



ASIAN PRODUCTIVITY ORGANIZATION

## PROJECT NOTIFICATION

16 June 2017

1. **Project Code** 17-IN-13-GE-WSP-B
2. **Title** Workshop on Total Productive Maintenance Applications in SMEs
3. **Timing and Duration** 30 October–3 November 2017 (five days)
4. **Venue** Taipei, Republic of China
5. **Implementing Organization** China Productivity Center (CPC)  
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6. **Number of Overseas Participants** Up to 18 qualified participants from Bangladesh, Cambodia, 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** 8 September 2017
9. **Objectives**
  - a. To equip participants with knowledge of total productive maintenance (TPM), its implementation, and implications for the Fourth Industrial Revolution;
  - b. To enable participants to incorporate TPM in digitized manufacturing processes and utilize data from equipment and maintenance to improve production efficiency; and
  - c. To promote applications of TPM in smart manufacturing to improve productivity in SMEs.

## 10. Background

TPM is one of the most prevalent management techniques in the manufacturing sector, aimed at increasing efficiency by comprehensive, continuous optimization in the area of production and maintenance with direct participation and support of the entire workforce. Originating from the idea of preventive maintenance, TPM was first developed in Japan with a focus on maintenance of equipment and facilities and its contribution to productivity. The concept was later expanded to overall business management, incorporating education, training, and management in safety, health, and the environment, and has since been widely adopted in countries with strong manufacturing capacities, especially in the Asia-Pacific region.

Moving toward the Fourth Industrial Revolution, in which digitization and massive customization will play a pivotal role in production and service for customers, the importance of TPM is even greater as the application of cyber-physical systems and customized production requires careful, integrated management of the workforce, equipment, and maintenance. Effective allocation and maintenance of machinery also directly influence the integration and analysis of data collected from equipment and facilities, which is the basis for management and strategic planning in the age of smart manufacturing. TPM, as a technique to improve overall equipment effectiveness and increase internal technical knowledge, thus becomes a strategically important technique for all manufacturers that are responsive to market demand and changes.

Supporting SMEs in achieving excellence in their management and manufacturing capacity, the APO has been conducting various types of training on TPM to strengthen the capability of SMEs and NPOs, including, in recent years, training courses in Bangladesh, India, Pakistan, and Vietnam; a workshop in Mongolia; and a videoconference-based e-learning course in which 11 member countries participated. This workshop is a continuation of those efforts and aims to update participants on the latest implications of TPM in the Fourth Industrial Revolution.

## 11. Scope and Methodology

### Scope

Concept of TPM, steps for TPM implementation, case studies, applications of TPM in smart manufacturing, and implications of TPM in the Fourth Industrial Revolution.

### Methodology

Interactive lectures, country presentations, site visit, group discussions, and presentations of action plans.

The tentative program of the workshop is given below:

Date/Time	Activity
Sun., 29 October 2017	Arrival of participants in Taipei
Mon., 30 October	Opening session, workshop overview, resource speakers' presentations
Tues., 31 October	Resource speakers' presentations and country paper presentations
Wed., 1 November	Country paper presentations and site visit

Thurs., 2 November	Group discussion and action plan preparation
Fri., 3 November	Action plan presentations and closing session
Sat., 4 November	Departure of participants

## 12. Qualifications of Candidates

The participants are expected to possess the following qualifications:

Present Position	TPM practitioners from SMEs or NPOs, production or maintenance managers from SME in the manufacturing sector, and representatives from industrial associations 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 workshop requiring participants to complete a number of individual and group activities and strenuous fieldwork. It is therefore recommended that member countries not nominate candidates likely to suffer from physical and mental stress.
Age	Candidates who fit the above profile are typically between 30 and 45 years of age.
APO Certificate	Participants are required to attend the entire program to receive the APO certificate of attendance.

## 13. Financial Arrangements

### To be borne by participants or participating countries

- a. 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 organizations will be responsible for any eventuality arising from accident or illness.

- b. All expenses related to visa fees and airport taxes.
- c. Any expenses incurred by participants for stopovers on the way to and from the project venue as well as for extra stay at the project venue before and/or after the official project period because of early arrival or late departure, for example, due to either limited available flights or any other reason.
- d. Any cancellation charges for airfare and hotel accommodations arising from withdrawals after letters of acceptance have been issued by the APO.

#### **To be borne by the host country**

- a. Per diem allowances and hotel accommodation for up to 18 overseas participants for up to six days at the rate to be specified later.
- b. All local implementation costs.

#### **To be borne by the APO**

- a. All assignment costs of overseas resource persons.
- b. Round-trip economy-class international airfare by the most direct route between the international airport nearest to the participants' place of work and Taipei. As far as practicable, all participants should purchase discount tickets. Please 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. It is also available on the APO website and from APO Liaison Officers in member countries.
- c. The APO may select more than 18 overseas participants in anticipation of last-minute withdrawals or no-shows. If more than 18 overseas participants attend, per diem allowances and hotel accommodation costs will be borne by the APO for up to two additional overseas participants at the rate to be prescribed for up to six days.

#### **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 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, the 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 workshop.

- l. NPOs should inform participants that they must attend all five days of the project to qualify for the certificate of attendance.
- m. NPOs should assist the APO and/or host country in collecting amounts corresponding to cancellation charges arising from participant withdrawal, as provided for under item 13.

#### **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 workshop.

#### **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)).



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