**PROJECT NOTIFICATION**

24 May 2016

1. **Project Code**
   16-IN-73-GE-OSM-B

2. **Title**
   Multicountry of Observational Study Mission on Industrial Engineering Techniques for Productivity Improvement in SMEs

3. **Timing and Duration**
   7–10 November 2016 (four days)

4. **Venue**
   Singapore

5. **Implementing Organization**
   SPRING Singapore
   Address: 1 Fusionopolis Walk, #01-02 South Tower
   Singapore 138628
   Phone: 65-6279-3690
   Fax: 65-6659-0645
   Website: www.spring.gov.sg
   e-Mail: William_LIM@spring.gov.sg

6. **Number of Overseas Participants**
   Up to 18 qualified participants from Bangladesh, Cambodia, Participants 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 September 2016

9. **Objectives**
   To provide an opportunity for participants to observe and learn the best practices of industrial engineering (IE) techniques implemented in SMEs and to examine their applicability in each participating member country.

10. **Background**
    In general, IE is primarily focused on the design, improvement, and installation of integrated systems of men, methods, materials, and machines for the betterment of human life. The integrated components are analyzed and specified by engineers to create efficient, effective systems that produce high-quality goods and services for end-users. At the company level, IE
helps businesses to remain competitive by continuously improving all areas, including lowering production costs, increasing the quality of products and services, providing conducive working environments for employees, protecting the environment, and complying with both local and international regulations. It provides ways for companies to optimize the available resources, maximize profits, and eliminate redundancies or waste wherever possible. The most important point is that IE works in any type of industry, regardless of the size of the company.

There are various techniques and tools that can be used in IE and all of them were developed through scientific management approaches. Techniques such as line balancing, work sampling, motion studies, and ergonomics are commonly used by companies to examine opportunities for improvement. Based on the results, productivity enhancement activities and initiatives such as employee suggestion schemes, 5S, quality control circles, Six Sigma, and lean management are undertaken to improve the entire work process and become standard practices.

Recognizing the importance of IE in enhancing productivity, including that in SMEs, in member economies, the APO organized a training course on a similar topic in 2014. The course provided participants with knowledge and know-how on IE techniques and applications. To strengthen the understanding and observe the impact of IE on SMEs, the APO is organizing this study mission in Singapore. Ranked as the second most competitive economy in the world and with nearly half of its GDP contributed by SMEs, the selection of Singapore as the venue of this mission will be beneficial for participating member countries. Through this experiential learning, it is expected that participants will observe and learn the applications of IE techniques in different types of SMEs, with the possibility of replicating the best practices in their home countries.

11. Scope and Methodology

Scope
The tentative modules to be covered are:

a. Overview of IE techniques and their impact on SME development and competitiveness;
b. Singapore’s policies and schemes to provide technical assistance to SMEs;
c. Observational site visits to selected SMEs; and
d. Discussion and development of action plans by each participant.

Methodology
Interactive lectures, case studies from individual member countries, observational study visits, and action plan presentation.

The tentative program of this training course is given below:

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>Mon., 7 November 2016</td>
<td>Arrival of participants in Singapore</td>
</tr>
<tr>
<td>Tues., 8 November 2016</td>
<td>Opening session, course overview, and outline of IE in SMEs</td>
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<tr>
<td>Wed., 9 November 2016</td>
<td>Observational site visits</td>
</tr>
<tr>
<td>Thurs., 10 November 2016</td>
<td>Observational site visits</td>
</tr>
<tr>
<td>Fri., 11 November 2016</td>
<td>Summing-up session, evaluation, and closing</td>
</tr>
<tr>
<td>Sat., 12 November 2016</td>
<td>Departure of participants</td>
</tr>
</tbody>
</table>
12. Qualifications of Candidates

The participants are expected to possess the following qualifications:

**Present Position**

SME business owners/managers, trainers/consultants providing productivity improvement consultancy to SMEs, and managers/professionals from government agencies responsible for SME development.

**Experience**

No specific number of years of experience is required for SME owners or managers. Trainers/consultants should have at least five years of experience in working with SMEs.

**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 field work. It is therefore recommended that member countries do not nominate candidates likely to suffer from physical and mental stress.

**Age**

Candidates who fit the above profile are typically between 35 and 50 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

For participants from profit-making organizations except for SMEs, and from APO member countries other than Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal:

a. Round-trip international airfare between the member country and Singapore.

b. Participating country expenses of USD50.00 per participant, payable to the APO in convertible currency.

For all participants:

a. Participants’ insurance premiums: All participants should be fully insured against accident
and illness (including hospitalization and death) for a principal sum equivalent to US$10,000.00 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.

To be borne by the host country

a. Per diem allowances and hotel accommodation for up to 18 overseas participants for up to five 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 Singapore, for participants from Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal; for participants from SMEs and nonprofit-making organizations from other APO member countries. 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 five 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). 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, 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 program.
1. NPOs should inform participants that they must attend all four days of the project to qualify for the certificate of attendance.

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 country paper prior to departure for the project venue, in preparing the paper, “Guidelines for the Preparation of Country Papers” will be provided later.

17. Evaluation of Participants

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

18. 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).

Mari Amano
Secretary-General