



PROJECT IMPLEMENTATION PLAN ADDENDUM

27 June 2018

1. **Project Code** 18-IN-92-GE-DON-C-01
2. **Title** Training Course on Smart Manufacturing Applied Technology and Practices
3. **Timing and Duration** 3–7 September 2018 (5 days)
4. **Venue** Taipei, Republic of China
5. **Addendum No.** 1
6. **Reference** APO Project Notification 18-IN-92-GE-DON-C dated 22 December 2017 and Project Implementation Plan dated 24 April 2018
7. **Subject** Change in 3. Timing and Duration

Timing of the project has been changed from 3–7 September 2018 to **22–26 October 2018 (5 days)** Duration remains unchanged as 5 days.

Unless otherwise modified by the APO in writing, the provisions of the Project Notification dated 22 December 2017 and Project Implementation Plan dated 24 April 2018 pertaining to this program remain valid.

Dr. Santhi Kanoktanaporn
Secretary-General



PROJECT IMPLEMENTATION PLAN

24 April 2018

1. **Project Code** 18-IN-92-GE-DON-C-01
2. **Title** Training Course on Smart Manufacturing Applied Technology and Practices
3. **Timing and Duration** 3–7 September 2018
4. **Venue** Taipei, Republic of China
5. **Implementing Organization** China Productivity Center (CPC)
2F, No. 79, Sec. 1, Xintai 5th Rd., Xizhi Dist.
New Taipei City 221, ROC
Phone: 886-2-2698-5881
Fax: 886-2-2698-2976
Email: 2844@cpc.org.tw
6. **Number of Local Participants** 24 participants
7. **Background**

The CPC works closely with the government in implementing the smart machinery element of its 5+2 Industrial Innovation Plan in an effort to assist enterprises to move in the direction of smart manufacturing and services so that local industry is better placed to overcome difficulties in enhancing productivity. APO international experts from the field of smart production technology can provide presentations on Industry 4.0 and smart factories so that CPC colleagues can learn more about related techniques as a way of promoting examples of methods and practices in smart manufacturing, smart services, big data analysis, smart management, etc.

8. Type of Project

A five-day training course will be held for CPC staff and others from the SME Development Agency.

9. Objectives

After this training course, consultants can immediately apply what they learned in client enterprises, allowing the CPC to help enterprises to upgrade and optimize operations, while strengthening domestic and international productivity reengineering capabilities. The specific objectives of the proposed modular training and development program are:

- a. To help CPC consultants to understand forward-looking global development trends in industry, increase their professional knowledge of Industry 4.0, and enhance their ability to offer training and consulting services to enterprises;
- b. To use examples of leading companies to reduce the learning curve in the field of smart manufacturing, utilizing current global practices to ensure quicker, more efficient applications of experience; and
- c. To develop professional national experts who have sufficient experience and knowledge to conduct training in basic productivity tools for smart manufacturing to meet international standards.

10. Project Schedule

The project schedule will be determined by the APO Secretariat and CPC in consultation with APO resource speakers (see Attachment I).

11. Implementation

This project is to be implemented in close collaboration with the APO Secretariat.

12. Roles and Responsibilities

The roles and responsibilities of the CPC and APO are outlined below.

CPC

- a. Organize a five-day training course with the main objective of creating a critical mass of productivity and quality practitioners;
- b. Assign a program manager and local coordinator(s) to organize the course (e.g., meeting room, participants' administration, training materials, exams including collecting the scores and communicating them to the APO Secretariat, site visits, and logistics);
- c. Maintain the overall quality of the training course including ensuring the proper transfer of knowledge from resource speakers to participants;
- d. Inform participants that they must attend the entire program and collect attending participants' signatures every day;
- e. Provide budget not covered by the APO;
- f. Prominently display the APO name and logo on a banner in the training venue on the working days of the project;
- g. Submit a comprehensive report to the APO within one month after completion of the training course; and
- h. Distribute certificates to participants who attended the entire project.

APO

- a. Assign international resource speakers;
- b. Assist the CPC in finalizing the course content in consultation with the resource speakers;
- c. Issue certificates based on the participants' attendance submitted by the CPC; and
- d. Provide administrative and financial support as detailed in the Project Notification.

13. Financial Arrangements

The APO will bear the cost of assigning of international resource speakers and provide financial support to meet the following costs:

- a. Meeting package including meeting room with training facilities and necessary stationery, materials, and documentation based on the agreed details of the training course (meals and translation/interpretation fees are not included in the meeting package.);
- b. Preparing and compiling training material sets for all participants; and
- c. Transportation costs for site visits, if any.

Tentative budget

No.	Item	Amount (USD)
1	Meeting package	4,920.00
2	Training material sets	2,205.00
3	Transportation costs for site visit(s)	535.00
	Total	USD7,660.00

The APO will pay implementation costs of up to USD7,660.00 toward the five-day training course, and the CPC will cover any other local implementation costs not covered by the APO.

Upon request by the CPC and after review, the APO will make a bank transfer of 50% of the estimated implementation cost (not more than USD3,830.00) as financial support to the CPC at least 45 days prior to the program.

The CPC will make the agreed expenditures and settle the entire account by providing all necessary proof of payment to the APO after completion of the program. The proof of payment, e.g., bills, payment records, and receipts issued by third parties, must be submitted together at one time, written in clear English, with English translations for all documents not originally written in English. The final payment will be made based on the actual expenditure after the CPC submits the comprehensive report. In general, internal evidence, i.e., expenditure confirmation issued by the implementing organization, is not accepted as proof of payment and will not be reimbursed.

14. Final Project Output

The project is expected to create a pool of productivity trainers and practitioners in the ROC who can act as trainers/consultants in their fields. Upon completion of the project, the CPC will undertake the following:

- a. Submit a comprehensive report on the training course following the format attached (Attachment II) to this document detailing how the project was carried out, explaining its benefits and possible advantages to stakeholders with as much as information as possible, and describing productivity tool-related technical guidance and consultancy that can be offered by the CPC. The report is to be submitted within one month of project completion and/or together with the evidence for the financial settlement.
- b. Submit publications related to the project if any, e.g., newsletters or website articles written in English or the local language including local media coverage of the event.
- c. Disseminate the knowledge and experience gained on the subject to the public and private sectors through publications, consulting, and training services.

- d. Submit an assessment of the program within six months of project completion.
- e. Report any follow-up actions to the project.



Santhi Kanoktanaporn
Secretary-General

18-IN-92-GE-DON-C-01

Training Course on Smart Manufacturing Applied Technology and Practices
3–7 September 2018, Taipei, Republic of China

Program Outline		Remarks and experts
Day 1	<p>Morning Presentations</p> <p>Current status and future trends in smart manufacturing worldwide</p> <p>Industry development in the ROC—innovative directions and value</p>	To be invited
	<p>Afternoon Presentations</p> <p>Enterprise smart manufacturing transformation and risk analysis</p> <p>Enterprise smart manufacturing transformation strategy and challenges (including organizational framework, staffing, installation of hardware/software)</p>	To be invited
Day 2	<p>Morning Presentations</p> <p>Smart manufacturing applied technology and practices</p> <ul style="list-style-type: none"> • Knowledge management and big data • Total productive maintenance (TPM) and artificial intelligence (AI) 	To be invited
	<p>Afternoon Presentations</p> <p>Smart manufacturing applied technology and practices (cont.)</p> <ul style="list-style-type: none"> • Supply chain management and cyberphysical systems • The Internet of Things (IOT) and cloud computing 	To be invited
Day 3	<p>Morning Field Visit</p> <p>Enterprise case study—onsite discussions</p>	To be arranged
	<p>Afternoon Field Visit</p> <p>CPC Central Regional Office for smart machine observation; or Enterprise case study—onsite discussions</p>	To be arranged

Day 4	Morning Presentations <ul style="list-style-type: none"> • Roles and tools of management consultants in promoting smart manufacturing • Cultivation of smart manufacturing talent and learning map 	To be invited
	Afternoon Presentations on Benchmark Learning Case Studies <ul style="list-style-type: none"> • Comprehensive solutions for enterprise smart manufacturing • Introduction and analysis of smart manufacturing promotion cases 	To be invited
Day 5	Morning Case study and group discussion	To be invited
	Afternoon Case study group discussion and report Resource speakers' summary	To be invited

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**PROJECT REPORT FORMAT BY THE IMPLEMENTING NPO
Institutional Strengthening of NPOs through the Development of Productivity
Practitioners**

Guidelines

It is requested that the implementing NPO present a report on the implementation of the project to the APO Secretariat within one month of project completion.

The report should outline a factual summary of what was achieved during the project together with recommendations on steps to be taken by the APO and NPO to follow up with necessary actions. Another element of the report is an evaluation of the performance of the parties involved and recommendations on measures to be taken by the APO and NPO for improving similar activities in future.

Format

1. Background

- a. Reason for implementing the project
- b. Objectives
- c. Venue and timing

2. Summary of project implementation

- a. Program content, methodology, and mode of delivery
- b. Type and number of participants
- c. Names and designations of local experts, if any, indicating the roles played by them
- d. Participants' understanding, i.e., based on results before and after the exams
- e. Description of site visits including how they facilitated the learning process
- f. Limitations in conducting the project
- g. Overall summary including effectiveness, room for improvement, linkage of the project to objectives, etc.

3. Evaluation

- a. Suitability of topics of the program selected, indicating the applicability of techniques taught to the local situation
- b. Duration allocated for the various topics
- c. Lead time for planning and preparing the activities
- d. Assessment of the implementing NPO
- e. Performance of resource persons
- f. Involvement of those attending
- g. Training materials and equipment
- h. Physical arrangements

4. Recommendations

5. Follow-up activities

- a. Steps to be taken by the APO and NPO to follow up the completed project and ensure multiplier effects including efforts to link the project and methods to overcome current challenges, indicating whether seminars, training courses, symposia, consulting services, or other activities would be beneficial
- b. The feasibility of developing case study materials resulting from the project including publications

6. Attachments

- a. Detailed schedule/itinerary
- b. Organizations and persons, with their official designations, visited
- c. Names and designations of participants
- d. Any other supporting material such as press and magazine clippings, photographs, etc.

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Training Course on Smart Manufacturing Applied Technology and Practices

3-7 September 2018, Taipei, Republic of China

<p>Link to the APO strategic map</p> <p>(Increase labor productivity)</p> <ul style="list-style-type: none"> - To assist NPO consultants learn recent trends and technologies for SME's competitiveness and productivity enhancement. 		<p>Measurement of Success and Targets</p> <ul style="list-style-type: none"> - 70% of the participants from CPC and SME Development Agency develop new training program and provide consulting service on smart manufacturing practices within a year.
<p>Objectives</p> <p>a. To help CPC consultants to understand forward-looking global development trends in industry, increase their professional knowledge of Industry 4.0, and enhance their ability to offer training and consulting services to enterprises;</p> <p>b. To develop professional national experts who have sufficient experience and knowledge to conduct training in basic productivity tools for smart manufacturing to meet international standards.</p>	<p>Outcome</p> <ul style="list-style-type: none"> - CPC consultants can immediately apply what they learned in client enterprises and they will provide consulting service on smart manufacturing for innovation and competitiveness for SMEs. - CPC will develop some training programs for smart manufacturing applied technology and practices for the productivity improvement of SMEs. 	
<p>Target Participants</p>	<p>CPC consultants and others from the SME Development Agency.</p>	