station pursuant to their plan, which provides a systematic restraint against the problems specified in this paper.

30) Based on the Radio Act Amendment, in this allocation the frequency transfer is implemented at the expense of the party wishing to obtain the frequency.

The absolute examination standards (minimum standards that shall be satisfied) here were for example that: (1) there are plans for securing base station establishment locations, supplies of facilities and establishment worksite systems; (2) there are supplies of funding necessary for facility investment and plans to earn profits in a yearly term prior to expiration of the effective term of the establishment plan (10 years); (3); capability to supply funding applied for the minimum necessary expenses for transferring frequency of existing system wireless stations (120 billion Yen); (4) realization of 50 percent coverage rate of all people within the jurisdiction of Japan in four years (end of the 2015 business year) since the approval, and within seven years after the approval (end of the 2018 business year) of 80 percent coverage rate of all people within the jurisdiction of Japan in; and (5) realizes speed increase for 3.9G mobile phones within one year (end of 2018) from the term for frequency transfer of an existing wireless station. If there are multiple parties who satisfy these requirements, the examination is performed in the following sequence of standards, as competitive bid examination standards, until the multiple candidates are whittled down to one. That is to say, as the “First Standard”, the party that had the ability to pay the highest expenses to an upper limit of 210 billion Yen related to the frequency transfer (as the “Second Standard”, the party that had the greatest population coverage rate for 3.9G mobile phones (depend at the end of the 2018 business year), and as the “Third Standard”, the party that was most suited overall in the light of each of the following items.

[Standard A]

As concerns matters related to closing incentive measures, there are concrete measures for facilitating to reach a mutual assent of the relevant licenses swiftly and well-made plans concerning preparation for basic

Applications for approval for plans concerning the establishment of a specified base station related to the Establishment Policy (hereinafter “Establishment Plan”) were submitted by eAccess Ltd., NTT DoCoMo, Inc., KDDI Corporation and Okinawa Cellular Telephone Company and Softbank Mobile Corp., in the application period running from December 14, 2011 through January 27, 2012. Examination of these four applications was conducted based on Article 27-13 (4) of the Radio Act and the prescriptions of the Establishment Policy.

systems to facilitate smooth implementation.

[Standard B]

There are well-made specific plans for increasing incentives to the usage of specified base stations through connection of telecommunications facilities and other methods, or through provision of wholesale telecommunications services for various parties such as other telecommunications carriers.

[Standard C]

Considering the existence and differences in allocated frequency bands, as well as the scale of the number of contracts for allocation of frequency band, establishing the base station and conducting telecommunications carrier business will make a contribution through healthy development and smooth operations of the telecommunications carrier business. When application of these standards led to the situations in which a number of applicants satisfy each item of the absolute examination standards and a decision cannot be made even on the merits of the first and second standards of the competitive bidding examination standards, the third standard was applied in the examination.³¹⁾ As a result, in the case of “Standard A”, a number of applicants had solutions for facilitating a mutual assent of the relevant licenses swiftly regarding closing incentive measures and plans concerning smooth implementation systems. In the case of “Standard B” also, a number of applicants held well-made concrete plans for incentives to the usage of specified base stations through connection of

31) From the perspective of the need to maintain transparency and objectivity in the examination, the degree of conformity to each of standards A–C is converted into points, and the decision is made based on the total number of points. In other words, firstly, from the view of promoting effective usage of frequencies, each of standards A–C are important, no standard is given a higher weighting and the distribution of scores between them is averaged. Secondly, in the case of standards A and B, as the content of the plans differs according to each applicant, the examination is conducted as a competitive examination (a round-robin between each two). Thirdly, in the examination for standard C, an assessment is conducted of applicability in relation to certain facts pursuant to matters prescribed in the Establishment Policy (differences in allocated frequencies and scale of the number of contracts in allocated frequencies). Note that as the applications are all from existing carriers, examination items (whether they have in allocated frequency) that cover new entrants were not provided.

telecommunications facilities and other methods, or provision of wholesale telecommunications services concerning MVNO (Mobile Virtual Network Operator, communications carriers who lease wireless infrastructure such as mobile phones from other companies and provide services under their own brand name) for various parties. In the case of “Standard C” when considering the transmission properties of the radio waves of the 900 MHz band in this allocation, two parties were assessed as eligible, Softbank Mobile Corp. (hereinafter “Softbank Mobile”) and eAccess Ltd. (hereinafter “eAccess Ltd.”), who did not hold frequency band below 1 GHz which was equivalent to the frequency concerned. In the end, it was Softbank Mobile that received the highest score, so its establishment plan was approved as being the best in terms of suitability to the competitive bidding standards (third standard).³²⁾

2 Specified Base Stations Utilizing Frequencies From 773 MHz to 803 MHz

During the application period from April 17, 2012 to May 25, 2012 applications for approval of establishment plans for specified base stations covered under the Establishment Policy were filed by eAccess, NTT DoCoMo, Inc. (hereafter “NTT DoCoMo”), as well as KDDI Corporation

32) The following conditions were applied in the approval of establishment plans, considered in the light of the gist of the Establishment Policy and the results of the examination etc. (1) Efforts towards diffusion of broad broadband services through 3.9 G mobile Communications Systems. (2) Efforts toward smooth implementation, devising a sufficient format for agreement with the existing licensees etc. concerning closing incentive measures, and sufficient consideration toward maintaining transparency. (3) Efforts toward promoting usage of specified base stations through connections with telecommunications facilities, provision of wholesale telecommunications services and other methods. (4) Against the background of the damage sustained due to the Great East Japan Earthquake (Tohoku-Pacific Ocean Earthquake) and frequent occurrence of obstructions to communications, efforts toward improving the safety and stability of telecommunications facilities such as countermeasures to deal with blackouts and congestion, and measures to prevent the occurrence of obstructions to communications.

(hereinafter “KDDI”) and Okinawa Cellular Telephone Company (hereinafter “Okinawa Cellular”). In the same manner as for the 700 megahertz band, these three applications were examined with Article 27-13 (4) of the Radio Act and the Establishment Policy. There are some changes³³⁾ and additional points³⁴⁾ in the 900 MHz band Establishment Policy but fundamentally they are the same.

The examination result was that all of the applicants satisfied all items of the absolute examination standards (the minimum standards to be satisfied), and in terms of the competitive bidding examination standards subsequently, none of these applicants could be determined as being better

33) For the 900 MHz band, the number of allocations is 15 MHz band×2 allocated to one party, the period for transfer of frequencies of existing wireless stations runs until the end of the 2017 business year, and the lower limit for the ability to pay frequency transfer costs is 120 billion Yen while the upper limit is 210 billion Yen. In contrast, for the 700 MHz band, 10 MHz band×2 allocated to 3 parties, the period for transfer of frequencies of existing wireless station runs until the end of the 2018 business year, and the lower limit for the ability to pay is 60 billion Yen while the upper limit is 150 billion Yen.

34) Additional points from the 900 MHz band frequency policy are as follows.

Ⅰ Implementation of measures to prevent reception of terrestrial digital broadcast. All carriers who receive an allocation jointly devise measures to prevent and alleviate reception of terrestrial digital broadcast.

Ⅱ Measures in line with allocation of frequencies to multiple carriers

1 Matters concerning frequency transfer

(1) All carriers who receive an allocation jointly implement the following

- 1) Make the outline of the implementation of frequency transfers known to existing licensees and notify the implementation procedures.
- 2) Cooperate with licensee federations concerning making matters known and notifications pursuant to 1) above.
- 3) Agreement with existing licensees concerning frequency transfers

(2) Consultations and agreement between carriers concerning method of implementing 1)-3) above within 3 months from approval of carriers.

(3) The amount payable by one carrier is an amount proportional to the number of allocations

2 Matters concerning maintaining transparency.

(1) During the period until approval, an applicant may not consult with other applicants concerning implementation of the frequency transfer.

(2) When a carrier has agreed to concerning 1 (2) above, they must promptly present documents showing the contents to the Minister, and publicize that content on the Internet.

3 Matters concerning allocation of frequencies

If there is an overlap between frequencies parties wish to have allocated to them, the competitive bid examination standards are applied and the allocation is performed in accordance with the wishes of the first -ranked party.

or worse according to the first³⁵⁾ and second standards³⁶⁾ also, thus the third standard was applied to conduct examination. In relation to “Standard A” of the third standard (smooth implementation of closing incentive measures), all of the applicants had plans concerning smooth implementation and measures for reaching a mutual assent swiftly. In terms of “Standard B” (promotion of use of specified base stations), again all of the applicants had specific plans for promoting use of specified base stations through connection of telecommunications facilities or through provision of wholesale telecommunications services for MVNO for multiple parties. In the case of Standard C (allocated frequency bands/situation with the number of contracts), as to the 700 MHz band, considering the transmission properties of radio waves, eAccess was assessed as not holding below 1 GHz frequency band which was equivalent to the frequency concerned. On the other hand, as to the number of contracts in relation to allocated frequency spectrum, it was determined to assess the applicants based on the level of the average value of the number of contracts of all applicants, which led to the two selected applicants who had a greater number than this average, NTT DoCoMo and KDDI/Okinawa Cellular Telephone. In the end, in terms of the degree of conformance with the competitive bidding examination standards (second standard) NTT DoCoMo was assessed at the highest level, acquiring the highest points, while eAccess and KDDI/Okinawa Cellular acquired the same score and occupied the same position in the order. Finally, NTT DoCoMo was allocated its first preferred frequency (middle band) while eAccess and KDDI/Okinawa Cellular were allocated its secondary preference of the frequency³⁷⁾ and all parties were granted approval for their respective establishment plans.³⁸⁾

35) The amount for the ability to pay of all the applicants reached 150 billion Yen thus an examination was conducted based on the second standard.

36) The population coverage rate comprising the standard was surpassed 95 percent by all of the applicants so an examination was conducted based on the third standard.

37) eAccess was allocated high band and KDDI/Okinawa cellular telephone, low band.

38) The following conditions were applied in the approval of establishment plans.

(1) Efforts towards diffusion of broad broadband services through 3.9 G mobile Communications Systems. (2) Efforts toward smooth implementation, devising a

In this way, considering that all of the applications for the amount of the ability to pay for the frequency transfer expenses incurred were sitting at the upper limit (though this was not foreseen originally), the results of the examination of the allocation of frequencies in the 700/900 MHz bands, can be viewed as the examination with no substantial difference to the past comparative examination.

4 Debates Leading up to the Introduction of Spectrum Auction System

1 Investigations into the Spectrum Auction System up to the Present

Reorganization of the 700/900 MHz band frequencies should perhaps be called a “market mechanism type comparative examination system”, and the Panel Discussion concerning Frequency Auctions should be considered as the first investigation venue in which the MIC grappled with the issues of the frequency auction system head-on.

It was the e-Japan concept³⁹⁾ that represented the government’s first official papers concerning the frequency auction system. In this article, it was decided that “research will be made on the future frequency use in Japan as well as the frequency allocation systems such as auction system in foreign countries along with related problems. Based upon this

sufficient format for agreement with the existing licensees etc. concerning closing incentive measures, and sufficient consideration toward maintaining transparency. (3) Efforts toward promoting usage of specified base stations through connections with telecommunications facilities, provision of wholesale telecommunications services and other methods. (4) Appropriate implementation of measures to prevent/alleviate obstructions to reception of terrestrial digital broadcast, in the establishment of specified base stations and their operation. (5) Against the background of the damage sustained due to the Great East Japan Earthquake and frequent occurrence of obstructions to communications, efforts toward improving the safety and stability of telecommunications facilities such as countermeasures to deal with blackouts and congestion, and measures to prevent the occurrence of obstructions to communications.

39) Decision by IT Strategic Headquarters, March 29, 2001.

research, the optimal frequency allocation system in our nation will be considered from viewpoints of fairness, transparency, speed and efficiency in frequency use. A conclusion shall be reached by FY2005”.⁴⁰⁾ Further, in the “Structural Reform of the Japanese Economy: Basic Policies for Macroeconomic Management”,⁴¹⁾ it was decided that “for public resources such as radio frequencies, the optimum distribution methods including utilizing market mechanisms such as public bids shall be investigated”.⁴²⁾ In both documents, the word “investigate” was mentioned in relation to the frequency auction system, so while it is not necessarily a positive step toward introduction of auction system, the fact that it expressed the necessity of such investigation itself is significant still.

After that, however, the MIC did not actively move toward introducing a frequency auction system. For example, the result of the investigations by the MIC/Study Group on Policies concerning Effective Spectrum Use (2002–2004) was negative towards introduction of auctions. They found that “Once bidding prices go too high, auction systems, however, will cause the following problems as exemplified by European countries:

- 1) Services are postponed; the population coverage is sacrificed; and furthermore, service itself has hardly started up.
- 2) As a result, the ICT industry, a national leading/strategic industry, may go into decline.
- 3) On the occasion of high license fees, the strengthened rights of licensees, e.g. the valid term of license is generally set at 20 years, create problems by making it difficult to achieve a swift reallocation of spectrum in the future. Regardless of the perspective of public finance,

40) See the item in that decision under:

II. Formation of the World’s Most Advanced Information and Telecommunications Networks 3) Priority Policies

1) Formation of Internet Access Networks ii) Promotion of the formation of ultra high-speed network infrastructure f) Quick and transparent allocation of frequency resources

41) Cabinet decision, June 26, 2001.

42) Refer to Seven Programs of Structural Reform 2. The “Support Challengers” Program—a Social System That Encourages Individual Ability” in Structural Reform of the Japanese Economy: Basic Policies for Macroeconomic Management.

this includes a risk of substantial obstruction against effective use of frequencies. Accordingly, from the viewpoint of promoting effective use of spectrum, when it is appropriate to utilize market mechanisms and licensing procedures, it is appropriate to consider other possible measures for overcoming potential risks.” (Underlined by the author⁴³⁾) while taking advantage of auction systems incorporating market principles. Introduction of frequency auction system was declined. Selecting the optimum uses for radio waves is not just an assessment concerning the financial value of frequencies to the licensee. Opinions on the appropriateness of the business plan and on the maintenance of technical capabilities are also important. Accordingly, “Therefore, comparative examination systems are appropriate as a kind of licensing procedures...” and “Thus, in cases where it is appropriate to incorporate market mechanisms in considering methods of spectrum use, it is appropriate to introduce comparative examination systems based on market mechanisms instead of auction systems” (underlined by the author).

However, in recent years voices calling for radio wave auctions have strengthened.⁴⁴⁾ The government has responded to this and in the MIC’s “Basic Policy concerning Next Review of Spectrum User Fees”,⁴⁵⁾ it was decided that introduction of spectrum auction system utilizing market mechanisms has sufficient value to justify research from the viewpoints of fair and efficient usage of spectrum and maintaining transparency in licensing procedures. Thus, serious debate concerning the introduction of auctions shall be undergone, examining reasonableness and necessity in the light of the objectives and effects of introducing an auction system, and

43) Refer to the “Chapter III Measures for introducing market principles for promotion of effective use of radio spectrums”, in the First Report of the “Study Group on Policies concerning the Effective Radio Spectrum Use” (December 2002). This conclusion was also emulated in the Study Group’s final report, (October, 2004).

44) For example, Hajime Oniki who wrote in *The Economist* (in Japanese), January 17, 2012 p. 80. “as soon as possible, the allocation system through the MIC should be stopped and a system of radiowave auctions introduced”.

45) MIC decision, August 30, 2010

this process needs of spectrum auction to be presented to the people.⁴⁶⁾ It represents the first time that the policy was mentioned as a plan for a proper policy option. A point deserving attention is that in this “Basic Policy” it says that concerning burden of expenses of frequency reorganization in the 700/900 MHz bands, there should be an investigation of whether market mechanisms can be utilized in the system as much as possible.

In the Study Group on Spectrum User Fees and the Panel Discussion concerning Frequency Auctions which is discussed later, the relationship between frequency auction systems and spectrum user fees systems was discussed. However, both systems are fundamentally different to each other. The spectrum user fees system prescribed in the Radio Act⁴⁷⁾ is a system

46) However, the auction system places new burdens on licensees and must be adequately explained. Further, those involved must be selected so that problems concerning competition policy do not arise between future carriers.

47) The current spectrum user fees system was introduced in fiscal year 1993. The following describes how it has been amended over time. The initial purposes for which the fees were used were “radio wave monitoring”, “production/management of Comprehensive Radio Station Management Files”, “other purposes (administration for the direct objective of benefiting wireless stations overall)”. The amount of fees is set evenly for expenses related to radio wave monitoring, while for expenses related to Comprehensive Radio Station Management Files it is set proportionally in relation to the volume of information used. In fiscal year 1996 the amount of the fees was amended and the purpose of “technical examination administration” was added. In fiscal 2001 the purpose of “specific frequency change support service” was added and during the period from 2003 through 2010 television broadcast stations came to pay for part of expenses (approximately 3 billion Yen per year). In fiscal year 2004 the purpose of “specified frequency termination support service” was added, then in fiscal year 2005 the fees were amended as the idea that the burden of payment should be in relation to the economic value of spectrum (frequency bands used) was introduced (the system of wide area dedicated radio waves was introduced). Further, measures (characteristic coefficient) to lighten spectrum user fees for wireless stations that contribute to protecting the citizens’ life assets, their health and their property were introduced. For television broadcast different cost lightening measures to the characteristic coefficient were applied. Then, the purposes of “research and development for expanding radio wave resources” and “businesses using equipment that covers areas, such as mobile phones” were added. In fiscal year 2008 the amount was amended, and that part of the burden of costs corresponding to economic value of radio waves was expanded, while the amount payable by television broadcast was increased, as the amount of fees was set in conformance with the economic value of radio waves in the same manner as for other wireless stations (although the amount was reduced by quarter through application of the characteristic coefficient). Purposes for which the fees could be applied were expanded to include “administration for communication and coordination concerning international

in which, for the purpose of maintaining appropriate usage of frequencies through radio wave monitoring and other methods, administration expenses incurred from pursuing the objective of benefiting overall wireless stations are the responsibility of the licensee beneficiaries.⁴⁸⁾ The nature of this system is that it places responsibility of expenses required by this administrative process on the licensee beneficiaries. In other words, it is like management expenses shared by apartment tenants. On this point, the amounts paid for a spectrum auction, which is a price for obtaining a position that enables exclusion of other parties from the application for a license for a wireless station used in accordance with determined conditions for the subject frequency, is completely different in nature. The spectrum user fees system has been reviewed at least every three years and the common administrative expenses of spectrum usage necessary during that term are paid by the wireless stations anticipated to be involved during that term. Thus by means of review the content administration common of

standardization”, “administration related to supporting terrestrial digital broadcast transfers (relay stations, making shared-use facilities digital, measures to deal with digital interference, organizing a viewers consultation system)” and “administration toward improving literacy about radio waves”. Then the purposes in “other purposes (administration for the direct objective of benefiting wireless stations overall)” were amended so that all the purposes were specifically enumerated. In fiscal year 2009 a system was introduced enabling spectrum user fees to be paid at convenience stores while the purpose of “providing support for low income households to purchase terrestrial digital tuners” was added. Then in fiscal year 2011 the fees were amended and that part of the burden of costs corresponding to economic value of radio waves was expanded (but “the characteristic coefficient” was retained). The purpose of “extension of deadlines for use of terrestrial analog broadcasting frequencies in three prefectures in the Tohoku region”, a time limiting measure, was also added.

48) Spectrum user fees are decided so that the burden of costs is paid by wireless stations forecast to be operating during the three-year term in which the necessary expenses for administration for common benefit of radio wave usage applies. Incidentally, this was approximately 95 billion Yen at the end of fiscal year 2010, that was a subsequent fiscal year requiring a substantial payment burden for measures to deal with terrestrial digital transfers, however the scale of the budget for the period from the 2008 through 2010 fiscal years saw the amount set at an average yearly rate of 68 billion Yen. For fiscal year 2012, the expenditure budget was approximately 67.9 billion Yen while the revenue budget was approximately 71.6 billion Yen. In order to apply amounts as financial resources for expenses for spectrum users’ common benefit, the amounts for spectrum user fees, comprising amounts that licensees etc pay in accordance with their wireless station category, is determined by the Radio Act Appended Table 6 (related to Article 103-2).

spectrum usage and the required amounts of expenses will be investigated and determined. Moreover, enumerated examples of application show that, in relation to maintaining effective usage of radio waves under the Radio Act, the purpose of spectrum user fees also, is restricted to administration affairs performed for the direct objective of benefiting of all radio stations.⁴⁹⁾ These points show that the frequency auction system as a framework for utilizing economic value derived from radio wave resources

49) Spectrum user fees are incorporated in general accounting, but with the purposes for their use being administration performed for the direct objective of benefiting wireless stations overall, individual basic administration items are prescribed in the Radio Act Article 103-2 (4). The main purposes include monitoring the illegally established radio stations, establishment and management of the comprehensive radio stations management system, research and development for expanding radio wave resources, investigating safety of radio waves, businesses using equipment that covers areas, such as mobile phones etc., businesses involved in radio wave shielding solutions, and preparing the environment for smooth transfer to terrestrial digital broadcast. Spectrum user fee fiscal resources are handled as general accounts, but pursuant to the Radio Act Article 103-3 (1) “The Government shall allocate as a fund for the expenses for spectrum users’ common benefit every fiscal year an amount of money equivalent to the budgeted amount for the revenue of the Spectrum User Fees for the relevant year pursuant to the provisions of the national budget”. Thus, even though handled as general accounts, unlike fiscal resources from other tax revenue, usages of which are not prescribed by law, the purposes for which these fiscal resources can be used is specified by law. The spectrum user fees system is one in which, basically, the amounts are set such that common expenses for radio wave usage necessary for the three-year period are shared fairly between the wireless stations forecast to be operating during that term. Spectrum user fees revenue based on this however, has been systemized pursuant to the above regulations, to be applied as fiscal resources for radio wave usage common benefit. One aspect of this, is that it is envisaged that in a single accounting year, due to an unforeseen increase in the number of wireless stations, the revenue budget for that financial year may exceed the expenditure budget. In this case, pursuant to the proviso of that paragraph which stipulates that “where the amount of money is determined to exceed the amount budgeted for the expenses for spectrum users’ common benefit in the relevant year, this shall not apply to the excess amount of money”, the portion in excess of the expenditure budget can be applied to other government expenses during that financial year”. Pursuant to the provisions of paragraph (2) of that article however, for the general accounting year, when the revenue from spectrum user fees is below the necessary expenses for spectrum users’ common benefit, in addition to spectrum user fees income for that financial year, an allocation can be made to fiscal resources for expenses for spectrum users’ common benefit within the scope of the total amount of spectrum user fees income not allocated to fiscal resources for expenses for spectrum users’ common benefit for each fiscal year since the system was established. Thus the gist of the system that the total amount of spectrum user fees revenue is applied to the fiscal resource of expenses for spectrum users’ common benefit is retained.

represents fundamentally different thinking. It is also a fact however, that spectrum user fees and the purposes of these have been under serious criticism.⁵⁰⁾

At the next Study Group on Spectrum User Fees (for the 2011–2013 business years) for investigating the next term spectrum user fees as well, there were discussions about policies that could reflect the economic value of spectrum. However on the subject of the scale of the budget for spectrum user fees some severe opinions were expressed about the ease with which the purposes of the use of these fees can be absolutely expanded.⁵¹⁾ Above all, with regard to the burden of the payment for spectrum user fees in terms of achieving a policy that reflecting the economic value of spectrum more strongly, it has been emphasized that among the spectrum user fees constituted by “the payable part that corresponds to occupied spectrum” and

50) For example, the result of the assessment of “Proposal-based Policy Screening” by the Government Revitalization Unit (November 21, 2011) was “our main opinions are that there should be an expansion in the purposes of usage of spectrum user fees for the objective of benefiting information communications of citizens/consumers who directly and indirectly pay for spectrum user fees, these purposes should be expanded to contribute to understanding of radio wave policy, they should be expanded in the scope of usage for disaster prevention and they should be made into general fiscal resources with due consideration given to priority distribution to ICT related businesses involved with disaster/satellite communications/medical etc. For purposes other than the originally intended radio wave supervision, spectrum user fees revenue should be made into general fiscal resources, and giving due consideration to a stage by stage expansion in the purposes of their usage, they should be made into general fiscal resources through expanding these usages over the medium and long terms. With virtually all people having a mobile phone these are already a tax, and therefore should be made into a general fiscal resource. Further, inefficient expenditures amongst the expenditures for which spectrum user fees are used should be thoroughly scrutinized. Some have expressed the opinion that under the current system the number of items enumerated has expanded inviting inefficiencies. In the light of this we would like to see responses implemented. In summary of the above, this working group’s proposal is that there should be an investigation into the directions to be taken to expand the purposes for which spectrum user fees are applied”.

51) This point was stressed by an ancillary resolution of the Diet (House of Representatives Committee on General Affairs (May 24, 2011) and House of Councilors Committee on General Affairs (April 19, 2011)) at the time of the previous spectrum user fees review, and in the comments by those conducting an assessment in the budget screening process by the Government Revitalization Unit also. However, this point requires consideration of the allocation of the burden of payment in subsequent years (overall work expenditures 200 billion Yen to be repaid by fiscal year 2016) for solutions involved with terrestrial digital transfers.

“the paid part divided equally among all wireless stations” the ratio of the former should be increased.^{52),53)}

This is the background on which the Panel Discussion had been held.⁵⁴⁾

2 Points Shown by the Panel Discussion concerning Spectrum Auctions

The issues discussed at the Panel Discussion comprised the following points.

The first is the “objectives of introduction”. What are the objectives for introducing auctions? Is it “efficient usage of radio waves through requiring an allocation of payments that reflects the economic value of radio waves?” Is it to “maintain transparency in the licensing process”? Or is it for “utilization of resources shared by the people for the benefit of all the people”? Secondly, “legal status of bidders”, in other words, what are the reasons that payments must be made in order to use radio waves? The third is “the purposes for which the income is spent.” Whether the income from radio frequency should be seen as a general financial resource or a specific financial resource? Fourthly, should all wireless systems that attract competitive bids (mobile phones, broadcast, satellite etc.) be the subject of frequency auctions? Further, should there be an auction held at the time of relicensing? The fifth point involves concrete system design. In other words, system planning for the purpose of resolving concerns on

52) Until now, the revenue ratio has been approximately 1:1.

53) There were also substantial arguments concerning the handling of measures to lighten the load paid by broadcast carriers (a ratio of quarter compared to mobile phone carriers).

54) There is an increasing volume of literature concerning frequency auctions. Here, see *Shuhasu Ookushon*, supervising editor Masayuki Funada, Yuseisho Denpashigen no Yukoukatsuyohousaku nikansuru Kondankai ed., Nikkan Kogyo Shimbun, Ltd., 1997, and, Hajime Oniki., *Economics of Radio-Frequency Resources-US Spectrum Auctions* Gendaitosho Co., Ltd. 2002, for detailed reviews of overseas frequency auctions. Also, for more recent examples, see Tomoko Yamanjo, *Oobei niokeru Shuhasuookushon no Doko*, NextCom No. 7 (2011) p. 16, and Tetsuya Shibasaki, *Eikokuhatsu “Shuhasuookushon” Kosatsu*, in *ICT World Review* Vol. 4 No. 6 p. 25 (2012).

the points of: (1) whether winning bids keep going higher; (2) whether the competition may become unfair and distorted (e.g. a specific powerful carrier that buys up excessively and occupies an exclusive position); and (3) whether obstacles may be created to rapid reorganization of frequencies in the future. Additionally, there are some discussions on the practical methods for operating the auction. Basically, this issue involves: 1) qualifications for participation in the auction and minimum bid prices, as well as the method of setting these standards; 2) the method of bidding and the method of displaying the state of bidding (including systems development); 3) requiring a duty to provide a specific area coverage rate; 4) the method of paying the amount to be paid by the winning bidder; and 5) methods of preventing malpractice such as bid rigging. The sixth point concerns whether to allow secondary transactions (resale). The seventh point concerns the ideal model of the existing spectrum user fees system in line with the introduction of auctions. The eighth point involves how to review the effective term of the license (currently 5 years) and organize the relationship between auctions and the licensing system. Finally, there is the issue of how to view foreign capital. I will proceed to investigate some important items concerning these issues.

Concerning the first point on the objectives for introducing the auction system, the "Report from the Panel Discussion concerning Frequency Auctions" noted that "the main objective for introducing a frequency auction system is to promote effective usage of radio waves and maintain transparency and speed in the wireless station licensing procedures". The contribution to the national finances made by the collection of fees paid for the auction is absolutely, a subordinate consideration.

On the second point concerning "the legal status of bidders" the Report from The Panel Discussion stated that "the successful bidder, by paying the amount to be paid, may apply for a wireless station license in order to use the subject frequency in accordance with determined conditions. If the result of the examination is that there are no problems, the bidder obtains an exclusive position enabling them to establish and operate the wireless

station”. This can be understood as indicating a two-stage way of thinking. It can be understood that by paying the amount to be paid, the successful auction bidder acquires a legal status enabling their exclusive application for a license for a wireless station utilizing the frequency concerned, which shows that the bidder acquires an exclusive position to apply for the wireless station license for the frequency by means of payment, and then based on that bidder’s application, the bureaucratic procedures of licensing are performed as a result of the necessary examinations. That is to say, the qualification acquired through the auction is not for that specified frequency spectrum itself, but merely gives the bidder an exclusive status enabling an exclusive application for the wireless station license. If the Minister receives such an application the Minister must examine the necessity for the establishment and whether or not there are concerns about obstructions through interference on other wireless stations, based on the provisions of Article 7 (1), Article 8 (1), Article 10 (1) and Article 12 of the Radio Act. After the necessary examinations of these the license may be granted, however It should be understood that granting of licenses by bureaucratic action can be accompanied by granting of “additional provisions” at the same time. The reason for this is that a license to use things that are for public use normally involves granting of additional provisions. Thus it may impose “a duty for a specified area/population coverage rate” and “a duty to establish the network to other carriers” on the licensee as the additional provisions when granting a license by bureaucratic action.⁵⁵⁾ However, according to the Radio Act Amendment Bill, it seems that the duties such as protecting an area coverage rate which are prescribed in the bidding establishment policy can be applied as a condition for approval, and setting up a station in compliance with the bidding establishment plan (in other words, conforming with the area coverage rate prescribed in the bidding establishment plan) is a “condition” legally prescribed in Article 27-17-8 (1) (ii). It should be noted that this is different in nature from additional

55) However, these kinds of conditions should be clarified at the stage of publicizing the auction.

provisions applied at the discretion of the governing authorities. In any event, the Panel Discussion Report claimed that a duty such as providing an area/population coverage rate should be a condition of the auction saying “when the subject of a frequency auction is a wireless system that provides service to a wide region such as a mobile communication system, there may be concerns that investment in facilities in non-profitable areas will be delayed and there may be a need to prevent participation in the auction by operators whose objective is not to use the frequency by itself but to resell it to someone else. Thus reaching a specified area/population coverage rate can be set as a condition of the auction and it would be appropriate to adopt measures that the status of the successful bidder would be cancelled if that condition is not satisfied.”

While it is understood that the qualification obtained by a successful bid is the acquisition of an exclusive position to apply for the license, it should also be understood that in terms of processing the application, the Minister may not refuse to grant the license unless there are special circumstances. The reason for this is that, a considerable capital investment is made to win exclusive position in the bid if the result of a successful bid was that the license was not granted, it could bring unforeseen losses to carrier operators participating in the bidding. Notwithstanding the abovementioned explanation, it does not mean that any rights in the nature of property rights (the possibility of transferability of status) are directly connected to that exclusive status. The granting of transferability is, in terms of achieving efficient usage of frequency, certainly appealing to carrier operators for the point that it allows flexibility in corporate strategy after a party has acquired the status (For argument sake, even if we accept it that transferability - the ability to dispose of the rights - could not be granted to that status, a certain asset like value in that status must be admitted to the carrier that acquires the status or between private entities (something that could be recognised as an intangible asset according to corporate accounting standards)), however as a policy decision, denying transferability of the status and granting an exclusive right may be possible and appropriate.

The Radio Act Amendment Bill provides that it should devise a bidding establishment policy for the relevant base station, when seeking to maximize the economic value of radio waves by virtue of determining the party that may apply for a license for a base station for telecommunications service through bidding. And the relevant bidding establishment plan is to record matters concerning the frequency that is the subject of the bidding, the effective term of the approval (up to 20 years), minimum bid price, amounts for guarantees, method of payment of the amount of the successful bid, the term of payment, the method of implementing the bidding, and so on (Radio Act Amendment Bill Article 27-17-2).⁵⁶⁾ The reason for this is that it is essential when there is a license allocated by auction the subsequent business activities will be conducted smoothly and swiftly in accordance with the original plan, and a successful bid for frequency by auction must not be made simply for its own sake. From this perspective, it is essential to apply a duty to have conditions and the minimum necessary examination for the purpose of smooth and prompt development of business activities after the successful bid.

On the third point, “the purposes for which the income is used”, the Panel Discussion Report found that “in respect of the purposes for which income obtained by auctions for spectrum that are an asset owned by the people in common can be used, it is appropriate that the auction income be used to cover expenses required for the smooth implementation of the auction, such as firstly, auction administration expenses, or expenses of transferring another frequency to the existing licensee who used to control the frequency covered by the auction”. Thus it is appropriate that in addition to returning benefit to radio wave users by application of the funds toward encouraging ICT for effective use of frequencies, the income From spectrum as a financial resources of the state should also be returned to the

56) Moreover, when there are applications for approval of bidding establishment plans the Minister implements the bidding etc. for those parties who have submitted a bidding establishment plan that conforms to the bidding establishment policy, and approves the bidding establishment plan of the party with the highest bid price (Radio Act partial amendment act Article 27-17 (3)).

people as a whole. The point is that exclusion of expenses necessary for smooth implementation of an auction clarifies that the income is a general resource. Thus the same legal definition of the income can be seen in the Radio Act Amendment Bill.⁵⁷⁾

On the abovementioned fifth point concerning basic system design, for example, preventing malpractices is important. This is because, as stated in the Panel Discussion Report, performing any act in the bidding, such as employing techniques or posing threats to create an erroneous rather than a reasonable decision or bid rigging in which participants concertedly lower the value of the winning bid in advance, prevents bidding from fair procedures and ignores the objective of the frequency auction system.” Thus the Radio Act Partial Amendment Act Draft creates sanctions in Article 109-4, Article 109-5, and Article 114 against parties or those in a collusion of parties, who perform an act that damages the fairness of bidding which provide for prison terms of up to three years, a fine of up to ¥2.5 million or a combination of both (severe penalties are prescribed for public servants and legal persons).

On the final point proposed concerning foreign capital, the Panel Discussion Report stated that Considering WTO (World Trade Organization) treaties since the treatment of foreign capital in relation to wireless stations for telecommunications business in Japan should be performed appropriately according to the foreign exchange laws which belongs to the general law regarding foreign currency restrictions, there is no need to adopt special measures for the introduction of frequency auction systems.

In Japan, Article 5 (1) of the Radio Act establishes restrictions on foreign capital that constitute a reason for disqualification for a radio station license, but under Article 5 (2) (viii) these restrictions on foreign capital are not applied to wireless stations which are established for the objective

57) However, compensation costs incurred by existing licensees required to transfer to other frequencies in line with amendments to international treaties and planning and implementation expenses associated with the bidding etc. have been included as expenses necessary for smooth implementation of auctions (Radio Act partial amendment act Article 27-17 (6)).

of performing telecommunications business (in other words services providing telecommunication services). Further, these foreign capital restrictions are applied not only when carrier establishes a wireless station but also after received its license for the station (Radio Act Article 75 (1)), howe for a wireless station established for the objective of performing telecommunications services, in the same manner as above, the restrictions on foreign capital do not apply either. In this way, wireless stations for telecommunications services are excluded from the coverage of the restrictions on foreign capital in the Radio Act and this is due to Japan's undertakings to the WTO which promise to open up to foreign capital in telecommunications services except for restrictions on investment in NTT (Nippon Telegraph and Telephone Corporation).⁵⁸⁾

That is to say, in the United States Article 310 (b) (3) of the Communications Act, it maintains restrictions on direct investment from foreign countries in wireless stations such as telecommunications service wireless stations that the rate can not exceed 20%. Thus, for example, in the course of providing communications services using satellites in the US if a Japanese carrier operator wished to acquire a wireless station license for a terrestrial station established in the US, it would be impossible, making it difficult to construct a flexible network. Further, in the case of indirect investment in wireless stations etc. for telecommunications services from foreign countries, the Communications Act Article 310 (b) (4) maintains this restriction that the rate cannot exceed 25%. For the United States Federal Communications Commission (FCC) Regulations concerning participation from capital of foreign nations (FCC 97-398, November 25,

58) However the undertakings under the WTO do not prevent devising methods necessary to ensure a member state maintains public order. Thus, under the Foreign Exchange and Foreign Trade Act (Foreign Exchange Law), a party seeking to make direct domestic investments etc. in information communications business is obligated to file a report which is examined by the government. Basically, when a foreign investor is seeking to make direct internal investments in specified industries declared by Cabinet order to be subject to concerns that these may affect national security, they are required to file a report in advance and the government conducts a prior examination.

1997), in the case of investment from WTO member states, when the level of investment exceeds 25%, one could offer the rebuttal that it would serve the public benefit. However up to this point the regulations have not been abolished. Further, at administrative level meetings of the United States-Japan Economic Harmonization Initiative,⁵⁹⁾ no positive response was seen from the United States side as the discussions continued.⁶⁰⁾

It can thus hardly be said “reciprocal”, judging from the restrictions on direct investment and indirect from foreign capital pertaining to wireless station licenses that is obtained for the objective of performing telecommunications services in the US. And viewing the state of progress in the dialogue between the US and Japan until now, it is hard to see the US side compromising on these restrictions. As for Japan, it is also evident

59) The governments of Japan and the US conducted an exchange of their respective wishes concerning regulatory reform and competition policy etc. in the “US-Japan Regulatory Reform and Competition Policy Initiative” launched in 2001. Since the exchanges of 2008 however, as a result of investigations concerning the state of dialogue on the economy between the two nations conducted both within and between their respective governments, it was decided not to exchange their views. A framework launched as a framework to replace the economic dialogue until now including “regulatory reform and competition policy initiatives” is a framework based on the “Fact Sheet on New US-Japan Initiatives” (a document published at the time of the Japan-US Summit Meeting talks of November 13, 2010). This United States-Japan Economic Harmonization Initiative is a framework corresponding to this US-Japan Regulatory Reform and Competition Policy Initiative. In the Harmonization Initiative dialogue was pursued concerning promoting smooth trade, preparing the business environment, dealing with individual conditions and regional issues of concern to both parties.

60) At the United States-Japan Economic Harmonization Initiative administrative level meetings last year, the following kinds of requests concerning foreign regulation on US wireless station licenses were expressed, but the US response was lackluster. In other words, foreign capital restrictions related to wireless station licenses, the restrictions on foreign capital applying for wireless station licenses for the purpose of conducting telecommunications business (for direct investment up to 20%, indirect investment up to 25%) should be abolished to enable foreign telecommunications carriers to construct flexible networks. Additionally, as concerns restrictions on entry into the US market by foreign telecommunications carriers, the examination standards concerning entry to the US market by foreign enterprises etc. should maintain opportunities for entry by carriers or foreseeability, while the examination standards at time of entry into the US market by foreign telecommunications carriers etc. comprising “concerns over commerce”, “foreign policy” and “extremely high risks to competition” should be abolished or clarified. See, <http://www.mofa.go.jp/mofaj/area/usa/keizai/pdfs/tyouwataiwa1102.pdf> (last visited on May 2013).

that a policy has been taken in the foreign capital restrictions of NTT⁶¹⁾ is sufficient and necessary. But even if this is correct from the viewpoint of telecommunications business administration, but on the other hand, from the viewpoint of spectrum administration, doubts may remain. These issues remain after the Panel Discussion Report, and will continue to be investigated.

5 Radio Act Amendment Bill

As mentioned, the Act for Partial Amendment of the Radio Act Bill (Radio Act Amendment Bill) has been submitted to the National Diet.⁶²⁾ Judging from the current political situation, the outcome on establishing this Radio Act Amendment Bill remains uncertain, at the end of this paper an outline of significant points in the draft is presented. The Radio Act Amendment Act Bill newly establishes provisions from Article 27-17-2 to Article 27-17-10 in the existing Radio Act, prescribing matters concerning bidding establishment policy for base stations subject to bidding and approval of bidding establishment plans. Frequency auctions⁶³⁾ are now placed as a special program for specified base station establishment operations. It should be noted that application of these rules for auctions to broadcast frequencies and other services is not envisaged.

Further, among wireless stations corresponding to the existing specified base stations, the subject radio frequency is regarded as follows.⁶⁴⁾ “It

61) That is to say, regardless of whether direct or indirect, limit of less than one third holding of voting rights in NTT holding company and prohibition on any person not holding Japanese citizenship from appointment to a position as a director or auditor of NTT holding company or both NTT East and NTT WEST. Article 6 and Article 10 of the Act on Nippon Telegraph and Telephone Corporation, etc.

62) Decision on March 9, 2012. Submitted to the Diet on the same day.

63) According to the terms in the law draft, the frequency auction system is a “system for telecommunications services base stations (mobile phone base stations) that use specified frequencies, in which, from among those parties who have made application with a plan that conforms to the Establishment Policy prescribed by the Minister, the bidding establishment plan of the party that bids the highest amount (bidding or competition) is approved.”

64) Radio Act Amendment Bill, Article 27-17-2 (1).

is accepted that, by means of bidding or competition of among parties, a decision on who may perform an application for a license can be made with the maximum economic value of radio waves”.⁶⁵⁾

The matters prescribed in the policy concern the establishment of stations which are the objects of the bidding and the implementation of bidding (Radio Act Partial Amendment Act Draft Article 27-17-2 (1)). That is to say, what is prescribed in the bidding establishment policy regarding auctions is as follows: (1) guarantee bond to be provided by bidding participants; (2) the appropriate amount when setting the amount for a minimum successful bid; (3) the effective term of an approval; and (4) other matters concerning the implementation of bidding.⁶⁶⁾ In addition to these there are (4) the scope of base stations covered; (5) the frequencies used; (6) the timing of the location and establishment of base stations; (7) the technology for maintaining effective usage of frequencies; (8) promotional measures for termination; and (9) matters concerning promoting smooth establishment.⁶⁷⁾ These points are the same as those present points applicable when establishing a specified base station. What is of interest here is firstly point (2), the appropriate amount when setting the amount for “a minimum successful bid”. When considering how this amount should be set it is necessary to have transparency and clear calculation standards so that, while it is an administrative decision of the bureaucracy, the amount will not be set at the discretion of the opinion from time to time. Further, concerning point (8), when there is an existing licensee, promotional measures for termination are required in the same way as the present, and transfer expenses must be paid in the same manner as applies in the case of 700/900 MHz band frequencies. Then the bid amount must be paid in addition to this. As to the matters to be recorded in the bidding establishment plans, the same as existing establishment plans, there are (1) scope of transfer of wireless stations to be moved; (2) desired frequencies;

65) If economic value is accepted, the systems approved in the existing Establishment Policy and establishment plan are applied.

66) Radio Act Amendment Bill, Article 27-17-2 (2).

67) Radio Act Amendment Bill, Article 27-17-2 (2).

(3) location of establishment and the period of establishment of the base stations; (4) technology related to the efficient usage of radio waves; and (5) matters as prescribed by ministerial ordinances.⁶⁸⁾ However, unlike the case of existing establishment plans, items on method of payment for construction and operations expenses associated with a base station, records of business plans, and business revenue forecasts are not required by present law. This point will be determined through implementation of auction systems. (Under the existing law these matters only need to be recorded for specified base stations called multimedia broadcast use. They are not required in case of specified base stations for mobile phones. Because the auction system focuses only on mobile phones, in the same manner as applies with the present law, these matters should not need to be recorded). Further, when termination of incentive measures are only necessary matters concerning the content and method of payment of expenses are not required to be recorded in the bidding establishment plan. The MIC has shown that closing incentive measures are necessary in the bidding establishment plans, but they have nothing to say on the method of implementation and the content. This means that closing incentive measures are emphatically a voluntary system for enabling an attested establisher to swiftly establish their base station, while the implementation is left to the incentive of the attested operator. For this reason, in the case of an auction, implementation of closing incentive measures is not a duty of minimum compliance placed on the successful bidder by the state, and in the approval the state makes no judgment on the merits of the content. Accordingly, the Radio Act Amendment Bill does not require these matters to be recorded in the bidding establishment plan.

Parties who submitting a bidding establishment plan can participate in the bidding process when satisfying two requirements simultaneously, including (1) their plans are appropriate in the light of the bidding establishment policy, and (2) there is no illegality such as crime.⁶⁹⁾ From

68) Radio Act Amendment Bill, Article 27-17-3 (1), (2).

69) Radio Act Amendment Bill, Article 27-17-4 (i), (ii).

the purport of the reasons for introduction of auctions, it can be ascertained that for requirement (1), minimum requirements for qualification (absolute examination standards) have been established for the bidding establishment policy. For final implementation of the bidding and approval of bidding establishment plans, the successful bidder or competitive bidder is decided based on the highest amount for the bid, and that party's plans go for approval.⁷⁰⁾

Finally, regarding the purposes for which the amount of the successful bid can be used, it requires that the budget of the amount which is equivalent to the amount of income from the successful bid can be applied for (1) compensation for losses related to cancellation of a license for a wireless station, changes of frequency, and (2) expenses for implementation such as for bidding, as recognised in the budget each business year.⁷¹⁾ Further, depending on the prescriptions of the budget, this may be applied retrospectively to such expenses incurred in past years.⁷²⁾ There is no regulation that the amounts are attributed to general accounts, however they cannot be applied to policy type expenses for telecommunications, therefore the amounts naturally come to general accounts. This was what was proposed by the Panel Discussion as well.

6 Conclusion

This paper provides a general view on the efforts by the government until the present concerning the state of effective usage of spectrum, which are essential in promoting more convenient lifestyles for the people and in maintaining stability and safety, amidst a background of increasing pressures on frequencies in line with the development of wireless broadband. In order to promote more effective usage of frequencies, policies that provide the key to go forward are believed to be focused, as

70) Radio Act Amendment Bill, Article 27-17-5.

71) Radio Act Amendment Bill, Article 27-17-6.

72) (2) of that Article of the Bill.

implied in the 700/900 MHz band frequency reorganization, the spectrum auction system and the spectrum user fees system. Many issues remain surrounding spectrum user fees. The existing spectrum user fees are expenses for spectrum users' common benefit, which are premised on the relationship between the benefits received by and the burdens placed on wireless station licensee. But here there is room to reinvestigate what these "common benefits" are. Further, in the light of future developments in the spectrum usage, a uniform review concerning the purposes of usage of spectrum user fees is inevitable.⁷³⁾ What are the purposes necessary in order to promote development of radio frequency resources or to reorganize radio frequencies, which are contribute to expanding needs affecting spectrum usage? What are the purposes necessary to cope with unprecedented emerging radio wave usages which support economic and social activities through small-scale wireless stations not consciously noticed among users such as those using 3-D contents wireless transmission, wireless navigation systems in electric cars, green IT and home healthcare people? Issues surrounding promotion of the effective use of spectrum going forward illustrate that information communications is an important lifeline of the people.⁷⁴⁾ Even for that reason only, the Ministry of Internal Affairs and Communications that is responsible for spectrum management, carries a heavy responsibility. From now on, spectrum policy will be continuously reviewed and amended.

73) Further, the distribution of the amount for spectrum user fees to the burden of payment on each wireless system is proportional to the frequency bandwidth, however several issues remain to be investigated further. These include, how to handle the characteristic coefficient in order to lighten the amount with due consideration to the commonality aspect, the existing purposes for usage of spectrum user fees (administration concerning maintaining appropriate usage of spectrum, for the direct objective of benefiting all wireless stations) and how to maintain each framework pertaining to the characteristics of spectrum user fees (placing the burden for payment of the licensees etc. who are the beneficiaries of the expenses for those administrative processes).

74) The MIC commenced the Investigative Commission for Promotion of Effective Use of Radio Spectrum headed by the Vice Minister of Internal Affairs and Communications from 2012, in order to investigate basic policy and various issues on effective use of frequencies.

Postscript

After this paper was completed and at the correction stage, the Draft Interim Report from Investigative Commission for Promotion of Effective Use of Radio Spectrum (July, 2012) was disclosed. There, it was found that radio waves are mutually interfering electromagnetic waves, a limited scarce resource in their relationships with location, time and frequencies (limitation and scarcity) and reach to places outside the usage objective (dispersion), thus it is necessary to devise appropriate usage of frequencies through application of uniform rules. Nonetheless, in reviewing rules related to spectrum usage, considering these kinds of properties of frequencies, in addition to rules through laws and regulations, the review was conducted based on the thinking about improving utilization via technology, market mechanisms and social norms. Under this basic thinking, Chapter 1 of the above Report is a review of the state of rules covering changes in the spectrum usage environment and Chapter 2 of the Report is a review into promotion of effective usage of spectrum from the perspective of users. Chapter 3 of the Report is a review on the state of utilization of spectrum user fees, as these pertain to expenses for policy to realize the solutions investigated in Chapter 1 and Chapter 2 of the Report. It is important to observe how the debates evolve.

【附記】

本稿は、日本学術振興会若手研究者戦略的海外派遣事業費補助金・頭脳循環を加速する若手研究者戦略的海外派遣プログラム「法整備支援研究の世界的結節点をめざして」による海外派遣助成に基づく研究成果の一部である。