



## PROJECT NOTIFICATION

10 December 2018

- 1. Project Code** 17-IN-82-GE-WSP-A
- 2. Title** Workshop and Practitioners' Group Meeting on Standardization of Industrial Automation
- 3. Timing and Duration** 14–15 March 2019 (two days)
- 4. Venue** New Delhi, India
- 5. Implementing Organization**

Ministry of Consumer Affairs, Food and Public Distribution  
Department of Consumer Affairs  
Krishi Bhawan, New Delhi 110114, India  
Phone: 91-11-23383120  
e-Mmail: [dirit-ca@nic.in](mailto:dirit-ca@nic.in)

National Productivity Council (NPC)  
Utpadakta Bhawan 5-6, Institutional Area  
Lodi Road, New Delhi 110003, India  
Phone: 91-11-24690331  
Fax: 91-11-24615002  
e-Mail: [isg@npcindia.gov.in](mailto:isg@npcindia.gov.in)
- 6. Number of Overseas Participants** Up to 18 qualified participants from member counties
- 7. Number of Local Participants** Up to six qualified participants
- 8. Closing Date for Nominations** 11 February 2019
- 9. Objectives**
  - a. To develop an understanding of current standardization work for smart manufacturing, Industry 4.0, and the Industrial Internet of Things and the need for international coordination;
  - b. To introduce and discuss the differences among and coordination of system architectures and international standards and interoperability;
  - c. To discuss critical requirements that need international coordination; and
  - d. To assist participants in developing strategies for their own countries as well as for international cooperation.

### Asian Productivity Organization

1-24-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan Tel: (81-3)3830-0411 Fax: (81-3)5840-5322 [www.apo-tokyo.org](http://www.apo-tokyo.org)

## **10. Background**

Industry 4.0 is characterized by pervasive adoption and application of nine major pillars of technologies: autonomous systems; simulation; system integration; the Internet of Things; cybersecurity; cloud computing; additive manufacturing; augmented reality; and big data. These pillars can achieve continuous optimization of manufacturing processes and lead to innovative business models responding to changing needs and demand. Such optimization relies on seamless, Internet-supported integration of systems, which depends in turn on compliance with commonly recognized standards and reference frameworks that facilitate compatibility among machines, interoperability in applications, and communication among systems. Standardization is thus crucial for the success of Industry 4.0 and has significant implications for all stakeholders in global supply chains.

Although the Industry 4.0 movement is typically led by highly industrialized economies, technology giants, and research institutes, the work of standardization is in fact a joint function fulfilled by the groups involved, including users, governments, industrial associations, researchers, consumers, and regulators. International bodies, such as the International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), and International Telecommunication Union (ITC), and regional/national agencies and initiatives, such as DIN, DKE, and VDE in Germany and Japan's Robot Revolution, Industrial IoT Initiative, and Industrial Valuechain Initiative, have been closely collaborating with industries and experts to identify consensus-based standards and specifications in key areas to create conditions and foundations for further innovation.

Adapting and collaborating with international standards require the alignment of stakeholders in each country, including government agencies responsible for research, telecommunications, and economy, industries and associations, as well as labor unions and the education sector due to the long-term impacts on employment and welfare. The APO is organizing this workshop to keep its member countries abreast of the trends and developments in international standardization and assist them in developing strategies for harmonization of standards, interoperability, and connectivity among systems and products to strengthen their resilience in the era of Industry 4.0.

Since 2017, the APO has been organizing various activities to support its members in developing awareness, capabilities, and strategies in the era of Industry 4.0, including conferences and workshops on Industry 4.0 and new technologies in Cambodia and the ROC, technical expert services in IR Iran and Thailand, a bilateral policy study in the ROK and Malaysia, and establishing the Center of Excellence on IT for Industry 4.0 in India. This workshop is continuing those efforts by providing a platform for member countries to exchange thoughts and develop strategies in response to the unprecedentedly fast changes in the Fourth Industrial Revolution.

## **11. Scope and Methodology**

### **Scope**

Industry 4.0 and smart manufacturing; major developments and trends in standardization for Industry 4.0; initiatives from major countries and organizations; standardization in the field of the Industrial Internet of Things; reference architecture models; key issues related to standardizations; and strategies for harmonization of standards, interoperability, and connectivity among systems.

## **Methodology**

Interactive presentations, comparison of practices in major countries, status in member countries, and discussions of strategies.

The tentative program of the workshop is given below:

<b>Date/Time</b>	<b>Activity</b>
Wed., 13 March 2019	Arrival of participants
Thurs., 14 March 2019	Opening session Industry 4.0, Connected Industries, Industrial Internet of Things, and Smart Manufacturing Standardization Issue 1: Reference Architecture Models Such as RAMI4.0, IIVI-RA, and IIRA Standardization Issue 2: Standards for Connectivity Standardization Issue 3: Use Cases
Fri., 15 March 2019	Expert discussions Standardization Issue 4: Legal Issues/Trustworthiness Standardization Issue 5: IT/Cybersecurity
Sat., 16 March 2019	Departure of participants

## **12. Qualifications of Candidates**

The participants are expected to possess the following qualifications:

Present Position	Government officials and association representatives in charge of technology standardization related to smart manufacturing and industrial digitization, with backgrounds in engineering and experience in manufacturing and ICT. It is necessary to have adequate experience related to technological standardization processes under international bodies, such as the ISO, IEC, and ITC. Participants should be influencers from the standardization sector who can lead necessary developments in their countries.
Experience	At least five years of experience in the subject area.
Education	University degree from a recognized university/institution or equivalent qualification/experience.
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. It is therefore recommended that participating countries do not nominate candidates likely to suffer from physical and mental stress.

**Age** Candidates who meet the qualifications above are generally between 35 and 50 years of age.

**Attendance** Participants are required to attend the entire program.

### **13. Financial Arrangements**

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

- a. All costs for the assignment of overseas resource persons;
- b. Round-trip economy-class international airfare for participants;
- c. Per diem allowances and hotel accommodations for overseas participants;
- d. Meeting package including rental of meeting room, equipment, refreshments, etc.; and
- e. Welcome reception, if any.

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

- a. Costs for local resource persons;
- b. Costs of local staff required to prepare for and implement the project; and
- c. All other local implementation costs not borne by the APO.

#### **To be borne by participants or participating countries**

- a. Travel insurance premiums;
- b. All expenses related to visa fees and airport taxes; and
- c. Any expenses incurred by participants for stopovers.

#### **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 member countries.

<b>Cost item</b>	<b>Cost to be borne by</b>		
	<b>Participants or participating countries</b>	<b>Host country</b>	<b>APO</b>
Round-trip economy-class international airfare (refer to paragraph 13)	No	No	Yes
Participating Country Expenses (PCEs)	NA	NA	NA
Hotel accommodation in New Delhi	No	No	Yes
Per diem allowance in New Delhi	No	No	Yes
Transportation costs to and from hotel and airport in New Delhi	No	No	Yes
Insurance coverage in India (refer to paragraph 13)	Yes	No	No

Cost item	Cost to be borne by		
	Participants or participating countries	Host country	APO
Any expenses related to visa fees and airport taxes	Yes	No	No
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
Local implementation costs including: Meeting package including rental of meeting room, equipment, refreshments, etc.	NA	No	Yes
All other local implementation costs not borne by the APO	NA	Yes	No

#### 14. Actions by Participating 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 documents listed below. 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 web site ([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, 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, participating 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 two days of the project.
- m. NPOs should assist the APO and/or host country in collecting amounts corresponding to cancellation charges arising from 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, their slots may be filled by alternates from the same or another participating 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 during the workshop and share the plans with their NPOs. The APO will 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, it 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.



Dr. Santhi Kanoktanaporn  
Secretary-General

