



## PROJECT NOTIFICATION

22 December 2017

1. **Project Code** 18-IN-13-GE-TRC-B
2. **Title** Training of Trainers in Total Productive Maintenance Applications for Manufacturing
3. **Timing and Duration** 29 April–3 May 2018 (five days)
4. **Venue** Dhaka, Bangladesh
5. **Implementing Organization** National Productivity Organisation  
Ministry of Industries  
Shipla Bhaban (1st Floor) 91, Motijheel Commercial Area  
Dhaka-1000  
Tel: 880-2-9587501, 880-2-01720-107032  
Fax: 880-2-9563553  
e-Mail: npobangla@yahoo.com
6. **Number of Overseas Participants** Up to 18 qualified participants from Cambodia, Republic of China, Fiji, India, Indonesia, IR Iran, Lao PDR, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam.  
  
However, other member countries with special interest in this project may nominate candidates upon consultation with the APO Secretariat.
7. **Number of Local Participants** Up to six qualified participants
8. **Closing Date for Nominations** 9 March 2018
9. **Objectives**
  - a. To equip participants with updated knowledge of total productive maintenance (TPM), its implementation in the manufacturing sector, and implications for the Fourth Industrial Revolution;
  - b. To enable participants to incorporate TPM techniques and digitization into manufacturing processes and diffuse these techniques and knowledge to SMEs and manufacturers; and
  - c. To promote applications of TPM in smart manufacturing to improve productivity in the manufacturing sector.

## 10. Background

TPM is a powerful management technique that focuses on comprehensive, continuous optimization in the area of production and maintenance with direct participation of the entire workforce. It was first developed in Japan with a focus on preventive maintenance and was later expanded to overall business management, incorporating planning, training, health and safety, and environmental considerations. It is widely adopted in the manufacturing sector for its holistic approach, practicality, and effectiveness in raising production efficiency.

In the era of the Fourth Industrial Revolution, TPM plays an even more important role in manufacturing because the utilization of cyberphysical systems and customized production require more integrated management of employees, equipment, maintenance, planning, and monitoring. Effectively linking TPM concepts and techniques with digitization and data analysis will provide strong support for manufacturers to upgrade operational processes, improve strategic planning, and more fully engage the workforce, which contribute to overall enhancement of performance and productivity.

The APO has been promoting the development of SMEs by introducing trends and techniques that assist them to achieve excellence in management and manufacturing capacity, including conducting TPM-themed training courses, workshops, and videoconference-based e-learning courses in various member countries. To assist its fast-growing manufacturing sector, Bangladesh hosted two TPM training courses in 2011 and 2012 and will host this training in 2018 to equip participants with the most updated knowledge on TPM and its implications in the Fourth Industrial Revolution.

## 11. Scope and Methodology

The tentative topics to be covered are:

- a. Concept and eight pillars of TPM;
- b. Steps for TPM implementation;
- c. Case studies; and
- d. Implications of TPM in the Fourth Industrial Revolution.

The training course will consist of themed presentations, sharing of country experiences, site visit, group exercises, and presentations of learning points and action plans.

The tentative program of the training course is given below:

<b>Date/Time</b>	<b>Activity</b>
Saturday, 28 April 2018	Arrival of participants in Dhaka
Sunday, 29 April	Opening session Presentation of resource papers and country papers
Monday, 30 April	Presentation of resource papers and country papers
Tuesday, 1 May	Presentation of resource papers and discussion
Wednesday, 2 May	Site visit, group discussion, and preparation for participants' presentations

Thursday, 3 May                      Presentation of group work output and individual action plans  
Program evaluation by participants, resource persons, and  
implementing organization  
Closing session

Friday, 4 May 2018                  Departure of participants

## 12. Qualifications of Candidates

The participants are expected to possess the following qualifications:

Present Position	Trainers or consultants specializing in production and maintenance management in the manufacturing sector and representatives from industrial associations and policy makers with experiences in production or maintenance management in industrial plants.
Experience	At least three years of experience in the position described above.
Education	University degree or equivalent qualification from a recognized university/institution.
Language	All proceedings of the project are conducted in English, and participants are frequently required to make oral and written presentations. They must therefore be proficient in spoken and written English. Those who are not proficient in English will not be accepted.
Health	Physically and mentally fit to attend an intensive project requiring participants to complete a number of individual and group activities and strenuous fieldwork. It is therefore recommended that member countries do not nominate candidates likely to suffer from physical and mental stress.
Age	Candidates who meet the qualifications above are generally between 30 and 45 years of age.
Attendance	Participants are required to attend the entire program.

## 13. Financial Arrangements

### a. Airfare

The APO will bear the cost of round-trip economy-class international airfare between the international airport nearest to the participants' place of work and Dhaka, Bangladesh from organizations in any of these categories:

- a. SMEs;
- b. Nonprofit organizations; and
- c. Any organization from the APO list of LDCs.\*

*\*As of 7 July 2006, the APO list of LDCs comprised Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal.*

The APO will only reimburse discount air tickets for the most direct route. Participants should note that the arrangements for the purchase of air tickets should follow the "Guide on Purchases of Air Tickets for APO Participants," which will be sent to the selected

participants and is also available on the APO website and from APO Liaison Officers in member countries.

**b. Participating Country Expenses (PCEs)**

PCEs payable to the APO do not apply to organizations in any of these categories:

- a. SMEs;
- b. Nonprofit organizations; and
- c. Any organization from the APO list of LDCs.\*

*\*As of 7 July 2006, the APO list of LDCs comprised Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal.*

**c. Insurance Coverage**

Participants’ insurance premiums: All participants should be fully insured against accident and illness (including hospitalization and death) for a principal sum equivalent to USD10,000.00 for the entire duration of the project and travel and must submit to the APO Secretariat a copy of the comprehensive travel insurance certificate before participation. Such insurance should be valid in the host country. This insurance requirement is in addition to existing government insurance coverage in some member countries. If any participant is unable to insure himself/herself as stipulated above, he/she should secure this insurance in the host country at the commencement of the project and pay the premium himself/herself, if necessary, from the per diem allowance provided. Neither the APO nor the implementing organization will be responsible for any eventuality arising from accident, illness, acts of war, force majeure, or any unexpected events beyond human control such as those related to natural disasters.

**d. Cost Sharing**

Subject to the conditions stated in the Financial Arrangements section, the following table shows the cost-sharing arrangements between the APO, host country, and participants or participating countries.

Cost item	Cost to be borne by		
	Participants or participating countries	Host country	APO
Round-trip economy-class international airfare (refer to paragraph 13-a for conditions)	Conditions apply	No	Conditions apply
Participating Country Expenses (PCEs) (refer to paragraph 13-b)	USD50 per participant	No	No
Hotel accommodation in Dhaka	No	Yes	No
Per diem allowance in Dhaka	No	Yes	No
Transportation costs to and from hotel and airport in Dhaka	No	Yes	No
Insurance coverage in Bangladesh (refer to paragraph 13-c)	Yes	No	No
Any expenses related to visa fees and airport taxes	Yes	No	No

Cost item	Cost to be borne by		
	Participants or participating countries	Host country	APO
All expenses incurred by participants for any reason including but not limited to: a. Stopovers b. Extension of stay c. Early arrival or late departure d. Flight cancellation	Yes	No	No
Any cancellation charges for expenses such as airfare and accommodations incurred by the APO or host country after issuance of Letters of Acceptance	Yes	No	No
Assignment costs of international resource persons	NA	No	Yes
Assignment costs of local resource persons	NA	Yes	No
All local implementation costs including but not limited to: a. Meeting rooms b. Documentation c. Preparatory costs	NA	Yes	No

#### 14. Actions by Member Countries

- a. Each participating country is requested to nominate three or more candidates in the order of preference. Please ensure that candidates nominated meet the qualifications specified under section 12 above.
- b. No form of self-nomination will be accepted. All nominations must be endorsed and submitted by an APO Director, Alternative Director, Liaison Officer, or their designated officer.
- c. Please note that nomination of a candidate does not necessarily guarantee that he/she will be selected. Selection is at the discretion of the selection committee of the APO Secretariat. A basic criterion for selection is the homogeneity of the participants in terms of qualifications and work experience. Nonselection therefore does not mean that the candidates concerned are not competent enough. Sometimes candidates are not selected because they are overqualified for a project.
- d. Each nomination should be accompanied by the necessary documents. A nomination lacking any of these documents may not be considered: two copies of the candidate's biodata on the APO biodata form together with a passport-sized photograph. The biodata form can be downloaded from the APO website ([www.apo-tokyo.org](http://www.apo-tokyo.org)). We encourage submitting the biodata form to the APO Secretariat in electronic form as an attachment to a cover e-mail message from the APO Director, Alternate Director, or Liaison Officer. The nomination documents should be sent to the Industry Department, APO Secretariat (e-mail: [ind@apo-tokyo.org](mailto:ind@apo-tokyo.org), fax: 81-3-5840-5324).

- e. The APO Medical and Insurance Declaration/Certification Form. Every candidate must complete and submit a copy of the APO Medical and Insurance Declaration/Certification Form with his/her biodata at the time of nomination. Please note that self-declaration is sufficient for candidates without any of health conditions or illnesses listed on the reverse side of the medical form. However, for all others, medical certification by a licensed physician on the reverse side of the medical form is required.
- f. Necessary documents are to be submitted electronically. In that case, there is no need to send a hard copy by postal mail. However, if the documents are submitted by fax, member countries are requested to mail the originals of the documents to the APO Secretariat as well. If a digital photograph of a nominee is not attached to the electronic biodata form, a hard-copy photograph should be sent to the APO Secretariat by postal mail. Please give the candidate's name and the project code on the reverse side of the photograph.
- g. Member countries are requested to adhere to the nomination deadline given on page 1. The APO Secretariat may not consider late nominations as they have in the past resulted in considerable difficulties to the implementing organization in its preparatory work for the project.
- h. For member countries where nominations are required to be approved by higher government authorities and require a longer time, APO Liaison Officers/NPOs are urged to send the names of nominees on or before the deadline, indicating that government approval will follow.
- i. If a selected participant becomes unable to attend, he/she should inform the APO Liaison Officer/NPO in his/her country immediately and give the reason for withdrawal. The NPO concerned is requested to transmit that information to the APO Secretariat and the host country promptly.
- j. NPOs are requested to inform the selected participants that they are not to bring family members or to engage in any private business activities during the entire duration of the project.
- k. Each selected participant should be instructed to arrive at the venue one day before the start of the official project. Also, he/she is expected to return home upon completion of the official project because he/she is visiting the host country for the specific purpose of attending this APO training course.
- l. NPOs should inform participants that they must attend all five days of the project.
- m. NPOs should assist the APO and/or host country in collecting amounts corresponding to cancellation charges arising from the withdrawal or no-show of a participant.

#### **15. Actions by the APO Secretariat**

- a. Under normal circumstances, candidates who are selected will be informed of their acceptance at least four weeks prior to the start of the project.

- b. If some candidates fail to qualify or be unable to participate after selection, or if some member countries fail to nominate any candidate, their slots may be filled by alternates from the same or another member country on a merit basis.

## **16. Project Preparation**

The participants are required to prepare a paper prior to departure for the project venue. In preparing the paper, they are expected to follow the “Guidelines for the Preparation of Country Papers” to be provided later.

## **17. Postproject Actions**

All participants are required to prepare action plans and share the plans with their NPOs. The APO will also request participants to submit progress reports six months after completion of the training course.

## **18. Evaluation of Participants**

If the conduct/attendance/performance of a participant is not satisfactory, these will be reported to the APO director concerned.

## **19. Guide for Participants**

Other conditions for participation are given in the *APO Guide for Participants*, which is available from APO Liaison Officers/NPOs in member countries and on the APO website ([www.apo-tokyo.org](http://www.apo-tokyo.org)).

## **20. Dress Code**

Participants are required to wear business attire during the project. Other instructions will be provided in the circular for participants.



Santhi Kanoktanaporn  
Secretary-General