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Clarification of the Office of the Board of Investment

Application for Technology-based Incentives in accordance with Announcement of the Board of Investment No. Sor.1/2560

In order to ensure clarity relating to investment promotions in technology-based incentives in accordance with the Announcement of the Board of Investment No. Sor.1/2560, dated 14 March 2017, the Office of the Board of Investment (the "Office") hereby issues the following:

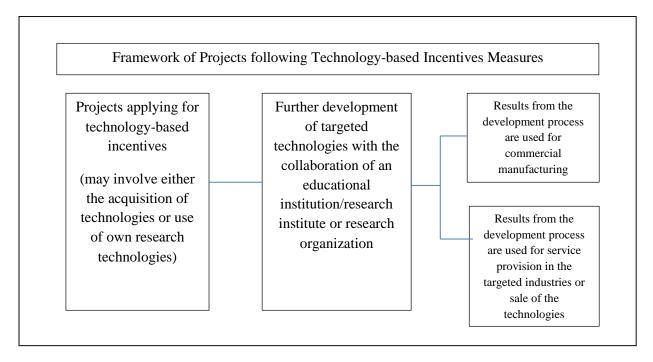
Clause 1 Investments in the interests of enhancing technological competitiveness shall mean investments in the following two groups:

- 1.1 An investment project that engages in a promoted activity under the Section 8 Technology and Innovation Development. Activity 8.1 (Targeted core technology development) means investment in an activity that involves the development of the targeted technologies for use in the manufacturing processes or service provisions in various industries. Such an activity shall also involve collaboration with an educational institution, research institute, or research organization for research and development in the four targeted technologies: Biotechnology, Nanotechnology, Advanced materials technology, and Digital technology, the details of which are set out in the included attachment.
- 1.2 Investments in services with a high added value that promote the development of targeted technologies (enabling services) as follows:
 - 5.6 Electronics design;
 - 7.11 Research and development;
 - 7.13 Engineering design;
 - 7.14 Scientific laboratories;
 - 7.15 Calibration services; and
- 7.19 Vocational training centers (only in the field of science and technology).

Projects comprising the provision of such services shall significantly involve the procedures for the development of targeted technologies and shall also include collaboration with an educational institution, research institute, or research organization.

Clause 2 Application procedures

- 2.1 Applicants who wish to apply for technology-based incentives under Clauses 1.1 and 1.2 shall submit the "Application for Promotion Service Activity" (F PA PP 03) along with the "Application for Investment Promotion under Technology-based Incentives Measures".
- 2.2 If a project applying for promotion hereunder involves the commercialization of the results of the technological developments from a promoted activity, the type of product and the manufacturing capacity shall also be specified in the Application for Investment Promotion under Technology-based Incentives Measures.
- Clause 3 The important details of a project for which technology-based incentives are sought (a "Project") are as follows:
- 3.1 The Project shall involve procedures for the development of the targeted technologies set out in Clause 1.1 and 1.2.
- 3.2 There shall be collaboration in research and development with a research organization that is registered with the Revenue Department, educational institution, or research institute, with respect to the activities set out in Clauses 1.1 and 1.2. Such registered educational institutions, research institutes, or research organizations that participate in the joint research and development shall be based in Thailand. A foreign educational institution, research institute, or research organization may participate in the technology development project, provided that such participation is in accordance with the format approved by the Office, such as a technology research consortium.



3.3 The results of the development of the targeted technology must be usable for commercialization, and/or service provision/supporting other industries.

- 3.4 There shall be evidence of the plan for collaboration in research and development with an educational institution, research institute, or research organization. This may be in the form of a memorandum of understanding (MOU) or a joint research and development proposal, all of which will be taken into consideration [in granting the technology-based incentives].
- 3.5 If the results of the development process are used for commercialization, the Office may grant permission for the Applicant to use the machinery which was used as a part of the existing project, regardless of whether the incentives are granted, for the commercial manufacturing process for a Project, provided that the results of the technological development are strictly used for the manufacturing process.
- Clause 4 Examples of projects that are granted technology-based incentives are those that involve the following:
- 4.1 The development and use of a targeted technology as a basis for the manufacturing process. For example:
- (1) The use of biotechnology for improving methods of fermenting, culturing cells, and extracting proteins from ovarian rat cells for producing aseptic pharmaceuticals for use in treating diseases such as cancer, rheumatism, allergies, and psoriasis;
- (2) The manufacturing of construction materials by means of applying advanced materials technology for the synthesis of new products, the qualities of which are superior to those of a natural material, e.g. synthetic granite.
- 4.2 The development and use of a targeted industry as a basis for the provision of services in various industries. For example:
- (1) The application of advanced materials forming processes to engineering designs or scientific testing by using high frequency waves, ultrasonic waves, or vibrations high in frequency, pressure, and size derived from the development of, or in collaboration with an educational institution or joint research initiative. In this regard, the application of the above process shall be for service provision with respect to the selection of raw materials and forming parameter designs in order to obtain works that are suitable for further applications.
- (2) The use of digital technologies, specifically Artificial Intelligence (AI) technology for designing systems for the employer to use in their work operations, for reducing the labor required for work performance, as well as the rendering of advice with respect to various businesses, e.g. call centers or diagnosis and analysis of a disease suffered by patients in a hospital.

Clause 5 Amendments to project details

(Translation)

If applicants granted technology-based incentives wish to make amendments to the project details, i.e. increasing the production capacity, adding product types, or expanding the scope of the services provided, in considering the approval of such amendments, the following criteria shall apply:

- 5.1 The increase in production capacity, introduction of new product types, or the expansion of the scope of the services of a project that has been granted technology-based incentives shall be practicable provided that such amendment of the production capacity, product type, or scope of services is related to the development of a targeted technology in the project.
- 5.2 In the case of activities involving the development of targeted technologies that use core technologies as the basis for service provision in the targeted industries or research and development projects that are granted the technology-based incentives: if the project details are subsequently amended following the granting of the technology-based incentives, whereby the results of the research and/or development will be commercialized, regardless of whether the applicant engages in commercial manufacturing on their own or by means of engaging a third-party, amendments to the project details shall be practicable provided that income derived from the sale of any such product is deemed as income that is exempted from the corporate income tax for that particular activity.

Please be informed accordingly.

Office of the Board of Investment
5 July 2017

[Seal of the Board of Investment]

Targeted Core Technologies

Biotechnology	Advanced Material Technology
Cell Culture/Tissue Engineering Technology	Advanced Catalyst Technology
Gene and Molecular Technology	Composite Materials Technology
Genetic Engineering Technology	Functional Materials Technology
Omics Technology	Photonics & Optical Technology
Biodegradable Materials Technology	Printed Electronics and Organic Electronics
Bioinformatics	Advanced Materials Forming Process
Advanced Bioprocessing Technology	Materials Characterization Technology
Bio-Analytical Technology	Energy Storage
Biomaterial Production Technology	
Nanotechnology	Digital Technology
Drug Delivery System	Big Data Analytics Technology
Nano-encapsulation	Decentralized Sequential Transaction Database
Nanofiber Technology	Human Computer interaction Technology
Nanomaterials Syntheses	Internet of Things Technology
Membrane Technology	Natural Language Processing Technology
Absorption Technology	Virtual & Augmented Reality Technology
Nano-characterization and Testing	Digital Engineering and Manufacturing
	Technology
Nanostructure Fabrication	Software Testing Technology
Surface Coating/Engineering Technology	Embedded Technology
	Smart Grid
	Wearable Technology
	Artificial Intelligence Technology
	Sensor Technology
	Automation Technology
	Robotics Technology