Final Report of the Study Group on Innovation and Competition Policy (Summary)

Innovation is essential for sustained economic growth; therefore, ensuring a competitive environment that can foster innovation is an important and contemporary issue in competition policy. The Study Group has theoretically and systematically examined the mechanisms by which corporate conduct impacts innovation based on its expertise in Economics and relevant disciplines, and has also examined approaches to evaluate the impact of innovation on competition under the Antimonopoly Act.

Part 1: Theoretical Summary of the Impact Mechanisms of Corporate Conduct on Innovation

In this Study Group, "impact on innovation" is understood as the changes in research and development (R&D) incentives caused by various forms of corporate conduct, and the theoretical framework in Economics for observing and predicting such changes is positioned as the "impact mechanism." <u>Based on the Study Group's expertise in Economics, the following table summarizes changes (increase or decrease) in R&D incentives resulting from various forms of corporate conduct.</u>

Increase/decrease in R&D incentives resulting from various forms of corporate conduct (summary)*

Impact mechanism Corporate conduct	Increase in appropriability	Decrease in spillover	Synergistic effect (complementary effect)	Increases in investment capability and investment capacity of the firm as a whole	Demand and margin expansion effects	Total optimization and Resolution of hold- up problem	Replacement effect (cannibalization effect)	Escape competition effect	Pre-emption effect
Horizontal business combination	Increase	Decrease	Increase	Increase	Increase	No change	Decrease	Decrease	Increase or decrease
Vertical/mixed business combination	Increase	Decrease	Increase	Increase	Increase	Increase	No change	Decrease	Decrease
Joint research and development	Increase	Decrease**	Increase	Increase	Increase	No change	Decrease	Decrease	Decrease

*The actual occurrence of impact needs to be determined on a case-by-case basis based on the market structure, product and technology characteristics, etc., in addition to the specific form of corporate conduct. **Furthermore, spillover effects among participating companies in joint R&D may increase R&D incentives.

Part 2: Assessing the Impact on Innovation under the Antimonopoly Act

To ensure a competitive environment that promotes innovation, it is necessary for competition authorities to assess the impact of innovation on competition appropriately. The following summarizes our approach and points of focus, etc. in applying the Antimonopoly Act to issues of innovation.

1. Market definition focusing on R&D competition

• Because it takes a long time to commercialize an innovation and the competitive situation may change during this time, it may be too late to evaluate the impact of the innovation on competition after it has been commercialized

• Even at a point in time when there are no goods, etc., it is appropriate to define the market for goods or services that are expected to be created in the future in consideration of the purpose of R&D, etc.,

and to evaluate the impact on competition in that market.

2. Points of focus for assessing the impacts on innovation from a long-term perspective

- The need to assess the impact of innovation based on a dynamic perspective that considers the impact of innovation on future as well as present competition.
- The need to assess the impact of innovation in light of recent changes in the R&D environment, such as increased uncertainty in the realization of results due to the increasing sophistication and complexity of the technologies regarding R&D.
- The long-term pro-competitive effects of innovation also need to be properly evaluated. When short-term anti-competitive effects and long-term pro-competitive effects are expected to occur simultaneously, both effects shall comprehensively be taken into consideration to determine

whether or not they are problematic under the Antimonopoly Act. In determining this, the following shall also be considered: the feasibility of the pro-competitive effect; whether the innovation increases consumer welfare; the extent of reach of the pro-competitive effect; the

extent to which the behavior restricts market competition; and the causal relationship between the short-term anti-competitive effect and the long-term pro-competitive effect.

3. Appropriate provision of information by enterprises and manner of establishing proofs in the evaluation of the impact of innovation

• Compiling information for competition authorities to properly determine the impact of innovation on competition (e.g., content and results of R&D, probability of success, magnitude of results, lead times).

• Encouraging enterprises that claim to promote innovation to proactively submit objective evidence supporting their claims.