

MINISTRY OF SCIENCE AND TECHNOLOGY
STATE AGENCY FOR TECHNOLOGY
AND INNOVATION

Establishment of Smart factory Demonstration Center and support for training professional experts for Smart Factory Transformation of the Manufacturing Industry in Vietnam
(4-year/8.3 Million USD)

The Socialist Republic of Vietnam

Project Concept Paper

September 2024

<i>Applicant Information</i>	
Organization	<i>Sate Agency for Technology and Innovation (SATI) under the Ministry of Science and Technology (MOST)</i>
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PROJECT CONCEPT PAPER (PCP)

SECTION 1. BASIC PROJECT INFORMATION		
1.1	Country	The Socialist Republic of Vietnam
1.2	Title	Establishment of a smart factory demonstration center and support for training professional experts for smart factory transformation of the manufacturing industry in Vietnam
1.3	Location(s)	Vietnam
1.4	Duration	4 years (2026-2029)
1.5	Budget (total)	US\$ 8.3 Million
1.6	Objectives	Based on the Korean government's experience in supplying and fostering smart factories for manufacturing companies, the purpose is to promote the development of Vietnam's manufacturing industry and to support the smart factory transformation of Vietnamese manufacturing sites, thereby providing opportunities for continuous economic cooperation between the two countries.
1.7	Beneficiary	Vietnamese SMEs and manufacturing labor force
1.8	Implementing organization	Vietnam Ministry of Science and Technology (MOST), State Agency for Technology and Innovation (SAIT),

SECTION 2. PROJECT RATIONALE	
2.1	<p>SITUATION ANALYSIS: Please provide a brief introduction to the current social and economic situation related to the Project (geographic region and beneficiaries, etc.)</p> <p>Please describe the problem or critical issue which the project seeks to resolve, how the problem was identified, and how will the Project address the problem. If relevant, analysis on gender equality needs to be described.</p> <p>Social and Economic Status in Vietnam</p> <p>Although Vietnam has traditionally developed primary industries (agriculture, forestry, and fisheries), the share of manufacturing and service industries has been increasing gradually in recent years. As of 2023, primary industries accounted for 11.96%, secondary industries (manufacturing and construction) accounted for 37.12%, and tertiary industries (service industries) accounted for 42.54%. Major industries are sugar, clothing and textiles, shoes, cars, food and beverages, and many trade agreements have provided export opportunities to major markets, including Europe. However, many products are still produced by hand, which is a stumbling block to the development of manufacturing.</p> <p>The lack of development of the parts and materials industry has delayed the advancement of the local manufacturing industry and the investment of global companies, which is pointed out as one of the main causes of Vietnam's trade deficit. In response, the Vietnamese government established the "2035 Outlook, Vietnam's Industrial Development Strategy by 2025" and set the manufacturing</p>

industry as a priority development field. The government is strengthening the attraction of foreign investment to develop related parts and materials industries such as textile, clothing, and shoe manufacturing.

The Vietnamese government is building large infrastructure for smart factory adoption through an industrial park revitalization plan, but many manufacturing plants still maintain manual production methods using low labor costs. Advanced manufacturing technology has not yet been widely introduced. According to World bank's report, In Vietnam's manufacturing industry, 70% of products are created using human-controlled machines, 20% are handmade, only 9% use computer-controlled machines, and less than 1% use more advanced technologies such as robots and 3D additive manufacturing.

Current Status and Issues of SMEs in Vietnam

As small businesses in Vietnam account for 97% of Vietnamese companies, they play an important role in the national economy, but they still have many challenges. The main problems are the vulnerability of the parts and material industries, as well as low technology and automation levels. Vietnamese SMEs rely on traditional manual methods based on low labor costs, and the lack of high-quality manpower and outdated infrastructure are hindering the introduction of advanced manufacturing technology. As a result, Vietnamese SMEs are having difficulty securing global competitiveness.

The rate of enterprises with R&D in manufacturing industries is still very low, such as: Electrical equipment manufacturing industry 17%, chemical manufacturing industry 15%, food processing industry 9%, rubber and plastic products manufacturing industry 7%, leather and related products manufacturing industry 6%, textile industry 5%.

Moreover, Vietnamese SMEs are in a situation where the burden of time and cost is high in introducing digital transformation and smart technology. According to a recent survey, only 21% of companies have initiated digital transformation in the Vietnamese private sector, and the remaining 79% are still not ready. Accordingly, the Vietnamese government is actively attracting FDI (Foreign Direct Investment) and is promoting various policies at the government level for the development of the smart manufacturing industry.

Necessity to Applying Smart Factory transformation

Vietnam still has an abundance of low-wage labor as a strength, but the need to introduce smart factories is increasing given the rapidly rising wage levels every year and the national goal of becoming a global supply chain hub. In particular, Vietnam central committee issued a resolution of orientation towards formulation of national industrial development policy by 2030 with a vision to 2045, in which determine "Accelerate the integration of information technology and automation in industrial production to create smart production processes, smart factory models, develop the production of smart products and equipment. Develop and promulgate technology standards and smart production techniques"; the Vietnamese government also encourages the introduction of the fourth industrial revolution technology and supports the development of the smart manufacturing industry through the 'Vietnam Industry 4.0 Taks Forces (TF)'.

The introduction of smart factories will be an important factor for Vietnam to increase the competitiveness of the manufacturing industry, improve productivity,

	<p>and attract foreign investment. The introduction of automation and digital technology can revolutionize industries that have traditionally relied on manual labor, and is expected to play an essential role in Vietnam's position as a global manufacturing base in the long run.</p> <p>Vietnam is currently in an advantageous position to attract large-scale FDI with 16 Free Trade Agreements (FTAs), which will have a positive impact on the development of the smart factory and automation equipment industry. Infrastructure construction and technology development for smart factory introduction are scheduled to take place by 2030, which will be an important turning point for strengthening the competitiveness of the Vietnamese manufacturing industry.</p>
2.2	<p>COUNTRY DEVELOPMENT STRATEGIES AND POLICIES: Please describe how the Project relates to other relevant national development strategies and policies, and provide the ongoing status of their implementation, results and effects, if any.</p> <p>The proposed project aligns closely with Vietnam’s national development strategies and policies, particularly the "Orientation towards formulation of national industrial development policy by 2030 with a vision to 2045" and the “2035 Outlook, Vietnam’s Industrial Development Strategy by 2025.” Those strategies prioritizes the development of the manufacturing sector, emphasizing the need for modernization and the adoption of advanced technologies to enhance productivity and competitiveness. Our project, which focuses on establishing a Smart Capability Enhancement Center and supporting process improvement demonstrations, directly supports these goals by promoting smart factory transformation and smart manufacturing practices.</p> <p>Ongoing Status of Implementation:</p> <p>The Vietnamese government has been actively implementing various initiatives under this strategy, with significant progress in attracting FDI to develop the parts and materials industries, which are crucial for the manufacturing sector. Industrial parks and infrastructure projects are being developed to facilitate the adoption of smart factory technologies. However, many manufacturing plants still rely on manual production methods, indicating a need for further efforts to fully realize the strategy’s objectives.</p> <p>The underdevelopment of the parts and materials industry is a factor that hinders the development of Vietnamese manufacturing and the investment and advancement of global companies, and is pointed out as a major cause of Vietnam's trade deficit. Efforts are being made to improve this, and for this purpose, the introduction of manufacturing support policies and programs based on Korea's smart factories is urgent.</p> <p>Major Policy Resolutions Related to Smart Factories:</p> <ol style="list-style-type: none"> 1. Orientation towards formulation of national industrial development policy by 2030 with a vision to 2045 (Resolution No. 23-NQ/TW) 2. National Strategy on Fourth Industrial Revolution (Resolution No. 52-NQ/TW) 3. The strategy for development of science, technology and innovation by 2030 (Decision No.569/QĐ-TTg) 4. National Digital Transformation Program through 2025 (Decision No.749/QĐ-TTg)

5. Promote supporting industry development (Resolution No. 115/NQ-CP)

Orientation towards formulation of national industrial development policy by 2030 with a vision to 2045:

By 2030: The industry is expected to account for over 40% of GDP, with manufacturing and processing industries accounting for around 30% and manufacturing industry alone accounting for over 20%; The value proportion of hi-tech products from the processing and manufacturing industry will reach at least 45%; The industrial growth rate of industrial added value will average over 8.5%, of which the processing and manufacturing industry will reach over 10% per year; The average annual growth rate of labor productivity of the industry will be 7.5%

Priority automation-manufacturing technologies:

Technology for design and manufacturing of compatible equipment and lines in petroleum, hydroelectricity, thermal power, shipbuilding, mineral extraction and processing; technology for manufacturing of energy-saving equipment systems; technology for manufacturing of complex, large-scale and highly reliable systems; advanced technology for 3D printing, reverse engineering and rapid prototyping used in manufacturing of all kinds of industrial equipment, electrical equipment, metal products and high-level composites; automation technology for measurement and processing of information, control of the processes of production; technology for production of important microcontroller chips, high-power semiconductor components used in automation devices; technology for production of basic auxiliary equipment in automation, robot technology, automated production line.

Smart Manufacturing and Priority Development Fields:

The smart manufacturing strategy focuses on the digitalization of the manufacturing industry, building smart factories, developing data-related services, and strengthening workers' digital capabilities. Eight sectors, including healthcare, education, finance, agriculture, logistics, energy, and the environment, have been selected as priority areas for digital innovation development. Four major goals were set: digital government, digital economy, digital society, and fostering digital technology companies with global capabilities. The development goals are divided into three areas (government, economy, and society), and targets for 2025 and 2030 are established for each detailed indicator, forming the Vietnamese government's policy conditions for promoting this ODA project.

National Digital Transformation Program through 2025:

The Vietnamese government aims to expand the share of the digital economy to 20% of GDP by 2025 and 30% by 2030. It is planned to foster 100,000 enterprises with innovative digital technologies by 2030, contributing 30% to Vietnam's GDP. The decision states that digital technology enterprises in Vietnam will be categorized into four groups: core technology development, digital technology product and service development, digital technology solution construction, and digital technology startups, and will be given priority for fostering. Additionally, it plans to accelerate the development of e-government and expand the share of the digital economy in major industries to over 10%.

	<p>Results and Effects:</p> <p>The implementation of these strategies has yielded positive results, including increased FDI inflows and the establishment of new industrial zones. These developments have contributed to the growth of the manufacturing sector and the overall economy. However, challenges remain, particularly in the widespread adoption of advanced manufacturing technologies. Our project aims to address these challenges by providing the necessary infrastructure and support for smart factory transformation, thereby enhancing the competitiveness of Vietnam’s manufacturing industry and contributing to the country’s long-term economic development goals.</p> <p>Conclusions and Implications:</p> <p>Vietnam’s smart factory transformation offers opportunities in various industries, and Korean companies can explore opportunities to cooperate, especially in the field of ICT. The introduction of smart factories will be crucial for Vietnam to increase the competitiveness of the manufacturing industry, improve productivity, and attract foreign investment. Automation and digital technology can revolutionize industries that have traditionally relied on manual labor and are expected to play an essential role in Vietnam’s position as a global manufacturing base in the long run. Vietnam is currently in an advantageous position to attract large-scale FDI with 16 FTAs, which will positively impact the development of smart factories and automation equipment industries. Infrastructure construction and technology development for smart factory introduction are scheduled to take place by 2030, marking an important turning point for strengthening the competitiveness of the Vietnamese manufacturing industry.</p> <p>Vietnam is the country in which Korea has invested the most directly, and Korean companies are estimated to account for up to 35% of Vietnam's total exports. Among these, the contribution of electrical and electronic companies, including Samsung Electronics, is estimated to be as high as 25%. The share and role of Korea in Vietnam's economy and industry is significant. Digitalization through the introduction of smart factories by Vietnamese companies is expected to greatly contribute to the continuous exchange and cooperation between companies in both countries.</p>
2.3	<p>JUSTIFICATION FOR INTERVENTION: Please describe how the need for the Project was determined, and what the rationale/justification for the Project (why the Project is considered to be the most effective way the problem is resolved.).</p> <p>Determination of Need:</p> <p>The need for the project was identified through the feasibility study and stakeholder consultations, which identified key issues such as reliance on manual labor, lack of advanced technology, skills gaps and rising labor costs.</p> <p>Justification for the Project:</p> <ol style="list-style-type: none"> 1. Alignment with National Strategies: The project supports Vietnam’s the "Orientation towards formulation of national industrial development policy by 2030 with a vision to 2045" and the “2035 Outlook, Vietnam’s Industrial Development Strategy by 2025.”, focusing on modernization and technology

	<p>adoption.</p> <ol style="list-style-type: none"> 2. Comprehensive Approach: Establishing a Smart Capability Enhancement Center and process improvement demonstrations will provide necessary infrastructure and training. 3. Capacity Building: Enhancing workforce skills ensures long-term sustainability in smart manufacturing area. 4. Economic Benefits: Improved productivity and competitiveness will attract FDI and boost economic growth. 5. Sustainability: Promotes efficient, environmentally friendly production methods. 6. Gender Equality: Ensures inclusive training opportunities for both men and women.
2.4	<p>LESSONS LEARNED: Please describe what lessons Partner Country has drawn on (from Partner Country's own and other's past experience) in designing this Project.</p>
	<p>Importance of Smart Factory Transformation: Vietnam has recognized the critical need for smart factory transformation to remain competitive in the global market. Previous initiatives have shown that adopting advanced technologies can significantly enhance productivity and efficiency.</p> <ol style="list-style-type: none"> 1. Need for Skilled Workforce: Past projects have highlighted the importance of having a skilled workforce capable of operating and maintaining new technologies. This project emphasizes training and capacity building to ensure long-term sustainability. 2. Economic Diversification: Vietnam has learned that diversifying its economy beyond traditional industries is essential for sustainable growth. By focusing on smart manufacturing, the country aims to reduce its reliance on low-wage labor and manual production methods. 3. Attracting Foreign Investment: Previous experiences have demonstrated that creating a favorable environment for foreign direct investment (FDI) is crucial. This project aims to attract FDI by modernizing the manufacturing sector and improving infrastructure. 4. Sustainability and Inclusivity: Vietnam has understood the importance of sustainable development and inclusivity. The project incorporates environmentally friendly practices and ensures equal opportunities for both men and women in the workforce.
<p>SECTION 3. PROJECT DESCRIPTION</p>	
3.1	<p>Objective/Outcome/Output: Please outline the objectives, the expected outcomes, and outputs of the Project.</p>
	<p>Project objective: Based on the government's experience in supplying and spreading smart factories to Korean manufacturing companies, policy advice on 'Establishing a Vietnamese-style smart factory transformation response strategy' and seeking to develop the manufacturing industry through support for smart factory transformation, and to</p>

provide opportunities for continuous economic cooperation between the two countries.

1. **(Key Tasks)** After developing a smartification roadmap for manufacturing sites in Vietnam, the project will implement a comprehensive, site-specific support cycle consisting of Infrastructure Development Smartification → Support → Professional Workforce Training

① (Vietnamese Smart Demonstration Center) Overseeing the ODA project for the establishment of a 'Vietnamese Smart Smart Demonstration Center,' matching demand and supply companies for smart factory construction, establishing a hub for workforce development, building smart solution validation and demonstration facilities, and developing a center as an exchange hub between Korean and Vietnamese enterprises

② (Smartification Support) The goal is to support the establishment and operation of 10 smart factories and establish industry-specific and solution-specific operation guidelines.
* Based on pre-feasibility studies, select target areas considering industry-specific and regional distribution of businesses → Establish and promote construction models by setting target levels according to the classification → Basic (7) + Intermediate 1 (3)

③ (Specialized Workforce Development) Utilizing the 'Smart Demo Center' to establish a network among industry-academia collaboration partners such as the Vietnam University of Technology, forming a network to cultivate specialized workforce suitable for construction and operation in Vietnam.

* Specialized personnel are selected through recommendations from the Ministry of Science and Technology of Vietnam Cultivate → outstanding talents through theoretical education, practical training, and industrial internships in smart factory operations → Utilize them as leaders in the future digital transformation in Vietnam.

Project outputs:

1. Opening of the 'Smartization Training Center' (Funding Project Management and Human Resources Development Foundation)
2. 60 local professionals and operational personnel for smart factory operation
3. Support for Smart Process Improvement and Establishment of Operational Manual for Local Companies in Vietnam

Project outcomes:

1. Securing the competitiveness of Vietnamese manufacturing sites through smart factories
2. Strengthen Vietnam's human capabilities by fostering related professionals
3. Establishment of bilateral economic cooperation system through smart factory technology

Performance Index

	Performance and targets	The basis for calculating	Measurement formula	Data Collection

performance Index		'26	the target value	(Or measurement method)	Method or Source				
Support for process improvement	Local company discovery diagnosis and process improvement (company)	30	Excavation diagnosis	10	Process improvement	- Excavation diagnosis 30 ('26-'27) - Process improvement 10 ('27-'28)	Find local companies and performance of process improvement operations for the relevant year		Operation report
	Productivity improvement index (%)	-	10	12	15	Productivity index (Average value of constructors)	post-introduction production- Pre-introduction production Pre-introduction production	X 100	Construction company performance
Manpower training	Number of students who have completed training (number)	15	15	15	15	An invitation / Local training	Training Program Operation Performance		Human Resources Training Results Report

3.2

Activities: Please describe what will be carried out in terms of planned activities, their timing and duration, and who will be responsible for each activity. It should indicate the sequence of all major activities and implementation milestones.

- 1st year: Discovering domestic and foreign demand and establishing a basic smartization training center
 - Finding demand, roadmap for local customized smartization, basic establishment and operation training of center, etc.
- 2nd year: Pre-consultation, smartization support, training of professional manpower, and completion of training center construction
 - Demand discovery, process improvement, manpower training, center construction completed
- 3rd year: Smartization support and training of professional manpower, operation of training center
 - Demand discovery, construction support, manpower training, center operation
- 4th year: Smart factory construction support and operation consulting, and training professional manpower
 - Process improvement, manpower training, center operation

Yearly Activity Plan(about)

1. 1st year (US\$ 0.6 M): Discovering the demand in both countries & basic

	<p>establishment of smartization training center</p> <ul style="list-style-type: none"> · Demand discovery, local customized smartization promotion roadmap, basic establishment of the center and operational support, etc. <p>2. 2nd year (US\$ 4 M): Pre-consulting, smartization support, training experts, establishment of training center</p> <ul style="list-style-type: none"> · Demand discovery, process improvement, expert training, center establishment <p>3. 3rd year (US\$ 2.1 M): Smartization support, training experts, operation of center</p> <ul style="list-style-type: none"> · Demand discovery, construction support, expert training, center operation <p>4. 4th year (US\$ 1.6 M): Smart factory establishment support, operation consulting, expert training</p> <ul style="list-style-type: none"> · Process improvement, expert training, center operation
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Budget: Please provide a brief requirement by activities. The budget requirement is not a full and well-defined. The detailed budget requirement will be fully elaborated after the PCP is selected. Nevertheless, this information is to help Korean Ministry to better understand the project.

Main Content	Details	Yearly Timeline																					
		2026			2027			2028			2029												
Supporting smartization /Consulting	Discovering and evaluation of Vietnam companies (dispatch relevant experts to local site/diagnosis)																						
	Supporting local Vietnam SMEs Smart Factory																						
Training specialized workforce	Invited training in Korea																						
	Training for specialized workforce																						
Establishment of Center	Establishment & management of smartization Training Center																						

3.3

* The Schedule above can be changed subject to situations.

Korean Government	Smartization Support	<p>Cost : 3.8 M USD</p> <ul style="list-style-type: none"> ▪ Demand discovery through local industry-academic cooperation and business briefings ▪ Consulting and supervision of smartization support, establishment of guideline, etc.
	Training specialized workforce	<p>Cost: 0.5 M USD</p> <ul style="list-style-type: none"> ▪ Develop & supplement of basic curriculum /Intensive course ▪ Local training/workshops for smart factory personnel and training materials ▪ Invited technical training for design/production/technical engineers, etc. ▪ Invited/local training for smart factory-related policy managers
	Establishment & Operation of Smartization Training	<p>Cost: 2.9 M USD</p> <ul style="list-style-type: none"> ▪ (Basic planning) Establish ISP and operational roadmap for the center establishment

	Center	<ul style="list-style-type: none"> ▪ (Center Establishment) Site confirmation → basic design → operational infrastructure establishment ▪ (Demonstration and testing) Demonstration, Installation of testing facility and solution, stabilization ▪ (Operation) Cost of training and practice equipment purchase, maintenance
	Operation cost of Implement organization	Cost: 1.1 M USD <ul style="list-style-type: none"> ▪ Business operation cost (accounting audit, travel expenses, etc.) and expert utilization, etc. ▪ project labor costs, etc.
Viet Nam Government	<ul style="list-style-type: none"> - Discovering and recommending of smart factory demand companies in Vietnam - Provision of proper space for the establishment of ' Smartization Training Center (tentative name)' / free lease - Support for equipment customs clearance, tax exemption, local transportation, and local certification of equipment - Other business-related administrative and legal support 	

*CBA rate for 1USD- 24,617VND/1,1310 WON

SECTION 4. STAKEHOLDER ANALYSIS

TARGET BENEFICIARY: Please describe the following information: a) direct and indirect/wider beneficiary group, b) number of beneficiary, with gender segregation if necessary (e.g. 300 children rather than children in 3 schools), c) how the target group was identified, d) why they were selected as target group, e) how intended beneficiaries have been involved in Project design, and their expected role in Project implementation and evaluation. If relevant, the target group needs be disaggregated by sex.

- 4.1**
- Direct and Indirect Beneficiary Group:**
- Direct Beneficiaries:
 - Local manufacturing companies
 - 60 professionals, operational personnel
 - Indirect/Wider Beneficiaries:
 - Broader manufacturing sector
 - Local communities and policymakers
- Number of Beneficiaries:**
- Direct Beneficiaries: 60 individuals (professionals and operational personnel)
 - Indirect/Wider Beneficiaries: Approximately 100 companies and thousands of workers
- Target Group is identified through surveys, interviews, and consultations with stakeholders focusing on sectors needing digital transformation. Chosen for their critical role in the economy and potential benefits from smart manufacturing technologies. Ensures gender equality.

SECTION 5. PROJECT MANAGEMENT AND IMPLEMENTATION

5.1	<p>PROJECT MANAGEMENT: Please describe a) who will be responsible for planning and management of the Project operations as well as coordinating other bodies and organizations associated with the Project, b) what arrangements will be established to ensure that there will be effective coordination with other relevant programs and activities.</p>
	<p>Responsible Parties:</p> <ul style="list-style-type: none"> • Project Planning and Management: <ul style="list-style-type: none"> ○ Ministry of SMEs and Startups(MSS): Responsible for overall project planning, management, and coordination. And,work with Vietnamese stakeholders to comprehensively manage Korea’s smart factory technology support, consulting, and expert training programs. • Coordination with Other Bodies: <ul style="list-style-type: none"> ○ Ministry of Science and Technology (MOST) and State Agency for Technology and Innovation (SATI): Offer policy guidance and regulatory support. ○ Vietnam-Korea Institute of Science and Technology(V-KIST) : Provide space and support for professional person to build smart factory demonstration center. ○ Vietnamese Industry Associations(VCCI, VinaSMEs): Facilitate community engagement and advocacy. <p>b) Coordination Arrangements:</p> <ul style="list-style-type: none"> • Regular Meetings: Scheduled meetings between MSS, MOST, SATI, and other stakeholders to review progress and address issues. • Joint Management Teams: Establishment of teams comprising representatives from all key organizations to ensure seamless coordination. • Workshops and Consultations: Regular workshops and stakeholder consultations to align project activities with other relevant programs. • Monitoring and Evaluation: Continuous monitoring and evaluation mechanisms to track progress and make necessary adjustments.

*The following documents as annex, are required to be submitted with the PCP

1. Annex: Project Design Matrix (PDM, tentative)

Project Summary	Objectively Verifiable indicators	Means of Verification	Assumptions
<p><u>Goal</u></p> <p>Establishment of Smartization Training Center</p>	Establishment of Smartization Training Center	Whether to establish a smartization training center (performance indicators)	Selection of Vietnamese policy institutions and establishment of support grounds
<p><u>Project Purpose</u></p> <p>Establishment of Evidence Regulations Set up Demo Factory Process improvement demonstration project Training of professional manpower</p>	Strengthen Smartization Capabilities Establishment and operation plan of center	Process improvement performance verification Number of professional manpower training personnel (Quantitative/Qualitative)	Willingness of Vietnamese companies with high application suitability / evaluation support companies to promote
<p><u>Outputs</u></p> <p>10 SMEs for process improvement 60 professional human resources training</p>	Verifying 2 Quantitative Indicators	Process improvement performance Number of professional manpower training personnel (Paper completion / implementation evaluation)	Vietnamese government cooperation is a prerequisite for generating results
<p><u>Activities</u></p> <p>1. Establish training center 2. Develop and conduct training programs 3. Provide support for process improvements 4. Develop operational manuals</p>	<p><u>Inputs</u></p> <p>* Project Budget : \$ 8.3 million * Recipient organization : Vietnam (MOST;SATI/VTTC/VISTI) * Contributing financial resources : \$1 million * Other financial resources: \$1 million,</p>	<p><u>Pre-conditions</u></p> <p>* Vietnamese government cooperation (institutional/human support) * ODA Project Realization * Progress Report</p>	

2. Annex: Project Location Map (tentative)

