

IMPLEMENTATION PROCEDURES
CAPACITY-BUILDING PROGRAM ON THE APO INDUSTRY 4.0 AND ARTIFICIAL INTELLIGENCE
FRAMEWORK
APO CENTER OF EXCELLENCE ON IT FOR INDUSTRY 4.0

About the COE on IT for Industry 4.0

The APO COE on IT for Industry 4.0, hosted by the National Productivity Council (NPC), India, supports productivity-led digital transformation across APO member economies. The COE promotes the adoption of Industry 4.0, AI, and related digital technologies through awareness creation, capacity building, research, knowledge dissemination, and collaborative partnerships. It places special emphasis on strengthening digital transformation capabilities and addressing barriers to responsible adoption of Industry 4.0 technologies, particularly among MSMEs.

1. Objective and Background

The APO COE on IT for Industry 4.0, established in 2017, has progressively expanded its activities including developing the COE roadmap, assessing Industry 4.0 readiness among MSMEs, formulating digitalization strategies, building expert networks, implementation of demonstration projects, and documenting good practices in manufacturing transformation. Building on these initiatives, the COE opted for developing the APO Industry 4.0 and Artificial Intelligence (I4AI) Framework in 2025, together with the Need and Readiness Self-assessment (NRSA), Diagnostic Assessment Framework, training manual, assessment toolkit, and online platform to provide a structured approach to responsible digital transformation.

Under the annual action plan for 2026–27, the COE will focus on promoting and disseminating the APO I4AI Framework through a series of complementary activities, including online awareness and capacity-building programs, demonstration pilot projects, sectoral research studies, development of reference materials, and international outreach initiatives. These activities are designed to strengthen APO members' capacity, generate practical implementation experience, develop knowledge resources, and expand international collaboration. The first initiative in 2026 is the online capacity-building program on the APO I4AI Framework, which aims to disseminate the framework and its associated tools among APO member economies.

The objectives of the program are to:

- a. Enhance awareness, dissemination, and understanding of the APO I4AI Framework among APO member economies;
- b. Strengthen the institutional capacity of NPOs and partner organizations to promote the responsible adoption of Industry 4.0 and AI;
- c. Equip participants with knowledge of the structure, key components, diagnostic methodology, and practical application of the APO I4AI Framework;
- d. Introduce the Need and Readiness Self-assessment (NRSA) and Diagnostic Assessment Framework for assessing organizational readiness for Industry 4.0 and AI adoption;
- e. Enable participants to identify organizational strengths, capability gaps, and opportunities for adopting Industry 4.0 technologies;
- f. Support APO member economies in initiating follow-up awareness, capacity-building, diagnostic, and pilot initiatives using the APO I4AI Framework; and
- g. Contribute to APO Vision 2030, particularly Pillar 3: Capacity Empowerment, by developing a pool of practitioners capable of promoting the APO I4AI Framework.

2. Modality of Implementation

The activity will be implemented in the online modality. The program will consist of up to five training batches between 24 August 2026 and 10 December 2026.

Each batch will comprise 25 participants, including 19 international and six local participants. Each training day will consist of three hours of online sessions, tentatively from 14:00 to 17:00 Indian Standard Time (IST), subject to finalization by the APO Secretariat in consultation with the COE and

participating NPOs. Any adjustment to the number of batches or participant composition will be made by the APO Secretariat in consultation with the COE.

Appendices 1 and 2 provide the implementation timeline for each batch and the indicative program schedule, respectively.

Scope

The program will focus exclusively on the wider dissemination and promotion of the APO I4AI Framework for responsible adoption of Industry 4.0 and AI. It will enhance participants' understanding of the framework and its assessment methodologies. It will also provide participating organizations with an initial appraisal of readiness for adopting I4AI tools and technologies.

The training will cover:

- a. Fundamentals of Industry 4.0 and AI
- b. Responsible AI in manufacturing
- c. APO I4AI Framework
- d. Need and Readiness Self-assessment (NRSA) and Diagnostic Assessment Framework
- e. Individual and group-level readiness assessments
- f. Case studies and discussions
- g. Group exercises and presentations
- h. Development of actionable recommendations.

Methodology

The program will adopt an interactive online learning approach to promote knowledge sharing and practical application of the APO I4AI Framework combining the following:

- a. Expert presentations: Overview of key topics
- b. Guided assessment exercises: Step-by-step application of NRSA and Diagnostic Assessment Framework to evaluate organizational readiness and interpret results
- c. Case studies and discussions: Analysis of practical examples and experience sharing
- d. Collaborative group activities: Group exercises, presentations, and development of actionable recommendations
- e. Program documentation: Consolidation of batch outputs, participant feedback, lessons learned, and submission of implementation reports.

3. Qualifications of Resource Persons

The program will accommodate one international resource person and one national resource person from the COE on IT for Industry 4.0 with the following qualifications:

- a. Extensive technical and theoretical knowledge of Industry 4.0, AI, responsible AI, digital transformation, knowledge management, and related assessment methodologies;
- b. Demonstrated understanding of the APO I4AI Framework, Need and Readiness Self-assessment (NRSA) and Diagnostic Assessment Framework, or compatible digital maturity and organizational readiness assessment approaches;
- c. Demonstrated experience in designing and delivering international training, advisory, consultancy, research, or capacity-building programs on Industry 4.0, AI, digital transformation, or related fields, particularly for MSME development and enterprise productivity enhancement;
- d. Ability to facilitate interactive online learning, including technical presentations, case discussions, practical assessment exercises, and knowledge sharing among participants;
- e. Ability to contextualize the APO I4AI Framework for member economies and facilitate practical learning through case studies, diagnostic assessment exercises, group activities, and technical discussions;
- f. Familiarity with productivity enhancement, organizational transformation, and technology adoption in MSME and manufacturing contexts; and

- g. Excellent English communication, presentation, and technical reporting skills.

4. Task Assignments of Resource Persons

Resource persons are expected to:

- a. Coordinate closely with the APO Secretariat and COE on IT for Industry 4.0 to support effective preparation, implementation, and follow-up of the program, including participation in the pre- and postprogram coordination meetings, as required;
- b. Contribute to the technical design, preparation, and finalization of the program schedule, curriculum, session flow, and learning materials;
- c. Deliver assigned training sessions through the digital platform designated by the APO Secretariat in accordance with the approved activity framework and methodology;
- d. Facilitate interactive discussions, case studies, practical assessment exercises, and group activities;
- e. Conduct learning reviews, contribute to participant feedback analysis, and provide technical recommendations for improving future implementation of the program;
- f. Prepare and submit implementation reports in the prescribed format to the APO Secretariat by the agreed deadline; and
- g. Complete all assigned activities in accordance with the agreed work plan, schedule, quality standards, and program objectives, contributing to the expected outputs of the COE on IT for Industry 4.0 and APO Vision 2030.

5. Roles and Responsibilities

COE on IT for Industry 4.0

- a. Identify and nominate suitable international and national resource persons in consultation with the APO Secretariat;
- b. Lead the technical planning and preparation of the program in coordination with the APO Secretariat and assigned resource persons;
- c. Coordinate all technical and logistic arrangements required for implementation of the program in consultation with the APO Secretariat;
- d. Facilitate effective delivery of the program, provide technical support throughout its implementation, and ensure the quality of its technical outputs; and
- e. Support project documentation and evaluation and prepare and submit an implementation report.

APO Secretariat

- a. Assign international and national resource persons and facilitate their effective participation in the program;
- b. Review and approve the program design and implementation arrangements to ensure alignment with the objectives of the COE on IT for Industry 4.0 and APO Vision 2030;
- c. Coordinate with NPOs on participant nomination, confirmation, and related arrangements;
- d. Provide administrative, financial, and technical guidance to support effective implementation of the program in accordance with APO rules, regulations, policies, and procedures; and
- e. Supervise and monitor overall program implementation and review and accept implementation reports and other deliverables submitted by the COE on IT for Industry 4.0 and resource persons.

NPOs

- a. Nominate qualified participants and coordinate necessary administrative arrangements in consultation with the APO Secretariat;
- b. Encourage confirmed participants to actively participate in all program sessions and complete required learning activities and evaluation exercises; and
- c. Support trained participants in disseminating the knowledge and tools acquired through the program and promote follow-up awareness, assessment, and implementation activities within their respective organizations.

6. Financial Arrangements

All financial arrangements for the program shall be made in accordance with the APO's prevailing rules, regulations, policies, and procedures. The respective financial responsibilities are outlined below.

To be met by the APO

- a. Honoraria for international and national resource persons, including preparation and reporting costs in accordance with APO policy;
- b. Cost of interpretation and other approved technical support services, where applicable;
- c. Costs of development, publication, and dissemination of program reference materials and outputs; and
- d. Other eligible costs related to program activities in accordance with the financial arrangements specified in the COE Implementation Procedures 2025.

To be met by the COE on IT for Industry 4.0

- a. All other costs not covered by the APO.

To be met by RPs

- a. All expenses incurred for activities outside the approved official assignment and entitlements; and
- b. Any other costs not covered by the APO and COE on IT for Industry 4.0.

Appendix 1
Tentative Implementation Timeline

The following tentative implementation timeline will apply to each batch, subject to adjustments by the APO Secretariat in consultation with the COE on IT for Industry 4.0 and resource persons.

Batch	Date	Duration	Time (IST)
Batch 1	24–27 August 2026	4 days	14:00 to 17:00
Batch 2	7–10 September 2026	4 days	14:00 to 17:00
Batch 3	5–8 October 2026	4 days	14:00 to 17:00
Batch 4	2–5 November 2026	4 days	14:00 to 17:00
Batch 5	7–10 December 2026	4 days	14:00 to 17:00

Appendix 2
Indicative Program Schedule

The following indicative program schedule will generally apply to all batches, subject to adjustments by the APO Secretariat in consultation with the COE on IT for Industry 4.0 and resource persons.

Day	Time (IST)	Session and Agenda
Day 1	14:00–15:30	Session 1: Inauguration; Program Orientation and Introduction to Industry 4.0 (I4.0) and Artificial Intelligence (AI)
	15:30–15:45	Break
	15:45–17:00	Session 2: Responsible AI in Manufacturing; Learning review and key messages
Day 2	14:00–15:30	Session 3: Introduction to the APO I4AI Framework
	15:30–15:45	Break
	15:45–17:00	Session 4: Introduction to the APO I4AI Diagnostic Framework for Need and Readiness Self-assessment (NRSA); Learning review and key messages
Day 3	14:00–15:30	Session 5: Conducting Individual NRSA
	15:30–15:45	Break
	15:45–17:00	Session 6: Case Study and Group-based NRSA; Learning review and key messages
Day 4	14:00–15:30	Session 7: Group Exercise and Presentation
	15:30–15:45	Break
	15:45–17:00	Session 8: Developing Actionable Recommendations and Program Wrap-up