Major Business Combination Cases in Fiscal Year 2016
(Tentative Translation)

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Japan Fair Trade Commission

For the purpose of ensuring the transparency of reviews undertaken by the Japan Fair Trade Commission (hereinafter referred to as "JFTC") on business combination cases, and for the purpose of improving the predictability of the JFTC's reviews on cases, the JFTC has published "Guidelines to Application of the Antimonopoly Act concerning Review of Business Combination (May 31, 2004, JFTC. Hereinafter referred to as the "Business Combination Guidelines")"in applying the Antimonopoly Act (hereinafter referred to as the "AMA") to the JFTC's reviews on business combinations. In addition, the JFTC has also published the results of the reviews of major business combination cases each fiscal year.

This year, the JFTC also publishes the results of reviews of major business combinations in fiscal year 2016 and provides the data associated with these reviews.

The JFTC sincerely hopes that companies planning business combinations will make use of the published outcomes of the JFTC's reviews of major business combination cases, as well as the Business Combination Guidelines.

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Major Business Combination Cases in Fiscal Year 2016

(Note 1) The order of the cases in this document complies with the order used in the Japan Standard Industry Classification, applied to business concerning products and services subject to reviews of business combinations.
(Note 2) Confidential information and competitor names, etc. associated with the companies concerned are not disclosed in the respective cases.
(Note 3) Market shares, HHI levels after business combinations, and number counts, i.e. the increment, etc. of the HHI after business combinations, are shown as "approximate figures estimated by the JFTC" based on the calculations according to the documents/materials submitted by the companies concerned

(note that the term “HHI” in this context refers to the Herfindahl-Hirschman Index; the same shall be applied hereafter). When it comes to market shares, in principle, these figures are shown at 5% intervals.

(Note 4) In each case, a horizontal business combination refers to a business combination between companies with a competitive relationship in the same particular field of trade, a vertical business combination refers to a business combination between companies at different transaction stages, such as a merger between a manufacturer and a distributor that sells its products, and a conglomerate business combination refers to a business combination that is neither a horizontal business combination nor a vertical business combination, including a merger between companies in different industries and acquisition of shares between companies in different geographic ranges in the same particular field of trade.

Case 1 Acquisition of Weyerhaeuser NR Company's business of manufacturing and sales of liquid packaging board by Nippon Dynawave Packaging

Part I Outline of this case

This case concerns a plan in which Nippon Dynawave Packaging Co. (headquartered in the US, hereinafter referred to as "NDP")[1], which belongs to a group of combined companies which are held by the ultimate parent company, Nippon Paper Industries Co., Ltd. (JCN 8011501009422) (hereinafter referred to as "Nippon Paper"; the group of combined companies hereinafter referred to as "Nippon Paper Group"), would acquire business of manufacturing and sales of liquid packaging board (hereinafter referred to as "LPB") based in the State of Washington, US, from Weyerhaeuser NR Company (headquartered in the US and hereinafter referred to as "Weyerhaeuser"; Nippon Paper Group and Weyerhaeuser hereinafter collectively referred to as "the Parties"; the acquisition concerned hereinafter referred to as "the conduct of this case").

The applicable provision in this case is Article 16 of the AMA.

Part II Particular field of trade

1. Product description

(1) LPB

LPB is a type of white paperboard used for paper containers for liquid produced by a paper machine processing virgin pulp, the raw material. LPB is processed into paper containers for liquid including beverages (drink boxes, cartons) at manufacturers of paper containers for liquid and used by them.

LPB is usually manufactured through a process of 1) producing pulp, 2) processing into paperboard (papermaking), and 3) laminating. Depending on the usage, it may be sent to manufacturers of containers for liquid, who are customers, before being laminated, and they laminate it together with aluminum foil after other processing such as printing.

While LPB manufactures exist around the world, manufacturing processes and techniques used by them are quite similar.

(2) Containers for liquid

Containers for liquid (drink boxes, cartons) are divided into the following two types of products:

1) Those produced by LPB getting printed with designs for goods of each

[1] NDP is Nippon Paper's wholly-owned subsidiary established in the American State of Delaware by Nippon Paper only for the purpose of achieving the conduct of this case (so-called buyer SPC).

customer, creased, stamped out, and then sealed and folded before being packed (gable–top-type)

2) Those produced by LPB getting printed, creased, laminated and then wound into a roll before being packed (brick-type)

Manufacturing processes and techniques used by manufacturers of either type of containers for liquid are quite similar.

2. Product range

(1) LPB

As LPB is paperboard for paper containers which will be filled with liquid, it is substantially different from other types of white paperboard in terms of durability, watertightness, processing suitability, etc. For this reason, there is no demand substitutability with other types of white paperboard for the users, who are manufacturers of paper containers for liquid.

As well, supply substitutability is limited because LPB is ultimately used for containers for liquid including beverages, thereby making itself different from other general types of white paperboard in terms of raw materials, manufacturing process, and quality control, for example:

1) Only virgin pulp is allowed as raw materials and pulp recycled from used paper collected from homes will not go in;
2) Special measures need to be taken to ensure hygiene of a manufacturing environment including inspection during the manufacturing process to see whether bacteria are kept under a certain level.

In the meantime, LPB, especially the gable-top-type LPB, is required to be laminated and all major LPB manufacturers have laminators. While different raw materials are used for laminating process, the purpose of laminating is the same, which is enhancing LPB's functions including durability and watertightness. Therefore, substitutability exists among LPBs manufactured with different raw materials. As well, in some cases, the users, who are manufacturers of containers for liquid, laminate LPB by themselves or outsource the process to a third party, based on which demand substitutability for users is found to exist between laminated LPB and non-laminated LPB.

Based on the above, the JFTC defined a product range as "LPB" in this case.

(2) Containers for liquid

As discussed in the above 1 (2), there are two types in the form of paper containers for liquid: the gable-top type and the brick type.

The gable-top type is mainly used for refrigerated transport of milk,

processed milk, fruit juice, etc. which cannot be preserved for a long time whereas the brick type is mainly used for normal-temperature transportation of long-life soft drinks. For this reason, users of the gable-top type are mainly dairy manufacturers whereas the brick type is used mainly by manufacturers of beverages including tea and other soft drinks.

As well, there is no substitutability for users between the gable-top type and the brick type because the brick type undergoes a sterilization process upon being filled by liquid in order to make the content last for a long time at room temperature, and also uses different filling equipment from the gable-top type.

Based on the above, the JFTC defined product ranges as "Gable-top-type paper containers for liquid" and "Brick-type paper containers for liquid" in this case.

3. Geographic range

(1) LPB

Manufacturers of paper containers for liquid in Japan including Nippon Paper import LPB from manufacturers in other countries to cover around 95% of domestic demand. LPB comes from LPB manufacturers around the world including North America and Europe. Manufacturers of paper containers for liquid in and outside of Japan usually have multiple suppliers to trade with. They obtain quotes from multiple LPB manufacturers in and outside of Japan, consider price, quality, and delivery terms, etc., and decide on whom to purchase from, which means they do not discriminate LPB manufacturers for where they are located even if they are far away from Japan.

As well, major LPB manufacturers including Weyerhaeuser export products to not only Japan but the entire world including North America, Asia, Europe, and Australia. As there is no special barrier against transportation of LPB, it can be shipped to any place in the world without much cost. According to the estimate by the Parties, transportation cost of LPB accounts for less than 10% of the total procurement cost. On top of that there is no duty imposed on LPB imports, distance factors including shipping cost have only a minor impact on LPB price.

Accordingly, the JFTC defined the geographic range for LPB as "worldwide."

(2) Paper containers for liquid

Users who purchase paper containers for liquid from Nippon Paper are dairy/beverage manufacturers located all over Japan, and these users generally purchase paper containers for liquid only from manufacturers in Japan. There is no geographic restriction on transportation of paper containers for liquid in Japan and prices do not vary depending on the region either.

Therefore, the JFTC defined the geographic range for paper containers for liquid as “all regions of Japan.”

Part III Impact of the conduct of this case on competition

1. Horizontal business combination

The following table shows market shares of the Parties and competing enterprises concerning LPB manufacturing business. As well, the HHI will increase by around two points. Therefore the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[LPB market shares in 2014]

Rank	Company name	Market share
1	Company A	Approx. 25%
2	Company B	Approx. 20%
3	Company C	Approx. 15%
4	Company D	Approx. 10%
5	Company E	Approx. 10%
6	Company F	Approx. 5%
7	Weyerhaeuser	Approx. 5%
8	Company G	0-5%
9	Company H	0-5%
10	Company I	0-5%
	Nippon Paper	0-5%
	Others	0-5%
Total		100%

2. Vertical business combination

(1) Position of the Parties and conditions of competing enterprises

A. Upstream market

Market shares of the Parties and competing enterprises concerning LPB manufacturing are provided in the above 1 and the HHI will increase by two points. Therefore, the conduct of this case meets the safe-harbor criteria for vertical business combinations.

B. Downstream market

(a) Manufacturing of gable-top-type paper containers for liquid

The following table shows market shares of the Parties and competing enterprises concerning manufacturing of gable-top-type paper containers for liquid. The HHI is around 2,200, while the Parties' market share is around 35%. Therefore, the conduct of this case does not meet the safe-harbor criteria for vertical business combinations.

[Market shares of gable-top-type paper containers for liquid in 2014]

Rank	Company name	Market share
1	Nippon Paper	Approx. 35%
2	Company J	Approx. 20%
3	Company K	Approx. 15%
4	Company L	Approx. 10%
5	Company M	Approx. 10%
6	Company N	Approx. 10%
Total		100%

(b) Manufacturing of brick-type paper containers for liquid

The following table shows market shares of the Parties and a competing enterprise concerning manufacturing of brick-type paper containers for liquid. The HHI is around 7,300, while the Parties' market share is around 15%. Therefore, the conduct of this case does not meet the safe-harbor criteria for vertical business combinations.

[Market shares of brick-type paper containers for liquid in 2014]

Rank	Company name	Market share
1	Company O	Approx. 85%
2	Nippon Paper	Approx. 15%
Total		100%

(2) LPB purchase refusal, etc.

A. Capabilities to implement customer foreclosure

Nippon Paper's market share in manufacturing of paper containers for liquid in Japan is around 35% for the gable-top type and around 15% for the brick type, as discussed in the above (1) B (a) and (b). Competing enterprises account for a substantial share in both markets.

As well, the market for LPB is not limited to Japan and it can be sold to

manufacturers of paper containers for liquid all over the world. In fact, multiple influential LPB users, located outside of Japan, are manufacturing paper containers for liquid.

Accordingly, even if Nippon Paper, after carrying out the conduct of this case, discontinues or reduces purchase of LPB from manufacturers which are competing against NDP in the upstream market (such an act is referred to as "customer foreclosure" in (2) and (3)), the competing enterprises would be able to switch their LPB sales from Nippon Paper to other manufacturers of paper containers for liquid in and outside of Japan. Therefore, it is reasonable to assume that Nippon Paper does not have capabilities to implement customer foreclosure.

B. Incentives to implement customer foreclosure

Around half of LPB Nippon Paper purchased in 2014 was from Weyerhaeuser.

Manufacturers of paper containers for liquid in Japan including Nippon Paper purchase LPB from multiple suppliers in and outside of Japan. This is because if they source LPB from the US only, it may interfere with their manufacturing of paper containers for liquid, if LPB supply stop due to a dock strike which happens often in the US occurs, in addition to the fact that there is not much difference in product quality between US and European LPB manufacturers.

As well, in some cases, the customers of manufacturers of paper containers for liquid, who are dairy or beverage manufacturers, may designate manufacturers who provide LPB used for their paper containers for liquid.

In consideration of such needs to hedge procurement risk and meet customers' request, it is considered difficult for Nippon Paper, after carrying out the conduct of this case, to raise the LPB purchase rate from NDP and thereby trading with NDP only. Therefore, it is considered that the conduct of this case is unlikely to generate incentives for Nippon Paper to implement customer foreclosure.

C. Summary

According to the above discussion, the JFTC decided that the issue of closure or exclusivity of the market would not arise from implementation of customer foreclosure if the conduct of this case was carried out.

(3) Coordinated conduct by LPB manufacturers

If Nippon Paper, after carrying out the conduct of this case, continues to trade with LPB manufacturers who are competing against NDP without implementing customer foreclosure, NDP will be able to obtain competing enterprises' competitively important information including LPB price through Nippon Paper, which will make it easier for NDP to predict those competitors' behavior. Those competitors will also assume that NDP has access to their information. As a result, NDP and competing enterprises would be more likely to coordinate their conduct with each other in the LPB manufacturing business.

However, as discussed in the above 1, there are many influential LPB manufacturers, and it is unlikely that NDP and competing enterprises will form common understanding concerning their coordinated conduct.

Accordingly, in the upstream market, it is considered that the conduct of this case is unlikely to increase the possibility for the Parties and competing enterprises to coordinate their conduct.

(4) LPB supply refusal, etc.

Market shares of the Parties and competing enterprises concerning LPB manufacturing are as discussed in the above 1, and the market share of the Parties, after carrying out the conduct of this case, will be around 5%. Therefore, the conduct of this case meets the safe-harbor criteria for vertical business combinations.

Accordingly, the JFTC decided that the issue of closure or exclusivity of the market would not arise, even if NDP, after carrying out the conduct of this case, refused to supply LPB to Nippon Paper's competitors who manufactured gable-top-type or brick-type paper containers for liquid (such an act is referred to as "input foreclosure" in the following (5)).

(5) Coordinated conduct by manufacturers of paper containers for liquid

On the other hand, if NDP, after carrying out the conduct of this case, does not implement input foreclosure, and continues to trade with Nippon Paper's competitors, Nippon Paper will be able to obtain competing enterprises' competitively important information (their LPB procurement cost, volume, product specifications, procurement plans, etc.), and Nippon Paper and competitors would be more likely to coordinate their conduct in consideration of the following:

1) While there are relatively few businesses competing in manufacturing of gable-top type paper containers for liquid, as discussed in the above (1) B (a), Nippon Paper holds the largest market share.

2) There are only two manufacturers of brick-type paper containers for liquid including Nippon Paper as discussed in the above (1) B (b).

However, as discussed in the above 1, there are many competitive LPB manufacturers, and Nippon Paper's competitors are able to trade with not only NDP but also those other competitive LPB manufacturers. Therefore, even if Nippon Paper obtains its competitors' information such as LPB procurement cost through NDP, Nippon Paper is considered to have difficulties in predicting competitors' procurement cost for LPB provided by other suppliers. On top of that, the Parties informed the JFTC on their intent to take measures to not share information as discussed later in Part IV. The JFTC, therefore, decided to conduct legal assessment based on the AMA in light of the details of the Parties' measures.

Part IV The Parties' proposal of measures to not share information

The Parties submitted the written notification to the effect that Nippon Paper and NDP would take measures to not share information (hereinafter referred to as "the measures in this case") after carrying out the conduct of this case, and keep them in place until they become unnecessary as a result of a change in the market environment or the ratio of shareholding in order to expedite the JFTC's examination on this case.

Details of the measures in this case proposed by the Parties are as follows:

1) Executives and regular employees engaged in LPB operations of Nippon Paper Group (hereinafter referred to as "executives and regular employees concerned") do not disclose competitively significant information gained through their LPB operations concerning competitors in the downstream market (LPB procurement cost, volume, product specifications, procurement plans, etc.) to Nippon Paper's executives and regular employees of the departments in charge of operations of paper containers for liquid (hereinafter referred to as "departments in charge of operations of paper containers for liquid").
2) To guarantee the confidentiality discussed in the above 1), the Parties demand that the executives and regular employees concerned submit a covenant to the effect that they agree that disclosure against the confidentiality obligation would be subjected to disciplinary action. As well, the Parties will make sure that the executives and regular employees concerned would not concurrently hold a post in one of the departments in charge of operations of paper containers for liquid and that if they are transferred to other departments after the Parties carry out the conduct of

this case, they would not be assigned to one of the departments in charge of operations of paper containers for liquid for at least two years after they leave LPB operations.

3) The departments in charge of operations of paper containers for liquid are currently placed on a floor of Nippon Paper's headquarters building that is different from the floor on which the departments for the executives and regular employees concerned are placed. On top of that, executives and regular employees of the departments in charge of operations of paper containers for liquid cannot access to data stored in a department's shared system folder in other departments Therefore, information is currently shared neither physically nor systematically, and the Parties will continue such information management after carrying out the conduct of this case. Likewise, the Parties will make adjustment to NDP's information-sharing system so that it would become inaccessible by executives or regular employees of the departments in charge of operations of paper containers for liquid at Nippon Paper.
4) After carrying out the conduct of this case, Nippon Paper will file a report to the JFTC on details of measures taken based on the above 1)-3) . As well, the Parties will obtain the JFTC's prior approval if they wish to discontinue implementation of the measures in this case as a result of a change in the market environment or the ratio of shareholding.

Part V Assessment of the measures in this case

If the measures in this case as discussed in Part IV above are taken, it will be even more unlikely that Nippon Paper and competing enterprises will coordinate their conduct in manufacturing gable-top-type and brick-type paper containers for liquid. Therefore, the JFTC decided that the measures in this case would be significant.

Part VI Conclusion

Based on the circumstances discussed in Part III 2 (5) above and the premise that the measures in this case proposed by the Parties are taken, the JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 2 Integration of Dow Group and DuPont Group

Part I Outline of this case

This case concerns a plan in which 1) The Dow Chemical Company (headquartered in the US and hereinafter referred to as "Dow"; a group of enterprises which have joint relationships with Dow hereinafter referred to as "Dow Group") and Diamond Merger Sub, Inc. (headquartered in the US) would be merged into a surviving company, Dow; and E. I. du Pont de Nemours and Company (headquartered in the US, hereinafter referred to as "DuPont"; a group of enterprises which have already built joint relationships with DuPont hereinafter referred to as "DuPont Group"; Dow Group and DuPont Group collectively referred to as "the Parties") and Orion Merger Sub, Inc. would be merged into a surviving company, DuPont ; and 2) DowDuPont Inc. (headquartered in the US) would acquire all shares of Dow and DuPont (hereinafter, 1) and 2) above collectively referred to as "the conduct of this case").

The applicable provisions in this case are Article 10 and Article 15 of the AMA.

While there are many specific products manufactured and sold by the Parties which are in horizontal or vertical relationships, the following examines products that are considered to have a relatively large impact on competition (acid co-polymers, KrF photoresist polymers, and KrF photoresists).

Part II Acid co-polymers

Acid co-polymers are petrochemicals produced by combining ethylene and refined acrylic acid or methacrylic acid through high pressure copolymerization, and have a wide variety of usage including high-performance sealants, extrusion coating, adhesive lamination, adhesive tie-layer, combination for reforming shock resistance, etc.

Among petrochemicals of which the Parties would have a higher total market share after carrying out the conduct of this case are acid co-polymers, and the Parties' domestic market share in total would be around 95% as seen in the following table. However, the Parties proposed that they would conduct business transfer discussed in the following 1 (hereinafter referred to as "the measures in this case"), which would effectively eliminate competition between the Parties. Therefore, the JFTC conducted legal assessment based on the AMA in consideration of the measures in this case.

[Domestic market shares of acid co-polymers in 2015]

Rank	Company name	Market share
1	DuPont Group	Approx. 90%
2	Dow Group	0-5%
3	Company A	0-5%
4	Company B	0-5%
Total		100%

1. The Parties' proposal of the measures in this case

The Parties proposed on acid co-polymer business as follows:

(1) The Parties will divest acid co-polymer manufacturing facilities owned by Dow Group (factories in US, etc.), agreements with customers, records thereof, raw-material supply agreements, certain employees, know-how, trademarks concerning acid co-polymers, operation-agreement services, etc.

(2) The Parties will select a buyer based on the following criteria: 1) the buyer is independent from the Parties; 2) the buyer is a force to be reckoned among the Parties and other players in the acid co-polymer market and has funds, technical skills and incentives to maintain and grow the business to be divested; and 3) the acquisition of the business by the buyer will not raise a concern over the competition.

(3) The Parties will separate the business to be divested from other operations by the Dow Group until completion of the measures in this case, support an independent third party (monitoring trustee)[1] which will make sure that the business to be managed as one that is appropriate for acquisition, and maintain economic growth potential, market value, and competitiveness of the business.

(4) The Parties will conclude an agreement with the buyer within a certain period of time after obtaining approval for the conduct of this case from the European Commission[2]. As well, the Parties will carry out divestiture within a certain period of time after obtaining approval for the buyer and terms of sale from the European Commission, etc. (including the JFTC; the same will apply hereinafter.)

(5) If the Parties fail to conclude an agreement with a buyer within a certain period of time after obtaining approval for the conduct of this case from the European

[1] A monitoring trustee is obligated to keep an eye on the Parties in terms of their conformity to conditions and duties provided by the measures in this case.

[2] As the European Commission was expected to require a longer period of time in investigating the business combination in question than other competition authorities, it was decided that the Parties would need to conclude an agreement with a buyer within a certain period of time after obtaining approval for the conduct of this case from the European Commission.

Commission, they will nominate an independent third party (business divestiture trustee) with the JFTC's consent, and the trustee will execute divestiture of the business defined in the above (1) within a period provided by the latter part of the above (4).

2. Assessment of the measures in this case

Based on the premise that the measures in this case are taken, carrying out the conduct of this case will not lead to an increase in the Parties' total share in the acid co-polymer market. A buyer is considered to be an independent competitor in the acid co-polymer market, if the requirement set out in the above 1 (2) is met, and whether this requirement is met is to be determined by the European Commission, etc. after receiving a report from the Parties. Therefore, the European Commission, etc. is provided with an opportunity to judge the eligibility of a candidate buyer beforehand. As well, the measures in this case, as discussed in the latter part of the above 1 (4), are supposed to be executed within a certain period of time after obtaining approval for the buyer and terms of sales from the European Commission, etc., thereby setting a clear time frame for implementation appropriately.

3. Summary

From the discussion above, based on the premise that the Parties take the proposed measures in this case, the JFTC decided that the conduct of this case would not substantially restrain competition in any particular field of trade.

Part III KrF photoresist polymers and KrF photoresists

1. Particular field of trade

(1) Product range

A. KrF photoresist polymers

Photoresist polymers are photosensitive resin and a raw material for photoresists. Being light sensitive, they are classified into a number of types by the wavelength of light[3], and manufactured for specific photoresists. Therefore, the users, who are photoresist manufacturers, select and use appropriate photoresist polymers which respond to a particular wavelength. Accordingly, there is no demand substitutability among various types of photoresist polymers.

While production process and facilities are the same across different types

[3] Based on the wavelength to which they respond, photoresist polymers are divided into ArF photoresist polymers for the 193nm wavelength, KrF photoresist polymers for the 248nm wavelength, i-line photoresist polymers for the 365nm wavelength, and g-line photoresist polymers for the 436nm wavelength.

of photoresist polymers, synthesis techniques and required technical levels vary depending on the type. As a result, a company which can manufacture ArF photoresist polymers may not be able to manufacture KrF photoresist polymers, for example. Therefore, supply substitutability among various types of photoresist polymers is limited.

According to the above discussion, the JFTC defined a product range based on each type of photoresist polymers which respond to a particular wavelength of light. As well, the JFTC examined the vertical relationship concerning "KrF photoresist polymers" between the Parties resulting from the conduct of this case because one of the Parties, DuPont Group, manufactures and sells "KrF photoresist polymers" while the other, Dow Group, manufactures and sells "KrF photoresist."

B. KrF photoresists

Photoresists are a liquid chemical agent made mainly from polymers, photosensitizer, and a solvent. With properties of reacting only to a particular wavelength of light, a photoresist is used for photolithography[4] in the semi-conductor manufacturing process where a circuit pattern is printed onto a silicon wafer (hereinafter referred to as "wafer") by using light. Photoresists are divided into a number of types based on the wavelength they react to.[5] As they have properties of reacting selectively to particular wavelengths of light, the users, who are semi-conductor manufacturers, select and use photoresists appropriate for a particular wavelength required by the design of semi-conductor manufacturing facilities. Accordingly, there is no demand substitutability among various types of photoresists.

As photoresists are used for producing fine circuit patterns by light, intricate and advanced techniques as well as accumulation of experience are required at the time of selection and preparation of photosensitive polymers, a raw material, and adjustment of reaction to wafers that are media to be coated with a photoresist. In addition, intellectual property and know-how required for manufacturing vary depending on the type of photoresists. Therefore, there is no supply substitutability among various types of photoresists.

According to the above discussion, the JFTC defined a product range based on each type of photoresists which respond to a particular wavelength of light.

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[4] Photolithography refers to a technique to produce a pattern made of exposed parts and unexposed parts by exposing the surface of a material coated with a photosensitive substance in a desired pattern. (The exposure technique is referred to as pattern exposure or imagewise exposure.)

[5] Based on the wavelength to which they respond, photoresists are divided into ArF (193nm) photoresists, KrF (248nm) photoresists, i-line (365nm) photoresists, and g-line (436nm) photoresists.

As well, the JFTC examined the vertical relationship concerning "KrF photoresists" between the Parties resulting from the conduct of this case because one of the Parties, DuPont Group, manufactures and sells "KrF photoresist polymers" while the other, Dow Group, manufactures and sells "KrF photoresist."

(2) Geographic range

A. KrF photoresist polymers

Most of KrF photoresist polymer manufacturers have a production base in Japan and the users, who are KrF photoresist manufacturers, also purchase most of KrF photoresist polymers from domestic production bases.

Therefore, the JFTC defined the geographic range for KrF photoresist polymers as "all regions of Japan."

B. KrF photoresists

Bases of KrF photoresist manufacturers are concentrated in Fukushima, Niigata, and Shizuoka prefectures, which have semiconductor industry clusters, and the users, who are semiconductor manufacturers, also purchase most of KrF photoresists from domestic production bases. As well, sales prices of KrF photoresists vary to a certain degree depending on the region, such as the US and Europe.

Therefore, the JFTC defined the geographic range for KrF photoresists as "all regions of Japan."

2. Impact of the conduct of this case on competition

(1) Position of the Parties

A. Upstream market

After carrying out the conduct of this case, the Parties will account for around 35% of the KrF photoresist polymer market. Therefore, the conduct of this case does not meet the safe-harbor criteria for vertical business combinations.

[Market shares of KrF photoresist polymers in FY2015]

Rank	Company name	Market share
1	DuPont Group	Approx. 35%
2	Company C	Approx. 20%
3	Company D	Approx. 15%
4	Company E	Approx. 10%

	Others	Approx. 30%
Total		100%

B. Downstream market

After carrying out the conduct of this case, the Parties will account for around 20% of the KrF photoresist market, and the HHI will be around 2,300. Therefore, the conduct of this case meets the safe-harbor criteria for vertical business combinations.

[Market shares of KrF photoresists in FY2015]

Rank	Company name	Market share
1	Company F	Approx. 35%
2	Company G	Approx. 25%
3	Dow Group	Approx. 20%
4	Company H	Approx. 15%
5	Company I	0-5%
6	Company J	0-5%
7	Company K	0-5%
Total		100%

(2) KrF photoresist polymer supply refusal, etc.

This section looks at whether the issue of closure or exclusivity of the KrF photoresist market will arise from DuPont Group refusing to supply KrF photoresist polymers to any KrF photoresist manufacturers other than Dow Group (such an act hereinafter referred to as “input foreclosure” in (2)).

Apart from the Parties, there are two competitive suppliers which have 10% or more share respectively in the KrF photoresist polymer market.

As the KrF photoresist market, the downstream market, in 2015 was around 60% of its 2011 level, and demand for KrF photoresist polymers is also on the decline accordingly, it is reasonable to assume that KrF photoresist polymer manufacturers have sufficient excess capacity.

As described above, because the DuPont Group’s competitors in manufacturing of KrF photoresist polymers have sufficient excess capacity, KrF photoresist manufacturers are able to secure an alternative supplier easily.

Therefore, the JFTC decided that the issue of closure or exclusivity of the market would not arise from implementation of input foreclosure.

(3) Summary

Based on the discussion above, the JFTC decided that the conduct of this case would not substantially restrain competition in any particular field of trade.

Part IV Conclusion

Based on the premise that the measures in this case proposed by the Parties are taken, the JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 3 Acquisition of Shares of Showa Shell Sekiyu K.K. by Idemitsu Kosan Co., Ltd., and Acquisition of Shares of TonenGeneral Sekiyu K.K. by JX Holdings, Inc.

Part I The Parties

1. Acquisition of Shares of Showa Shell Sekiyu K.K. by Idemitsu Kosan Co., Ltd.

Idemitsu Kosan Co., Ltd. (JCN:9010001011318; hereinafter referred to as "Idemitsu"; and the corporate group consisting of companies that have already formed joint relationships with Idemitsu is referred to as "Idemitsu Group") and Showa Shell Sekiyu K.K. (JCN:5010401014535; hereinafter referred to as "Showa Shell"; the corporate group consisting of companies that have already formed joint relationships with Showa Shell is referred to as "Showa Shell Group"; Idemitsu and Showa Shell are collectively referred to as "Idemitsu Integrating Parties"; and Idemitsu Group and Showa Shell Group are collectively referred to as "Idemitsu Integrating Groups") are companies that primarily conduct the business of production and sale of petroleum products.

2. Acquisition of shares of TonenGeneral Sekiyu K.K. by JX Holdings, Inc.

JX Nippon Oil & Energy Corporation (JCN: 4010001133876; hereinafter referred to as "JX") whose ultimate parent company is JX Holdings, Inc. (JCN; 9010001131743 hereinafter referred to as "JXHD"; and the corporate group consisting of companies that have already formed joint relationships with JXHD is referred to as "JX Group"), and TonenGeneral Sekiyu K.K. (JCN;2010401015916 hereinafter referred to as "TonenGeneral"; the corporate group consisting of companies that have already formed joint relationships with TonenGeneral is referred to as "TonenGeneral Group"; JX and TonenGeneral are collectively referred to as "JX Integrating Parties"; and JX Group and TonenGeneral Group are collectively referred to as "JX Integrating Groups") are companies that primarily conduct the business of production and sale of petroleum products.

Hereinafter, Idemitsu Integrating Parties, JXHD, and JX Integrating Parties are, where necessary, collectively referred to as "the Parties," and Idemitsu Integrating Groups and JX Integrating Groups are, where necessary, collectively referred to as "the Parties Groups."

Part II Outline of these cases, and applicable provisions

1. Idemitsu Integration

Idemitsu plans to acquire more than 20% of the voting rights attaching to shares in Showa Shell (hereinafter referred to as the "Idemitsu Integration").[1,2]

The applicable provision is Article 10 of the AMA.

2. JX Integration

JXHD plans to acquire more than 50% of the voting rights attaching to shares in TonenGeneral (hereinafter referred to as the "JX Integration").[3]

The applicable provision is Article 10 of the AMA.

Part III Sequence of events etc.

1. Sequence of events

(1) Idemitsu Integration

From July 2015, Idemitsu Integrating Parties voluntarily submitted written opinions and materials to the JFTC, stating that the Idemitsu Integration would not substantially restrain competition, and the JFTC held meetings several times with Idemitsu Integrating Parties in response to requests by Idemitsu Integrating Parties. Subsequently, on December 16th of the same year, the JFTC accepted a written notification of a stock acquisition plan pertaining to the Idemitsu Integration submitted by Idemitsu on the basis of the provisions of the AMA, and commenced the preliminary investigation. The JFTC conducted the preliminary investigation on the basis of the aforementioned written notification and other documents submitted by Idemitsu Integrating Parties. As a result, finding it necessary to conduct a more detailed investigation, the JFTC made a request to Idemitsu for provision of reports etc. on January 15th, 2016, opened the secondary investigation, and on the same day announced the commencement of the secondary investigation and of solicitation for public comments from third parties.

In the secondary investigation, the JFTC held meetings several times with Idemitsu Integrating Parties in response to requests by Idemitsu Integrating Parties, provided explanations on points at issue, and held discussions. The JFTC conducted the secondary investigation into the effect of the Idemitsu Integration on competition, on the basis of the results etc. of hearings with competing

[1] Although the acquisition of shares concerned is not seeking to acquire the majority of the voting rights, this investigation was conducted on the premise that Idemitsu Integrating Parties would conduct business activities in a totally integrated manner, since Idemitsu Integrating Parties did not assert, "It was an acquisition of minority shares, and therefore the extent of business activities to be conducted in an integrated manner would be limited."

[2] Idemitsu Integrating Parties are planning to integrate their managements with a view to moving on to a merger as a basic policy, although the timing of such integration has not been set.

[3] At the same timing as acquiring the shares, JX Integrating Groups are to merge JX with TonenGeneral, the former being the surviving company and the latter being the absorbed company.

enterprises, users, etc. and document examinations, in addition to the reports etc. sequentially submitted by Idemitsu.

Regarding the request to Idemitsu for provision of reports etc., the submission of all reports etc. was completed with those submitted on December 1st, 2016.

(2)JX Integration

From December 2015, JX Integrating Parties voluntarily submitted written opinions and materials to the JFTC, stating that the JX Integration would not substantially restrain competition, and the JFTC held meetings several times with JX Integrating Parties in response to requests by JX Integrating Parties. Subsequently, on February 29th, 2016, the JFTC accepted a written notification of a stock acquisition plan pertaining to the JX Integration submitted by JXHD on the basis of the provisions of AMA, and commenced the preliminary investigation. The JFTC conducted the preliminary investigation on the basis of the aforementioned written notification and other documents submitted by JX Integrating Parties. As a result, finding it necessary to conduct a more detailed investigation, the JFTC made a request to JXHD for provision of reports etc. on March 30th of the same year, opened the secondary investigation, and on the same day announced the commencement of the secondary investigation and of solicitation for public comments from third persons.

In the secondary investigation, the JFTC held meetings several times with JX Integrating Parties in response to requests by JX Integrating Parties, provided explanations on points at issue, and held discussions. The JFTC conducted the secondary investigation into the effect of the JX Integration on competition, on the basis of the results etc. of hearings with competing enterprises, users, etc. and of document examinations, in addition to reports etc. sequentially submitted by JXHD.

Regarding the request to JXHD for provision of reports etc., the submission of all reports etc. was completed with those submitted on November 30th, 2016.

2. Investigation method

Since the Idemitsu Integration and JX Integration (where necessary, hereinafter collectively referred to as “Both Integrations”) are to take place in close proximity in time, the investigation of the Idemitsu Integration was conducted with reference to the JX Integration, and vice versa.

3. Brief summary of investigation results

The JFTC conducted an investigation into approximately 45 fields of trade, in which the Parties have a competitive relationship or trade relationship with each

other. On the premise that the remedies proposed to the JFTC by the Parties would be implemented, the JFTC concluded that Both Integrations would not substantially restrain competition in the business of primary distribution of each of propane gas (for details, see Part IV 1. below), butane gas (the same), gasoline, kerosene, diesel fuel, and heavy oil A. The results of the investigation pertaining to the aforementioned fields of primary distribution are as described in Part IV to VIII below.

Furthermore, the JFTC concluded that Both Integrations would not substantially restrain competition in any particular field of trade other than the aforementioned primary distribution fields.

Part IV Business of primary distribution of propane and butane

1. Outline

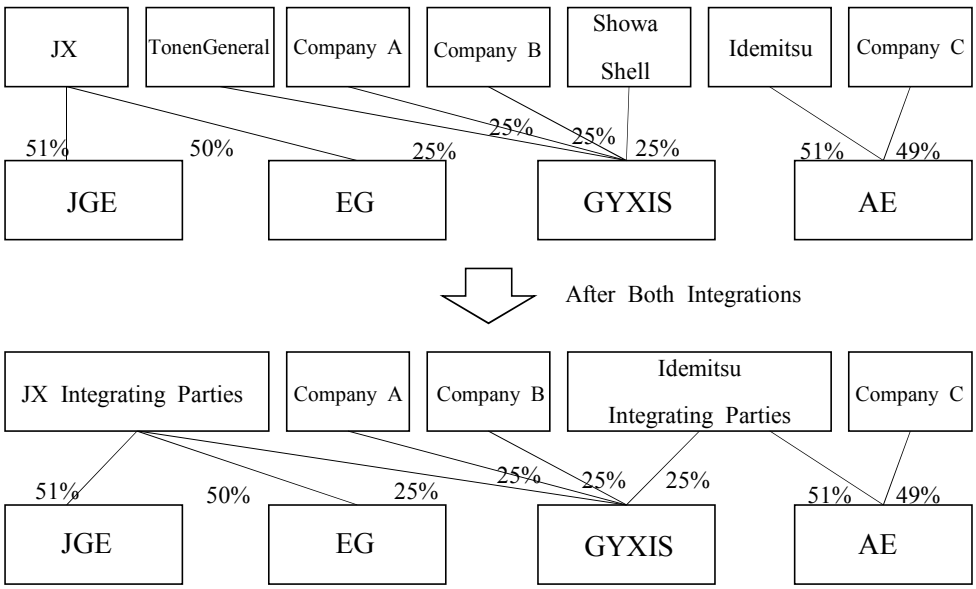
Liquefied petroleum gas is a collective term used to describe gases which are relatively liquescent, such as propane gas and butane gas. The gas whose principal component is propane is called propane gas (hereinafter simply referred to as "propane"), and the gas whose principal component is butane is called butane gas (hereinafter simply referred to as "butane") (among liquefied petroleum gases, propane and butane are collectively referred to as the "LP Gases," where necessary). Propane is mainly used as a domestic fuel and commercial fuel, whereas butane is mainly used as an industrial fuel.

With respect to the Company Groups, Astomos Energy Corporation (JCN: 5010001030404; hereinafter referred to as "AE") in which Idemitsu has taken a 51% stake, ENEOS GLOBE Corporation (JCN: 1010001090889; hereinafter referred to as "EG") and Japan Gas Energy Corporation (JCN: 5010401081187; hereinafter referred to as "JGE"; and EG and JGE are collectively referred to as "EG Etc.") that are subsidiaries of JX, and GYXIS Corporation (JCN: 2010401099579; hereinafter referred to as "GYXIS") in which each of Showa Shell and TonenGeneral has taken a 25% stake, engage in the business of primary distribution of the LP Gases.

For that reason, subsequent to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties are to invest in multiple primary distributors of the LP Gases, respectively.

The capital contribution relations subsequent to the implementation of Both Integrations are as follows.

[Chart of Capital Contribution Relations]



2. Particular fields of trade

(1) Product range

The LP Gases are classified into propane and butane according to their principal components. Their main usage and boiling points are different from each other, and thus facilities for distribution, storage and end users' use are also different. On this basis, the demand substitutability between the LP Gases is considered limited. In addition, since the production facilities and methods of the two gases are different, there is no supply substitutability between propane and butane.

Therefore, the JFTC defined the product range of this case as "propane" and "butane."

(2) Geographic range

The prices of the LP Gases for transactions between primary distributors and wholesalers are normally determined by a certain calculation formula (hereinafter referred to as the "formula"). Owing to this formula, wholesalers are able to purchase the gases at almost the same respective prices in all regions of Japan. However, due to transportation costs, each transportation range is roughly within a regional block in which a refinery or import base (primary base) is located (Hokkaido, Tohoku, Kanto, Chubu, Kinki, Chugoku, Shikoku, Kyushu, and Okinawa). Accordingly, it is possible to consider that a primary distribution market of the LP

Gases has been formed in each regional block. On this basis, the JFTC defined the geographic range of this case as "all regions of Japan" and "regional block" in a multi-layered manner.

3. Examination of substantial restraint of competition

(1) Joint relationships and cooperative relationships

With regard to the business of primary distribution of the LP Gases, joint relationships will be formed between GYXIS and AE and EG Etc. (collectively referred to as "Four Primary LP Gas Distributors"), as a result of changes made by Both Integrations in their capital contribution relations, as shown by the Chart of Capital Contribution Relations in Part IV 1. above. The issue is whether cooperative relationships will also to be formed between the Four Primary LP Gas Distributors.

The officers and employees of GYXIS (hereinafter referred to as "Officers Etc.") are composed only of the persons assigned to that company by the four companies holding its shares. In addition, Officers Etc. assigned to GYXIS (hereinafter referred to as "Assigned Officers Etc.") are subject to the personnel authority of their assignor companies. Therefore, such Assigned Officers Etc. have an incentive to pursue the interests of their assignor companies as well as the interests of GYXIS. Consequently, since the changes to be made in the capital contribution relations by Both Integrations will lead to a situation where Assigned Officers Etc. pursue common interests between GYXIS and Idemitsu Integrating Parties or JX Integrating Parties, which are their assignor companies, this situation is considered to cause an incentive for Four Primary LP Gas Distributors to engage in coordinated conduct such as avoiding competition (hereinafter referred to as a "coordination incentive").

Besides, due to Both Integrations, both Idemitsu Integrating Parties and JX Integrating Parties will assign their Officers Etc. to GYXIS and have a certain veto power on the basis of shareholders' agreements among GYXIS' shareholders. On this basis, both Idemitsu Integrating Parties and JX Integrating Parties are able to take part in overall business activities of GYXIS, and to significantly affect GYXIS' decision-making with regard to its business activities.

Furthermore, since the changes in the capital contribution relations due to Both Integrations are to standardize interests between GYXIS and AE, and those between GYXIS and EG Etc., and to create a coordination incentive for Four Primary LP Gas Distributors, it is not expected that AE or EG Etc. will be able to mutually obstruct coordinated conduct with GYXIS.

In addition, given that primary LP Gas distributors' information such as their retail prices to wholesalers does not become obsolete quickly, there is a risk that

such information may be shared among Four Primary LP Gas Distributors when Assigned Officers Etc. return to their respective assignor companies, which are Idemitsu Integrating Parties or JX Integrating Parties, and are subsequently transferred to AE or EG Etc.

Therefore, the probability of cooperative relationships being formed between Four Primary LP Gas Distributors is considered high.

(2) Other circumstances that facilitate coordinated conduct

LP Gas products are found to be homogeneous, and their cost conditions are found to be similar. Moreover, each primary LP Gas distributor has its own LP Gas wholesaler as its affiliated company, and this LP Gas wholesaler is able to obtain other companies' price information by receiving gas supply from other multiple channels such as other primary LP Gas distributors, in addition to the affiliated primary distributor. Consequently, it is not considered difficult for a primary LP Gas distributor to predict others' actions with a high degree of certainty and come to a common understanding with regard to coordinated conduct.

Besides, the LP Gases are traded in small lots and/or with regular clients. For instance, a primary LP Gas distributor may be able to earn only little by conducting a deviating action such as lowering its wholesale price in an attempt to expand its sale. For that reason, primary distributors of the LP Gases are relatively strongly induced to adopt coordinated conduct.

Furthermore, it is regarded as possible to monitor deviating actions to some extent since transactions are in small lots or routine ones, and it is not difficult for Four Primary LP Gas Distributors to retaliate against each other since each of them has a sufficient excess capacity. It is considered that these facts relatively strongly induce them to adopt coordinated conduct.

Therefore, the probability that Four Primary LP Gas Distributors will adopt coordinated conduct among them is regarded as high.

(3) Constraints on coordinated conduct

In the case of cooperative relationships developed between Four Primary LP Gas Distributors, the aggregate market share of these companies in the field of primary distribution of the LP Gases will be around 80% in all regions of Japan, or over 90% in some regional blocks, creating a tight oligopoly market. For that reason, in regional blocks in which the aggregate market share of Four Primary LP Gas Distributors exceeds 90%, or in which the excess capacities of competing enterprises other than Four Primary LP Gas Distributors are not sufficient (for example in a regional block in which competing enterprises do not have any import

base etc. for their sole use), it is considered that restraints posed by such enterprises will not sufficiently function.

Furthermore, although there is a certain level of competitive pressure from adjacent markets with goods competing with the LP Gases (electricity, city gas, etc.), users' option of suppliers other than Four Primary LP Gas Distributors is limited, since significant switching is regarded as difficult on the basis of costs and time required for such switching, or in a region where the excess capacities of enterprises competing with Four Primary LP Gas Distributors are not sufficient. With these factors taken into account, it is considered that competitive pressure from either adjacent markets or users will not sufficiently function as constraints on coordinated conduct.

(4) Economic analysis

A. Outline

In order to analyze the impact of the changes to be made by Both Integrations in the capital contribution relations, through which Idemitsu Integrating Parties and JX Integrating Parties are to take a 25% stake in GYXIS respectively, on each primary LP Gas distributor's retail price of propane, the JFTC conducted a simulation analysis[4] (hereinafter referred to as the "analysis") that took account of the equity relation and controlling relation between a company and its shareholders.[5]

B. Demand model

For the analysis, the PCAIDS (Proportionally-Calibrated AIDS),[6] which is a simplified model of the AIDS (Almost Ideal Demand System),[7] was used as the demand model. The PCAIDS model can estimate a demand system by using the own-price elasticity of demand in the entire market and the own-price elasticity of demand for an arbitrary company chosen as a reference company, in addition to the sales share of each primary LP Gas distributor.

The own-price elasticity of demand in the entire market was obtained by using the method of instrumental variables and thereby estimating a demand

[4] With regard to economic analysis in business combination review, the analysis method of so-called merger simulation is used to predict the price increase rate etc. of each product associated with the relevant business combination by estimating a demand function, etc. For Both Integrations, the economic analysis method employed is simply called simulation analysis, since Four Primary LP Gas Distributors are not to be combined together; only their capital contribution relations are to be changed.

[5] Since the fact that there will be changes in the capital contribution relations due to Both Integrations is common to both propane and butane, only propane was used as a subject of the analysis concerned.

[6] R. J. Epstein and D. L. Rubinfeld, "Merger Simulation: A Simplified Approach with New Applications," Antitrust Law Journal, 69, 2001, pp.883-919.

[7] A. Deaton and J. Muellbauer, "An Almost Ideal Demand System," American Economic Review, 70, 1980, pp.312-326.

function. For the analysis, AE was selected as the arbitrary reference company, and the own-price elasticity of demand for AE was used as the reciprocal of AE's price-cost margin in the calculation.

C. Application of the relation between the shareholders and the company to the simulation model

For the analysis based on the demand system derived from the PCAIDS model, the concept of the equity relation and controlling relation between the company and its shareholders was applied to the simulation model.[8] In other words, the optimization problem that the management of certain primary LP Gas distributor j faces under the demand system based on the PCAIDS model is expressed by the Formula (A) below.[9,10]

$$\max_{p_j} \pi_j + \sum_{k \neq j} \zeta_{kj} \pi_k , \qquad \zeta_{kj} = \frac{\sum_{i \in \Im_j} \psi_{ij} \phi_{ik}}{\sum_{i \in \Im_j} \psi_{ij} \phi_{ij}} \cdots\cdots\cdots\cdots \text{(A)}$$

Furthermore, the first order condition associated with the optimization of the Formula (A) is as shown by the Formula (B) below.[11]

$$w_j + \sum_{k=1}^{J} \zeta_{kj} \left(\frac{p_k - MC_k}{p_k} w_k \eta_{kj} \right) = 0 \cdots\cdots\cdots\cdots \text{(B)}$$

The first order condition for the optimization of each primary LP Gas distributor after Both Integrations was determined by using the Formula (B), and the natural logarithmic value of the ratio of the prices before and after Both Integrations was obtained by solving the set of simultaneous equations for the natural logarithmic value of such ratio.

D. Simulation results

The price change rate of propane was calculated on the basis of the ratio of the prices before and after Both Integrations obtained by solving the set of simultaneous equations as described in C. above. The price change rate calculated through the simulation varied among primary LP Gas distributors

[8] D. P. O'Brien and S. C. Salop, "Competitive Effects of Partial Ownership: Financial Interest and Corporate Contr ol," Antitrust Law Journal, 67, 2000, pp.559-614.

[9] J. Azar, M. C. Schmalz and I. Tecu, "Anti-Competitive Effects of Common Ownership," University of Michigan Ross School of Business Working Paper No. 1235, 2015.

[10] In the Formula (A), profits of primary LP Gas distributor j are expressed as π_j, the ratio of the equity interests of Shareholder i in primary LP Gas distributor j as ϕ_{ij}, the influence of Shareholder i on the management of pri mary LP Gas distributor j as ψ_{ij}, and the aggregate of all the shareholders of primary LP Gas distributor j as $\Im_j$. Furthermore, the propane retail price of primary LP Gas distributor j is expressed as p_j, the demand function as Q_j, the vector summarizing the retail prices of all primary LP Gas distributors as $\mathbf{p}$, the cost function for propane as C_j, and profits as $\pi_j = p_j Q_j(\mathbf{p}) - C_j[Q_j(\mathbf{p})]$.

[11] In the Formula (B), the sales share of primary LP Gas distributor j is expressed as w_j, and the price elasticity of demand for primary LP Gas distributor k (own-price or cross-price elasticity) when the propane retail price of p rimary LP Gas distributor j changes is expressed as η_{kj}.

and depended on the values set for various conditions; for the primary LP Gas distributor whose price change rate was the greatest, the simulation results showed that its price would increase by approximately 2% to 6%.[12]

(5) Legal assessment based on the AMA

It is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through the coordinated conduct of Four Primary LP Gas Distributors, substantially restrain competition in any particular fields of trade relative to the business of primary distribution of propane and butane.

Part V Business of primary distribution of gasoline

1. Outline etc.

(1) Outline

Gasoline is mainly used as a fuel for gasoline-powered engines, and classified into two types according to octane rating: high-octane gasoline and regular gasoline. Since gasoline is combustible and thus dangerous, rigorous quality standards are prescribed by the Japanese Industrial Standards (hereinafter referred to as the "JIS") and the Act on the Quality Control of Gasoline and Other Fuels (Act No. 88 of 1976; hereinafter referred to as the "Quality Control Act"), and the sale of gasoline not conforming to such standards is prohibited.

(2) Commercial distribution

Gasoline has three different route of sale: (i) where gasoline is supplied from a primary oil distributor to its own affiliated specified agents[13] and dealers[14] for the purpose of selling it at service stations operating with the trademark of the primary oil distributor on the basis of specified agent agreements (hereinafter a service station is referred to as an "SS," and an SS operating with its primary oil distributor's trademark is referred to as an "Affiliated SS") [affiliation route]; (ii) where gasoline is sold, through distribution routes different from the affiliation route and through trading companies etc., at trading-companies' own private-brand (hereinafter referred to as "PB") SSs, independent PB-SSs (meaning SSs other than Affiliated SSs, trading-companies' PB-SSs, or JA[15]'s PB-SSs), JA's PB-SSs,

[12] However, in cases where simulation analysis is used in business combination review, as is the case for the anal ysis concerned, it is important to realize that the results of such analysis are based on a series of assumptions. Th erefore, the simulation results in the analysis concerned here should not be treated as a decisive conclusion on the effect of Both Integrations, but should rather be positioned as results supplementing qualitative investigation results.
[13] Enterprises that are licensed by their respective primary oil distributors to use the trademarks of such distributor s, and that have executed contracts with such distributors to directly purchase gasoline from them
[14] Dealers that are licensed by their respective primary oil distributors to use the trademarks of such distributors
[15] Meaning the National Federation of Agricultural Cooperative Associations

etc.[16] [non-affiliation route; gasoline traded through any non-affiliation route is hereinafter referred to as "Non-affiliated Gasoline"]; and (iii) where gasoline is directly sold to such users as public offices and freight companies.

2. Particular fields of trade

(1) Product range

Although general consumers who are main users of gasoline use high-octane gasoline or regular gasoline basically depending on the specifications of their own vehicles, there are some consumers who use both types of gasoline irrespective of such specifications. On this basis, there is a certain degree of demand substitutability between high-octane gasoline and regular gasoline. In addition, with regard to supply substitutability, each primary oil distributor is able to produce both high-octane gasoline and regular gasoline by refining crude oil, and able to adjust its production quantity of each of the types of gasoline in accordance with demand trends. On this basis, there is supply substitutability between high-octane gasoline and regular gasoline.

Therefore, the JFTC defined the product range of this case as "gasoline."

(2) Geographic range

Each primary oil distributor has a system and capability to supply gasoline to all regions of Japan through its Affiliated SSs, and determines its wholesale price of gasoline for each prefecture by using its own formula that is free from any impact of retail market conditions. On this basis, the JFTC defined the geographic range of this case as "all regions of Japan."

3. Examination of substantial restraint of competition

(1) Substantial restraint of competition by unilateral conduct

A. Positions of the Parties, and conditions of competing enterprises

(a) Market share and ranking

In relation to the business of primary distribution of gasoline following Both Integrations, the combined market share and ranking of Idemitsu Integrating Parties will be approximately 30% and the second place, and their incremental Herfindahl-Hirschman Index (HHI) will be approximately 500. The combined market share and ranking of JX Integrating Parties will be approximately 50% and the first place, and their incremental HHI will be approximately 1,100. Therefore, neither Idemitsu Integration nor JX

[16] There are cases where gasoline flows into Affiliated SSs through distribution routes other than the affiliation rou te.

Integration will meet the safe-harbor criteria for horizontal business combinations.

[Market share in the field of primary distribution of gasoline in FY2014]

Ranking	Name of company	Market share
1	JX	Approx. 35%
2	TonenGeneral	Approx. 15%
3	Showa Shell	Approx. 15%
4	Idemitsu	Approx. 15%
5	Company D	Approx. 10%
6	Company E	0-5%
	Other	0-5%
Total		100%

(b) Conditions of competing enterprises

Since Idemitsu Integrating Parties and JX Integrating Parties have sufficient excess capacities, they are considered mutually capable of becoming competitive suppliers. On the other hand, with regard to Company D whose market share is approximately 10%, there is a risk that Company D may face difficulty maintaining its competitiveness in all regions of Japan, due to its limited excess capacity and increase in its distribution costs following the cancellation of its barter contracts[17] as a result of the restructuring of distribution networks triggered by Both Integrations. On this basis, it is considered that competitive pressure will be rather limited.

B. Import

Pursuant to the Oil Stockpiling Act (Act No. 96 of 1975), enterprises importing gasoline are obliged to stockpile gasoline[18]. Consequently, such enterprises incur costs for performance of the obligation to stockpile.[19] Besides, for enterprises other than primary oil distributors, there are physical obstacles; for instance, ports[20] and tanks[21] that such enterprises can use for import are limited.

[17] These contracts mean a type of trade through which primary oil distributors mutually accommodate each other with the same types and quantities of oil products in regions in which only one of such distributors has a refinery or oil tank.
[18] Oil refiners etc. (oil refiners, specified oil distributors, and oil importers) shall, all the time, keep at least the standard stockpile of oil in preparation for changes in the demand and supply quantities of oil due to any drastic change in oil prices, war, etc.
[19] Costs for the maintenance, management, etc. of tanks to store/stockpile imported oil
[20] Ports are required to be able to accommodate the sizes of tankers used for oil import.
[21] Tanks are required to have sufficient capacities to store the standard stockpile of oil all the time.

According to hearings conducted, enterprises whose procurement of oil products is highly dependent on primary oil distributors hesitate to import such products since they enter into a competing relationship with their primary oil distributors by engaging in import.

Furthermore, the JFTC conducted impulse response function analysis[22] on the relationship between the volumes of gasoline imported by enterprises other than primary oil distributors and the wholesale prices of gasoline in Japan[23], and examined the impact of the shock (variation) generated in the volumes imported by such enterprises on the wholesale prices of gasoline in Japan by graphing such impact. The results of this analysis showed that the shock (variation) generated in the volumes imported by such enterprises did not have a significant impact on the wholesale prices of gasoline in Japan.[24]

Accordingly, it is considered that there will be no import pressure.

C. Competitive pressure from users

Although it is likely that Both Integrations will fill the demand-supply gap of gasoline to some extent, and will lower the volume of Non-affiliation Gasoline, it is considered that a certain volume of Non-affiliation Gasoline will still be circulated, as it will be difficult to completely eliminate the demand-supply gap. In addition, since gasoline products are homogeneous and thus easily cause a price competition, each primary oil distributor will be forced to accept a request for price reduction from its specified agents to some extent in order to enable its own Affiliated SSs compete against other companies' Affiliated SSs on price. Under this circumstance, pressure for price reduction is considered to work to a certain degree.

Therefore, it is considered that there will be a certain level of competitive pressure from users.

D. Summary

As described above, because there are competitive suppliers with sufficient excess capacities, and competitive pressure from users will work to a certain degree, it is considered that following Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will not, through their unilateral conduct,

[22] This is an analysis method to examine how a variable responds to a shock (variation) in another variable when such shook (variation) occurs, on the basis of a presumed vector autoregressive model. In the case concerned, the analysis was conducted with the data on the volumes of gasoline imported by enterprises other than primary oil di stributors during the period from January 2010 to October 2015, and the data on the wholesale prices of gasoline i n Japan during the same period.

[23] Released by the Oil Information Center

[24] The significance level was 5%.

substantially restrain competition in particular fields of trade relative to the business of primary distribution of gasoline.

(2) Substantial restraint of competition by coordinated conduct

Owing to Both Integrations, each primary oil distributor should be able to, in a timely manner, obtain information on changes in prices notified by other companies, since (i) the number of competing enterprises will decrease, (ii) oil products are homogeneous and thus there will be little room for competition for better sales conditions, (iii) primary oil distributors' cost structures are similar to each other, and (iv) prices notified by primary oil distributors are published in trade publications. For that reason, there will be a situation where primary oil distributors are able to predict each other's behaviors with high precision. Besides, according to hearings etc., both competing enterprises and users share a common understanding that it is desirable that competition should be relaxed and distributors' earnings should be improved. On this basis, it is not considered difficult to reach a common understanding on coordinated conduct.

Moreover, in light of points (i) to (iv) above, it is not considered difficult to monitor any deviation from coordinated conduct.

Furthermore, both Idemitsu Integrating Parties and JX Integrating Parties have sufficient excess capacities, regarded as being able to take retaliatory action. On the other hand, with regard to Company D whose market share is approximately 10%, there is a risk that Company D may face difficulty maintaining its competitiveness in all regions of Japan, due to its limited excess capacity and increase in its distribution costs following the cancellation of its barter contracts as a result of the restructuring of distribution networks triggered by Both Integrations. On this basis, it is considered that competitive pressure will be rather limited.

In addition, if primary oil distributors raise their respective prices in a coordinated manner, it is likely that users will consider it necessary to accept such price increase without any other alternative supplier. On this basis, competitive pressure from users is not considered to work.

As described above, since there are circumstances that lead to the adoption of coordinated conduct, it is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of gasoline.

(3) Legal assessment based on the AMA

It is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of gasoline.

Part VI Business of primary distribution of kerosene

1. Outline etc.

(1) Outline

Kerosene is mainly used as a fuel for heating appliances and water heaters. As is the case for gasoline, rigorous quality standards for kerosene are prescribed by the JIS and the Quality Control Act, and the sale of kerosene not conforming to such standards is prohibited.

(2) Commercial distribution

The commercial distribution of kerosene is basically the same as that of gasoline described in Part V 1. (2) above. However, it may be sold to general consumers through retailers other than SSs, such as home improvement retailers, Consumers' Co-operatives (hereinafter referred to as a "Co-Op"), and firewood and charcoal dealers[25].

2. Particular fields of trade

(1) Product range

In accordance with the JIS, kerosene is categorized into the following two types according to difference in sulfur content etc.: Class 1 (for heating appliances and water heaters) and Class 2 (for oil motors, solvents and machine -washing). However, Class 2 kerosene is not currently produced or sold due to decline in demand.

Therefore, the JFTC defined the product range of this case as "kerosene."

(2) Geographic range

Since the circumstances surrounding kerosene are found to be similar to those surrounding gasoline, the JFTC defined the geographic range of this case as "all regions of Japan," as described in Part V 2.(2) above.

[25] Meaning stores retailing such fuels as kerosene, the LP Gases, charcoal and firewood, rice, and other goods

3. Examination of substantial restraint of competition

(1) Substantial constraint of competition by unilateral conduct

A. Positions of the Parties, and conditions of competing enterprises

(a) Market share and ranking

In relation to the business of primary distribution of kerosene following Both Integrations, the combined market share and ranking of Idemitsu Integrating Parties will be approximately 35% and the second place, and their incremental HHI will be approximately 600. Furthermore, the combined market share and ranking of JX Integrating Parties will be approximately 50% and the first place, and their incremental HHI will be approximately 900. Therefore, neither Idemitsu Integration nor JX Integration will meet the safe-harbor criteria for horizontal business combinations.

[Market share in the field of primary distribution of kerosene in FY2014]

Ranking	Name of company	Market share
1	JX	Approx. 35%
2	Idemitsu	Approx. 20%
3	Showa Shell	Approx. 15%
4	TonenGeneral	Approx. 15%
5	Company F	Approx. 10%
	Other	Approx. 5%
Total		100%

(b) Conditions of competing enterprises

Since the circumstances surrounding kerosene are found to be similar to those surrounding gasoline, competitive suppliers for Idemitsu Integrating Parties and JX Integrating Parties will mutually and only be each other, as described in Part V 3.(1) A.(b) above.

B. Import

Since the circumstances surrounding kerosene are found to be similar to those surrounding gasoline,[26] it is considered that there will be no import pressure, as described in Part V 3.(1) B. above.

C. Competitive pressure from adjacent markets

Kerosene is mainly used as a fuel for heating appliances and water heaters. It

[26] Since the economic analysis for the investigation was conducted only with respect to gasoline, economic analysis results are not included. The same applies to diesel fuel and heavy oil A.

is possible to substitute such heating appliances and water heaters with those whose heat source is electricity, city gas, etc.

Therefore, it is considered that there is a certain level of competitive pressure from adjacent markets with competing products such as electricity and city gas.

D. Competitive pressure from users

The circumstances surrounding kerosene are found to be similar to those surrounding gasoline under Part V3. (1) C. above. In addition, retailers such as home improvement retailers, Co-Ops, and firewood and charcoal dealers do not use the trademarks of their respective primary oil distributors, and thus it is relatively easy for such retailers to change their distributors. Accordingly, pressure for price reduction is considered to function to a certain degree.

Therefore, it is considered that there will be a certain level of competitive pressure from users.

E. Summary

As described above, because there are competitive suppliers with sufficient excess capacities, and competitive pressure from adjacent markets as well as users will work to a certain degree, it is considered that following Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will not, through their unilateral conduct, substantially restrain competition in particular fields of trade relative to the business of primary distribution of kerosene.

(2) Substantial constraint of competition by coordinated conduct

The circumstances surrounding kerosene are found to be similar to those surrounding gasoline under Part V.3(2) above.

Furthermore, although there is a certain level of competitive pressure from adjacent markets with products competing with kerosene (electricity, city gas, etc.), immediate significant switching is regarded as difficult on the basis of costs and time required for such switching. Accordingly, it is considered that competitive pressure from adjacent markets will not sufficiently function as a constraint on coordinated conduct.

Therefore, it is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of kerosene.

(3) Legal assessment based on the AMA

It is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of kerosene.

Part VII Business of primary distribution of diesel fuel

1. Outline etc.

(1) Outline

Diesel fuel is mainly used as a fuel for diesel engines and gas-turbine engines for vessels and warships. As is the case for gasoline, rigorous quality standards for diesel fuel are prescribed by the JIS and the Quality Control Act, and the sale of diesel fuel not conforming to such standards is prohibited.

(2) Commercial distribution

The commercial distribution of diesel fuel is basically the same as that of gasoline described in Part V 1. (2) above. However, in comparison with gasoline, the proportion of diesel fuel sold directly to users such as freight companies through specified agents, trading companies, etc., but not through SSs, is greater. Additionally, the proportion of diesel fuel sold by enterprises so-called "specified agents optimized for corporate vehicle fleets," which put efforts into sale of diesel fuel, has increased.

2. Particular fields of trade

(1) Product range

Diesel fuel is classified into five types according to pour point, and the type of diesel fuel used varies from season to season. On this basis, demand substitutability between the types of diesel fuel is regarded as limited. On the other hand, with regard to supply substitutability, each primary oil distributor produces all the types of diesel fuel by refining crude oil, and is able to switch one type of diesel fuel to another by changing the fraction of the base material and/or by changing the combination of the base material and additives. On this basis, there is supply substitutability among the types of diesel fuel.

Therefore, the JFTC defined the product range of this case as "diesel fuel."

(2) Geographic range

Since the circumstances surrounding diesel fuel are found to be similar to those

surrounding gasoline, the JFTC defined the geographic range of this case as "all regions of Japan," as described in Part V 2.(2) above.

3. Examination of substantial constraint of competition

(1) Substantial constraint of competition by unilateral conduct

A. Positions of the Parties, and conditions of competing enterprises

(a) Market share and ranking

In relation to the business of primary distribution of diesel fuel following Both Integrations, the combined market share and ranking of Idemitsu Integrating Parties will be approximately 35% and the second place, and their incremental HHI will be approximately 600. Furthermore, the combined market share and ranking of JX Integrating Parties will be approximately 45% and the first place, and their incremental HHI will be approximately 600. Therefore, neither Idemitsu Integration nor JX Integration will meet the safe-harbor criteria for horizontal business combinations.

[Market share in the field of primary distribution of diesel fuel in FY2014]

Ranking	Name of company	Market share
1	JX	Approx. 35%
2	Idemitsu	Approx. 20%
3	Showa Shell	Approx. 15%
4	Company G	Approx. 10%
5	TonenGeneral	Approx. 10%
	Other	Approx. 10%
Total		100%

(b) Conditions of competing enterprises

Since the circumstances surrounding diesel fuel are found to be similar to those surrounding gasoline, competitive suppliers for Idemitsu Integrating Parties and JX Integrating Parties will mutually and only be each other, as described in Part V 3.(1) A.(b) above.

B. Import

Since the circumstances surrounding diesel fuel are found to be similar to those surrounding gasoline, it is considered that there will be no import pressure, as described in Part V 3.(1) B. above.

C. Competitive pressure from users

The circumstances surrounding diesel fuel are found to be similar to those surrounding gasoline under Part V 3. (1) C. above. In addition, where specified agents etc. directly sell diesel fuel to users such as freight companies rather than selling it through SSs, they do not use the trademarks of their respective primary oil distributors, unlike selling through SSs. Consequently, it is relatively easy for such specified agents etc. to change their distributors, and pressure for price reduction is considered to function to a certain degree.

Therefore, it is considered that there will be a certain level of competitive pressure from users.

D. Summary

As described above, because there are competitive suppliers with sufficient excess capacities, and competitive pressure from users will work to a certain degree, it is considered that following Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will not, through their unilateral conduct, substantially restrain competition in particular fields of trade relative to the business of primary distribution of diesel fuel.

(2) Substantial constraint of competition by coordinated conduct

Since the circumstances surrounding diesel fuel are found to be similar to those surrounding gasoline, it is considered, as described in Part V 3.(2) above, that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of diesel fuel.

(3) Legal assessment based on the AMA

It is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of diesel fuel.

Part VIII Business of primary distribution of heavy oil A

1. Outline etc.

(1) Outline

Heavy oil A is mainly used as a fuel for industrial boilers, heating appliances for buildings, marine diesel engines, heating appliances for plastic greenhouses, etc.

As is the case for gasoline, rigorous quality standards for heavy oil A are prescribed by the JIS, and the sale of heavy oil A not conforming to such standards is prohibited.

(2) Commercial distribution

Heavy oil A is sold (i) through specified agents, trading companies, etc., or (ii) directly from primary oil distributors to users. Because heavy oil A is not for general household use, SSs do not sell it to general consumers.

2. Particular fields of trade

(1) Product range

In the JIS, heavy oil is classified into heavy oil A, heavy oil B,[27] and heavy oil C in accordance with kinetic viscosity, and heavy oil A is further classified into class 1 and class 2 according to difference in sulfur content. Since the prices and qualities of heavy oil A and heavy oil C are different, there is no demand substitutability between these two types. Moreover, since users choose heavy oil A class 1 or heavy oil A class 2 according to sulfur content, there is no demand substitutability between them. On the other hand, with regard to supply substitutability, the production of heavy oil A class 1 can easily be switched to that of heavy oil A class 2, and vice versa, by changing the proportion of diesel fuel fraction, which is the base material of heavy oil A. On this basis, there is supply substitutability between heavy oil A class 1 and heavy oil A class 2.

Therefore, the JFTC defined the product range of this case as "heavy oil A."

(2) Geographic range

Since the circumstances surrounding heavy oil A are found to be similar to those surrounding gasoline, the JFTC defined the geographic range of this case as "all regions of Japan," as described in Part V 2.(2) above.

3. Examination of substantial constraint of competition

(1) Substantial constraint of competition by unilateral conduct

A. Positions of the Parties, and conditions of competing enterprises

(a) Market share and ranking

In relation to the business of primary distribution of heavy oil A following Both Integrations, the combined market share and ranking of Idemitsu Integrating Parties will be approximately 40% and the second place, and their incremental HHI will be approximately 700. Furthermore, the combined

[27] However, heavy oil B is not examined in the investigation concerned since it is not currently produced.

market share and ranking of JX Integrating Parties will be approximately 50% and the first place, and their incremental HHI would be approximately 700. Therefore, neither Idemitsu Integration nor JX Integration will meet the safe-harbor criteria for horizontal business combinations.

[Market share in the field of primary distribution of heavy oil A in FY2014]

Ranking	Name of company	Market share
1	JX	Approx. 40%
2	Idemitsu	Approx. 25%
3	Showa Shell	Approx. 15%
4	Company H	Approx. 15%
5	TonenGeneral	Approx. 10%
	Other	0-5%
Total		100%

(b) Conditions of competing enterprises

Since the circumstances surrounding heavy oil A are found to be similar to those surrounding gasoline, competitive suppliers for Idemitsu Integrating Parties and JX Integrating Parties will mutually and only be each other, as described in Part V 3.(1) A.(b) above.

B. Import

Since the circumstances surrounding heavy oil A are found to be similar to those surrounding gasoline, it is considered that there will be no import pressure, as described in Part V 3.(1) B. above,.

C. Competitive pressure from adjacent markets

A large part of heavy oil A is used as a fuel for boilers used in plants, shopping malls, hospitals, hotels, etc. It is possible to substitute such boilers with those whose heat source is electricity, city gas, etc.

Therefore, it is considered that there is a certain level of competitive pressure from adjacent markets with competing products such as electricity and city gas.

D. Competitive pressure from users

Where primary oil distributors, specified agents, etc. directly sell heavy oil A to users rather than selling it through SSs, such specified agents, etc. do not use the trademarks of their respective primary oil distributors for sales purposes. For that reason, it is relatively easy for them to change their distributors, and

accordingly pressure for price reduction is considered to function to a certain degree.

Therefore, it is considered that there will be a certain level of competitive pressure from users.

E. Summary

As described above, because there are competitive suppliers with sufficient excess capacities, and competitive pressure from adjacent markets and users will work to a certain degree, it is considered that following Both Integrations, the Parties will not, through their unilateral conduct, substantially restrain competition in particular fields of trade relative to the business of primary distribution of heavy oil A.

(2) Substantial constraint of competition by coordinated conduct

The circumstances surrounding heavy oil A are found to be similar to those surrounding gasoline under 5.3(2) above.

Furthermore, although there is a certain level of competitive pressure from adjacent markets with products competing with heavy oil A (electricity, city gas, etc.), immediate significant switching is regarded as difficult on the basis of costs and time required for such switching. Consequently, it is considered that competitive pressure from adjacent markets will not sufficiently function as a constraint on coordinated conduct.

Therefore, it is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of heavy oil A.

(3) Legal assessment based on the AMA

It is considered that due to Both Integrations, Idemitsu Integrating Parties and JX Integrating Parties will, through coordinated conduct with competing enterprises other than their own companies, substantially restrain competition in particular fields of trade relative to the business of primary distribution of heavy oil A.

Part IX Proposal of remedies by the Parties

The JFTC pointed out the issues under Part IV to VIII above, and in response the Parties proffered the following remedies concerning each of the issues (hereinafter

referred to as a "Remedy") to the JFTC.[28]

1. Remedy concerning the business of primary distribution of the LP Gases

The JFTC pointed out to the Parties the issue that the Parties would substantially restrain competition with respect to the business of primary distribution of the LP Gases when the capital contribution relations were to change as illustrated by the Chart of Capital Contribution Relations in Part IV 1. above, thereby causing a coordination incentive to be created among Four Primary LP Gas Distributors and consequently leading these distributors to engage in coordinated conduct. In response, the Parties proffered the following measures to the JFTC.

(1) Idemitsu Integrating Parties

Idemitsu Integrating Parties will execute a contract to (i) transfer GYXIS shares owned by Showa Shell within nine months of the execution date of the Idemitsu Integration in order to lower its capital contribution ratio to 20%, and execute such share transfer within three months of the execution date of the contract.

Furthermore, Idemitsu Integrating Parties ensure that (ii) the officers of GYXIS assigned from Showa Shell will resign within nine months of the execution date of the Idemitsu Integration, and that thereafter Showa Shell will limit the number of officers at the assignee company sent from Showa Shell to one part-time auditor only.

Furthermore, Idemitsu Integrating Parties ensure, from the execution date of the Idemitsu Integration, that (iii) Showa Shell will not be involved in the personnel evaluation of Assigned Officers Etc. from Showa Shell to GYXIS after the execution date of the Idemitsu Integration, that (iv) Showa Shell will not exercise any right beyond those granted to it as a shareholder under the Companies Act, that (v) Showa Shell will continue supplying its manufactured products to GYXIS, that (vi) Showa Shell will continue its lease of facilities to GYXIS, and that (vii) Showa Shell will take measures for the implementation of information blocking.

(2) JX Integrating Parties

JX Integrating Parties will execute a contract to (i) transfer GYXIS shares owned by TonenGeneral within six months of the execution date of the JX Integration, and execute such share transfer within three months of the execution date of the contract.

Furthermore, JX Integrating Parties will (ii) have all of their Assigned Officers Etc. at GYXIS return to their respective companies within one year of the execution date of the JX Integration at the latest.

[28] In addition to the Remedies under Part IX.1. to IX.3., JXHD and JX Integrating Parties proffered the JFTC a measure in which JX would refrain from issuing its monthly news release regarding the wholesale prices of its oil products (main fuels) for the month, and holding a monthly press conference in association with such news release.

Additionally, JX Integrating Parties ensure, from the execution date of the JX Integration, that (iii) JX Integrating Parties will not be involved in the personnel evaluation of their Assigned Officers Etc. at GYXIS, that (iv) JX Integrating Parties will continue supplying their manufactured products to GYXIS, that (v) JX Integrating Parties will continue providing bases to GYXIS, and that (vi) JX Integrating Parties will take measures for the implementation of information blocking.

2. Remedy concerning the business of primary distribution of main fuels

The JFTC pointed out to the Parties the issue that the Parties would substantially restrain competition with respect to the business of primary distribution of each of gasoline, kerosene, diesel fuel, and heavy oil A (hereinafter collectively referred to as "main fuels"), since coordinated conduct would be adopted and there would not be competitive pressure such as import pressure. In response, the Parties proffered the following measures to the JFTC.

(1) Import promotion measure (assuming the obligation to stockpile on behalf of others)

With regard to the obligation to stockpile imposed on enterprises, other than primary oil distributors, that import the main fuels, the Parties will assume this obligation on behalf of such enterprises (hereinafter referred to as the "on-behalf stockpiling") by utilizing the Parties' own crude oil or stock of the main fuels.

For each type of the main fuels, the Parties will assume the obligation to stockpile on behalf of importing enterprises other than primary oil distributors until the volume imported by such enterprises reaches a level equivalent to 10% of domestic demand in Japan, and enterprises using the on-behalf stockpiling (hereinafter referred to as a "measure user") will be required to pay to the Parties a commission fee for the on-behalf stockpiling on the basis of costs required for the maintenance and management of tanks used for this purpose. Furthermore, with respect to information concerning the on-behalf stockpiling, the Parties will implement measures for information blocking and thereby prevent such information from being exchanged between the department in charge of the on-behalf stockpiling and the department in charge of sale of the main fuels.

(2) Import promotion measure (commitment not to treat in a disadvantageous manner)

The Parties will make a commitment to the JFTC not to treat their clients in a disadvantageous manner when selling the main fuels to them on the ground that they have imported the main fuels. Furthermore, the Parties will make public such

commitment.

3. Other remedies (measure to maintain the competitiveness of competing enterprises)

The JFTC pointed out to the Parties the issue that there would be a risk of decline in competitive pressure from competing enterprises, for example, due to cancellation of barter contracts with such enterprises. In response, the Parties proffered the JFTC a measure to continue currently effective barter contracts in order to maintain the competitiveness of competing enterprises.

Part X Assessment of the Remedies

1. Measure concerning the business of primary distribution of the LP Gases

(1) Assessment

In accordance with the measures proffered by Idemitsu Integrating Parties, the influence of Idemitsu Integrating Parties on GYXIS' decision making is to be reduced, the extent of common interests is to be reduced since the capital contribution ratio concerned is to be lowered to 20%, and measures are to be taken to prevent the sharing of competition-sensitive information between GYXIS and AE. On these bases, it is considered that even after the Idemitsu Integration, both GYXIS and AE will engage in their business activities as independent competing entities to a certain degree.

Furthermore, in accordance with the measures proffered by JXHD and JX Integrating Parties, their influence on GYXIS' decision-making is to be eliminated, and their interests are to be no longer shared as common interests with GYXIS, since their capital contribution relation with GYXIS is to be dissolved, and their Assigned Officers Etc. at GYXIS are to be returned to them. In addition, measures are to be taken to prevent the sharing of competition-sensitive information between GYXIS and EG Etc. On these bases, it is considered that even after the JX Integration, both GYXIS and EG Etc. will engage in their business activities as independent competing entities.

In addition, in accordance with the measures proffered by the Parties, GYXIS is considered able to maintain its competitiveness at the same level as before Both Integrations.

(2) Economic analysis

A quantitative examination was conducted on the impact of the Remedies on the price change rate by using the model of the analysis under Part IV 3. (4) above. As a result, the price change rate significantly declined to nearly zero, in comparison

with the rate without the Remedies. Accordingly, the Remedies are considered quantitatively effective as well.

2. Measure concerning the main fuels (import promotion measure)

(1) Import promotion effect

In the case where the import promotion measure is implemented, the burden of the obligation to stockpile (deemed interest expenses for inventory, costs for the maintenance and management of tanks, and securing tanks etc.) on measure users who are to import the main fuels, and their psychological barriers will be reduced. On this basis, the import promotion measure is considered effective in promoting import.

(2) Regarding the import quantity acting as a constraint

Although the import promotion measure is not necessarily able to lead to an import volume equivalent to 10% of the market share immediately after its implementation, it is generally regarded as a measure to promote import up to a level at which import is considered a certain level of competitive pressure. Furthermore, since it is not easy for primary oil distributors to predict, with high precision, activities of importing enterprises other than primary oil distributors, and the import promotion measure is expected to increase import quantities or create a situation where such increase is possible, it is considered that it will be difficult for primary oil distributors to engage in coordinated conduct.

(3) Economic analysis

As grounds that imported products accounting for approximately 10% of domestic demand in Japan are sufficient in restraining the Parties' coordinated conduct, JX Integrating Parties submitted the results of an economic analysis using a framework based on critical loss analysis[29] to examine whether there was an incentive for the Parties to raise their wholesale prices of the main fuels. In this

[29] The analysis submitted by JX Integrating Parties was to find out whether there was an incentive for the Parties to increase their wholesale prices of the main fuels by applying critical loss analysis, which is normally used to define particular fields of trade. In critical loss analysis for defining particular fields of trade, on the assumption that a hypothetical monopolist in the market environment subsequent to the relevant integration raises its price, the upper limit (critical loss) of the proportion of demand decline, at which profits can be maximized, is compared against the decrease in demand (actual loss) expected to arise from the price increase. If the actual loss is greater than the critical loss, this means that the monopolist's profits cannot be maximized by the price increase concerned.

The critical loss of a hypothetical monopolist in a profit maximization problem is calculated by using the following formula. In the analysis for the investigation concerned, the critical loss was calculated by using a method equivalent to that formula.

$$\text{Critical loss} = \frac{\text{Price increase rate}}{\text{Price cost margin rate of the hypothetical monopolist} + 2 \times \text{Price increase rate}}$$

In the case concerned under the investigation, the actual loss is a quantity that is approximately 10% of domestic demand and subject to the on-behalf stockpiling. This is the quantity for which users can find a substitute after price increase.

analysis, the critical loss in the case where the wholesale prices of the main fuels were increased was calculated. The calculated critical loss was less than approximately 10% of domestic demand, i.e. the actual loss. In accordance with the results of this analysis, the Parties will not be able to maximize profits even where they increase their wholesale prices of the main fuels, meaning there will be no incentive to raise such prices.

Therefore, the results of this analysis indicate that imported products accounting for approximately 10% of domestic demand in Japan are sufficient in restraining the Parties' price increase.

(4) Summary

As described above, on the premise of the Remedies proposed, it is considered that there will be an import promotion effect that is sufficient in restraining coordinated conduct in relation to the main fuels.

3. Measure to maintain the competitiveness of competing enterprises

In the case where the Remedies are implemented, competing enterprises are expected to be able to maintain their competitiveness as they will be able to supply the main fuels to all regions of Japan at least at the same price levels as the current levels.

Part XI Conclusion

On the premise that the Remedies would be implemented by the Parties, the JFTC concluded that Both Integrations would not substantially restrain competition in particular fields of trade relative to the business of primary distribution of each of propane, butane, gasoline, kerosene, diesel fuel, and heavy oil A.

Case 4 Business swap by Sanofi Group and Boehringer Ingelheim Group

Part I Outline of this case

This case concerns a plan in which 1) Sanofi K.K. (JCN 7011101037279) (a group of companies including Sanofi K.K. which are held by the ultimate parent company Sanofi S.A. [headquartered in France] hereinafter referred to as "Sanofi Group"; Sanofi K.K. referred to as "Sanofi") would acquire consumer healthcare business from Nippon Boehringer Ingelheim Co ., Ltd. (JCN 1010701019774) (a group of companies including Nippon Boehringer Ingelheim which are held by the ultimate parent company C.H. Boehringer Sohn AG & Co. KG, Ingelheim [headquartered in Germany] hereinafter referred to as "BI Group"; Sanofi Group and BI Group hereinafter collectively referred to as "the Parties"); 2) Sanofi would acquire all shares of SSP Co., Ltd. (JCN 8010001034749) which belongs to BI Group; and 3) Boehringer Ingelheim Animal Health France SAS (headquartered in France) which belongs to BI Group would acquire all shares of Merial SAS (headquartered in France) which belongs to Sanofi Group (hereinafter, 1)-3) above collectively referred to as "the conduct of this case"). Through the conduct of this case, Sanofi Group would acquire BI Group's consumer healthcare business and BI Group would acquire Sanofi Group's animal health business.

The applicable provisions in this case are Article 10 and Article 16 of the AMA.

While there are many specific products manufactured and sold by the Parties which are in horizontal relationships, the following examines products that are considered to have a relatively large impact on competition (systemic antihistamines [R6A], antipyretic analgesics for animals, cardiovascular drugs for animals, and vaccines for porcine circovirus infection).

Part II Particular field of trade

1. Product range

(1) Pharmaceutical products

As for classification of pharmaceutical products, the ATC Classification System[1] established by European Pharmaceutical Market Research Association (EphMRA) is widely used. Pharmaceutical products are assigned with a code (so-called ATC code) comprised of four different levels (the first level to the fourth level) thereby being divided into groups.

In past cases of business combinations, competing products were usually specified based on the digits and letters on first three levels according to the ATC

[1] It stands for "Anatomical Therapeutic Chemical Classification System." It is regarded as classification of pharmaceutical products according to the anatomical site of action, the indication, the usage, the chemical formula, and the action mechanism.

Classification System. In cases where two products were assigned with the same ATC code up to the third level, the product range was defined based on the fourth-level letter or even further subdivision if they were not deemed to have the same type of functions/effects from the perspective of medical institutions, etc. (e.g., two drugs were not substitutable in light of actual practice of administration to patients or doctors' judgement)[2]. The JFTC took the same approach when defining the product ranges in this case as well.

Another thing to be noted when defining the product ranges was a difference between the two types of pharmaceutical products: prescription drugs and over-the-counter drugs. The former needs a prescription issued by a doctor, etc. when purchased, which makes medical institutions, etc. the users whereas the latter is available at licensed stores (drug stores, etc.) and can be purchased by any consumer, who is the user. As there is no demand substitutability between prescription drugs and over-the-counter drugs from the perspectives of medical institutions, etc. or consumers, the product ranges were separately defined for these two types of products. There are no competing prescription drugs including those at the R&D (Research and Development) phase based on the letters and digits of the first three levels of ATC codes between Sanofi Group and BI Group in consumer healthcare business. The same can be said about over-the-counter drugs in consumer healthcare business except that the two Groups compete in systemic antihistamines (R6A) based on the letters and digits of the first three levels of ATC codes. As drugs classified as systemic antihistamines (R6A) all have the same efficacy and effects of alleviating symptoms including sneeze and runny and stuffy nose caused by allergic rhinitis, etc., and are internal medicines, the JFTC learned that they are used interchangeably in principle.

Based on the above, the JFTC defined a product range as systemic antihistamines (R6A) (over-the-counter drugs).

(2) Pharmaceutical products for animals

Pharmaceutical products for animals refer to pharmaceutical products to be exclusively used for animals (Article 83, paragraph 1 of the Act on Securing Quality, Efficacy, and Safety of Products Including Pharmaceuticals and Medical Devices [Act No. 145 of 1960; hereinafter referred to as the "Act on Pharmaceuticals and Medical Devices"]) among pharmaceutical products (defined by Article 2, paragraph 1 of the "Act on Pharmaceuticals and Medical Devices"). They are largely divided into drugs for animals, biologicals for animals,

[2] This approach was used for defining product ranges, for instance, in "Capital Alliance between Kirin Group and Kyowa Hakko Group" (Case 1 of Major Business Combinations in FY 2008) and "Transfer of business from GlaxoSmithKline K.K. to Novartis International AG" (Case 4 of Major Business Combination Cases in Fiscal Year 2014).

antimicrobials, insecticides, etc. according to the usage.

A. Drugs for animals

Drugs for animals are divided into prescription legend drugs which require a prescription or a written instruction by a veterinarian (Article 83, paragraph 1 of the Act on Pharmaceuticals and Medical Devices) and other drugs. However, because subjects of medication are animals and it is hard to find out symptoms without consulting a veterinarian, other drugs too are used based on prescriptions or instructions from a veterinarian in most cases just as prescription legend drugs are. For this reason, to define product ranges for drugs for animals, examination starts from looking at whether efficacy and effects are similar from the perspective of the users, who are veterinary clinics or veterinarians.

As well, because drugs for animals may be applied to various types, and their positioning varies depending on the type, e.g., if they are industrial animals or companion animals, it is necessary to consider individual circumstances by animal type.

Based on the above, the JFTC defined product ranges for drugs for animals by first 1) looking at the efficacy and effects, and then considering 2) the animal type, 3) active ingredients, 4) how to administer, 5) the duration of effects, and 6) the residual standard where necessary.

(a) Antipyretic analgesics for animals

Drugs classified as antipyretic analgesics for animals all have the same efficacy and effects of alleviating inflammation and pain caused by a motor system disease and postoperative inflammation and pain. These drugs may be divided by the type of animals to treat such as dogs, cats, or cattle but any of these drugs can be used interchangeably by adjusting the dosage for the type of animal to treat.

As well, according to an interview with veterinarians, the users, because antipyretic analgesics for animals may be administered orally or through a hypodermic injection, and efficacy and effects are the same either way, veterinarians, etc. consider these different routes of administration substitutable to each other.

Accordingly, the JFTC defined a product range as “antipyretic analgesics for animals.”

(b) Cardiovascular drugs for animals

Drugs classified as cardiovascular drugs for animals have the same efficacy and effects of improving symptoms of chronic cardiac failure associated with mitral insufficiency and suppressing protein leakage into urine in chronic renal failure. As the treatable animal types and routes of administration are the same across different drugs, veterinarians, etc. use drugs classified as cardiovascular drugs for animals interchangeably.

Accordingly, the JFTC defined a product range as "cardiovascular drugs for animals."

B. Biologicals for animals

Biologicals for animals refer to serums, vaccines, diagnostic solutions or similar drugs used exclusively for animals for the purpose of diagnosis, prevention, or treatment of a disease. (Article 1, paragraph 1 of the Ministerial Ordinance on Handling of Biological Preparations for Animal Use [Ordinance of Ministry of Agriculture, Forestry and Fisheries No. 4 of 1961]) Among these biologicals for animals, vaccines are discussed in the following.

(a) Animal species, indications

There is no substitutability among vaccines for different animal species even if they are used for the same kind of diseases.

(b) Monovalent vaccines and combination vaccines

Vaccines are divided into two types: one containing one pathogen (called monovalent vaccines) and the other containing multiple pathogens (combination vaccines). Livestock farmers, etc., the users, select vaccines by considering infectious diseases to prevent, the number of vaccinations, and cost in a comprehensive manner within their budget for epidemic prevention, and ask veterinary clinics or veterinarians for vaccination.

Accordingly, there is demand substitutability between monovalent and combination vaccines.

(c) Live vaccines and inactivated vaccines

Vaccines are divided into live vaccines which inject a pathogen that is less virulent and inactivated vaccines which give a pathogen which was killed. While these two types are different in the number of vaccinations required and the duration of effects, they are used for the same diseases and incur almost the same cost.

Accordingly, there is demand substitutability between live and inactive

vaccines.

(d) Summary

Based on the above, the JFTC defined a product range for each group of vaccines which are used for the same infectious disease of the same animal species.

Among different types of vaccines, the following discusses vaccines for porcine circovirus infection as the conduct of this case is considered to have a relatively large impact on competition concerning these vaccines.

2. Geographic range

It is not allowed to manufacture, sell or import the products discussed in the above 1 in Japan without a license based on the Act on Pharmaceuticals and Medical Devices. While licensed manufacturers conduct business all over Japan and there is no special circumstances concerning characteristics or transportation cost of the products, medical institutions, etc., the users, are able to purchase the products from any place in Japan. Therefore, the JFTC defined the geographic range of this case as "all regions of Japan."

Part III Impact of the conduct of this case on competition

1. Systemic antihistamine (R6A)

(1) Position of the Parties

After carrying out the conduct of this case, the Parties together will account for around 35% of the systemic antihistamine market, and the HHI will increase by around 600 points. Therefore, the conduct of this case does not meet the safe-harbor criteria for horizontal business combinations.

[Market shares of systemic antihistamines in FY2015]

Rank	Company name	Market share
1	Sanofi Group	Approx. 25%
2	Company A	Approx. 10%
3	BI Group	Approx. 10%
4	Company B	0-5%
5	Company C	0-5%
	Others	Approx. 45%
Total		100%

(2) Conditions of competing enterprises

As discussed in the above (1), Company A, a competitive supplier, and around 10 other companies including Company B and Company C compete in the market. As well, these competing enterprises are considered to have sufficient excess capacity.

Accordingly, the JFTC decided that competitive pressure from competing enterprises exists.

(3) Entry

While patents of some systemic antihistamine products including the Parties' have run out, a barrier to entry is not low since generic drugs require investment of a certain amount of time and capital, even though less than what original drugs require, from the R&D stage to start of sale. However, at the time of investigation concerning the conduct of this case, around 20 generic drug companies were manufacturing and selling generic systemic antihistamines.

As well, in this case, one of the competing enterprises, which is a global pharmaceutical corporation, is promoting the use of its systemic antihistamine, which is sold as a prescription drug, as an over-the-counter drug, and will start sale at stores in Japan as well by around 2017, which is expected to present entry pressure.

Accordingly, the JFTC decided that a certain degree of entry pressure exists.

(4) Competitive pressure from adjacent markets

As competing goods of systemic antihistamines, there are topical nasal preparations (R1A) and systemic nasal preparations (R1B). These drugs and systemic antihistamines are partially different in efficacy and effects. However, because all of them are indicated for the treatment of allergic rhinitis, topical nasal preparations and systemic nasal preparations share a certain degree of likeliness in the indication with systemic antihistamines. As well, in 2015, topical and systemic nasal preparations had a market as large as over half the size of the systemic antihistamine market respectively.

Therefore, the JFTC decided that competitive pressure from adjacent markets exists.

(5) Competitive pressure from users

As the JFTC found, while the Parties supply over-the-counter drugs to retailers including drug stores through a wholesaler or directly, it is retailers who practically decide prices of products even when products are supplied through a

wholesaler.

Retailers generally decide on products to sell by considering 1) efficacy and effects of products, 2) how well they are known, 3) details of support provided by pharmaceutical corporations including distribution of promotional merchandise, and 4) profit margins for retailers, among which 4) profit margins for retailers are especially important when selecting key products. As well, as general consumers usually have difficulties in deciding which drugs are good, drug stores' sales strategies including where products are placed and whether they come with recommendation from store pharmacists carry a lot of weight with general consumers when choosing products. If retailers do not like prices proposed by a pharmaceutical corporation, they may demote the company's products by changing their display.

Therefore, the JFTC decided that a certain degree of competitive pressure from users exists.

(6) Summary

Based on the above, the JFTC decided that the conduct of this case would not substantially restrain competition in any particular field of trade.

2. Antipyretic analgesics for animals

(1) Position of the Parties

After carrying out the conduct of this case, the Parties together will account for around 35% of the market of antipyretic analgesics for animals, and the HHI will increase by around 500 points. Therefore, the conduct of this case does not meet the safe-harbor criteria for horizontal business combinations.

[Market share of antipyretic analgesics for animals in FY2014]

Rank	Company name	Market share
1	BI Group	Approx. 20%
2	Company D	Approx. 15%
3	Company E	Approx. 15%
4	Sanofi Group	Approx. 10%
5	Company F	Approx. 10%
6	Company G	Approx. 10%
	Others	Approx. 20%
Total		100%

(2) Conditions of competing enterprises

As seen in the table provided in the above (1), apart from the Parties, four competitive suppliers have a market share of 10% or more respectively, and they are considered to have sufficient excess capacity. Therefore, they are considered to present competitive constraints against price increase of antipyretic analgesics for animals by the Parties.

Accordingly, the JFTC decided that a certain degree of competitive pressure from competing enterprises exists.

(3) Entry

Regarding drugs for animals, a new product launched by an existing competitor could be considered as entry pressure in light of the fact that even companies which already sell products are required to spend a lot of time and money on clinical tests, etc. when launching another new product. In fact, a new product was launched by a competing enterprise in 2016.

Therefore, the JFTC decided that a certain degree of entry pressure exists.

(4) Competitive pressure from users

While antipyretic analgesics for animals are distributed through wholesalers, many of these wholesalers are major pharmaceutical wholesalers, which, in addition to drugs for animals, deal in various drugs and have strong sales networks for that. As a result, they have strong price bargaining power. There are major pharmaceutical wholesalers specializing in drugs for animals, as well. They also have strong price bargaining power based on their strong bond with veterinarians and other users.

Therefore, the JFTC decided that competitive pressure from users exists.

(5) Summary

Based on the above, the JFTC decided that the conduct of this case would not substantially restrain competition in any particular field of trade.

3. Cardiovascular drugs for animals

(1) Position of the Parties

After carrying out the conduct of this case, the Parties together will account for around 50% of the market of cardiovascular drugs for animals, and the HHI will increase by around 800 points. Therefore, the conduct of this case does not meet the safe-harbor criteria for horizontal business combinations.

[Market share of cardiovascular drugs for animals in FY2014]

Rank	Company name	Market share
1	BI Group	Approx. 40%
2	Company H	Approx. 35%
3	Sanofi Group	Approx. 10%
4	Company I	Approx. 10%
5	Company J	0-5%
6	Company K	0-5%
Total		100%

(2) Conditions of competing enterprises

As seen in the table provided in the above (1), two competitive suppliers have a market share of 10% or more respectively, including Company H which has around 35% of the market, and they are considered to have sufficient excess capacity. Therefore, they are considered to present competitive constraints against price increase of cardiovascular drugs for animals by the Parties.

Accordingly, the JFTC decided that a certain degree of competitive pressure from competing enterprises exists.

(3) Entry

A generic drug from a competing enterprise went on sale in 2016.

As well, after the Parties' patent for a product ran out, an enterprise which had sold the product concerned entered the market with a generic drug in 2015.

Therefore, the JFTC decided that a certain degree of entry pressure exists.

(4) Competitive pressure from users

As the condition is the same as that discussed in the above 2 (4), the JFTC decided that competitive pressure from users exists.

(5) Summary

Based on the above, the JFTC decided that the conduct of this case would not substantially restrain competition in any particular field of trade.

4. Vaccines for porcine circovirus infection

(1) Substantial constraint on competition through unilateral conduct

A. Position of the Parties

After carrying out the conduct of this case, the Parties together will account for around 65% of the market of vaccines for porcine circovirus infection, and

the HHI will increase by around 600 points. Therefore, the conduct of this case does not meet the safe-harbor criteria for horizontal business combinations.

[Market shares of vaccines for porcine circovirus infection in FY2014]

Rank	Company name	Market share
1	BI Group	Approx. 60%
2	Company L	Approx. 25%
3	Company M	Approx. 10%
4	Sanofi Group	Approx. 5%
Total		100%

B. Conditions of competing enterprises

As seen in the table provided in the above A, there are two competitive suppliers with a market share of 10% or more respectively. Both of these competing enterprises are so-called Japanese subsidiaries of foreign-owned pharmaceutical corporations, and import and sell products manufactured overseas. These competitors are considered to have sufficient excess capacity for meeting demand in Japan based on their past record of imports and the fact that Japan accounts for only a small percentage of the total number of pigs, the subject of the vaccines, raised in the world.

Accordingly, the JFTC decided that competitive pressure from competing enterprises exists.

C. Entry

The condition is the same as that discussed in the above 2 (3) and multiple competing enterprises are going to launch new products including those which could be used for porcine circovirus infection by 2017 at the latest.

Therefore, the JFTC decided that a certain degree of entry pressure exists.

D. Competitive pressure from users

The condition of vaccines for porcine circovirus infection is also the same as that discussed in the above 2 (4).

Therefore, the JFTC decided that competitive pressure from users exists.

(2) Substantial constraint on competition through coordinated conduct

Having been commercially available in Japan for only around 10 years, vaccines for porcine circovirus infection are relatively new products, and companies' market shares and standings change every year. While these vaccines

are manufactured by cultivating and inactivating a vaccine strain and then adding adjuvants to it, raw materials, including vaccine strains and adjuvants, and manufacturing methods vary depending on the product, and manufacturing costs are also different accordingly. As the amount of money that went into R&D activities is also different depending on the product, cost conditions vary too. Furthermore, because products are also different in terms of the type (monovalent or combination vaccine), the inoculum dose, usage, etc., each product is differentiated. Therefore, companies are unlikely to share a common understanding concerning coordinated conduct for sales price and quantity and to predict each other's behavior with high probability.

Coupled with these circumstances, competing enterprises have sufficient excess capacity as discussed in the above (1) B, and are hence capable of aggressively increasing sales, which is considered to make coordinating conduct less attractive to them.

On top of that, as a certain degree of entry pressure exists as discussed in the above (1) C, and so is competitive pressure from users as in the above (1) D, such pressure is also considered as a factor to hinder coordinated conduct.

(3) Summary

Based on the above, the JFTC decided that neither unilateral conduct nor coordinated conduct would substantially restrain competition in any particular field of trade.

Part IV Conclusion

The JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case5 Results of Investigation of the Acquisition of Nisshin Steel Co., Ltd. Shares by NIPPON STEEL & SUMITOMO METAL CORPORATION

Part I The Parties

NIPPON STEEL & SUMITOMO METAL CORPORATION (JCN3010001008848) (hereinafter referred to as "NSSMC"; and the corporate group consisting of companies that have already formed joint relationships with NSSMC is referred to as "NSSMC Group") and Nisshin Steel Co., Ltd. (JCN 8010001149423) (hereinafter referred to as "Nisshin Steel"; NSSMC and Nisshin Steel are collectively referred to as the "Parties"; and NSSMC Group, Nisshin Steel, and Nisshin Steel's corporate group consisting of companies that have already formed joint relationships with it are collectively referred to as the "Company Groups") are companies that conduct the business of production and sale of steel products.

Part II Outline of this case, and applicable provisions

NSSMC plans to acquire more than 50% of the voting rights attaching to shares in Nisshin Steel (hereinafter referred to as the "Stock Acquisition").[1]

The applicable provision is in this case Article 10 of the AMA.

Part III Sequence of events, and brief summary of the investigation

1. Sequence of events

From February 2016, the Parties voluntarily submitted written opinions and materials to the JFTC, stating that the Stock Acquisition would not substantially restrain competition, and the JFTC held meetings several times with the Parties in response to requests by the Parties. Subsequently, on May 13th of the same year, the JFTC accepted a written notification of a plan for the Stock Acquisition submitted by NSSMC on the basis of the provisions of the AMA, and commenced the preliminary investigation. The JFTC conducted the preliminary investigation on the basis of the aforementioned written notification and other documents submitted by the Parties. As a result, finding it necessary to conduct a more detailed investigation, the JFTC made a request to NSSMC for provision of reports etc. on June 10th of the same year, opened the secondary investigation, and on the same day announced the commencement of the second investigation and of solicitation for public comments from third persons.

In the secondary investigation, the JFTC held meetings several times with the Parties in response to requests by the Parties, providing explanations on points at issue and holding discussions. The JFTC conducted the secondary investigation into

[1] By combination of a tender offer and third-party allocation of shares

the effect of the Stock Acquisition on competition, on the basis of the results etc. of hearings with competing enterprises, users, etc. and of document examinations, in addition to reports etc. sequentially submitted by NSSMC.

Regarding the request to NSSMC for provision of reports etc., the submission of all reports etc. was completed with those submitted on December 27th, 2016.

2. Brief summary of the investigation

The JFTC conducted an investigation into approximately 20 fields of trade, in which the Company Groups have a competitive relationship or trade relationship with each other. On the premise of the remedies proposed to the JFTC by the Parties, the JFTC concluded that the Stock Acquisition would not substantially restrain competition in relation to, among the approximately 20 fields, "hot-dip zinc-aluminum-magnesium alloy-coated steel sheet," which is a surface-treated steel sheet type, and "cold-rolled stainless steel sheet," which is a stainless steel type. The results of the investigation pertaining to these steel products are as described in Part IV and V below.

Furthermore, the JFTC concluded that the Stock Acquisition would not substantially restrain competition in any particular fields of trade other than the fields of the aforementioned steel products.

Part IV Hot-dip steel sheet

1. Product description

Surface-treated steel sheets are those whose original sheets are hot-rolled[2] or cold-rolled[3] steel sheets, and whose surfaces are coated in order to prevent rust. Coating materials for surface-treated steel sheets include zinc, tin, aluminum, and these materials with the addition of alloying elements. Coating methods include electroplated coating, which is performed electrochemically in an electroplating bath, and hot-dip coating, which coats steel sheets by immersing them in melted coating materials.

Surface-treated steel sheets are broadly categorized into two types according to the aforementioned coating methods: "electroplated steel sheet" and "hot-dip steel sheet." Steel sheets falling within the hot-dip steel sheet type are sub-categorized, according to coating constituents, into "hot-dip galvanized steel sheet," "hot-dip galvannealed steel sheet," "hot-dip zinc-aluminum-magnesium alloy-coated steel sheet," "hot-dip zinc-5% aluminum-coated steel sheet," "hot-dip 55% aluminum-zinc alloy-coated

[2] Hot-rolled steel sheets are steel sheets made by heating slabs, which are produced as semi-finished products throu gh the processes of pig-iron manufacturing and steelmaking, at over 1,000 degrees Celsius in a furnace and subseq uently rolling these heated slabs down to the thickness of less than 3 mm with a hot rolling mill consisting of mu ltiple rolling machines aligned in a straight line.

[3] Cold-rolled steel sheets are steel sheets made by re-rolling hot-rolled steel sheets at an ordinary temperature with a cold rolling mill, and subsequently annealing (heat treatment) such steel sheets in order to enhance their processa bility.

steel sheet," "prepainted hot-dip zinc-coated steel sheet," and "hot-dip aluminum-coated steel sheet."

Among the aforementioned subcategories, hot-dip zinc-aluminum-magnesium alloy-coated steel sheets are those whose corrosion resistance is enhanced by combining zinc with aluminum and magnesium, and/or whose cutting surfaces are given certain corrosion resistance. This type of steel sheet is mainly used for prefabricated houses, platforms for solar power generation systems, electrical machines, vehicles, etc. Main users of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets include building material manufacturers, electronic manufacturers, and automobile manufacturers.

The Parties are the only steel companies in Japan holding the process patent for hot-dip zinc-aluminum-magnesium alloy-coated steel sheets; NSSMC produces and sells this type of steel sheets under the product name of "SuperDyma," and Nisshin Steel produces and sells them under the product name of "ZAM."

2. Particular fields of trade

(1) Product range

A. Demand substitutability

As described in Part I above, hot-dip steel sheets are categorized, according to coating constituents, into hot-dip galvanized steel sheets, hot-dip galvannealed steel sheets, hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, hot-dip zinc-5% aluminum-coated steel sheets, hot-dip 55% aluminum-zinc alloy-coated steel sheets, prepainted hot-dip zinc-coated steel sheets, and hot-dip aluminum-coated steel sheets. According to users who gave their opinions at hearings etc., the capability required of a steel sheet differs depending on usage, and many of such users are of the opinion that there is no substitutability among the steel sheet types. On this basis, demand substitutability among the hot-dip steel sheet types is considered limited.

In particular, at hearings etc., most of the users were of the opinion that the hot-dip zinc-aluminum-magnesium alloy-coated steel sheet type had superior corrosion resistance and processability compared with the other hot-dip steel sheet types, and that it would not be possible to substitute the hot-dip zinc-aluminum-magnesium alloy-coated steel sheet type with another steel sheet type. Therefore, there is no demand substitutability between hot-dip zinc-aluminum-magnesium alloy-coated steel sheets and other hot-dip steel sheets.

In addition, economic analysis results also indicate that the hot-dip zinc-aluminum-magnesium alloy-coated steel sheet type may, by itself, be able to constitute a product range in particular fields of trade. Specifically, critical

elasticity analysis[4] was conducted after estimating the demand function of the steel sheet type with the method of instrumental variables and calculating its actual elasticity. As a result, the absolute value of the critical elasticity was greater than that of the actual elasticity, suggesting that the steel sheet type would, by itself, be able to define a particular field of trade.[5]

B. Supply substitutability

Hot-dip steel sheets are produced by immersing original sheets in a coating tank, called a melting pot, filled with coating solutions. Since it is not difficult to change a melting pot according to the type of coated steel sheets to be produced, it is considered that there is supply substitutability among the hot-dip steel sheet types.

Nonetheless, since the Parties own the process patent for hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, other enterprises are not at liberty to produce the steel sheet type.

Therefore, although it appears possible to consider that there is supply substitutability among the hot-dip steel sheet types, there is no supply substitutability between the hot-dip zinc-aluminum-magnesium alloy-coated steel sheet type and the other hot-dip steel sheet types, since only the Parties produce and sell the former steel sheet type in Japan due to the process patent, etc.

C. Summary

As described above, while demand substitutability among the hot-dip steel sheet types is considered limited, it is considered that there is supply substitutability among the hot-dip steel sheet types excluding the hot-dip zinc-aluminum-magnesium alloy-coated steel sheet type. For the hot-dip zinc-aluminum-magnesium alloy-coated steel sheet type, no demand substitutability or supply substitutability is found, and the economic analysis results suggest that this type may, by itself, be able to constitute a particular field of trade. On this basis, the JFTC defined the product range of this case as “hot-dip steel sheets” as well as “hot-dip zinc-aluminum-magnesium alloy-coated steel sheets,” in a multi-

[4] Critical elasticity analysis is an analysis method to define particular fields of trade by looking into whether profits will increase if a hypothetical party monopolizing the market of a certain product/service increases the price of such product/service by 5% to 10%. The value of the price elasticity of demand theoretically-derived for maximization of profits (critical elasticity) is compared with the value of the price elasticity of demand derived from actual transactions (actual elasticity). When the absolute value of the critical elasticity is greater than that of the actual elasticity, the price elasticity of demand is considered sufficiently small so that the price increase can lead to profits, and the product's/service's product range and/or geographic range is to be regarded as a particular field of trade.

[5] However, the economic analysis results here are subject to the restriction of available data and the analysis method. For that reason, the results should not be treated as a decisive conclusion on the definition of a particular field of trade, but should rather be positioned as results supplementing qualitative investigation results.

layered manner.

(2) Geographic range

With regard to hot-dip steel sheets for the product types defined in Part IV 2.(1) above, users do not currently trade with overseas suppliers in the same manner as they do with suppliers in Japan (steel companies). In addition, hot-dip zinc-aluminum-magnesium alloy-coated steel sheets are produced only in Japan, and thus no imported product is available for this type of steel sheets. For that reason, there is no circumstance suggesting that the geographic range of this case should extend to other countries. On the other hand, there is no constraint on the transportation of each of the products concerned in Japan in terms of difficulty and costs of transportation. In fact, the Company Groups and competing enterprises sell their products in all regions of Japan. Furthermore, no regional difference in the retail prices of products is found.

Therefore, for "hot-dip steel sheets" and "hot-dip zinc-aluminum-magnesium alloy-coated steel sheets," the JFTC defined the geographic range of this case as "all regions of Japan."

3. Examination of substantial constraint of competition

After examining any substantial constraint on competition in the particular fields of trade defined in Part II above, the JFTC concluded that the Stock Acquisition would not substantially restrain competition with regard to hot-dip steel sheets. On the other hand, in relation to hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, the JFTC found that the Stock Acquisition would substantially restrain competition. The details of the examination on hot-dip zinc-aluminum-magnesium alloy-coated steel sheets are as follows.

(1) Positions of the Parties, and competition status

The market share in the trade field of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets in Japan during FY2014 was as shown in the table below. Following the Stock Acquisition, the Parties will monopolize the market. Consequently, the Stock Acquisition will not meet the safe-harbor criteria for horizontal business combinations.

[Market share of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets in FY2014]

Ranking	Name of company	Market share
1	Nisshin Steel	Approx. 80%
2	NSSMC	Approx. 20%

Ranking	Name of company	Market share
Total		100%

(2) Import

Since there is no import hot-dip zinc-aluminum-magnesium alloy-coated steel sheet, there is no import pressure.

(3) Entry

Since the fact that the Parties own patents etc. for hot-dip zinc-aluminum-magnesium alloy-coated steel sheets poses barriers to market entry, there is no entry pressure.

(4) Competitive pressure from adjacent markets

According to the results of hearings with users, small part of them stated that among hot-dip steel sheets, hot-dip zinc-5% aluminum-coated steel sheets could be used in place of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, depending on usage. However, many of the users insisted that no hot-dip steel sheet could replace hot-dip zinc-aluminum-magnesium alloy-coated steel sheets.

Therefore, competitive pressure from adjacent markets is limited.

(5) Competitive pressure from users

With respect to automobile manufacturers and electronic manufacturers, which are users of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, their purchase departments summarize steel products that their business departments and partner component manufacturers use, collectively negotiate with steel companies including the Parties on quality, price, quantity, etc., determine such details, and procure steel products (this type of procurement method is hereinafter referred to as “centralized purchasing”). Consequently, in general, automobile manufacturers and electronic manufacturers are found to have a strong bargaining power over steel companies. On the other hand, in comparison with the other types of hot-dip steel sheets, hot-dip zinc-aluminum-magnesium alloy-coated steel sheets are produced only by the Parties, and there is no equivalent imported product. Since users do not have alternative options, their bargaining power is rather limited. Furthermore, the same applies to building material manufacturers, which are also users in addition to automobile manufacturers and electronic manufacturers. For users, it is difficult to replace hot-dip zinc-aluminum-magnesium alloy-coated steel sheets with other companies’ products or imported products.

Therefore, competitive pressure from users is limited.

4. Legal assessment based on the AMA

With the Stock Acquisition, one of the competition units in the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets in Japan will be reduced, thereby increasing the Parties' combined market share to 100%. Without any import pressure or entry pressure , and with limited competitive pressure from adjacent markets and users, there emerges a situation where the Parties has sole control over the prices etc. of the steel sheet type concerned to a certain degree. Consequently, it is found that the Stock Acquisition will substantially restrain competition in fields of trade relative to hot-dip zinc-aluminum-magnesium alloy-coated steel sheets in Japan.

Part V Cold-rolled stainless steel sheet

1. Product description

Among the steel products that the Company Groups produce and sell, "cold-rolled stainless steel sheets" fall within a steel product type called "stainless steel."

Stainless steel is a steel product made from iron, its main constituent (over 50%), with a minimum of 10.5% chromium and a maximum of 1.2% carbon, in order to prevent rust, which is the biggest weakness of iron. It has excellent corrosion resistance, durability, designability, fire resistance, processability, etc. In many cases, in accordance with alloy constituents added, stainless steel is classified as chromium-based stainless steel containing chromium but not nickel, or nickel-based stainless steel containing both chromium and nickel. Nickel-based stainless steel has relatively superior corrosion-resistance, processability, etc., and accordingly its usage is extensive, from household products to rail cars. In contrast with nickel-based stainless steel, chromium-based stainless steel does not demonstrate high corrosion resistance. Consequently, it is used for items in environments in which corrosion is not severe, such as automotive exhaust system components, commercial kitchens, and architectural interior.

In general, stainless steel is produced by using an electrical furnace. When stainless steel is produced through the process of melting raw materials such as steel scrap, pig iron, ferronickel, ferrochromium, and stainless steel scrap (steelmaking process), subsequently rolled with a hot rolling mill, and made into a band-like stainless steel product, this product is called a "hot-rolled stainless steel strip." Furthermore, when a hot-rolled stainless steel strip is re-rolled at an ordinary temperature with a cold rolling mill to enhance their designability and processability, the resultant band-like stainless steel product is called a "cold-rolled stainless steel sheet."

2. Particular fields of trade

(1) Product range

A. Demand substitutability

Cold-rolled stainless steel sheets are band-like stainless steel products whose

designability and processability are enhanced by cold-rolling hot-rolled stainless steel strips, and are used for vehicles, electrical machines, building materials, and other products in various fields. In contrast, hot-rolled stainless steel strips are often used as intermediate components used in the production of such products as “cold-rolled stainless steel sheets,” “stainless steel pipes,” and “stainless structural shapes.” Since hot-rolled stainless steel strips are not used as final products in many cases, there is no demand substitutability between cold-rolled stainless steel sheets and hot-rolled stainless steel strips.

As described in Part V .1., stainless steel is classified into nickel-based stainless steel and chromium-based stainless steel. Since these types of steel differ from each other in terms of corrosion resistance, processability, etc., users generally choose their steel types or switch from one type to another by weighing price trends of the two types and the performance of these types required for their products from a cost-effectiveness standpoint. On this basis, there is a certain level of demand substitutability between nickel-based stainless steel and chromium-based stainless steel.

B. Supply substitutability

As described in Part V.1., cold-rolled stainless steel sheets are produced by rolling hot-rolled stainless steel strips at an ordinary temperature with a cold rolling mill. On the other hand, hot-rolled stainless steel strips are produced by rolling, with a hot rolling mill, stainless steel produced through the steelmaking process. Since each type requires different production facilities, there is no supply substitutability between cold-rolled stainless steel sheets and hot-rolled stainless steel strips.

Meanwhile, despite the fact that nickel-based stainless steel and chromium-based stainless steel differ from each other in terms of alloy constituents added in these types of steel, there is supply substitutability between the two types since their basic production processes are the same.

C. Summary

As described above, while there is no demand substitutability or supply substitutability between cold-rolled stainless steel sheets and hot-rolled stainless steel strips, there are both demand substitutability and supply substitutability between nickel-based stainless steel and chromium-based stainless steel. On this basis, the JFTC defined the product range of this case as “cold-rolled stainless steel sheet.”

(2) Geographic range

The Parties asserted that the geographic range of cold-rolled stainless steel sheets could be defined as "East Asia," on the ground that alloy elements used for the production of stainless steel, such as nickel and chromium, account for a large part of the production cost of steel, that the prices of nickel and chromium are determined according to international markets, and that the prices of cold-rolled stainless steel sheets themselves are linked to international markets as well. Furthermore, in relation to cold-rolled stainless steel sheets, the Parties conducted price correlation analysis[6] and stationarity analysis[7], and submitted to the JFTC the results of these economic analyses, based on which the Parties claimed that market integrity in East Asia had been growing.

According to the results of hearings etc. with users, however, users of cold-rolled stainless steel sheets do not currently trade with steel companies in East Asia in the same manner as they do with steel companies in Japan, due to quality issues or transportation issues; the actual situation is that such users procure cold-rolled stainless steel sheets mainly from steel companies in Japan. Accordingly, the assertion made by the Parties is found to be inconsistent with the results of hearings, etc. with users. Furthermore, for the purpose of validating this point, the JFTC estimated a demand function of cold-rolled stainless steel sheets by using the method of instrumental variables, and conducted critical elasticity analysis after calculating the actual elasticity of such steel sheets. As a result, the absolute value of the critical elasticity was higher than that of the actual elasticity, supporting the result that the geographic range should be defined as "all regions of Japan."[8]

Therefore, the JFTC defined the geographic range of this case as "all regions of Japan."

3. Examination of substantial constraint of competition

(1) Positions of the Parties, and competition

The market share in the trade field of cold-rolled stainless steel sheets in Japan during FY2014 was as shown in the table below. Following the Stock Acquisition, the combined market share and ranking of the Companies Groups will be approximately 60% and the first place, and their incremental Herfindahl-

[6] Price correlation analysis for market definition is an analysis method that figures out a correlation coefficient between two prices subject to the analysis, and market integrity is found to be strong when a high correlation is observed between the two prices. In this analysis, a correlation coefficient is a value between -1 and 1. When a price is high (or low) and the other price is also high (or low), there is a positive correlation between these prices; the closer to one the correlation coefficient is, the higher the (positive) correlation between the prices is.

[7] Stationarity analysis for market definition is an analysis method that analyzes whether there is stationarity in the ratio between two prices subject to the analysis. Market integrity is regarded as strong when stationarity is found in the ratio. Stationarity in the ratio between two prices is a property that even where the ratio between two prices deviates from a certain level at a given time, it comes back to the level as time passes.

[8] However, the economic analysis results here are subject to the restriction of available data and the analysis method. For that reason, the results should not be treated as a decisive conclusion on the definition of a particular field of trade, but should rather be positioned as results supplementing qualitative investigation results.

Hirschman Index (HHI) will be approximately 1,900. Therefore, the Stock Acquisition will not meet the safe-harbor criteria for horizontal business combinations.

[Market share of cold-rolled stainless steel sheets in FY2014]

Ranking	Name of company	Market share
1	Nisshin Steel	Approx. 35%
2	NSSMC Group	Approx. 25%
3	Company A	Approx. 15%
4	Company B	Approx. 10%
5	Company C	0-5%
6	Company D	0-5%
7	Company E	0-5%
	Import	Approx. 10%
Total		100%

In the market of cold-rolled stainless steel sheets, there exist competitive suppliers of Company A (having a market share of approximately 15%) and Company B (having a market share of approximately 10%). However, the excess capacities of these companies are rather limited.

(2) Import

The market share of imported cold-rolled stainless steel sheets has been around 5% to 10% in recent years. In accordance with users of cold-rolled stainless steel sheets, although they find no quality-related problem with imported products designed for general purposes, they are also of the opinion that it is difficult to procure product types that meet the unique performance and quality requirements of individual users due to quality issues etc., or that there are still some issues such as the number of lots users can order from overseas steel companies, and such companies' handling of complaints or returned products, in comparison with domestic products.

Therefore, although imported products are expected to continue having a certain market share in time to come, import pressure is rather limited.

(3) Entry

The production of cold-rolled stainless steel sheets requires a large amount of capital investment. Moreover, in the past 5 years, there was no new enterprise that participated in the production. No steel company in Japan is planning to newly enter the production of cold-rolled stainless steel sheets, either.

Therefore, there is no entry pressure.

(4) Competitive pressure from adjacent markets

There can be a competitive relationship between cold-rolled stainless steel sheets and other materials, depending on usage. For instance, aluminum and resin are often used for rail cars, home electric appliances, kitchen instruments, etc. in place of cold-rolled stainless steel sheets. However, for reasons such as that these alternative materials are more expensive than cold-rolled stainless steel sheets, only some of alternative materials are used as substitutes.

Therefore, competitive pressure from adjacent markets is limited.

(5) Competitive pressure from users

Automobile manufacturers and electronic manufacturers, which are users of cold-rolled stainless steel sheets, have a strong bargaining power by means of centralized purchasing. However, among such users, some are not covered by centralized purchasing, because product types of cold-rolled stainless steel sheets to be procured can be extensive, rendering centralized purchasing not appropriate for some users. Furthermore, the specifications and/or constituents of some cold-rolled stainless steel sheet product types are individually adjusted for commercial goods manufactured by users. Production know-how in relation to such product types is required to meet the detailed needs of users, and consequently there are cases where only the Company Groups produce certain product types. In such cases, it is difficult for users to switch their steel sheet products to other companies' products or imported products.

Therefore, competitive pressure from users is limited.

4. Legal assessment based on the AMA

With the Stock Acquisition, one of the competition units in the market of cold-rolled stainless steel sheets in Japan will be reduced, changing the Company Groups' combined market share to approximately 60%. On the other hand, the excess capacities of competing enterprises are not necessarily sufficient, and there is no entry pressure. In addition, import pressure and competitive pressure from adjacent markets and users are limited. On these grounds, due to the Stock Acquisition, there will emerge a situation where the Company Groups have sole control over the prices etc. of cold-rolled stainless steel sheets to a certain degree. Furthermore, due to the limited excess capacities of competing enterprises, there is limited room for these enterprises to increase their market share in the case where the Company Groups increase their own prices. In a situation where there is no entry pressure and there is only limited competitive pressure from adjacent markets and users, the Company

Groups may be able to control prices etc. to a certain extent by engaging in coordinated conduct with such competing enterprises after the Stock Acquisition. Accordingly, it is found that the Stock Acquisition will substantially restrict competition in fields of trade relative to cold-rolled stainless steel sheets in Japan.

Part VI Proposal of remedies by the Parties

The JFTC pointed out the issues under Part IV and V above. The Parties then proffered the following remedies concerning each of the issues (hereinafter referred to as a "Remedy") to the JFTC.

1. Remedy concerning hot-dip zinc-aluminum-magnesium alloy-coated steel sheets

The JFTC pointed out to the Parties the issue that the Stock Acquisition would enable the Parties by themselves to control the prices, etc. of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets to a certain degree, and thus would substantially restrain competition in fields of trade relative to such steel sheets in Japan. In response, the Parties proffered the following measures to the JFTC.

(1) License for patents and production know-how

The Parties will grant Kobe Steel, Ltd. (JCN: 6140001005714; hereinafter referred to as "Kobe Steel") a license to use Nisshin Steel's patents and production know-how for hot-dip zinc-aluminum-magnesium alloy-coated steel sheets[9] (hereinafter referred to as the "license"; and any product manufactured with the use of the License is referred to as a "Licensed Product"). The effectiveness of the License will continue without a specific expiration date.

(2) Provision of information

The Parties will provide Kobe Steel with information necessary for it to engage in business activities to receive orders for Licensed Products.

(3) OEM supply

Until Kobe Steel has become able to produce Licensed Products on its own, or over the next two years, the Parties will supply such Licensed Products to Kobe Steel, on the basis of OEM, up to 80,000 tons per year for the purpose of creating an effective competition unit as expeditiously as possible.

(4) Entrustment of coating processes

Until Kobe Steel has become able to produce Licensed Products on its own (or for

[9] This includes Nisshin Steel's dispatch of its technical staff and instructions with respect to the relevant know-how, in addition to the provision of information materials describing the know-how.

the maximum period of 10 years), the Parties will, upon entrustment by Kobe Steel, perform coating processes for Kobe Steel's Licensed Products up to 160,000 tons per year after the expiration of the OEM supply term. With regard to the entrustment of coating processes, Kobe Steel will, based on its own wishes, entrust Nisshin Steel with coating processes for hot-rolled or cold-rolled steel sheets used as original sheets for Licensed Products that Kobe Steel produces at its own place, and Nisshin Steel will accept such entrustment.

(5) Consideration

The consideration to be paid in relation to PartVI.1.(3) and PartVI.1.(4) will be, in principle, an amount that is based on the full cost of Licensed Products produced by the Parties and that allows Kobe Steel to newly enter the relevant market. The confirmation of the JFTC will be obtained with regard to the consideration to be paid in relation to PartVI.1.(1) and PartVI.1.(4).

(6) Other

In order to prevent any cooperative relationship between the Parties and Kobe Steel from emerging, Nisshin Steel will implement measures for information blocking to ensure that the marketing departments of the Parties will not share information obtained in the course of implementing the OEM supply or the entrustment of coating processes, such as the quantities etc. of products by specification pertaining to Kobe Steel's entrustment. Furthermore, Nisshin Steel will obtain the confirmation of the JFTC with regard to the details of measures for information blocking, and will regularly report the implementation status of the Remedies to the JFTC.

2. Remedy concerning cold-rolled stainless steel sheets

The JFTC pointed out to the Parties the issue that the Stock Acquisition would enable the Company Groups by themselves to control the prices etc. of cold-rolled stainless steel sheets to a certain degree, or enable the Company Groups and their competing enterprises to control such prices etc. to a certain degree by adopting coordinated conduct, and would consequently and substantially restrain competition in fields of trade relative to cold-rolled stainless steel sheets in Japan. In response, the Parties proffered the following measures to the JFTC.

(1) Provision of business information and support

In order to transfer to Nippon Yakin Kogyo Co., Ltd. (JCN: 2010001034977; hereinafter referred to as "NYK") transactions with users that are, among users with whom the Company Groups currently trade, mainly those for whom the Company Groups compete against each other, the Company Groups will provide a

list of applicable users etc. to NYK.[10] The list of users to be provided to NYK will pertain to Nisshin Steel's transactions involving an annual amount of 14,000 tons or equivalent of nickel-based cold-rolled stainless steel sheets (hereinafter referred to as "Target Nickel-based Products"), and NSSMC Group's transactions involving an annual amount of 9,000 tons or equivalent of chromium-based cold-rolled stainless steel sheets (hereinafter referred to as "Target Chromium-based Products"; and Target Nickel-based Products and Target Chromium-based Products are collectively referred to as "Target Stainless Steel Products").

In addition, Nihon Teppan Co., Ltd. (JCN: 5010001062323; hereinafter referred to as "Nihon Teppan"), which is a joint venture company of the Parties, will have its sales representatives engage in business activities (providing customer information, accompanying relevant employees to target customer companies, etc.) supporting the sale of Target Nickel-based Products by NYK or Nas Trading Co., Ltd. (JCN: 7010001064037; hereinafter referred to as "Nas Trading"), which is NYK's subsidiary, over the next six months.

With respect to the provision of business information and support, appropriate measures for information blocking will be implemented to prevent any cooperative relationship from emerging between any of the sales department of Nisshin Steel, Nihon Teppan or NSSMC Group, and NYK in relation to Target Nickel-based Products, and between any of the sales department of NSSMC Group or Nisshin Steel, and NYK in relation to Target Chromium-based Products. Furthermore, the confirmation of the JFTC will be obtained with regard to the details of such measures.

(2) License for technical know-how

The Company Groups will grant NYK a license for the Company Groups' know-how[11] pertaining to the product specifications and production of Target Stainless Steel Products.

(3) OEM supply

Until NYK has achieved an expansion of its supply capacity, or over the next two years, the Company Groups will have Nisshin Steel supply Target Nickel-based Products to NYK or Nas Trading on the basis of OEM,[12] from the standpoint of bringing an effective constraint into action. From the same standpoint, NSSMC

[10] However, with respect to information concerning the list of users etc., the Company Groups shall take necessary information blocking measures among themselves, for example, to prevent any disclosure of such information betwe en NSSMC Group and Nisshin Steel.

[11] This includes the Company Groups' dispatch of their technical staff and instructions concerning the relevant kno w-how, in addition to the provision of information materials describing the know-how.

[12] The annual upper limit of the total of the OEM supply, the entrusted processes under PartVI.2.(4) below, and th e supply of original sheets under PartVI.2.(5) below is 42,000 tons.

Group will supply Target Chromium-based Products on the basis of OEM over the next five years.[13]

(4) Entrusted processes

Until NYK has achieved an expansion of its supply capacity, or over the next five years, the Company Groups will have Nisshin Steel accept the entrustment of hot-rolling or cold-rolling processes from NYK in relation to Target Nickel-based Products, from the standpoint of bringing an effective constraint restraint into action. Furthermore, with respect to Chromium-based Products, NSSMC Group will accept the entrustment of hot-rolling or cold-rolling processes from NYK over the next five years.

(5) Supply of original sheets

Where necessary, the Company Groups will have Nisshin Steel supply NYK with hot-rolled stainless steel strips, which are to be used as original sheets for Nickel-based Products, over the next five years.

(6) Consideration

The consideration to be paid in relation to Part VI.2.(3) above and Part VI.2.(5) will be, in principle, an amount that is based on the Company Groups' full cost of Target Stainless Steel Products, and the confirmation of the JFTC will be obtained in this regard.

(7) Other

In order to prevent any cooperative relationship between the Company Groups and NYK from emerging, the Company Groups will implement measures for information blocking to ensure that their marketing departments will not share information obtained in the course of implementing the OEM supply, the entrusted processes, etc., such as the quantities etc. of products by specification pertaining to NYK's entrustment. Furthermore, the Company Groups will obtain the confirmation of the JFTC with regard to the details of measures for information blocking, and will regularly report the implementation status of the Remedies to the JFTC.

[13] The annual upper limit of the total of the OEM supply and the entrusted processes under Part VI.2.(4) below is 27,000 tons.

Part VII Assessment of the Remedies

1. Measures concerning hot-dip zinc-aluminum-magnesium alloy-coated steel sheets

(1) Adequacy of the measure of granting a license for patents and production know-how

Hot-dip zinc-aluminum-magnesium alloy-coated steel sheets are produced at parts of the Parties' steel plants and by using the same production facilities as those for other hot-dip steel sheets. For that reason, when a new enterprise requires production facilities so as to enter the market, it is considerably difficult to split the Parties' production facilities and transfer part thereof to such new enterprise. Moreover, since the market of steel products in Japan has been on decline, there is no new enterprise willing to newly enter the hot-dip steel sheet market in Japan. Accordingly, it is unlikely that any enterprise will easily emerge and accept a transfer of any business department of the Parties in whole or part, rendering such measures as business transfer difficult.

On the contrary, with respect to hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, the Parties hold relevant patents and production know-how. This fact poses barriers to importing or market entry, meaning that there is almost no prospect that new competing enterprises will enter the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, unless the use of such patents and production know-how is granted. Therefore, if, upon request, the Parties grant a license etc. for their patents and production know-how, under appropriate conditions, to a competing enterprise that has already had production facilities etc. for hot-dip steel sheets, the competing enterprise is able to enter the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, thereby considered to serve as an effective constraint on the Parties. Therefore, granting a license etc. for the use of relevant patents and production know-how is considered appropriate as a Remedy.

(2) Regarding Kobe Steel

Kobe Steel has already had production facilities for hot-dip steel sheets, and has produced and sold such steel sheets other than hot-dip zinc-aluminum-magnesium alloy-coated steel sheets. In the case where the Remedy concerned is adopted, that means Kobe Steel will enter the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets. By newly selling hot-dip zinc-aluminum-magnesium alloy-coated steel sheets to customers etc. that purchase other hot-dip steel sheets that Kobe Steel has been producing, Kobe Steel will be able to sell, in the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, a quantity accounting for a maximum of 10% of the whole market share over the next two years, and for a

maximum of 20% within ten years thereafter. In this case, it is considered that Kobe Steel will have a sufficient competitiveness as a new entrant to the market.

Therefore, with the Remedy concerned, Kobe Steel is considered appropriate as a new entrant to the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets.

(3) Assessment of the details of the measures

A. License for patents and production know-how

As described in Part VII.1(1), in order to produce and sell hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, it is necessary to be granted a license for relevant patents and production know-how by the Parties. Where the Parties grant Kobe Steel a license for their patents and production know-how, and consequently where Kobe Steel enters the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, Kobe Steel will serve as an effective constraint on the Parties. Therefore, granting a license for relevant patents and production know-how is considered an appropriate Remedy in this case.

B. Provision of information

The fact that the Parties provide Kobe Steel with information such as technical know-how required for order-receiving activities will not pose a risk of developing a cooperative relationship between the Parties and Kobe Steel; on the contrary, such information provision is considered a necessary measure for Kobe Steel's new entry to the market of the product type concerned.

C. OEM supply

Until Kobe Steel has acquired production know-how etc. for hot-dip zinc-aluminum-magnesium alloy-coated steel sheets, the Parties' OEM supply of Licensed Products to Kobe Steel is considered a necessary measure for the purpose of creating an effective constraint on the Parties as expeditiously as possible.

Furthermore, the period of the OEM supply is two years in principle, and is limited to the period required for Kobe Steel to acquire production know-how etc. It is considered that the OEM supply period is set properly from the standpoint of reducing risk of any coordinated conduct between the Parties and Kobe Steel arising from a prolonged OEM supply period.

D. Entrustment of coating processes

The transition from the OEM supply to the entrustment of coating processes is likely to enhance the competitiveness of Kobe Steel in terms of cost, reduce

common costs between the Parties and Kobe Steel, and increase room for competition. Accordingly, the entrustment is considered an appropriate measure.

In addition, with regard to the fact that the period of the entrustment of coating processes starts upon the completion of the OEM supply and lasts until Kobe Steel commences its full in-house production or ten years at the longest, it is inevitable, as a new market entrant, that Kobe Steel requires a certain period of time for capital investment and for the remodeling of its facilities. Still, the entrustment period is limited to the duration required for switching to full in-house production. On these bases, it is considered that the entrustment period is properly set.

E. Other

The implementation of measures to block information between the Parties and Kobe Steel, and obtaining the confirmation of the JFTC with regard to the details of such information blocking measures are considered appropriate, from the standpoint of preventing a cooperative relationship from being formed, for example, through the sharing of information, among the marketing departments of the Parties, such as the quantities etc. of products by specification pertaining to Kobe Steel's entrustment.

Furthermore, regular reports on the implementation status of the Remedies to the JFTC are considered appropriate from the standpoint of monitoring the execution of the Remedies.

(4) Summary

As described above, on the premise of the measures proposed by the Parties, a new competing enterprise that is expected to occupy a market share of 20% at a maximum in the future will emerge as a result of Kobe Steel's entry to the market of hot-dip zinc-aluminum-magnesium alloy-coated steel sheets in Japan. Accordingly, Kobe Steel is expected to function as effective constraint on the Parties. On that basis, the JFTC concluded that the Stock Acquisition would not substantially restrain competition in fields of trade relative to hot-dip zinc-aluminum-magnesium alloy-coated steel sheets in Japan.

2. Measures concerning cold-rolled stainless steel sheets

(1) Adequacy of the measure of providing business information, support, etc. to competing enterprises

Considering the market environment surrounding cold-rolled stainless steel sheets, it is not expected that there will readily emerge an enterprise that accepts a transfer of any business department of the Company Groups in part or whole. For

that reason, it is considered difficult to implement such measures as business transfer, or to find effective measures to promote import.

Therefore, in this market structure, if the competitiveness of existing competing enterprises with limited supply capacities in the market of cold-rolled stainless steel sheets is enhanced through the provision of business information, support, etc., these competing enterprises are considered to serve as effective constraints on the Company Groups. Accordingly, the provision of business information, support, etc. is considered an appropriate Remedy.

(2) Regarding NYK

NYK is a competing enterprise in the market of cold-rolled stainless steel sheets, possessing its own electric furnace, and producing stainless steel products from raw materials of stainless steel in its facilities from first to last. With the Remedies implemented, NYK will be able to expand its own supply capacity and customer base in association with cold-rolled stainless steel sheets, and to sell a quantity accounting for a maximum of 15% of the whole market share for cold-rolled stainless steel sheets within the next five years. In such case, it is considered that NYK will be able to have a sufficient competitiveness as a competitive supplier.

Therefore, NYK is considered an appropriate enterprise whose competitiveness in the cold-rolled stainless steel sheet market is to be enhanced through the Remedies.

(3) Assessment of the details of the measures

A. Provision of business information and support

For the enhancement of NYK's competitiveness, it is necessary to expand its supply capacity associated with cold-rolled stainless steel sheets as well as its customer base. The provision of business information and support to NYK is considered an effective measure in terms of expansion of customer base.

B. License for technical know-how

The Company Groups' granting of a license for their technical know-how to NYK so as to enable it to manufacture products for specific users is considered a measure necessary for NYK to expend its customer base.

C. OEM supply

Since NYK requires making capital investment in order to expand its supply capacity associated to with Target Stainless Steel Products, and the period of approximately five years as a preparatory period for such expansion, the Company Groups' OEM supply of cold-rolled stainless steel sheets during such

preparatory period is considered a measure necessary to bring a constraint on the Company Groups into action. Furthermore, since the period of the OEM supply is limited to the transitional period during which NYK is to expand its supply capacity, it is considered that the OEM supply period is set properly from the standpoint of reducing risk of any coordinated conduct between the Parties and NYK arising from a prolonged OEM supply period.

D. Entrusted processes

As a measure, until NYK has achieved an expansion of its supply capacity, the Company Groups accept the entrustment of hot-rolling or cold-rolling processes from NYK with regard to Target Stainless Steel Products that NYK has processed up to the stage of the steelmaking process or hot-rolling process. This measure is considered an appropriate measure since, in comparison with the OEM supply, it is to enhance the competitiveness of NYK in terms of cost, to reduce common costs between the Parties and NYK, and to increase room for competition. Furthermore, since the period of the entrustment of processes is limited to the transitional period of five years during which NYK is to expand its supply capacity, it is considered that the entrustment period is set properly.

E. Supply of original sheets

The Company Groups' supply of original sheets for Target Nickel-based Products is considered an inevitable measure to prepare for repairs or accidents to NYK's production facilities during the period in which NYK is to expand its supply capacity.

F. Other

The implementation of measures to block information between the Company Groups and NYK, and obtaining the confirmation of the JFTC with regard to the details of such measures are considered appropriate, from the standpoint of preventing a cooperative relationship from being formed, for example, through the sharing of information, among the marketing departments of the Company Groups, such as the quantities etc. of products by specification pertaining to NYK's entrustment.

Furthermore, regular reports on the implementation status of the Remedies to the JFTC are considered appropriate from the standpoint of monitoring the execution of the Remedies.

(4) Summary

As described above, on the premise of the measures proffered by the Parties, NYK is expected to be able to occupy a share of approximately 15%, at a maximum, of

the cold-rolled stainless steel sheet market in Japan in the future by enhancing its competitiveness in the market. Accordingly, NYK will function as an effective constraint on the situation where the Parties are, by themselves, able to control the prices etc. of cold-rolled stainless steel sheets to a certain degree. Furthermore, where competing enterprises expand their excess capacities and actively engage in sales activities, the possibility that such enterprises are able to expand their respective market shares will increase. It is considered that this kind of situation will be effective in obstructing coordinated conduct among the Parties and other competing enterprises. On this basis, the JFTC concluded that the Stock Acquisition would not substantially restrain competition in fields of trade relative to cold-rolled stainless steel sheets in Japan.

Part VIII Conclusion

On the premise that the Parties would implement the Remedies, the JFTC concluded that the Stock Acquisition would not substantially restrain competition in any particular fields of trade.

Case 6 Integration of the valve business by Emerson Electric Company and Pentair plc

Part I Outline of this case

This case concerns a plan in which Emerson Electric Company (headquartered in the US, hereinafter referred to as "Emerson"; a group of companies which have already built joint relationships with Emerson hereinafter referred to as "Emerson Group"), which manufactures and sells instrumentation equipment for process control, would acquire all the issued shares of Pentair Valves & Controls Japan Co., Ltd (JCN 3010501028619) (hereinafter referred to as "Pentair Japan"), which is an importer and seller of valves and a subsidiary of Pentair plc (headquartered in the UK, hereinafter referred to as "Pentair"; a group of companies which have already built joint relationships with Pentair hereinafter referred to as "Pentair Group"), which conducts water quality system business, as well as all the outstanding shares of other multiple subsidiaries conducting valve business in Pentair Group (these subsidiaries together with Pentair Japan hereinafter referred to as "the acquired companies in this case"; Emerson Group and the acquired companies in this case collectively referred to as "the Parties"; the acquisitions in this case hereinafter referred to as "the conduct of this case").

The applicable provision in this case is Article 10 of the AMA.

(FYI) Coordination with foreign competition authorities

This case was also reviewed by the United States Federal Trade Commission (FTC), etc. and the JFTC reviewed this case while exchanging information with the FTC.

Part II Particular field of trade

The acquired companies in this case manufacture and sell valves, and the both sides of the Parties conduct valve manufacturing and selling business the world over.

1. Product range

(1) Control valves and isolation valves

A. What is a valve?

"Valves" is a generic term for devices which control the flow of a fluid (incl. liquid and gas) by opening and closing its passageways.

Valves are used at various fluid-handling facilities related to water, gas, power generation, the petroleum industry, the chemical industry, architecture, vessels, etc.

B. Classification by how to open or close

Valves are classified into manual valves, and automatic valves which are operated non-manually.

Manual valves require an operator in attendance, who opens or closes them by using an attached handle or lever whereas automatic valves open or close automatically according to the fluid pressure or the signal received from the outside.

Automatic valves are hugely different from manual valves in their functions because they can be remotely operated. In this sense, there is no demand substitutability between the two types of valves.

Accordingly, manual valves and automatic valves belong to their respective product ranges.

C. Classification by whether to respond to external signals

Automatic valves are divided into regulators and control valves by whether they are designed to respond to external signals which are sent to control the opening and closing.

Aimed at releasing excess pressure of a fluid and maintaining a constant pressure, regulators open or close valves based only on pressure information of a fluid which comes to the valves.

On the other hand, control valves open or close according to the signal which orders opening or closing sent by a control room or terminal outside of the valves based on various information including pressure, temperature, liquid level, etc. detected by sensors at specific locations in the facilities where the valves are used.

As evident from the above, because regulators and control valves are hugely different in their functions, there is no demand substitutability between them.

As well, while control valves are equipped with a valve actuator which is discussed later, regulators are not. For this reason, they are considered different in facilities and know-how required for manufacturing. Therefore, there is no supply substitutability between them either.

Accordingly, regulators and control valves belong to their respective product ranges.

D. Classification by valve opening position

Control valves are divided into control valves in the narrow sense

(hereinafter simply referred to as “control valves”), which can be set to any position between fully open and fully closed for pressure adjustment, and isolation valves which can be either fully open or completely shut.

Control valves are used at places where accurate control is required whereas isolation valves are installed at places where accurate control is not necessary or places where the passage should normally be kept fully open and close only at the time for maintenance.

As evident from the above, there is no demand substitutability between control valves and isolation valves. As know-how required for designing and manufacturing as well as a lineup of suppliers are different between these two types of valves, no supply substitutability exists.

Accordingly, control valves and isolations valves belong to their respective product ranges.

E. Summary

Based on the discussion from the above A to D, the JFTC defined product ranges separately as “control valves” and “isolation valves,” in both of which the Parties compete with each other.

(2) Valve actuators

A. Actuators

“Actuators” is a generic term for devices which convert air pressure, electricity or other energy into simple physical motion including expansion and contraction.

B. Classification by equipment on which an actuator is mounted

While actuators are mounted on valves, industrial robots, and various other devices, the Parties, both sides, only manufacture and sell actuators to be installed on valves. For this reason, only valve actuators which are built into valves were examined.

C. Valve actuators

Valve actuators are installed on “control valves” and “isolation valves,” working as a power source for opening and closing valves.

Valve manufacturers manufacture valve actuators by themselves or purchase actuators from valve actuator manufacturers and install them on valves which valve manufacturers made by themselves. Then, they sell valves equipped with actuators to plant construction companies or other users.

D. Classification by energy used

Valve actuators are divided into pneumatic, hydraulic, and electric actuators depending on the type of energy used. Users choose appropriate valve actuators based on the environment where they are used. (For instance, electric actuators are not suitable if there is a risk of explosion.)

In the meantime, valve manufacturers which manufacture valve actuators, as well as valve actuator manufactures usually manufacture all of these three types of valve actuators to meet requirements of various environments of users.

E. Classification of valve actuators

Valve actuators may be divided into smaller product ranges in light of energy used as discussed in the above D or difference in structure to convert such energy into physical motion.

However, according to the result of an interview with users, the Parties hold only a small share in the market of each type of valve actuators in Japan, and users did not show any special concern over various valve actuators manufactured and sold by the Parties.

On another note, among various valve actuators, the Parties hold a relatively large share in the world market of some types of scotch yoke actuators, but account for only around 10% in the domestic market.

Therefore, strict definition of the market of valve actuators is unnecessary.

(3) Valve instrumentation

Valve instrumentation is a generic term for controlling devices which are mounted on valve actuators, to determine the valve position (positioner), detect and restrict valve opening position (limit switch), or adjust the speed of valve opening and closing (speed controller).

As in the case of valve actuators, valve manufacturers manufacture valve instrumentation by themselves or purchase valve instrumentation from control equipment manufacturers and install it on valve actuators which valve manufacturers made by themselves. Then, they sell valve actuators equipped with valve instrumentation to plant construction companies and other users.

As evident from the above, as valve instrumentation includes multiple devices with different functions, substitutability, at least that for demand cannot be recognized. Therefore, smaller product ranges may be defined by dividing valve instrumentation.

However, according to the result of an interview with users, the Parties

hold only a small share in the market of each type of valve instrumentation in Japan, and users did not show any special concern over various types of valve instrumentation manufactured and sold by the Parties.

On another note, among various types of valve instrumentation, the Parties hold a relatively large share in the world market of switch boxes, but account for only around 3% in the domestic market.

Therefore, strict definition of the market of valve instrumentation is unnecessary.

2. Geographic range

While some suppliers of products discussed in the above 1 (1)-(3) conduct business globally, many enterprises focus their business on specific countries and regions including Japan. As well, even those global corporations have market shares which vary widely depending on the country and region.

Therefore, the JFTC defined the geographic range of this case as "all regions of Japan."

Part III Impact of the conduct of this case on competition

1. Control valves

As seen in the following table, the HHI in "control valves" will increase by around 50 through the conduct of this case. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Control valve market shares in 2015]

Rank	Company name	Market share
1	Emerson Group	Approx. 25%
2	Company A	Approx. 10%
3	Company B	Approx. 10%
4	Acquired companies in this case	0-5%
	Others	Approx. 55%
Total		100%

2. Isolation valves

As seen in the following table, the HHI in "isolation valves" will increase by around 10 through the conduct of this case. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Isolation valve market shares in 2015]

Rank	Company name	Market share
1	Company C	Approx. 10%
2	Company D	Approx. 5%
3	Acquired companies in this case	Approx. 5%
4	Emerson Group	0-5%
	Others	Approx. 80%
Total		100%

3. Valve actuators and valve instrumentation

Regarding valve actuators and valve instrumentation as well as any products which could divide them into smaller categories, the Parties have only a small share in their respective markets in Japan. Therefore, the conduct of this case would not have a large impact on competition in any of those markets.

Part IV Conclusion

The JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 7 Integration of the shield machine business by Japan Tunnel Systems Corporation and Mitsubishi Heavy Industries Mechatronics Systems, Ltd.

Part I Outline of this case

This case concerns a plan in which Japan Tunnel Systems Division Preparation Company (JCN 3020001116212) (hereinafter referred to as JTSC Preparation Company; a group of companies which have already built joint relationships with JTSC Preparation Company hereinafter referred to as "JTSC Group") established by Japan Tunnel Systems Corporation (JCN 8020001063516) (hereinafter referred to as "JTSC"), which manufactures and sells shield machines and is a subsidiary of IHI Corporation (JCN 4010601031604), which mainly manufactures and sells heavy industrial goods 1) would acquire through absorption-type demerger the shield machine manufacturing and selling business from JTSC, 2) likewise would acquire through absorption-type demerger the shield machine manufacturing and selling business from Mitsubishi Heavy Industries Mechatronics Systems, Ltd. (JCN 2140001013316) (hereinafter referred to as "MS"), a wholly owned subsidiary of Mitsubishi Heavy Industries, Ltd. (JCN 8010401050387) (hereinafter a group of companies which have already built joint relationships with Mitsubishi Heavy Industries referred to as "MHI Group"), and 3) would transfer 40% of JTSC Preparation Company's total shares to MS (hereinafter, 1)-3)above collectively referred to as "the conduct of this case").

The applicable provision in this case is Article 15-2 of the AMA.

Part II Particular field of trade

1. Product description

(1) Shield machines

Shield machines are cylindrical construction equipment to construct tunnels underground. They are large construction equipment made of cutter bits (superalloy blades), a cutter head (disk part that houses cutter bits), a chamber (space to store dug dirt), conveyors and sludge draining pipes (devices to dispose of dirt onto the ground), an erector (device to place segments[1] which build a tunnel), etc. The cutter head at the forefront rotates and digs out dirt, which will be transported to the chamber through cutter slits placed at the cutter head, and travel through conveyors and sludge draining pipes on to the ground.

The digging side (face) of the cutter head receives pressure of the ground caving in (earth pressure) and pressure of ground water coming into the chamber (ground-water pressure). To support the face during tunneling, the chamber will

[1] Ring-shaped, divided parts made of steel, etc.

be filled with slurry and mud made from excavated dirt, thereby keeping the counterpressure inside the chamber higher than earth and ground-water pressure from the face.

As well, to prevent the tunnel side walls from collapsing, the erector, set to the rear side of the shield machine, automatically assembles segments on the walls as the machine moves forward. The shield machine is propelled by a set of jacks placed pushing against the finished segment sides.

The tunneling method using a shield machine is called the shield method.

(Source) Documents presented by the Parties

(2) Shield machine usage, etc.

Shield machines are used to construct tunnels to lay water supply and sewerage systems, underground rivers[2], underground storage pipes[3], gas mains, railroad lines, roads, power cables, multipurpose underground utility conduits[4], etc. in ground layers which could collapse if other tunneling methods are used.

Instead of shield machines, a TBM (tunnel boring machine) is often used to construct similar tunnels overseas, where the ground is usually harder than in Japan. TBMs are not capable of dig the ground where there is a risk of a cave-in because they do not have a system to prevent the face or sides of a tunnel from collapsing. In Japan, even mountainous districts where the ground is relatively hard tend to have various soil qualities and there are not many places where the ground is secure enough to be dug by a TBM. Therefore, TBMs are hardly used in

[2] Artificial rivers laid under the ground of mountainous districts or urban areas to prevent rivers from overflowing at the time of torrential rains

[3] Sewer pipes to temporarily store rainwater at the time of torrential rains

[4] Tunnels to house two or more utility lines such as electricity, telephone, gas, and water and sewerage

Japan. In mountainous districts of Japan, what is called NATM (New Austrian tunneling method) is mainly used. This method bores through the ground by using dynamite explosion or a machine such as a drill, immediately applies shotcrete to the exposed surface to solidify it, and stabilizes the tunnel by driving rock bolts[5] deep into the rock mass.

The diameter of a tunnel excavated by a shield machine is almost the same as that of the shield machine. The following shows a rough idea of types of usage by the diameter of a shield machine (or a tunnel).

Gas pipes	Water supply and sewerage systems, underground storage pipes, multipurpose underground utility conduits, power cables	Railroad lines	Roads, underground rivers
-3m	-6m	5m-	Over 9m

(3) Shield machine users

A. Ways of procurement

Shield machine users are general contractors which landed a contract from the Government, etc. of construction requiring the shield method.

Upon an invitation for bid by the Government, etc., general contractors which are going to purchase a shield machine ask shield machine manufacturers for quotes to calculate their bid price. When doing so, general contractors look at the details of the project including the required diameter of a shield machine and ask multiple shield machine manufacturers which can meet requirements of the project to submit quotes.

The general contractor which wins the bid as a result will again ask multiple shield machine manufacturers for quotes and decide on a supplier and a procurement cost.

On another note, apart from the above, the Government, etc., which is the project owner, has shield machine manufacturers present reference price to calculate a target price through working with a consulting firm.

B. Users' preference

Domestic users highly value technical capabilities and construction results of domestic shield manufacturers. On the other hand, they are not as enthusiastic about shield machine manufacturers from other countries as about domestic shield manufacturers when selecting a supplier due to their lack of

[5] Special bolts to fix concrete to a rock mass

experience in construction in Japan where the soil quality varies widely as well as concerns over possible contract problems stemming from difference in business practice. As a result, the shield machine market in Japan is almost completely dominated by domestic manufacturers.

(4) Shield machine suppliers

There are around 10 major shield machine manufacturers in Japan including the Parties.

At least five suppliers exist outside of Japan, none of which has a Japanese subsidiary. However, some foreign manufacturers have sales offices in Japan.

(5) Market size of shield machines

The shield machine market in Japan is around 35 billion yen in FY2015. It was stable at around 10 billion yen from FY2009 to FY2013, shot up to around 35 billion yen in FY2014 and FY2015 due to the demand for road construction including the Tokyo Outer Ring Road and the Yokohama Ring Expressway, and is expected to hover around 20 billion yen from FY2016 to FY 2020 in light of the demand for construction of the Linear Chuo Shinkansen Line.

After that, however, no special demand is expected, therefore it is considered to go back to and remain at around 10 billion yen, the level prior to FY2013.

In the meantime, the market overseas has reached around 200 billion yen in total due to the demand for infrastructure improvement especially in developing countries, and is expected to keep growing going forward.

2. Product range

(1) Methods to keep the face of a shield machine

Shield machines are divided into slurry shield machines which use slurry pressure to keep the face against outer pressure, and mud pressure shield machines which use earth pressure.

The former type excels at fine tuning of the face while it may not be usable at some types of construction sites depending on the ground conditions because it needs installation of a device on the ground which separates excavated materials into dirt and water.

Mud pressure shield machines are used to overcome this shortcoming. This type of shield machines adopts a method to stabilize the face by pressure of mud which was generated by excavating dirt and immediately agitating it inside the chamber. Mud inside the chamber is managed so that pressure against the face would not decline too much while excess is removed through conveyors, etc. onto the ground.

Mud pressure shield machines are used in around 80% of the number of construction cases today.

General contractors, the direct users of shield machines, are not the ones who make decision on whether to use slurry shield machines or mud pressure shield machines because it will have been decided by the time the construction project owner issues an invitation for bid based on the ground space of the construction site. Therefore, there is no demand substitutability between slurry shield machines and mud pressure shield machines.

However, in light of the fact that mud pressure shield machines were developed to overcome the shortcoming of slurry shield machines, at least domestic shield machine manufacturers already have know-how concerning both types of machines, and in fact, they manufacture an appropriate type according to the requirement of a construction project provided by an invitation for bid.

As well, because manufacturing facilities are the same for both types of shield machines, manufacturing capabilities for one type may be used for the other.

For this reason, supply substitutability is found to exist between both types.

Therefore, the JFTC decided that slurry shield machines and mud pressure shield machines belong to the same product range.

(2) Diameter of a shield machine

The diameters of shield machines vary depending on the individual construction, ranging from around 2 to over 15 meters.

When used for construction, the diameter of a shield machine is determined roughly by the usage as discussed in the above 1 (2). As in the case of the methods to keep the face, it is the Government, etc., the construction project owner, who decides the diameter of a tunnel, and general contractors, the direct users, cannot choose the diameter of a shield machine. Accordingly, there is no demand substitutability between shield machines of different diameters.

In the meantime, shield machines, even those of different diameters, share basic common structure except for a few minor differences in placement of internal mechanism. For this reason, each shield machine manufacturer is manufacturing products of not a particular diameter but different diameters within a certain range based on its plant building, manufacturing facilities, and other physical resources as well as human resources including designers.

From an interview with major shield machine manufacturers in Japan, the JFTC learned that domestic shield manufacturers can be, at least, divided into those which can manufacture products of 8 meters or larger in diameter and the others which cannot.

Accordingly, to reflect the reality of the market, examination should be made based on the assumptions that supply substitutability exists in products of different sizes in diameter up to 8 meters, that supply substitutability exists in products of different sizes in diameter 8 meters or larger, and that supply substitutability does not exist between products of less than 8 meters and 8 meters or larger in diameter.

Therefore, examination will be made based on the premise that shield machines of less than 8 meters in diameter (hereinafter referred to as "small/mid-sized shield machines") and those of 8 meters or larger (hereinafter referred to as "large-sized shield machines") individually define a product range and belong to different product ranges accordingly.

(3) TBM

TBMs, as discussed in the above 1 (2), are not equipped with a system to prevent the sides of tunnels from collapsing, and therefore, cannot excavate the ground layers which could fall. As in the cases of the methods to keep the face as well as diameters, the project owner will have decided by the time of issuing an invitation for bid, whether to use the shield method or other methods including one that uses a TBM. Accordingly, there is no demand substitutability between shield machines and TBMs.

As well, shield machines to excavate ground layers which could fall and TBMs to excavate ground layers including hard ground which would not collapse are different in terms of structure of cutter bits and the propelling method[6] in addition to whether they have a system to prevent a cave-in of the face and sides of a tunnel. Accordingly, there is no supply substitutability between shield machines and TBMs.

On another note, because TBMs are hardly used in Japan as discussed in the above 1 (2), domestic shield machine manufacturers mainly manufacture and sell shield machines even though they could meet demand for TBMs. Especially, neither side of the Parties has ever sold TBMs in the past.

Therefore, the JFTC decided that shield machines and TMBs belong to different product ranges.

(4) Summary

Based on the above discussion (1)-(3), the JFTC defined product ranges as "small/mid-sized shield machines" and "large-sized shield machines."

[6] Shield machines move forward by jacks placed pushing against the finished segments' sides whereas TBMs advance by placing legs called grippers directly against the sides of a tunnel, extending grippers, shortening them when having fully extended, and then placing them and pushing against the tunnel sides again.

3. Geographic range

No matter whether they want small/mid-sized shield machines or large-sized shield machines, domestic users prefer products manufactured by domestic manufacturers as discussed in the above 1 (3) B. In fact, domestic users have never purchased a shield machine to be used for construction in Japan from an overseas manufacturer. Therefore, the JFTC defined the geographic ranges for both small/mid-sized shield machines and large-sized shield machines as "all regions of Japan."

Part III Impact of the conduct of this case on competition

1. Applicability of the safe-harbor criteria

(1) Small/mid-sized shield machines

As seen in the following table, after the Parties carry out the conduct of this case, the HHI in "small/mid-sized shield machines" will increase by around 100 points to around 1,700. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Small/mid-sized shield machine market shares from 2011 to 2015[7]]

Rank	Company name	Market share[8]
1	JTSC Group	Approx. 25%
2	Company A	Approx. 20%
3	Company B	Approx. 20%
4	Company C	Approx. 10%
5	Company D	Approx. 10%
6	Company E	Approx. 5%
7	Company F	Approx. 5%
8	MS	0-5%
	Others	Approx. 5%
Total		100%

(2) Large-sized shield machines

As seen in the following table, after the Parties carry out the conduct of this case, the HHI in "large-sized shield machines" will increase by around 1,400 points to around 4,500. Therefore, the conduct of this case does not meet the safe-harbor

[7] The market share was calculated based on the accumulated sales results from 2011 to 2015 because the volatility of the market share is high due to small sales quantity (Around 50 units of small/mid-sized shield machines and 10 units of large-sized shield machines are sold every year.) The same shall apply to the following 1 (2).
[8] The market share was calculated based on sales value not quantity because price varies widely depending on the diameter size. The same shall apply to the following 1 (2).

criteria for horizontal business combinations. Factors to consider will be discussed later.

[Large-sized shield machine market shares from 2011 to 2015]

Rank	Company name	Market share
1	JTSC Group	Approx. 40%
2	Company F	Approx. 35%
3	MS	Approx. 20%
4	Company B	Approx. 10%
Total		100%

2. Position of the Parties and conditions of competing enterprises

(1) Market share and ranking

After carrying out the conduct of this case, the Parties together will have the largest market share (60%).

In the meantime, holding 35% of the market, Company F is considered a competitive supplier against the Parties. Company F may even outperform the Parties in a single year market share.[9]

As well, Company B, while holding only around 10% of the market, is also a competitive supplier with high technical capabilities, as evident in its sale of the world's largest shield machine of over 17 meters in diameter to an overseas user in 2013.

(2) Excess capacity of competing enterprises

Because orders for large-sized shield machines are neither many nor seasonal, the factory-operating ratio varies widely and it is not reasonable to simply calculate excess capacity.

However, while the Parties as well as competing enterprises have a certain level of excess capacity at the moment, they are also able to switch capacities for manufacturing small/mid-sized shield machines to those for manufacturing large-sized shield machines, or divert the use of factories manufacturing other heavy industrial goods for manufacturing large-sized shield machines.

On top of that, one competing enterprise plans to renew its manufacturing facilities and drastically increase manufacturing capacities for large-sized shield machines within a one-year period.

[9] For instance, in 2014, the Parties had around 40% (JTSC Group: around 30%, MS: around 5%) whereas Company F had around 60% of the market.

(3) Degree of differentiation

While the required diameter of a large-sized shield machine varies depending on the usage, all competing enterprises as well as the Parties are capable of manufacturing large-sized shield machines of over 10 meters in diameter designed for tunnel construction for expressways which require the largest diameter, and therefore there is not much differentiation stemming from the diameter size.

As well, it is true that large-sized shield machines are manufactured according to the specifications of each unit depending on the quality of soil to be excavated. However, general contractors, who are major customers of the Parties, say that there is no construction which requires a shield machine manufactured by a specific manufacturer.

Therefore, the JFTC decided that differentiation is small among large-sized shield machines manufactured by different competing enterprises.

(4) Terms and conditions, etc.

There is no trade association which regularly publishes price information on individual products manufactured by companies competing in the market of "large-sized shield machines."

A transaction of a large-sized shield machine is a large deal amounting to 1 billion to over 5 billion yen per unit, and occurs when road or other large-scale construction is planned hence on an irregular basis.

As well, based on the fact that competitors' shares in the market of "large-sized shield machines" underwent a huge change in the past, it is reasonable to assume that these players fiercely competed with each other in this market.

Therefore, there is not much inducement for the Parties and their competitors to coordinate their conduct and it is hard for them to predict each other's behavior in the market of "large-sized shield machines."

3. Import

Domestic general contractors prefer shield machines manufactured by domestic manufacturers and they have never purchased one from an overseas manufacturer to be used in construction in Japan, as discussed in the above Part II 1 (3) B.

However, some overseas manufacturers have been asked to submit quotes for a large-sized shield machine, in some cases that of over 12 meters in diameter, by multiple large or medium-sized Japanese general contractors, although they never landed a deal.

As well general contractors, the users, if they are not satisfied with a quote by a domestic shield machine manufacturer, try to negotiate the price by suggesting that they might ask a quote from an overseas manufacturer, and in some cases, they actually do obtain quotes from overseas manufacturers.

According to some overseas manufacturers, import takes around one to two months for transportation and incurs additional 3-5% of the unit price as transportation cost and duties. However, these do not stand in the way of import, considering the high value of a transaction, amounting to around 1 billion to over 5 billion yen per large-sized shield machine, and the long delivery term of around two years after an order.

On top of that, overseas manufacturers argue that they have comparable technical capabilities to domestic manufacturers' and do not have any technical obstacles upon manufacturing.

Based on the above argument, the JFTC decided that a certain degree of import pressure is present because import from overseas manufacturers, though there is none at the moment, may be triggered by a price increase by the Parties.

4. Entry

While materials, manufacturing process and required techniques are basically the same between small/mid-sized and large-sized shield machines, a large capital investment would be required in manufacturing facilities including a factory building, a large lathe, and a large crane if a manufacturer of "small/mid-sized shield machines" wish to enter the market of "large-sized shield machines."

However, if small/mid-sized shield machine manufacturers decide that they would be able to recover such a huge investment by an increase in demand for large-sized shield machines, which is expected to peak in a few years as discussed in the above Part II 1 (5), they may enter the market of "large-sized shield machines" by making required capital investment.

In fact, in response to increasing inquiries about large-sized shield machines in recent years, one of small/mid-sized shield machine manufacturers made capital investment in 2015 and is purportedly ready to manufacture large-sized shield machines of up to 12 meters in diameter, although the company has not yet made a sale.

Based on the above, the JFTC decided that the market of "large-shield machines" is exposed to a certain degree of entry pressure from "small/mid-sized shield machine" manufacturers.

5. Competitive pressure from users

As the Government, etc., which orders construction through the shield method, decides on a general contractor for a project through competitive bidding process, general contractors, the users, are competing fiercely with each other.

These general contractors, as discussed in Part II 1 (3) A above, decide on suppliers and procurement cost by asking multiple shield machine manufacturers for quotes.

On top of that, general contractors have a wealth of information on how much was paid for a shield machine in the past, based on which they ask a manufacturer for explanation or a requote if they find an estimate from the manufacturer higher than past results in light of the diameter size and specifications.

Based on the above, the JFTC decided that general contractors, the users, have bargaining power against the Parties, and that a certain degree of competitive pressure from users exists accordingly.

6. Summary

Based on 1 to 5 above, the JFTC decided that the conduct of this case would not substantially restrain competition in any particular field of trade through unilateral conduct or coordinated conduct.

Part IV Conclusion

The JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 8 The Integration of Lam Research Corporation and KLA-Tencor Corporation

Part I Outline of this case

This case concerns a plan in which 1) a subsidiary of Lam Research Corporation (headquartered in the US and hereinafter referred to as "Lam"; a group of companies which have already build joint relationships with Lam hereinafter referred to as "Lam Group"), which manufactures and sells equipment, a part of semiconductor making equipment, which executes manufacturing process (hereinafter referred to as "manufacturing equipment"), and KLA-Tencor Corporation (headquartered in the US and hereinafter referred to as "KT"; a group of companies which have already build joint relationships with KT hereinafter referred to as "KT Group"; Lam Group and KT Group collectively referred to as "the Parties"), which also manufactures and sells equipment, a part of semiconductor making equipment, which tests the results of manufacturing process (hereinafter referred to as "testing equipment") would be merged into a surviving company KT, and 2) Lam would acquire all the outstanding shares of KT (hereinafter, 1) and 2) above collectively referred to as "the conduct of this case").

The applicable provisions in this case are Article 10 and Article 15 of the AMA.

(FYI) Coordination with foreign competition authorities

The conduct of this case was also reviewed by the United States Department of Justice Antitrust Division (hereinafter referred to as "DOJ"), etc. and the JFTC reviewed this case while exchanging information with DOJ.

Part II Product description

1. Semiconductor making equipment

Semiconductor making equipment refers to equipment which processes silicon wafers[1] (hereinafter referred to as "wafers") thereby fabricating semiconductors (IC)[2].

For an IC to be fabricated, a series of steps including deposition[3], lithography[4], and etching[5] is repeated hundreds of times. This series of steps is executed by

[1] A wafer is a thin disk made by polishing and cleaning a 1 mm thin piece sliced away from cylindrical monocrystalline silicon.
[2] Electronic parts made of a substrate of around one centimeter square installed with an electronic circuit which offers processing functions such as data storage, numeric calculation, logical operation, etc. based on the properties of semiconductors
[3] A step where thin layers such as a semiconductor film, which makes the base of a transistor, a metal film, which is a wiring-base, and an insulator film, which isolates them, are applied on a wafer
[4] A step where a circuit pattern is transferred from a photomask, which contains the original of the circuit pattern, onto a wafer based on the principle of photography
[5] A step where unwanted parts of thin layers are selectively removed by chemicals and gasses according to the circuit

manufacturing equipment, the result of which is inspected by testing equipment. If a defect is found, manufacturing equipment will be configured to reflect the finding.

2. Users of semiconductor making equipment

Users of semiconductor making equipment are IC manufacturers and manufacturing equipment manufacturers. IC manufacturers purchase manufacturing equipment and testing equipment for their IC-related R&D activities and manufacturing whereas manufacturing equipment manufacturers purchase testing equipment to conduct their R&D activities for new manufacturing equipment.

Part III Impact of the conduct of this case on competition

Both sides of the Parties conduct manufacturing and sales of semiconductor making equipment worldwide. However, manufacturing equipment and testing equipment are totally different in functions they provide as well as know-how and techniques required for manufacturing. Therefore, they are not in horizontal relationship.

In the meantime, Lam Group purchases testing equipment from KT group to conduct their manufacturing-equipment manufacturing business. For this reason, the conduct of this case falls under the definition of vertical business combinations where testing equipment and manufacturing equipment are considered upstream market and downstream market respectively.

Among different types of testing equipment KT Group manufactures and sells, some are considered especially important for R&D activities of manufacturing-equipment manufacturers. (These types are hereinafter collectively referred to as "specified testing equipment.") Examination was made to find out if there is a risk of the Parties refusing/delaying, etc. supply of KT Group's specified testing equipment to Lam's competitors. (The act of refusing/delaying, etc. is hereinafter referred to as "input foreclosure" in Part III and Part V.)

1. Input foreclosure capabilities

Specified testing equipment made by KT Group is used by many major IC manufacturers and manufacturing-equipment manufacturers.

According to IC manufacturers and manufacturing-equipment manufacturers, KT Group's specified testing equipment has considerably high performance compared to specified testing equipment made by other testing-equipment manufacturers, and detects finer dust and defects.

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pattern copied on a wafer.

In addition, when an IC manufacturer chooses manufacturing equipment, manufacturing-equipment manufacturers are sometimes asked by the IC manufacturer to present performance of their manufacturing equipment in the form of a test result using KT Group's specified testing equipment. Even if the IC manufacturer does not explicitly require use of KT Group's specified testing equipment, testing equipment of other manufacturers are sometimes found inappropriate in terms of performance.

Accordingly, the JFTC decided that the Parties would have capabilities to conduct input foreclosure.

2. Incentives for input foreclosure

Testing equipment of KT Group is mainly sold to IC manufacturers while sales of that to manufacturing-equipment manufacturers account for only a small portion of KT Group's total sales of testing equipment.

In light of the fact that Lam Group's sales of manufacturing equipment to IC manufacturers are even greater than KT Group's total sales of testing equipment, the JFTC decided that the Parties have incentives to conduct input foreclosure.

3. Summary

Based on the above 1 and 2, the JFTC decided that concerns that the Parties might conduct input foreclosure are justified. In addition to the input foreclosure, there are concerns over a possible impact discussed in the following (1) and (2). Therefore, competition in the field of trade of manufacturing equipment may be substantially restrained.

(1) Inappropriate use of classified information of IC manufacturers and manufacturing-equipment manufacturers

If KT Group transfers classified information of an IC manufacturer concerning IC manufacturing or classified information of a manufacturing-equipment manufacturer concerning its R&D activities to Lam Group and it is used for Lap Group's development of manufacturing equipment, the Parties would have unfair advantage in the market of manufacturing equipment.

(2) Impediment to joint R&D activities

If IC manufacturers and manufacturing-equipment manufacturers which do not belong to Lam Group are concerned about the possible conduct discussed in the above (1), they would be less motivated to continue joint R&D activities which have been conducted through partnership between KT Group and IC

manufacturers or manufacturing-equipment manufacturers.

Part IV The Parties' proposal of remedy

When the Parties were informed on concerns discussed in Part III above, they proposed a remedy in which they would make sure that Lam Group's competitors would be provided with an opportunity to use specified testing equipment practically at the same time when Lam Group would use it at least for a certain period of time.

Part V Assessment of the remedy

Based on difficulties of monitoring the state of compliance with the proposed remedy and of restoring competition if it is lost by input foreclosure and the fact that there was no circumstances that would solve the issue after a certain period of time, the JFTC concluded that the proposed remedy would not be enough to eliminate the impact of the conduct of this case on competition.

Part VI Conclusion

When the Parties were informed on the conclusion as discussed in Part V above, they dropped the plan for the conduct of this case. Therefore, the JFTC discontinued the review on the conduct of this case.

Case 9 Merger between Abbott Laboratories Group and St. Jude Medical Group

Part I Outline of this case

This case concerns a plan in which 1) a special purpose company, which is a subsidiary of Abbott Laboratories (headquartered in the US, hereinafter referred to as "Abbott"), which conducts research, development, manufacturing and sales of healthcare products, and St. Jude Medical, Inc. (headquartered in the US, hereinafter referred to as "SJM"), which conducts research, development, manufacturing and sales of cardiovascular medical equipment, would be merged into a surviving company SJM, and 2) SJM and Vault Merger Sub, LLC, which is Abbott's subsidiary, (special purpose company; a group of companies which are held by the ultimate parent company, Abbott, referred to as "Abbott Group"; a group of companies which are held by the ultimate parent company, SJM, referred to as "SJM Group"; Abbott Group and SJM Group hereinafter collectively referred to as "the company group") would be merged into a surviving company, Vault Merger Sub, LLC (hereinafter, 1) and 2) above collectively referred to as "the conduct of this case").

The applicable provision in this case is Article 15 of the AMA.

(FYI) Coordination with foreign competition authorities

This case was also reviewed by the United States Federal Trade Commission (FTC), European Commission, Korea Fair Trade Commission (KFTC), etc. and the JFTC reviewed this case while exchanging information with KFTC.

Part II Particular field of trade

1. Product description (vascular closure devices)

In some types of minimally invasive cardiovascular diagnosis and interventions (treatment by inserting a catheter), a device is inserted into the artery of a patient by making a hole in it, which needs to be closed later for hemostasis.

These holes are divided into a small type and a large type, and closed by one of or a combination of the following methods:

1) Manual compression: Method in which pressure is put on the opening on the skin for a few minutes until natural healing process starts in an artery hole (for closing an artery hole that is 8Fr[1] or smaller)
2) Surgical suture: Method to close a large artery hole, in which skin is incised to expose artery and then the hole is sutured (for closing an artery hole that is larger than 8Fr)
3) Use of a closure assist device (hereinafter referred to as "CAD"): Method which

[1] 1Fr is around 0.3mm.

uses a device helping small-hole closure including a band, etc. to press artery and medication to speed up natural healing process

4) Use of a vascular closure device (hereinafter referred to as "VCD")[2]: Method in which a small or large-sized[3] device is inserted or placed in an artery hole for closure

In Japan, Abbott Group sells small-sized VCDs whereas SJM Group sells CADs and small-sized VCDs. VCDs are largely divided into suture-based VCDs and plug-based VCDs. In Japan, Abbott Group and SJM Group sell the former and the latter respectively while Company A, which is a competing enterprise, also sells the latter.

There are only these three types of products (CADs, small-sized suture-based VCDs, and small-sized plug-based VCDs) available in Japan.

2. Product range

According to the company group, because natural healing of a large-sized artery hole over 8Fr is physiologically limited, surgical suture or large-sized VCDs are usually used to achieve hemostasis for such an opening whereas small-sized artery holes 8Fr or smaller are treated with manual pressure, CADs, or small-sized VCDs as actual medical practice worldwide. Therefore, there is no demand substitutability from either side between large-sized VCDs and small-sized VCDs.[4]

As well, regarding VCDs, which are specially controlled medical devices, the company group is authorized to sell those for a hole of 8Fr or smaller. The company group cannot easily start manufacturing and selling large-sized VCDs for a hole of over 8Fr for Japanese market since it would cost a lot to switch a production line and take some time to obtain a sales permit. Therefore, there is no supply substitutability between these VCDs of different sizes.

Small-sized VCDs are largely divided into suture-based products and plug-based products, as discussed in the above 1. They use different methods but are both used for hemostasis, and physicians also purchase them without discriminating them. Therefore, the JFTC decided that demand substitutability exists between

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[2] In the insurance reimbursement system, the Ministry of Health, Labour and Welfare has established insurance reimbursement prices (hereinafter referred to as "reimbursement prices") for medical materials, which make up each medical device, by each functional division. If a medical institution has purchased a qualified medical device and used it for medical service to a patient, it will get a refund equivalent to the reimbursement price uniformly set for the medical device from health insurance associations, etc. regardless of how much it paid to purchase the device. Reimbursement prices are revised every two year based on the Ministry's research on medical institutions' purchasing cost of each medical device and prices of similar devices in other countries. To prevent loss resulting from purchasing a medical device at cost (including consumption tax) higher than the reimbursement price, medical institutions purchase medical devices at cost somewhat lower than reimbursement prices in most cases. VCD is classified as "hemostatic material for a puncture for percutaneous transluminal angioplasty," and its reimbursement price is set as 27,900 yen.

[3] Large-sized VCD is not available in Japan.

[4] According to the company group, while Abbott Group's VCDs are used to close an artery hole of 8Fr or smaller, it is technically possible to close a large-sized artery hole by combining two of these VCDs. However, there has never been a case where a physician uses two small-sized VCDs to close a large artery hole.

them.

VCDs distributed in Japan by the company group are all small-sized designed for a hole of 8Fr or smaller.

While catheters are usually inserted from a foot, an elbow, or a wrist of a patient, they are most often inserted from a foot in case of a difficult operation because blood vessels of a foot are the thickest. To achieve hemostasis, a small-sized VCD or manual pressure is used. However, small-sized VCDs can only be inserted from a blood vessel of a foot and they cannot be used to an artery of a wrist (radial artery) due to the artery's small diameter.

On the other hand, as CADs may be used to a foot, an elbow or a wrist, there is no demand substitutability between small-sized VCDs and CADs. As well, manufacturing methods are significantly different between them. Therefore, there is no supply substitutability.

Accordingly, the JFTC defined the product range of this case as "small-sized VCDs."

3. Geographic range

To distribute small-sized VCDs defined in the above 2 in Japan, domestic manufacturers, and Japanese subsidiaries or sole import distributorship of foreign manufacturers are required to obtain confirmation based on the Act on Securing Quality, Efficacy, and Safety of Pharmaceuticals, Medical Devices, Regenerative and Cellular Therapy Products, Gene Therapy Products, and Cosmetics (Act No. 145 of 1960). Medical institutions, the users, also purchase products designed for Japan which received the said confirmation. Therefore, the JFTC defined the geographic range as "all regions of Japan."

Part III Impact of the conduct of this case on competition

1. Position of the company group

After carrying out the conduct of this case, the company group will hold the largest share, total around 55%, in the small-sized VCD market, and the HHI will increase by around 1,100 points to around 5,100. Therefore, the conduct of this case does not meet the safe-harbor criteria for horizontal business combinations.

[Small-sized VCD market shares in FY2015]

Rank	Company name	Market share
1	Company A	Approx. 45%
2	SJM Group	Approx. 40%
3	Abbott Group	Approx. 15%
Total		100%

2. Conditions of competing enterprises

After the conduct of this case, two players will compete in the small-sized VCD market: the company group and Company A, unless the company group transfers the relevant business.

According to the company group, Company A is capable of increasing supply in Japan by switching small-sized VCDs for overseas market to Japanese market. However, based on the fact that the company group together holds around 75% and Company A around 25% of the world-wide market of small-sized VCDs, Company A may not have sufficient excess capacity to increase supply in Japan. The company group also argues that Company A may be able to increase supply in Japan easily by outsourcing small-sized VCD manufacturing to a third party[5]. However, because such a third party is not manufacturing small-sized VCDs at the moment, the competitor's excess capacity is limited.

3. Import

Very few enterprises, apart from the company group and Company A, are currently manufacturing small-sized VCDs outside of Japan, and they have never sold small-sized VCDs in Japan. As domestic medical institutions rarely purchase from overseas manufacturers with no track record in Japan, it is difficult for those manufacturers to sell their small-sized VCDs in Japan. Therefore, import pressure is limited.

4. Entry

According to small-sized VCD distributors, if a new player tries to enter the market, which is already filled with products made by the company group and Company A, by developing small-sized VCDs with functions equivalent to those made by the company group or Company A, few medical institutions will be interested in purchasing from such a new company with no track record, which

[5] According to the company group, manufacturing of suture-based VCDs, which Abbott Group manufactures, are hard to outsource to other firms whereas plug-based VCDs, which are manufactured by SJM Group as well as Company A, have simple structure and, therefore, are easy to outsource.

makes it necessary for the new company to equip its product with new functions that are not available from the company group or Company A. However, development of such a new product in a short period of time is not easy at all. Therefore, entry pressure is limited.

5. Competitive pressure from users

While small-sized VCDs are used at hospitals of more than a certain size where doctors can perform a catheter operation, it is common for hospitals to have suppliers compete with each other by asking them for quotes when purchasing medical devices. In medical institutions, which are the users, products are actually selected by relevant doctors in many cases, and doctors tend to make selection by quality of the products and how much doctors are used to the products. Because the way of using small-sized VCDs varies depending on the manufacturer, they require doctors to learn a certain level of techniques before use. In this sense as well, doctors tend to stick to products they are used to and do not switch products often. Therefore, competitive pressure from users is limited.

In addition, when a small-sized VCD is used in an operation, it can be totally replaced with manual pressure in general. According to small-sized VCD distributors, small-sized VCDs are used in about half of the cases where bleeding needs to be stopped on a foot and a small-sized VCD is applicable, and the remaining half of the cases are managed by manual pressure. However, in case of manual pressure, a doctor needs to hold the puncture site by hand as long as 10 minutes, which cannot be manageable at a busy hospital. Moreover, the patient then needs to be placed at rest for 8-9 hours. On the other hand, if a small-sized VCD is used, the patient needs to stay in bed for 2-3 hours only, which is a quite advantage for the patient as well. Therefore, doctors who once used a small-sized VCD tend to stay with VCD. This means that users do not readily switch to manual pressure even if a small-sized VCD price goes up. Therefore, competitive pressure from users is limited.

6. Summary

Based on the above, the JFTC decided that the conduct of this case would substantially restrain competition in a particular field of trade.

Part IV Divestment of small-sized VCD business

To expedite approval process of competition authorities concerning the merger in this case, the company group decided to sell SJM Group's small-sized VCD business of all countries (hereinafter referred to as "business to be sold") to Terumo

Corporation (JCN 6020001020997) (hereinafter referred to as "Terumo"; the selling of business hereinafter referred to as "the measures in this case").

Through the measures in this case, Terumo will take over everything required for management of the business to be sold and manufacturing in the business including all tangible assets, intangible assets, intellectual property rights, know-how, customer records, and agreements with suppliers and customers as well as employees. As well, Terumo will be able to receive support concerning management, quality assurance, etc. from the company group for up to two years after completion of the merger in this case.

Part V Assessment of the measures in this case

1. Buyer of the business to be sold

Terumo distributes many medical devices to medical institutions and holds around 60%[6] of the market of the TR Band[7], one of "CADs for wrists," which is relevant to the business to be sold. Terumo has also distributed small-sized VCDs as an agency of Abbott Group since November 2004, based on which Terumo is considered to have sufficient experience and capabilities. As well, because Terumo has no financial relationship with the company group and is completely independent from it, Terumo is likely to become an independent competitor against the company group. On top of that, Terumo has a wealth of experience in domestic catheter business and is financially capable of maintaining and growing the business to be sold. As well, Terumo provides a wide variety of medical devices which are indispensable in catheter operations including those which create an opening for a catheter to be introduced into a blood vessel and those which creates a path to the site of lesion. Because Terumo will be able to complete a series of vascular access devices from puncture to hemostasis by acquiring the business to be sold, it is considered to have specialty and incentives required to maintain and grow the business to be sold. Through the measures in this case, Terumo will have around 40%[8] of the small-sized VCD market. However, as discussed in the following 2, that is not considered a cause for concern over competition in the said market. As a result, the JFTC decided that Terumo would be appropriate as a buyer of the business to be sold.

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[6] According to Terumo, there is only one competitive supplier in the TR Band market.

[7] The TR Band is used to stop bleeding from an artery hole by applying pressure to the artery in a wrist. Alternatively, doctors may use silicon bands or self-made tools by combining gauze and silicon to apply pressure and achieve hemostasis in an artery hole in a wrist. These devices cannot be applied to feet or elbows.

[8] Terumo was distributing small-sized VCDs made by Abbott Group in the past. However, according to Terumo and the company group, the contract concerning Abbott's VCDs expired on September 30, 2016, and Terumo will run out of stock by March 2017. As well, Abbott Group has been distributing their small-sized VCDs by themselves since October 1, 2016.

2. Impact of the conduct of this case on competition

(1) Horizontal business combination

Terumo is not manufacturing or selling small-sized VCDs, and will simply take over the market held by SJM Group, one party of the company group, as is through the measures in this case. Therefore, the conduct of this case will not lead to an increase in the company group's market share. All in all, there is no change in the small-sized VCD market share.

As discussed in Part IV above, because SJM Group is transferring the business to be sold as is including employees who have been relevant to the business, content of transfer is considered sufficient.

Therefore, the JFTC decided that Terumo would become an independent influential competitor in the small-sized VCD market.

(2) Conglomerate business combination

This section will look at whether the issue of closure or exclusivity of the market would arise in the field of trade of the TR Band or small-sized VCDs by Terumo using tie-in sales through adding the TR Band to a small-sized VCD or a small-sized VCD to the TR Band.

A. TR Band

When the measures in this case have been taken, the market of small-sized VCDs will have three players, Company A, Abbott Group and Terumo, competing with one another, and Terumo will have around 40% of the market, as discussed in Part III 1 above.

As discussed in Part II 1 above, in some types of minimally invasive cardiovascular diagnosis and interventions[9], a device is inserted into the artery of a patient by making a hole in it, which needs to be closed later for hemostasis. The TR Band and small-sized VCDs are used for that purpose. According to the company group and Terumo, the TR Band, which will be wrapped around a wrist, can only be used for radial arteries which are thin in diameter. Terumo argues that while a catheter is usually inserted from a foot, an elbow, or a wrist depending on the symptoms of the patient during an operation, a small-sized VCDs and the TR Band are rarely used at the same time because very few operations have a catheter inserted both from a foot and a wrist at the same time.

As well, if Terumo uses tie-in sales, medical institutions, which are also purchasing various products other than small-sized VCDs and the TR Band, may

[9] Treatment by inserting a catheter

oppose Terumo's behavior, which could lead to a negative impact on sale of Terumo's other products.

On top of that, as mentioned in the footnote 8, Terumo used to distribute small-sized VCDs and the TR Band in the past, but was unable to increase the market share at that time.

Therefore, even if Terumo packages the TR Band with small-sized VCDs, it would not lead to the issue of closure or exclusivity of the market in the field of trade of the TR Band.

B. Small-sized VCDs

As discussed in the above 1, Terumo holds around 60% of the TR Band market. However, there is a competitive supplier as well as multiple enterprises which distribute similar products. If Terumo uses tie-in sales, users will be able to easily switch to other suppliers. Therefore, it is considered difficult for Terumo to use tie-in sales.

On top of that, as mentioned in the footnote 8, Terumo used to distribute the TR Band and small-sized VCDs in the past, but was unable to increase the market share at that time.

As well, if Terumo uses tie-in sales, medical institutions, which are also purchasing various products other than the TR Band and small-sized VCDs, may oppose Terumo's behavior, which could lead to a negative impact on sale of Terumo's other products.

Therefore, even if Terumo packages small-sized VCDs with the TR Band, it would not lead to the issue of closure or exclusivity of the market in the field of trade of the small-sized VCDs.

C. Summary

As described above, the issue of closure or exclusivity of the market in the field of trade of the TR Band or small-sized VCDs is not likely to arise from Terumo packaging small-sized VCDs with the TR Band or the TR Band with small-sized VCDs. Therefore, the JFTC decided that if the measures in this case are taken, competition would not be substantially restrained in any particular failed of trade.

(3) Summary

Based on the above, the JFTC decided that the measures in this case proposed by the company group would be appropriate.

Part VI Conclusion

Based on the premise that the company group will take the proposed measures in this case, the JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 10　Acquisition of shares of Toshiba Medical Systems Corporation by Canon Inc.

The JFTC received submission from Canon Inc. (JCN 6010801003186) (hereinafter referred to as "Canon") of a plan notification (hereinafter referred to as "Notification") pertaining to its proposed acquisition of the shares of Toshiba Medical Systems Corporation (JCN 8060001013525) (hereinafter referred to as "TMSC"), and having conducted a review of the proposed business combination, the JFTC found that it would not have the effect of substantially restraining competition in any particular field of trade, and accordingly notified Canon that it would not be issuing a cease and desist order and concluded the review. (See Part I to IV below.)

However, before submission of the Notification to the JFTC, Canon acquired share options etc. whose underlying shares were common shares of TMSC, and, as consideration for such share options etc., Canon in effect made a payment to Toshiba Corporation (JCN 2010401044997) (hereinafter referred to as "Toshiba") of an amount equal to the value of the underlying common shares, and also a third party other than Canon and Toshiba came to own voting shares of TMSC until Canon exercises the share options.

This series of actions is likely to give rise to the formation of a certain joint relationship between Canon and TMSC through the above mentioned third party, comprising part of a structure premised on Canon ultimately acquiring the voting shares of TMSC subject to approval being obtained in the business combination review under the AMA.

Given that this series of actions, by being undertaken before Canon made a Notification to the JFTC, is likely to lead to activity that could violate the provisions of Article 10(2) of the AMA, being inconsistent with the purport of the prior notification system, the JFTC has cautioned Canon not to conduct such actions in the future and has also urged Toshiba, who engaged in the implementation of the above structure, not to engage in activity in the future that may be inconsistent with the purport of the prior notification system.

Therefore, if any companies which plan a business combination need to adopt a structure such as that described above in the future, they shall be requested to make a Notification to the JFTC prior to implementing a part of such a structure.

The result of the review of the business combination in this case is as follows.

Part I　Outline of this case

This case concerns a plan in which Canon, which mainly manufactures and sells office equipment, would acquire the shares of TMSC, which mainly manufactures and sells X-ray imaging equipment for medical use (hereinafter referred to as "the

conduct of this case"; Canon and TMSC collectively referred to as "the Parties").

The applicable provision in this case is Article 10 of the AMA.

Part II Particular field of trade

1. Product description

(1) Medical radiography equipment

Medical radiography equipment is a device to create visual representations of the interior of a body for image diagnosis, and divided into radiography equipment for still images and fluoroscopy equipment for moving images.[1]

Installed on medical radiography equipment, FPD (Flat Panel Detector) is an X-ray plane detector which catches X-rays which passed through a human body and converts them to digital signals.

By an adopted projection method, radiography equipment for still images is divided into three kinds: the analog type, the CR (Computed Radiography) type, and the DR (Digital Radiography) type.[2] The DR type obtains image data by converting intensity data of X-rays which passed through a subject and were detected by an FPD for still images. According to the Parties, while radiography equipment installed with an FPD for still images is generally divided into general projection devices, visiting cars, and examination cars, FPDs for still images can be used for any type of radiography equipment for still images.

By an adopted recording method, fluoroscopy equipment is divided into two kinds: the I.I. (Image Intensifier) type and the FPD (Flat Panel Detector) type.[3] The FPD type obtains moving image data by converting intensity data of X-rays which passed through a subject and were detected by an FPD for moving images. According to the Parties, while fluoroscopy equipment installed with an FPD for moving images is generally divided into X-ray television systems and X-ray angiography (imaging technique used to visualize blood vessels, etc.), FPDs for moving images can be used for either type of fluoroscopy equipment.

As evident from the above, still-image FPDs and moving-image FPDs are to be installed on different imaging equipment, making it technically difficult to use a still-image FPD with fluoroscopy equipment. As well, moving-image FPDs need to achieve performance higher than still-image FPDs (and thus use more expensive

[1] Fluoroscopy equipment is different from radiography equipment in that it could enable users to view moving images on the spot. For instance, users can see how far a catheter has traveled when they are actually inserting it into a patient's body.

[2] According to the Parties, the DR type was developed to replace the analog type and the CR type, and may be selected and adopted by medical institutions which are introducing their first still image shooting device or have been using the analog type or the CR type through comparison of the three types in terms of performance and cost.

[3] According to the Parties, even though the I.I. type has technical disadvantage in the resolution and the scope of vision, and produces distortion in the image margins, it won't be completely replaced by the FPD type for some time to come because it is a lot less costly than the FPD type.

circuits, sensors, and other parts), and hence are priced higher than still-image FPDs as seen in the following table.

[FPD price range]

FPD classification	Average price per unit
FPDs for still image	Around 3.5-4.5 million yen
FPDs for moving image	Around 6-11 million yen

Manufacturers are providing still-image FPDs or moving-image FPDs featuring their high-quality-image capabilities or lightweight but there is not much differentiation in terms of quality or performance among products made by different manufacturers.

In case of radiography equipment for still images, usually medical institutions designate what still-image FPD to be installed. This is because still-image FPDs can be retrofitted to radiography equipment by medical institutions. In fact, still-image FPD manufacturers and radiography equipment manufacturers individually try to sell respective products to medical institutions, the customers, who then decide on a combination of suppliers of FPDs and radiography equipment. Therefore, regarding still-image FPDs, radiography equipment manufacturers do not have much freedom in choosing which FPD manufacturers to go with.

On the other hand, fluoroscopy equipment manufacturers usually decide which FPD manufactures will supply products for their equipment. This is because moving-image FPDs cannot be retrofitted to fluoroscopy equipment by medical institutions; fluoroscopy equipment manufacturers deicide which moving-image FPD manufacturer's products to be installed on their equipment during its development or manufacturing stage. Therefore, moving-image FPD manufacturers promote their products to fluoroscopy equipment manufacturers, who then decide which moving-image FPD manufacturers to go with.

(2) Medical information systems

Medical information systems support medical administrative work, diagnosis, treatment, etc. at medical institutions and are classified into PACS, HIS and 3D Work Stations[4] by the type of work they support.

PACS (Picture Archiving and Communication System) is an image database system which digitally stores examination image data recorded by medical image diagnosis equipment including medical radiography equipment, CT equipment,

[4] Apart from these three types depending on the contents of works, medical information systems include remote medical systems as well. However, it is in these three segments that the Parties compete with each other.

and MRI equipment, and enables such data to be displayed or forwarded as needed.

HIS (Hospital Information System) supports administrative work at medical institutions including management of in-hospital examination reservations, medical accounting, and electronic medical records.

3D work stations refer to a system which makes analysis by reconstructing 3D images from image data recorded by CT equipment, MRI equipment, etc.

2. Product range

(1) Medical radiography equipment and FPDs

Still-image FPDs and moving-image FPDs are not substitutable to each other from the perspective of either demand or supply because they are different in terms of manufacturing know-how and imaging equipment which they are used for as well as expected performance and the price range.

Therefore, the JFTC defined the product ranges for FPDs as "still-image FPDs" and "moving-image FPDs."

As for medical radiography equipment, radiography equipment (for still images) and fluoroscopy equipment are not substitutable to each other either from the perspective of either demand or supply because they are different in terms of usage and manufacturing know-how.

Therefore, the JFTC defined the product ranges for medical radiography equipment as "radiography equipment" and "fluoroscopy equipment."

(2) Medical information systems

There is no demand substitutability among the three types of medical information systems because each type is designed for a particular usage, i.e., PACS for storing, etc. of examination images, HIS for support of administrative work, and 3D work stations for 3D processing of image data. As well, because manufacturing know-how as well as a lineup of suppliers is different among these three types of medical information systems, there is no supply substitutability either.

Therefore, the JFTC defined the product ranges for medical information systems in this case as "PACS," "HIS," and "3D work stations."

3. Geographic range

Manufacturers of any products discussed in the above 2 are selling products across Japan and there is neither difference in price ranges based on the region nor restrictions on transportation. Medical institutions, the users, are also purchasing

these products and services from manufacturers across Japan. Therefore, the JFTC defined the geographic range of this case as "all regions of Japan."

Part III Impact of the conduct of this case on competition

1. Horizontal business combination

As the Parties, both sides, manufacture and distribute "still-image FPDs," "moving-image FPDs," "PACS," "HIS," and "3D work stations," this case will fall under the definition of horizontal business combinations. The following provides market shares and applicability of the safe-harbor criteria for each product calculated based on data submitted by the Parties. All the products fall within the safe-harbor criteria for horizontal business combinations.

(1) Still-image FPDs

After carrying out the conduct of this case, the Parties together will account for around 10% (the third largest) share of the market, and the HHI will be around 1,200. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Market shares of still-image FPDs in FY2014]

Rank	Company name	Market share
1	Company A	Approx. 20%
2	Company B	Approx. 20%
3	Canon	Approx. 10%
4	Company C	0-5%
5	Company D	0-5%
-	TMSC	0-5%
	Others	Approx. 40%
Total		100%

(2) Moving-image FPDs

After carrying out the conduct of this case, the Parties together will account for around 15% of the market, and the HHI will increase by around 100 points. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Market shares of moving-image FPDs in FY2014]

Rank	Company name	Market share
-	Canon	Approx. 10%
-	TMSC	Approx. 5%
	Others	85%
Total		100%

(3) Medical information systems

A. PACS

After carrying out the conduct of this case, the Parties together will account for around 15% (the second largest) share of the market, and the HHI will increase by around 50 points to around 1,700. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Market shares of PACS in FY2014]

Rank	Company name	Market share
1	Company E	Approx. 35%
2	TMSC	Approx. 15%
3	Company F	Approx. 10%
4	Company G	Approx. 5%
-	Canon	0-5%
	Others	Approx. 35%
Total		100%

B. HIS

After carrying out the conduct of this case, the Parties together will account for around 5% of the market, and the HHI will increase by around 10 points. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Market share of HIS in FY2014]

Rank	Company name	Market share
-	Canon	0-5%
-	TMSC	0-5%
	Others	Approx. 95%
Total		100%

C. 3D work stations

After carrying out the conduct of this case, the Parties together will account for around 10% (the fourth largest) share of the market, and the HHI will increase by around 30 points to around 1,800. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations.

[Market shares of 3D work stations in FY2014]

Rank	Company name	Market share
1	Company H	Approx. 30%
2	Company I	Approx. 20%
3	Company J	Approx. 10%
4	Canon	Approx. 10%
5	Company K	Approx. 10%
6	Company L	Approx. 10%
7	Company M	Approx. 5%
8	TMSC	0-5%
	Others	0-5%
Total		100%

2. Vertical business combination

The Parties manufacture and distribute still-image FPDs and moving-image FPDs, whereas TMSC manufactures and distributes radiography equipment and fluoroscopy equipment. As discussed in Part II 1 (1) above, still-image FPDs and moving-image FPDs are designed to be installed on radiography equipment and fluoroscopy equipment respectively. Therefore, the conduct of this case falls under the definition of vertical business combinations, in which “still-image FPDs” make up the upstream market and “radiography equipment” makes up the downstream market, and at the same time “moving-image FPDs” make up the upstream market and “fluoroscopy equipment” makes up the downstream market.

(1) Position of the Parties and conditions of competing enterprises

A. Upstream market

(a) Still-image FPDs

As discussed in the above 1 (1), the Parties together will hold around 10% (the third largest) share of the still-image FPD market, and the HHI will be around 1,200. Therefore, the conduct of this case meets the safe-harbor criteria for vertical business combinations.

(b) Moving-image FPDs

As discussed in the above 1 (2), the Parties together will hold around 15% share of the moving-image FPD market. However, because it is unclear whether the HHI will be 2,500 or less, the examination will be made based on the premise that the conduct of this case does not meet the safe-harbor criteria for vertical business combinations.

B. Downstream market

(a) Radiography equipment

TMSC holds around 35% (the largest) share of the radiography equipment market, and the HHI is around 2,800. Therefore, the conduct of this case does not meet the safe-harbor criteria for vertical business combinations.

[Market shares of radiography equipment market in FY2014]

Rank	Company name	Market share
1	TMSC	Approx. 35%
2	Company O	Approx. 35%
3	Company P	Approx. 15%
4	Company Q	Approx. 5%
	Others	Approx. 10%
Total		100%

(b) Fluoroscopy equipment

TMSC holds around 25% (the largest) share of the fluoroscopy equipment market, the downstream market, and the HHI is around 1,900. Therefore, the conduct of this case does not meet the safe-harbor criteria for vertical business combinations.

[Market shares of fluoroscopy equipment market in FY2014]

Rank	Company name	Market share
1	TMSC	Approx. 25%
2	Company R	Approx. 20%
3	Company S	Approx. 20%
4	Company T	Approx. 10%
5	Company U	Approx. 10%
6	Company V	Approx. 10%
	Others	0-5%
Total		100%

(2) Refusal of still-image FPD purchase

TMSC accounts for around 35% (the largest) share of the market of manufacturing and distributing radiography equipment, the downstream market. However, in this market, Company O has almost the same share (around 35%, the second largest) as TMSC and Company P also accounts for over 10% of the market. In this situation, if TMSC, after carrying out the conduct of this case, refuses to purchase still-image FPDs from companies other than the Parties (hereinafter such an act referred to as "customer foreclosure" in (2)), it is not considered to have a large impact on competition in the still-image FPD market, the upstream market, because companies other than the Parties in the upstream market are easily able to find alternative customers.

As well, because it is basically medical institutions that decide on suppliers of still-image FPDs, TMSC, a radiography equipment manufacturer, could not provide preferential treatment to still-image FPDs made by the Parties in the first place.

Therefore, the JFTC decided that the Parties have no capabilities of implementing customer foreclosure after carrying out the conduct of this case.

(3) Refusal of moving-image FPD supply

While competitors' individual shares are unknown, the Parties account for only around 15% of the moving-image FPD manufacturing market, the upstream market and there are multiple competitive suppliers including ones which have a larger share than the Parties. If the Parties, after carrying out the conduct of this case, stop supply of moving-image FPDs to any company other than TMSC (hereinafter such an act referred to as "input foreclosure" in (3)), it is not considered to have a large impact on competition in the fluoroscopy equipment market, the downstream market, because companies other than TMSC in the downstream market are easily able to purchase moving-image FPDs from alternative suppliers.

Therefore, the JFTC decided that the Parties have no capabilities of implementing input foreclosure after carrying out the conduct of this case.

(4) Refusal of moving-image FPD purchase

TMSC accounts for around 25% (the largest) share of the market of manufacturing and distributing fluoroscopy equipment, the downstream market. However, in this market, there are influential competitors including Company R (market share: around 20%, the second largest) and Company S (market share: around 20%, the third largest).

In this situation, if TMSC, after carrying out the conduct of this case, refuses to purchase moving-image FPDs from companies other than the Parties (hereinafter such an act referred to as "customer foreclosure" in (4)), it is not considered to have a large impact on competition in the moving-image FPD market, the upstream market, because companies other than the Parties in the upstream market are easily able to find alternative customers.

Therefore, the JFTC decided that the Parties have no capabilities of implementing customer foreclosure after carrying out the conduct of this case.

3. Summary

The conduct of this case would not substantially restrain competition in any particular field of trade including that of still-image FPDs and moving-image FPDs.

Part IV Conclusion

The JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 11 Acquisition of shares of eBOOK Initiative Japan Co., Ltd. by Yahoo Japan Corporation

Part I Outline of this case

This case concerns a plan in which Yahoo Japan Corporation (JCN 4010401039979) (a subsidiary of SoftBank Group Corp. (JCN 1010401056795); hereinafter, a group of combined companies which are held by the ultimate parent company, SoftBank Group Corp., referred to as "SBG Group"), which operates an internet portal site "Yahoo!," would acquire over 20% of the voting shares of eBOOK Initiative Japan Co., Ltd. (JCN 1010001069108) (hereinafter, the company and its subsidiaries collectively referred to as "EIJ Group"; SBG Group and EIJ Group collectively referred to as "the Parties"), which operates e-book retailing business (the acquisition of shares concerned hereinafter referred to as "the conduct of this case").

The applicable provision in this case is Article 10 of the AMA.

Part II Particular field of trade

1. Product/service description

(1) Definition of "e-book"

While there is no decisive definition of the term "e-book," "Trends in the Electronic Book Market" (June 26, 2013, Competition Policy Research Center (CPRC), the JFTC) defines it as things that meet the following three requirements:

1) Character or graphic information which could replace conventional books or magazines
2) Provided as electronic information through an information network for a fee
3) Designed to be read on electronic devices (PCs, mobile phones (including smartphones), e-book readers, tablets, etc.)

According to this definition, the term "e-book" does not apply to blogs on the internet, electronic information sold in a CD-ROM format (dictionaries, white papers, etc.), electronic information which is designed to be read on paper as printouts (by print-on-demand), or anything which is available for free (Aozora Bunko, an online out-of-copyright book collection, online catalogues, etc.)

Upon examination of the conduct of this case, the JFTC also defined "e-book" as things that meet the above three conditions.

(2) Distribution of e-books

A. Distribution channels

In general, paper-based books (hereinafter referred to as “paper books”) are created by publishers, which are then distributed to book stores by wholesalers specialized in paper books, called Toritsugi (publishing agent).

On the other hand, in distribution of e-books, usually publishers create e-books by digitizing paper books, and distribute them to e-book retailers by themselves or through wholesalers or Toritsugi of e-books. However, distribution channels for e-books are more diversified than paper books as evident in cases of some publishers which operate e-book retail business by themselves, or authors who have directly signed agreements with e-book retailers and sell their books without using a publisher or wholesaler.

B. Forms of transactions

(a) Transactions among enterprises

As e-books are intangible, their transaction method is different from tangible paper books’.

Regarding transactions concerning e-books among enterprises, if an e-book publisher provides e-book contents to an e-book wholesaler or a e-book retailer, the e-book publisher provides the e-book retailer either through the e-book wholesaler or directly with a license which allows the e-book retailer to grant “rights to read the e-book contents concerned” (hereinafter referred to as “e-book licenses”) to consumers. This method is called sublicense system, in which it is e-book retailers who grant e-book licenses to consumers.

Alternatively, a consignment system may be adopted for a transaction method. In this method, publishers directly grant e-book licenses to consumers and e-book retailers simply act as a middleman.

The Parties, both sides, distribute e-books to consumers by using both methods of the sublicense system and the consignment system.

(b) Methods by which consumers read e-books

There are two methods for e-book reading: the download method (electronic data of e-books is downloaded to electronic media owned by consumers) and the streaming method (electronic data is received and played through a communication network).

The Parties, both sides, adopt both the download and streaming methods and provide e-books to consumers, who read them by using e-book viewer applications (e-book reader applications) developed by the Parties or directly

opening them on web browsers on PCs or smartphones.

2. E-book retail business

(1) Product/service range

A. Substitutability among e-books

E-books used to be readable only on devices which were compatible with a particular file format in which the contents were packaged. For this reason, consumers were limited in their choice of which e-book retailers they could purchase from and what e-books they could read depending on what file formats their devices were compatible with.

However, e-book retailers, including those which provide e-book reader devices, now provide viewer applications compatible with multiple file formats which could be installed on smartphones, tablets, or other multipurpose devices, or consumers can even directly read e-books on web browsers on their PCs or smartphones without using such viewer applications. Being able to purchase and read e-books from these e-book retailers without a particular e-book reader device, consumers are now subject to less restriction on e-books they can purchase. As well, by installing a viewer application, consumers can read e-books regardless of whether they are provided through the download method or the streaming method.

Therefore, demand substitutability exists among e-books of different file formats or distribution methods.

B. Substitutability between paper books and e-books

On October 7, 2015, the CPRC of the JFTC published a report called "Substitutability of Demand for Online and Offline Services," which examined demand substitutability between online and offline contents services concerning e-books, music distribution, movie distribution, and SNS. (For instance, in case of "books," the report examined substitutability between e-books (online) and paper books (offline).)

The report tried to find out whether the advent of e-books affected the market of paper books by looking at whether there was a structural change in the paper book market through a time series analysis.[1] As a result, the report found that the advent of e-books did not necessarily have a negative impact on the sales of paper books. Rather, consumers might be using paper books and e-books for comic books and comic magazines respectively, and the start of distribution of an e-book title seemed to have an effect of informing consumers

[1] See Chapter 5 of the said report.

of provision of the same title in a paper format.

Based on results of empirical analysis such as this, the report concluded that at least as of the time of examination that was conducted in 2011, demand substitutability between online and offline services in Japan was not evident, rather there was demand structure in which online and offline services complemented each other in the fields of books, music, and movies, which means that online and offline services should still be viewed as separate individual markets from the competition policy perspective.[2] The report suspects restrictions on the supply side is a major reason for the lack of substitutability, including a shortage of attractive contents due to the constraints such as the issues of copyright clearance, various specifications, and the division of formats in the online market.

If these constraints on the supply side are eliminated, substitutability between e-books and paper books is expected to increase. However, as the constraints have yet to be cleared today, in light of the results of the empirical analysis provided in the report, it is reasonable to assume that both demand substitutability and supply substitutability are limited between e-books and paper books at least for the moment.

C. Summary

Based on the above, the JFTC defined a product/service range in this case as "e-book retail business."[3]

(2) Geographic range

Regarding sales of e-books, consumers, who are one group of users, are able to purchase regardless of where they reside because e-books are downloaded or displayed through the internet. In contrast to paper books which may incur shipping cost, all the customers are charged with the same price regardless of their location.

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[2] See page 72 of the said report.

[3] The market of "e-book retail business" may have the characteristics of a two-sided market considering that 1) e-book retailers have two different groups of users, namely, publishers (content providers) and consumers, 2) that e-book retailers have functions of brokering transactions between the two groups of users, as discussed in the above 1 (2) B, and 3) that there are indirect network effects that the increase of the number of one group of users improves service quality to the other group of users (the more the users are, the more likely the service is to be used, and the more attractive the service is to content providers; and the more choices of contents the service offers, the more attractive the service is to users). Based on the above characteristics, the market share of an e-book retailer in sales value is considered to suggest the retailer's influence on e-book publishers. Therefore, the impact of the conduct of this case on e-book publishers is considered the same as the result of examination of the impact of the conduct of this case on consumers.

On another note, there is a variety of understanding with regard to the definition of two-sided market. Here, it is defined as a market which meets three requirements: (1) there are two or more different user groups; (2) there is a platform providing space which acts as an intermediary of trade between different groups of users; and (3) there are indirect network effects.

Publishers, the other group of users, are not subject to geographical restrictions either. They can do business with e-book retailers anywhere in Japan, and trade price does not change depending on the location.

Based on the above, the JFTC defined the geographic range for e-book retail business in this case as "all regions of Japan."

3. E-book publishing business

(1) Product/service range

SBG Group is operating e-book publishing business.

As discussed in the above 2 (1) B, demand substitutability and supply substitutability are both limited between e-books and paper books.

While e-book publishers and retailers do business through the sublicense system or the consignment system, as discussed in the above 1 (2) B (a), these two systems differ only in who grants e-book licenses to consumers, not in any other respects such as servers, systems, and other infrastructures required for e-book retailers to sell e-books. E-book retailers can switch from the sublicense system to the consignment system or vice versa without incurring additional cost. Therefore, the JFTC decided that demand substitutability exists between the sublicense system and the consignment system.

Based on the above, the JFTC defined a product/service range in this case as "e-book publishing business."

(2) Geographic range

E-book retailers, the users, do business with e-book publishers anywhere in Japan, not subject to geographical restrictions concerning transactions, and trade price does not change depending on the location.

Therefore, the JFTC defined the geographic range for e-book publishing business in this case as "all regions of Japan."

4. Types of business combination

(1) Horizontal business combination

Because the Parties, both sides, are operating e-book retail business discussed in the above 2 (1) C, the conduct of this case falls under the definition of horizontal business combinations.

(2) Vertical business combination

SBG Group is operating e-book publishing business discussed in the above 3 (1), and providing e-books to e-book retailers. In the meantime, the Parties, as e-

book retailers, receive e-books from e-book publishers.

Therefore, the conduct of this case falls under the definition of vertical business combinations where e-book publishing business operated by SBG Group is the upstream market and e-book retail business operated by the Parties is the downstream market.

Part III Impact of the conduct of this case on competition

1. Horizontal business combination and vertical business combination (downstream market)

The following table shows market shares of the Parties concerning "e-book retail business." Through the conduct of this case, the HHI will increase around 20 points. Therefore, the conduct of this case meets the safe-harbor criteria for horizontal business combinations. As well, the Parties together will hold around 5% of the market after carrying out the conduct of this case. Therefore, the conduct of this case meets the safe-harbor criteria for vertical business combinations, as well.

[E-book retail market shares in 2015]

Rank	Company name	Market share
Unknown	SBG Group	0-5%
Unknown	EIJ Group	0-5%

2. Vertical business combination (upstream market)

As the following table shows, the market share of the Parties concerning "e-book publishing business" is less than 5%. Therefore, the conduct of this case meets the safe-harbor criteria for vertical business combinations.

[E-book publishing market share in 2015]

Rank	Company name	Market share
Unknown	SBG Group	0-5%

Part IV Conclusion

The JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Case 12 Acquisition of shares of Digital Publishing Initiatives Japan Co., Ltd. by Media Do Co., Ltd.

Part I Outline of this case

This case concerns a plan in which Media Do Co., Ltd. (JCN 2180001047905), which operates e-book wholesale business, etc. (hereinafter referred to as "Media Do"; a group of combined companies which are held by the ultimate parent company, Media Do, referred to as "Media Do Group"), would acquire over 50% of the voting shares of Digital Publishing Initiatives Japan Co., Ltd. (JCN 8010001146016), which operates e-book whole sale business, etc. (hereinafter referred to as "DPIJ"; a group of combined companies which are held by the ultimate parent company, DPIJ, referred to as "DPIJ Group"; Media Do and DPIJ collectively referred to as "the Parties," and Media Do Group and DPIJ Group collectively referred to as "the company group"; the acquisition of shares concerned referred to as "the conduct of this case").

The applicable provision in this case is Article 10 of the AMA.

Part II Particular field of trade

1. Product description

(1) Distribution channels of e-books

The following shows a summary of distribution channels in the e-book[1] market, of which Distribution Channel ① and ② account for the major portion today.

A. Distribution Channel ①

A publisher[2] sells e-books to an e-book wholesaler, which then sells them to an e-book retailer, which then sells them to consumers (readers).[3]

B. Distribution Channel ②

A publisher directly sells e-books to an e-book retailer, which then sells them to consumers. Most of the transactions made by major e-book retailers follow this distribution channel.

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[1] E-books refer to things which meet the following three requirements: 1) Character and graphic information which could replace conventional books or magazines; 2) Provided as electronic information through an information network for a fee; and 3) Designed to be read on electronic devices (PCs, mobile phones (including smartphones), e-book readers, tablets, etc. Hereinafter the same shall apply.)

[2] In this case, the term "publisher" is simply defined as an enterprise publishing e-books. Interview findings suggest that there are some 4,000 publishers, including small and medium-sized businesses, providing paper-based books (hereinafter referred to as "paper books"), among which 2,000-2,500 companies publish e-books as well.

[3] In actuality, the following transactions are performed: 1) publishers grant rights of public transmission of contents and sublicense to e-book wholesalers; 2) e-book wholesalers grant rights of public transmission of contents to e-book retailers; and 3) e-book retailers use contents based on their rights of public transmission, (which means e-book retailers license consumers to read contents for a fee.) In this case, the concept of granting rights or licenses is simply expressed by words such as "sell" or "sale."

C. Distribution Channel ③

A publisher directly sells e-books to consumers. This applies, for example, when a major publisher creates and operates its own e-book distribution site, and directly sells e-books to consumers.

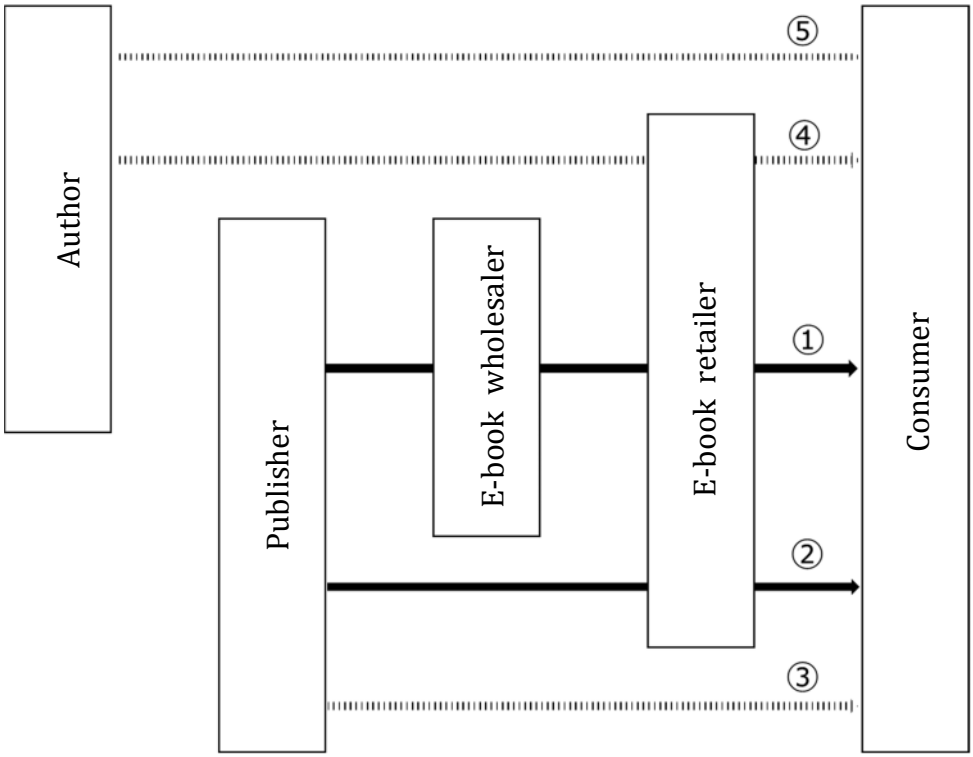
D. Distribution Channel ④

An author sells e-books by himself/herself to consumers through an e-book retailer.

E. Distribution Channel ⑤

An author sells e-books by himself/herself to consumers through his/her own e-book distribution site

[Diagram: Distribution channels]



* Solid lines represent major distribution channels.

(2) E-book wholesale business

The company group, both sides, operate e-book wholesale business. The following summarizes major services provided by e-book wholesale business.[4]

A. Distribution channel functions

Acquiring contents from publishers and providing them to e-book retailers

[4] Some e-book wholesalers provide services such as production of e-book data and development/introduction of e-book distribution platforms as well.

B. Billing agent/sales calculation

Developing billing/sales-management systems of e-book retailers and providing payment agency service and sales calculation service. Other services include taking care of administrative tasks such as monitoring the sales status daily, managing/tallying up a list of contents downloaded by consumers, managing history of use by consumers, outputting monthly ledger sheets concerning such data, etc.

C. Management/consolidation of e-book data and conversion of formats of e-book data and metadata (bibliographic data, etc.)[5]

Consolidating e-book data, converting it and metadata including bibliographic data created by publishers into formats used by each e-book retailer, and then delivering them to e-book retailers.

(3) Forms of transactions

A. Methods of distribution

In the distribution channel ① discussed in the above 1 (1) A, publishers first send e-book data and meta data produced by themselves or through outsourcing to a third party to e-book wholesalers. The e-book wholesalers, then, convert data concerning contents delivered by publishers into appropriate formats and send it to e-book retailers.[6]

On the other hand, in the distribution channel ② discussed in the above 1 (1) B, when publishers send data concerning contents to e-book retailers directly, they may do so after formatting the data appropriately for each e-book retailer by themselves or through outsourcing to a third party, or publishers may simply send data to e-book retailers, who then convert the received data into formats they use.

B. Classification by sales method

Transactions which happen when publishers sell e-books are largely divided into two types by who decides retail price: one in which e-book retailers

[5] The format of e-book data refers to standards of e-book data files containing text, graphics, etc. for viewing on electronic devices. Various standards are adopted depending on the electronic device and the e-book retailer. Reading an e-book requires an electronic device installed with viewer software compatible with the format of the e-book concerned. As well, e-book suppliers need to compile e-book data into different formats. On top of that, formats used for metadata including bibliographic data vary depending on the e-book retailer.

[6] E-book retailers receive and store data concerning contents in their own distribution servers, from which data is distributed to consumers. Alternatively, some e-book retailers obtain user rights for distribution servers run by e-book wholesalers, and distribute contents to consumers by letting consumers download contents from the e-book wholesalers' distribution servers.

decide retail price and the other in which publishers themselves decide retail price.

In both types of transactions, publishers, e-book wholesalers, and e-book retailers usually share revenue (a revenue-sharing system). The share of a publisher is determined by negotiation with e-book wholesalers or e-book retailers, and in case of the distribution channel ① discussed in the above 1 (1) A, the share of an e-book wholesaler is determined by negotiation with secondary e-book wholesalers (following the e-book wholesaler concerned) and e-book retailers.

There is a variety of ways e-book retailers charge consumers, e.g., consumers may be charged retail price for each content they buy, or a flat fee for reading whatever books are available as many as they want.

2. Product/service range

While e-book wholesale business offers functions discussed in the above 1 (2), these functions are all considered to be offered to serve two groups: publishers and e-book retailers.

Both e-book wholesalers and paper book wholesalers serve two separate groups of users, namely, publishers and retailers (e-book retailers for e-books and bookstores for paper books). However, lineups of users are somewhat different between e-books and paper books. (For instance, service to retailers is used by e-book retailers and bookstores.) In addition, even users who deal in both e-books and paper books expect different functions from e-book wholesalers and paper book wholesalers; they need e-book wholesalers to convert e-book data and metadata in formats appropriate for them to distribute contents whereas paper book wholesalers are required to pick up books from publishers or printers and deliver the books to book stores. Therefore, there is no demand substitutability between e-book wholesalers and paper book wholesalers.

Moreover, as evident from the distribution functions discussed above, because required business organizations, techniques, know-how, etc. are all different between e-book wholesale business and paper book wholesale business, it is not considered readily implementable for e-book wholesalers to start providing services of paper book wholesalers. In fact, different lineups of players are competing in e-book wholesale business and paper book wholesale business. Therefore, supply substitutability is also limited between e-book wholesale business and paper book wholesale business.

Based on the above, the JFTC defined the service range in this case as “e-book wholesale business” which consists of two different service ranges, one in which one

group of users, publishers, are served, and in the other in which the other group of users, e-book retailers, are served.

3. Geographic range

Users of e-book wholesalers, namely, publishers and e-book retailers, are able to use the service of e-book wholesalers under the same conditions anywhere in Japan. Therefore, the JFTC defined the geographic range of this case as "all regions of Japan."

Part III Impact of the conduct of this case on competition

1. Position of the Parties

After carrying out the conduct of this case, the Parties together will hold around 60% (the largest) share of the market, and the HHI will be around 4,300. Therefore, the conduct of this case does not meet the safe-harbor criteria for horizontal business combinations.[7]

[E-book wholesale market shares in FY2015]

Rank	Company name	Market share
1	DPIJ Group	Approx. 40%
2	Media Do Group	Approx. 20%
3	Company A	Approx. 20%
4	Company B	Approx. 15%
5	Company C	Approx. 5%
	Others	0-5%
Total		100%

2. Conditions of competing enterprises

There are at least seven e-book wholesalers including competitive ones, Company A and Company B, both of which hold more than 10% of the market, as well as Company C and others.

E-book wholesalers are trading with various e-book retailers and publishers are considered to distribute e-books, even the same title, through multiple e-book wholesalers because each e-book wholesaler partners with a different set of e-book

[7] E-book wholesale business has two separate groups of users: publishers and e-book retailers. As for publishers, this report will omit discussion because the conduct of this case would not substantially restrain competition in the field of service provided to publishers as discussed later in 2, 3, and 4. Because it was hard to estimate e-book wholesale market shares in this case, the JFTC determined applicability of safe-harbor criteria by estimating the market share based on the sales of contents distributed to consumers from e-book retailers through e-book wholesalers (contents sold to consumers through the Distribution Channel ①, discussed in Part II 1 (1) A above) according to data submitted by the Parties.

retailers. According to an interview, publishers are generally selling the same titles through multiple e-book wholesalers because marginal cost of e-books is minimal, and publishers can increase sales opportunities by increasing sales channels. Based on these circumstances, publishers would not see much advantage in limiting sales channels or e-book wholesalers to trade with by only distributing e-books through the company group. Therefore, other competing e-book wholesalers would also be able to continue to receive contents from publishers with popular contents.

According to an interview, services by Company A and Company B are not much substitutable to services by the Parties because of the properties of the contents which Company A and Company B mainly deal in and the peculiarities of e-book retailers they mainly trade with. On the other hand, services by Company C and Company D (see the following 3), which trade with various publishers and e-book retailers, are high in substitutability with services by the Parties. In addition, while some competitors carry largely the same contents as the Parties, e-book retailers are able to obtain most of the contents currently provided by the Parties from such competitors.

These competitors are subject to few physical constraints when they want to increase supply because, as discussed in Part II 1 (2) above, e-book wholesalers' main services are sending and receiving electronic data, and converting formats. Therefore they are considered to have sufficient excess capacity.[8]

Based on the above, the JFTC decided that competitive pressure from competing enterprise exists.

3. Entry

According to the Parties, there are no legal regulations which would restrain new entry in e-book wholesale business, and a capital investment required for entry is smaller than in the paper book wholesale business. In fact, some venture startups have entered the e-book wholesale business (see the table below), and one of them, Company B, which entered in 2010, for example, now holds around 15%, or the third largest share of the market. As evident from this, new entry is relatively easy

[8] As discussed in Part II 2 above, e-book wholesalers serve both publishers and e-book retailers. According to an interview, publishers usually supply contents, even the same contents, through multiple e-book wholesalers because marginal cost is very little and they can increase sales opportunities by increasing sales channels. As well, in quite a few cases, publishers do not proactively choose which e-book wholesalers to work with but simply use ones requested by e-book retailers. Therefore, publishers are not considered to base their selection of e-book wholesalers on how many e-book retailers a particular e-book wholesaler is working with. On another note, according to an interview, e-book retailers choose e-book wholesalers based on, first, their price, and, second, performance in tasks concerning delivery time, accuracy required for format conversion, etc. . Therefore, e-book retailers are not considered to base their selection of e-book wholesalers on how many publishers a particular e-book wholesaler is working with, either. Accordingly, while e-book wholesalers serve publishers and e-book retailers, two different groups of users, the acquisition of the shares concerned in this case is unlikely to improve the Parties' competitive position through indirect network effects.

and some new competitors have actually joined. Therefore, new entry is considered to help prevent the Parties from increasing price.

Accordingly, the JFTC decided that a certain degree of entry pressure exists.

[Recent cases of new entry into e-book wholesale business]

Company name	Time of entry	Outline
Company B	2010	Entered in e-book wholesale business and e-book retail business
Company D	July 2012	Entered in e-book wholesale business

4. Competitive pressure from users

(1) Switching business to competing enterprises

When a publisher switches e-book wholesalers, it sometimes needs to create metadata, etc. in a different format. However, because cost associated with that is small and the total number of metadata formats will not change, cost for managing multiple formats of data will not be affected.

As well, according to an interview, e-book retailers choose e-book wholesalers based on price and performance concerning format conversion, etc. of e-book wholesalers. Because e-book retailers actually switch suppliers for the same contents flexibly, switching e-book wholesalers is not considered to cost e-book retailers much. Therefore, in general, switching cost will not prevent e-book retailers from switching e-book wholesalers per se. When e-book retailers choose e-book wholesalers, they look at capabilities to procure contents and performance concerning delivery time, accuracy required for format conversion, etc. as important criteria. The JFTC found through an interview that e-book retailers can easily switch to, at least, Company C because it has capabilities of contents procurement and task performance equivalent to those of the Parties, and sufficient excess capacity as well. Other small and medium-sized e-book wholesalers could also partially, though not entirely, replace the supply from the Parties.

(2) Switching to direct trade between publishers and e-book retailers

As discussed in Part II 1 (3) B above, in the trade of e-books, publishers, e-book wholesalers, and e-book retailers use a revenue share system, and therefore there is an incentive for publishers and e-book retailers to skip e-book wholesalers, the middleman, and trade directly with each other, thereby increasing their shares of profits.

According to an interview, major publishers, which provide most of the e-

book contents available in the market, have capabilities and know-how required to carry out e-book wholesalers' functions by themselves, and no technical obstacles stand in the way of direct trade with e-book retailers.[9]

Because e-books do not need physical distribution unlike paper books, e-book retailers also decide whether to purchase contents through e-book wholesalers or directly from publishers by comparing e-book wholesalers' share of revenue and convenience of their services (e.g., digitization service, reduction of transaction costs incurred from dealing with many publishers, etc.)[10] Therefore, there is no technical obstacle preventing e-book retailers from switching to direct trade with publishers.

(3) Consumers switching to e-book retailers which procure e-books by bypassing e-book wholesalers

As discussed in the above (2), publishers and e-book retailers of more than a certain size have an incentive to skip e-book wholesalers and trade directly with each other. In fact, influential e-book retailers are doing business directly with publishers in most of their trade, and encouraging a switch to direct trade in part of remaining trade which is still involving e-book wholesalers. Especially, retailers which sell a lot of paper books hence have strong bargaining power against publishers tend to have quite strong influence as e-book retailers as well. As well, some major publishers are directly selling their contents to consumers by developing and managing their own e-book distribution sites.

The distribution channel which skips e-book wholesalers as discussed above is considered as the mainstream in the e-book market, today. Under such circumstances, if an e-book wholesaler increases its share of revenue and e-book retailers pass the increase on to consumers, consumers are expected to switch to e-book retailers which procure e-books without going through e-book wholesalers, and e-book sales through e-book wholesalers are expected to decline. Eventually, it would lead to a reduction of the e-book wholesaler's earnings which are determined by the revenue share system.

(4) Summary

Based on the discussion in (1)-(3) above, the JFTC decided that competitive

[9] Some small and medium-sized publishers need to trade through e-book wholesalers because of technical issues such as a lack of insufficient human resources. However, e-books sold by such publishers account for only a small portion of the entire e-book market.

[10] According to an interview, some small and medium-sized e-book retailers have difficulties in switching to direct trade with publishers because cost reduction effects would be limited. However, the top 20 or so e-book retailers in sales, which collectively account for the most of the market, could all expect cost reduction effects from direct trade with publishers.

pressure from users exists.

5. Summary

As described above, based on the existence of competitive pressure from competing enterprises, a certain degree of entry pressure, and competitive pressure from users, unilateral conduct would not substantially restrain competition in any particular field of trade if the conduct of this case is carried out.

There will be multiple competing enterprises apart from the Parties even if the conduct of this case is carried out, and the volume of sales, including sales which involve e-book wholesalers, is increasing because the market is quickly expanding due to the increase of smartphone and tablet computer users. In addition, the share of revenue of an e-book wholesaler is determined by an individual revenue share scheme the e-book wholesaler agreed on with each e-book retailer, and is relatively hard to grasp from the outside, and there is no index or information concerning e-book wholesalers' share of revenue published by an industry association, etc. Based on these factors, it is considered difficult for competing enterprises including the Parties to predict behavior of other companies with high probability. Therefore, it is considered difficult to form common understanding concerning coordinated conduct. Furthermore, because, as discussed above, it is not easy to obtain price information of other companies or monitor other companies to find deviant conduct and all e-book wholesalers have sufficient excess capacity, there seems to be an incentive for any e-book wholesaler to increase profits by itself considering the above circumstances. In addition, there is a certain degree of entry pressure and competitive pressure from users. Based on all of this, competition would not be substantially restrained in any particular field of trade through coordinated conduct by the Parties and competing enterprises.

Part IV Conclusion

Based on the above, the JFTC concluded that the conduct of this case would not substantially restrain competition in any particular field of trade.

Appendix 1

Regulations on business combinations

1 Regulations on business combinations

The AMA prohibits some forms of business combinations, namely, acquisition of shares, merger, demerger, joint-share transfer or transfer of business that is likely to substantially restrain competition in any particular field of trade. In response thereto, the JFTC has been conducting reviews of business combinations pursuant to the provisions of the AMA.

2 Notification system regarding business combination plans pursuant to the AMA (for a flowchart of reviews of business combinations, see paragraph 2, Appendix 2)

When a business combination is implemented between companies that satisfy certain conditions, the AMA requires such companies to make a notification on their business combination plan in advance to the JFTC (for a summary of the conditions requiring notification, see paragraph 1, Appendix 2).

The JFTC conducts a review of whether or not the business combination regarding which prior notification has been made needs a detailed review within 30 days of the date of acceptance of the notification. When the case in question does not violate any provision of the AMA, the JFTC concludes its review within the prescribed period. If the JFTC judges that the case requires further review, it requests that the companies submit reports, etc. and determines whether or not the business combination in question may violate any provision of the AMA, within 90 days after receiving all the reports, etc.

In cases where the JFTC judges that the business combination is in conflict with any provision of the AMA, the JFTC notifies the expected content of the cease and desist order, etc. to the person(s) to be designated as the addressee of the order, hears opinions from them, and then finally issues a cease and desist order against them. They are also allowed to seek a judgment by a court if they are dissatisfied with the cease and desist order issued.

Appendix 2

Summary of conditions requiring notification by type, flowchart of business combination review, and safe-harbor criteria

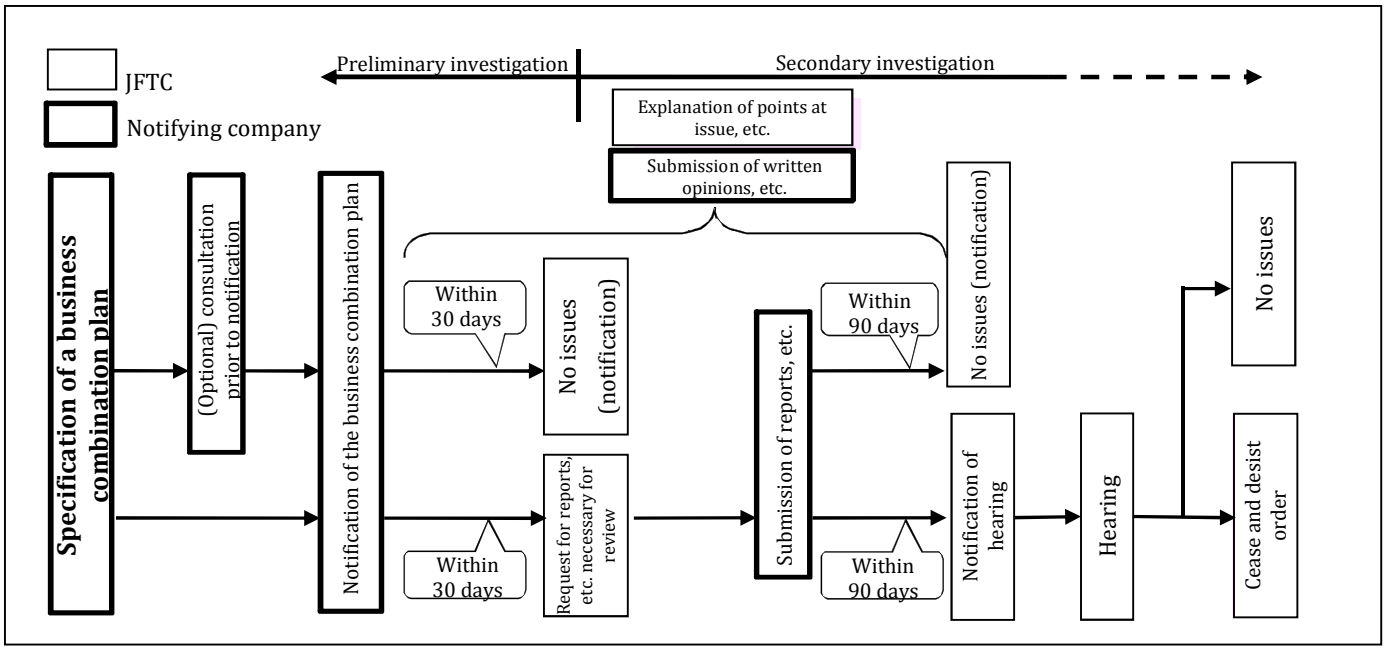
1 Summary of conditions requiring notification by type

Type of business combination (Applicable provisions)		Summary of conditions requiring notification
Acquisition of shares (Article 10)		(1) A company with total domestic sales(Note 1) exceeding 20 billion Japanese yen (2) acquires shares of another company whose total domestic sales including those of its subsidiaries exceed 5 billion Japanese yen, (3) thereby, as a proportion of voting rights held(Note 2), accounting for more than 20% or 50% of the company.
Merger (Article 15), joint share transfer (Article 15-3)		(1) A company with total domestic sales exceeding 20 billion Japanese yen and (2) another company with total domestic sales exceeding 5 billion Japanese yen (3) merge (or conduct a joint share transfer).
Demerger (Article 15-2)	Joint incorporation-type demerger	(1) A company with total domestic sales exceeding 20 billion Japanese yen and (2) another company with total domestic sales exceeding 5 billion Japanese yen (3) establish a company by joint incorporation-type demerger, to which all the businesses are transferred, etc.
	Absorption-type demerger	(1) Regarding a company with total domestic sales exceeding 20 billion Japanese yen, (2) another company with total domestic sales exceeding 5 billion Japanese yen (3) takes over all of its businesses, etc.
Transfer of business (Article 16)		(1) A company with total domestic sales exceeding 20 billion Japanese yen (2) acquires all the businesses transferred from another company with domestic sales exceeding 3 billion Japanese yen; or (1) A company with total domestic sales exceeding 20 billion Japanese yen (2) acquires any substantial part of a business with domestic sales exceeding 3 billion Japanese yen (or all or any substantial part of the fixed assets used for business).

(Note 1) Total domestic sales mean the aggregate domestic sales of companies, etc. belonging to a group of combined companies (a group consisting of "the ultimate parent company" of the notifying company and its subsidiaries).

(Note 2) A proportion of voting rights held here refers to the proportion of voting rights held by the group of combined companies to which the notifying company belongs.

2 Flowchart of business combination review



3 Safe-harbor criteria

(1) Safe-harbor criteria for horizontal business combinations

In cases where a company group, after a business combination, meets any of the following conditions 1) through 3), the horizontal business combination concerned is not normally considered to substantially restrain competition in a particular field of trade.

1) The HHI(Note 3) after the business combination is no more than 1,500;
2) The HHI after the business combination is more than 1,500 but no more than 2,500, and the HHI increase(Note 4) is no more than 250; or
3) The HHI after the business combination is more than 2,500, and the HHI increase is no more than 150.

(Note 3) The HHI score is calculated as the sum of the square of the market share of each relevant party in a particular field of trade.

(Note 4) When a business combination is conducted by two companies, the HHI increase from the business combination can be calculated by doubling the multiple of individual market shares of the two companies.

(2) Safe-harbor criteria for vertical business combinations and conglomerate business combinations

In cases where a company group, after a business combination, meets the following condition 1) or 2), the vertical business combination concerned or the conglomerate business combination concerned is not normally considered to substantially restrain competition in a particular field of trade.

1) The market share of the company group after the business combination is no more than 10% in any particular field of trade related to the relevant parties; or
2) The market share of the company group after the business combination is no more than 25% and the HHI after the business combination is no more than 2,500 in any particular field of trade related to the relevant parties.

Appendix 3

State of acceptance and review of notification concerning acquisition of shares, etc. in recent years

Table 1. Processing status of notifications received in the past three fiscal years

	FY2014	FY2015	FY2016
Cases closed at the preliminary investigation	275	281	308
Cases where the waiting period was shortened among above	(119)	(145)	(171)
Cases withdrawn prior to the conclusion of the preliminary investigation	11	8	8
Cases which were sent to the secondary investigation	3	6	3
Total	289	295	319

* Please refer to the JFTC's website for the state of notifications in FY2016.
(http://www.jftc.go.jp/dk/kiketsu/toukeishiryo/joukou.html)

Table 2. Processing status of secondary investigation in the past three fiscal years

	FY2014	FY2015	FY2016
Cases concluded at the secondary investigation	2	4	3
Cases found to have no issues given the implementation of remedies	2	1	3
Cases in which a cease and desist order was issued	0	0	0

* The above table shows the number of notifications processed in each fiscal year regardless of whether they were received during the same fiscal year.

Table 3. Change in the number of notifications concerning business combination plans that include a foreign enterprise in the Parties

	FY2013	FY2014	FY2015	FY2016
Integration plans between Japanese enterprises and foreign enterprises	7	7	8	12
Integration plans between foreign enterprises	18	41	45	47
Total	25	48	53	59