# GUIDELINES CONCERNING JOINT RESEARCH AND DEVELOPMENT UNDER THE ANTIMONOPOLY ACT

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## Fair Trade Commission

### Introduction

### 1. Basic Points of View

One of the characteristics features of recent technological innovations is that research and development (R&D) requires enormous expenditure and time as technologies have become highly sophisticated and complex, spanning many different fields. And the technologies called for could become quite diversified. For this reason, joint R&D projects by multiple firms are increasing in addition to R&D undertakings by a single firm and the introduction of technologies from other firms.

A joint R&D project stimulates and improves the efficiency of R&D activities and encourages technological innovations by (1) helping reduce the costs, distribute the risks or shorten the required time for R&D, and (2) facilitating mutual complementing of technologies and so forth, among firms in different lines of business, and accordingly are regarded as having pro-competitive effects in many cases.

On the other hand, since joint R&D projects are conducts by multiple firms, it is conceivable that they sometimes cause substantial restraint of competition in the market. Or, even where a joint R&D undertaking involves no problem in itself, an arrangement accompanying the implementation of the joint R&D project may unreasonably restrain business activities of the participants and impede fair competition in the technology market which is a fruit of the joint R&D project or in the market for products utilizing that technology.

This set of the Antimonopoly Act Guidelines Concerning Joint Research and Development, based on the above-stated perception, is published in the hope that the disclosure of the Fair Trade Commission (hereinafter referred to as "the FTC")'s general view, with respect to joint R&D, on arrangements for joint undertaking of R&D projects and their implementation may enable joint R&D projects to further promote, rather than impede, competition.

The FTC does not mean to question joint R&D activities in general, but it will examine a given R&D project in the light of the Antimonopoly Act only where it may exert an anti-competitive effect and, in making such an examination, will of course take into account the pro-competitive effects of joint R&D.

### 2. Coverage of the Guidelines and Timing in Passing Judgement

(1) The "joint R&D" projects to which the Guidelines are applicable are conducts of "joint undertaking of R&D with the participation of multiple firms". Thus, in respect of participation in joint R&D, the Guidelines are applicable to attempts in which "more than one firm" participate. The Guidelines are applicable to any such conduct as far as it may affect the Japanese market, irrespective of whether the participants are domestic or foreign firms.

(2) Whereas the way in which R&D is "jointly undertaken" may be (i) the sharing of R&D activities among the participants, (ii) the joint establishment of an organization to carry out R&D activities by the participants, (iii) undertaking of R&D activities by a trade association, or (iv) an arrangement under which mainly one party provides the funds and the other engages in actual R&D activities (excluded are such cases where only one participant engages in R&D activities and the other acquires all the R&D fruits for a certain remuneration, and is considered to be a contract or the like where the purpose is simply in the development of technology and does not have the nature of a joint conduct between firms), the Guidelines are applicable to any of these conceivable ways.

(3) Whereas R&D projects, in respect of their character, may be roughly classified into basic, applied and developmental researches, the Guidelines are applicable to joint R&D projects on any of these researches.

(4) In principle, it is at the time of the conclusion of a contract on the joint R&D project that judgement is passed regarding problems relating to the joint R&D under the Antimonopoly Act. However, if the handling of the fruits of the joint R&D, etc. cannot be prescribed at that time, judgement will be passed regarding problems under the Antimonopoly Act at the time handling arrangements on such aspects are made.

As to whether an individual specific joint R&D project and the arrangement

regarding its implementation present any problem under the Antimonopoly Act, since examination may often be required on a case-by-case basis, the FTC will establish a consulting system regarding joint R&D, and respond to individual requests for consultation (see Appendix).

## Part I Application of the Antimonopoly Act to Joint Undertaking of R&D

### 1. Basic Concept

If by undertaking R&D jointly, its activities are restricted among the participants, and which, in turn, may substantially restrict competition in the technology or product market, such a joint undertaking of R&D can pose a problem under the provisions of Section 3 of the Antimonopoly Act (Unreasonable Restraint of Trade). If the joint R&D project is undertaken by a trade association, it may also present a problem under Section 8, or if a jointly-invested company is established, it may also create a problem under Section 10 of the Antimonopoly Act.

Joint undertaking of R&D projects that would pose problems under the Antimonopoly Act would be those competing (including potentially competing, hereinafter referred to as "competing") firms undertaking R&D projects jointly. There is very little likelihood for non-"competing" firms to undertake R&D project jointly that would normally pose a problem under the Antimonopoly Act. Each firm is expected to undertake R&D regarding its products and production processes, and to compete with others in the technology or product market. However, for "competing" firms to undertake R&D project jointly would affect competition in the technology or product market.

In most cases, joint R&D projects are carried out by a small number of firms and there seems to be not much likelihood that they will pose problems under the Antimonopoly Act. However, in exceptional cases, where, for example, multiple firms in the oligopolistic industry or a majority of "competing" firms in the product market, in improving a certain product or in developing an alternative product, work together under a joint project, in spite of the fact that this project could be carried out by anyone of the participating firms. This could mean restricting R&D activities among the participants and cause substantial restraint of competition in the technology or product market.

### 2. Matters to be Considered When Making Judgements

(1) Regarding the problem of undertaking R&D jointly, judgement will be made case-by-case, and giving due consideration to the pro-competitive effect, whether or not the problem would cause substantial restraint of competition in the technology or product market. In passing judgement, the following matters will be

comprehensively taken into consideration.

{1} Number of Participants and Their Market Shares

In passing judgement as to whether or not a given joint undertaking of R&D presents a problem under the Antimonopoly Act, the number of participating firms and their shares and positions in the market are taken into account. Generally speaking, the greater the market shares of the participants and the greater the number of firms excelling in business capabilities including the technological development capability among participants, the more likelihood of the joint conduct to present a problem under the Antimonopoly Act or, conversely, the smaller the market shares of the participants and the smaller their number, the less likelihood of the joint conduct to present a problem under the Antimonopoly Act. For instance, a joint R&D project among competing firms in the market for a product, is undertaken to improve the product or to develop an alternative to the product. If the combined market share of the said product of the participants is no more than 20%, it will usually present no problem under the Antimonopoly Act. Furthermore, even if the total of the said market share exceeds 20%, it does not right away pose a problem. Judgement will be made by comprehensively, taking into consideration matters from {1} through {4}.

As a market relevant to a joint undertaking of R&D, apart from the product, it is possible to consider a technology market in which the technology itself is an object of transaction. In passing judgement on restriction of competition in the technology market, it will not depend on the market share, etc. of the said product of the participants, but on the standard of whether or not there are appropriate number of units to undertake R&D in the said technology market. In such a case, since technologies cost less to transfer and are objects of international transactions, when considering either actual or potential units to undertake R&D, not only domestic but also foreign firms would have to be taken into account and, normally, there are a substantial number of units to undertake R&D, and in that case, the undertaking is less likely to present a problem under the Antimonopoly Act.

{2} Character of Research

R&D projects can be classified into basic, applied and development researches as different stages of a comprehensive research work. And these differences in character are an important criterion in passing judgement as to whether the impact of a given joint R&D project on competition in the product market is direct or indirect. If it is a developmental research, since its fruits would have a more direct impact on the product market, it would more likely present a problem under the Antimonopoly Act. On the other hand, if a joint R&D project is made for basic research, which is not intended to develop a specific product, it usually would have little effect on competition in the product market, and is less likely to present a problem under the Antimonopoly Act.

{3} Need for Joint Undertaking

Where the risks involved or the cost of a research project are too great to be borne by a single firm, or where the firm undertaking the R&D project finds a strong need among other reasons, for joint undertaking with other firm or firms in view of the limitation of its accumulated technological resources, technological development potential and so forth, joint undertaking of the R&D project is considered necessary for the achievement of the objective of the R&D project, such undertaking is less likely to present a problem under the Antimonopoly Act. Moreover, a joint R&D project intended to address so-called external factors, such as developing an environmental or safety measure, may not in itself immediately exclude the possibility for such project to pose a problem under the Antimonopoly Act. However, taking into account cost, risk, and so forth, related to research, it may not be so easy to carry it out alone. In such a case, it is less likely to pose a problem' under the Antimonopoly Act.

{4} Range of Objects, Duration, etc.

The range of objects, duration, etc. of the joint R&D project are also taken into account in assessing its impact on competition in the market. In other words, where the range of objects, duration, etc. are clearly defined, its impact on competition in the market will be less than where they are more extensively stipulated than necessary.

(2) Moreover, even if the problems mentioned above do not arise, should the total market share of the participants be fairly high, and in starting a joint R&D project to develop technology indispensable for business linked to unification of standards or to standardization, a firm is restricted from participating and as a result, finds difficulty in carrying on business activities and be exposed to danger of being excluded from the market. In such a case and as an exception, undertaking such R&D jointly could pose a problem under the Antimonopoly Act (Private Monopolization, etc.).

For example, regarding a joint R&D project in which the combined market share of the participants is fairly high, the fruits of said R&D, assessed by the substance of the R&D, might very possibly be actually standardized in the business field concerned. Should this joint R&D project be difficult to be carried out by an individual firm, and if such standardization contributes to rationalizing production and distribution; does not harm the interests of the consumer; and does not restrict

the R&D, production, and sales activities of the product without the use of the technology concerned, the undertaking of R&D jointly will be permitted.

Even in such a case, if a firm is restricted from participating in said joint R&D project; restricted from access (rational terms for utilization of the results, availability of information on the results, etc., hereinafter referred to as Access); and finds difficulty in its business activities as it has no other possible means to do business. As a result, if there is danger of the firm being excluded from the market, it would pose a problem under the Antimonopoly Act.

However, if the firm that is restricted from participating in the said joint R&D project is guaranteed Access to the results which may not make the firm's business activities so difficult, it would not pose a problem under the Antimonopoly Act.

# Part II Application of the Antimonopoly Act to Arrangements Accompanying the Implementation of Joint R&D Projects

### 1. Basic Concept

Even where the joint undertaking of R&D presents no problem under the Antimonopoly Act, arrangements accompanying the implementation of the joint R&D project may affect competition in the market and they may create problem or problems under the Antimonopoly Act.

Thus, if an arrangement unjustly restricts the business activities of a participant under a arrangement and may thereby impede fair competition, the arrangement will constitute unfair trade practices and pose a problem under the provisions of Section 19 of the Antimonopoly Act.

Furthermore, in implementing a joint R&D project by "competing" firms in the product market, if business activities are mutually restricted in firms on price and volume, etc. of a product, it will be examined in accordance mainly with the provisions of Section 3 (Unreasonable Restraint of Trade) of the Antimonopoly Act. Moreover, since a joint R&D project is undertaken by multiple firms to achieve a common purpose, arrangements by the participants regarding its implementation are basically judged by this set of Guidelines. "Guidelines for the Regulation of Unfair Trade Practices with Respect to Patent and Know-how Licensing Agreements" (published on February 15, 1989), the object of which is technological transaction, will not apply. However, in concluding a license contract with a third party on the results of the joint R&D project, it will be judged by the above mentioned Guidelines.

### 2. Judgement Concerning Unfair Trade Practices

In the following paragraphs, matters to be arranged in connection with the implementation of a joint R&D project are classified, on the basis of the realities of

joint R&D projects, into three categories including (1) "Matters Concerning the Implementation of the Joint R&D Project", (2) "Matters Concerning the Technology which is a Fruit of the Joint R&D Project" and (3) "Matters Concerning Products Utilizing the Technology which is a Fruit of the Joint R&D Project", each being subdivided into (a) "Matters which are considered, in principle, not to fall under unfair trade practices", (b) "Matters which may fall under unfair trade practices", and the FTC's views under the Antimonopoly Act are revealed as much as possible from the viewpoint of unfair trade practices.

"Matters which are considered, in principle, not to fall under unfair trade practices" are considered to be within a reasonable scope, needed for smooth implementation of the joint R&D project and have little impact on competition. Even if such matters have been arranged, they do not, in principle, constitute unfair trade practices and accordingly present no problem under the Antimonopoly Act. However, even such matters will present a problem under Section 19 of the Antimonopoly Act (General Designations: Article 14 b(Abuse of Dominant Bargaining Position) or Article 5 (Discriminatory Treatment in a Concerted Activity)) if its contents significantly lack balance among the participants and thereby place any specific participating firm at an unreasonable disadvantage.

Regarding the "Matters which may fall under unfair trade practices," each matter is individually examined as to whether or not it may impede fair competition and, in such an examination, whether or not said matter may impede fair competition is judged on the basis of the overall assessment of the participants' positions in the market, the relationship among the participants, the market situation, the relative length of the period during which the restriction is imposed, among other factors. In a such case, the more influential the positions of the participants in the market, the less intense the competition in the related markets, and the longer the duration of the restriction, the greater the likelihood of impediment of fair competition. Furthermore, the compatibility with Articles 14 and 5 of the General Designations mentioned above will also be questioned here in certain cases.

"Matters which are highly likely to fall under unfair trade practices" are not deemed necessary for the implementation of the joint R&D project and as the contents of the restriction themselves to be imposed are highly likely to impede fair competition, they would be considered to fall under unfair trade practices unless there is a particular reason or reasons to justify such practices.

- (1) Matters Concerning the Implementation of the Joint R&D Project
- (a)Matters which are considered, in principle, not to fall under unfair trade practices
- {1} Arrangement on the objective, duration, and sharing (sharing of work, sharing of cost, etc.) of the R&D project.

- {2} Calling for the obligation to disclose among the participants themselves information (including what is obtained in the process of the joint R&D project; the same applies hereinafter) necessary for the joint R&D project.
- {3} Calling for the obligation to keep secret the information on the technologies, etc., disclosed under {2} from other participants.
- {4} Calling for the obligation to keep secret such information, other than the information on the technologies, etc. under {2}, obtained from fellow participants and those which are supposed to be particularly confidential (including the secrecy of the actual implementation of the joint R&D project).
- {5} Calling for the obligation to report on the progress of the shared part of the research work to other participants.
- {6} Restrictions on the diversion of the technologies, etc. disclosed by other participants under {2} for any purpose other than the theme (which means the scope of the objects of the joint R&D project; the same applies hereinafter) of the joint R&D project (except in the case of (1)-(b)-{1}).
- {7} Restrictions on an R&D of an individual or with a third party or parties which has the same theme as that of the joint R&D project during the implementation of the joint R&D project.
- {8} Restrictions on a joint R&D with a third party or parties on any theme very closely related to the theme of the joint R&D project during the implementation of the joint R&D project, where such restrictions are deemed necessary for preventing a dispute arising over the fruits of the joint R&D project or including the participants to the joint R&D project to dedicate themselves to the said project (see (1)-(c)-{1).
- {9} Restrictions on a joint R&D with a third party or parties on the same theme as or any theme very closely related to the theme of the joint R&D project for a reasonable period after the completion of the joint R&D project, where such restrictions are deemed necessary for preventing a dispute arising over the fruits of the joint R&D project and for including the participants to dedicate themselves to the said project. (see (1)-(c)-{1} and {2})

Restriction on R&D after completion of the joint R&D project can not, in principle, be accepted. It unjustly restricts the R&D activities of the participants and would seem to strongly impede fair competition (see (1)-(c)-{1} and {2}). However, in the case of a reasonable period after completion of the joint R&D project, when it is accepted that the restriction was necessary to prevent a breach of faith or confirm acquisition of rights, restricting an R&D with a third party having the same theme or very closely related to it, would not be considered, in principle, an impediment to fair competition.

{10} Restrictions on the introduction from some other party, of a technology similar to the technology which is the objective of the joint R&D project during the implementation of the joint R&D project in the case where the necessity is recognized to induce the participants to dedicate themselves to the joint R&D project (except in the case of (1)-(b)-{2}).

- {11} Restrictions on the participation of other firms in the joint R&D project. It will not, in principle, create a problem by just restricting participation of other firms in the joint R&D project. However, it could pose a problem in exceptional cases under unfair trade practices (General Designations: Article 1 [Concerted Refusal to Deal], Article 2 [Other Refusal to Deal], etc.) and under private monopolization, etc. (see No.1-2(2)).
- (b) Matters which may fall under unfair trade practices
  - {1} Restrictions on the diversion of the technologies, etc. disclosed by other participants in connection with the joint R&D project regarding themes other than that of the joint R&D project beyond a reasonable extent necessary for the prevention of the diversion of the technologies, etc. (see (1)-(a)-{6}). If even the development of another different technology based on a hint from the disclosed technologies, etc., instead of diverting them as they are, is restricted, the restrictions on such R&D activities will be regarded as exceeding a reasonable extent necessary for the prevention of the diversion of the technologies, etc., and, unjustly restricting business activities of the participants in the joint R&D project, and it would seem likely to impede fair competition (General Designations: Article 13 [Dealing on Restrictive Terms]).
  - {2} Restrictions on the introduction from some other party of any technology similar to the technology which is the objective of the joint R&D project beyond an extent necessary for the implementation of the joint R&D project (see (1)-(a)-{10}). If the wish of a participant to withdraw from the joint R&D project by disclaiming its rights to findings, fruits, etc. pertaining to the said R&D project and to introduce superior technology from another party is rejected, such a restriction will be regarded as binding unjustly on the business activities of the participant beyond an extent necessary for the implementation of the joint R&D project. And such a restriction would seem likely to impede fair competition by depriving the firm holding a competitive technology of transaction opportunities or depriving each participant of its freedom of the choice of technology (General Designations: Article 11 [Dealing on Exclusive Terms] or 13 [Dealing on Restrictive Terms]).
- (c) Matters which are highly likely to fall under unfair trade practices
  - {1} Restrictions on R&D on theme other than that of the joint R&D project (except in the case of (1)-(a)-{8} and {9}).
  - {2} Restrictions on R&D on the same theme as that of the joint R&D project after the completion of the said joint R&D project (except in the case of (1)-(a)-{9}).

Restrictions such as {1} and {2} above may unjustly restrict R&D activities by the participants and are regarded as being highly likely to impede fair competition (General Designations: Article 13 [Dealing on Restrictive Terms]).

- {3} Restrictions on the use of existing technologies by any participant or on granting of license of such technologies to a third party.
- {4} Restrictions on the production and sales activities by any participant with respect to any competing product or the like other than the products based on the fruits of the joint R&D project. Restrictions such as {3} and {4} above that are not deemed necessary for the implementation of the joint R&D project are regarded as being highly likely to impede fair competition (General Designations: Article 13 [Dealing on Restrictive Terms]).
- (2) Matters Concerning the Technology which is a Fruit of the Joint R&D Project
- (a)Matters which are considered, in principle, not to fall under unfair trade practices {1} Determination of the definition of or title to the fruits.
  - {2} Restrictions on the license for the implementation of the fruits by a third party. Restricting approval of implementation of the fruits to a third party in itself does not, in principle, pose a problem. However, it could pose an exceptional problem under unfair trade practices (General Designations Article 1 [Concerted Refusal to Deal], Article 2 [Other Refusal to Deal], etc.) and under private monopolization, etc. (see No. 1-2 (2)).
  - {3} Determination of the sharing, etc. of the royalty pertaining to the license for the implementation of the fruits by a third party.
  - {4} Calling for the obligation to keep the fruits of the work secret.
  - {5} Calling for the obligation to disclose inventions, etc. that would improve the fruits to other participants or to permit the implementation thereof by other participants on a non-exclusive bases. As already stated, any restriction from q through t above will present a problem if its contents significantly lack balance among the participants and thereby place any specific participating firm at an unreasonable disadvantage.
- (b) Matters which are highly likely to fall under unfair trade practices
  - {1} Restrictions on R&D activities utilizing the fruits. Such a restriction unjustly restricts R&D activities by the participants, may reduce competition in the market, and is regarded as being highly likely to impede fair competition (General Designations: Article 13 [Dealing on Restrictive Terms]).
  - {2} Calling for the obligation to transfer inventions, etc. that would improve the fruits to other participants or to permit the implementation thereof by other participants on an exclusive basis. Such a restriction weakens the incentive for R&D activities by the participants to improve the fruits, may reduce competition

in the market, and would be regarded as being highly likely to impede fair competition (General Designations: Article 13 [Dealing on Restrictive Terms]).

(3) Matters Concerning Products Utilizing the Technology which is a Fruit of the Joint R&D Project

(a)Matters which are considered, in principle, not to fall under unfair trade practices

- {1} Restricting the marketing of products utilizing the technology which is a fruit of the joint R&D project to another participant or to a firm or firms it designates within a reasonable period if such restrictions are required for keeping the know-how which is a fruit of the joint R&D project secret (see (3)-(b)-{3}).
- {2} Restricting the supply source or sources of raw materials or parts for the products utilizing the technology which is a fruit of the joint R&D project to another participant or to a firm or firms it designates within a reasonable period if such restrictions on the supply source or sources of raw materials or parts are required for keeping the know-how which is a fruit of the joint R&D project secret or for ensuring the quality of the products based on the fruit (see (3)-(b)-{4}).

The "reasonable period" under {1} and {2} above is determined according to the length of time when the know-how will lose its transaction value judged by reverse engineering or otherwise at the technological level prevailing in the area concerned and the length of time when equal raw materials or parts can become available from other sources, among other factors.

- {3} Calling for the obligation to maintain the product quality or standards at a certain level so as to ensure within a necessary range, the effectiveness of the technology which is the fruit of the R&D when receiving from another participant, supply of products based on the R&D result (see (3)-(b)-{5}).
- (b) Matters which may fall under unfair trade practices
  - {1} Restrictions on the production or sales territories of the products based on the fruits.
  - {2} Restrictions on the production or sales volumes of the products based on the fruits.
  - {3} Restrictions on to whom to sell the products based on the fruits (except in the case of (3)-(a)-{1}).
  - {4} Restrictions on the supply source or sources of the raw materials or parts for the products based on the fruits (except in the case of (3)-(a)-{2}).
  - {5} Restrictions on the quality or standards of the products based on the fruits (except in the case of (3)-(a)-{3}). Problem will arise if any of the items from q through t above is judged to have the possibility of impeding fair competition on the basis of overall assessment of the participants' positions in the market, the relationship among the participants, the market situation, and the relative

length of the period during which the restriction is imposed, among other factors. In such a case, the problem will be related to unfair trade practices (General Designations: Articles 11 [Dealing on Exclusive Terms], 13 [Dealing on Restrictive Terms], etc.). Furthermore, for e and r above, for example, regarding a joint R&D project between business partners to improve the product or to develop an alternative to the product, there may be cases where an influential firm in a market implement such restrictions, resulting in reduced business opportunities of the competitors and making it difficult for them to easily find alternative trading partners. In that case, such restrictions would seem likely to impede fair competition (see the Antimonopoly Guidelines Concerning Distribution Systems and Business Practices (published on July 11, 1991) Part 1, Chapter 4 [Restrictions on Trading Partners of Dealing with Competitors]).

- (c) Matters which are highly likely to fall under unfair trade practices
  - {1} Restrictions on the sales prices to a third party, of the products based on the fruits. Such a restriction would deprive any participant subject to the restrictions of its freedom of pricing, which is its important means of competition, and is regarded as being highly likely to impede fair competition (General Designations: Article 13 [Dealing on Restrictive Terms]).