



Philippines Training of Trainers on Frontier ICTs and Cybersecurity for Sustainable Development

11 to 14 April 2023 (Manila, Philippines)

BACKGROUND

Frontier ICTs (Information and Communication Technologies) are increasingly recognized as crucial tools for realizing the Sustainable Development Goals. Innovations such as Artificial intelligence (AI), Blockchain, and the Internet of Things (IoT) are anticipated to play a significant role in promoting sustainable development. However, they also present considerable challenges particularly in the realm of policymaking, especially among developing countries.

With growing reliance on technologies, countries also become more susceptible to various forms of information system attacks, including cyber-intrusions, cyber-terrorism and cyber-crime. These threats can have severe consequences for national security, economic stability and individual privacy. Many countries, particularly developing ones, often lack the necessary capacity and resources to handle these threats effectively.

It is crucial for countries to develop guiding frameworks in adopting frontier ICTs in their national development efforts. They also need to invest in cybersecurity measures and infrastructure as well as establish systems to protect against security threats.

The Asian and Pacific Training Centre for ICT for Development, a regional institute of the Economic and Social Commission for Asia and the Pacific (APCICT/ ESCAP), in cooperation with the Development Academy of the Philippines, is organizing the *Philippines Training of Trainers on Frontier ICTs and Cybersecurity for Sustainable Development* on 11 to 14 April 2023 in Manila, Philippines. The training aims to expand the pool of resource persons in the country that can support the capacity building of central and local

government officials on safely leveraging frontier technologies for sustainable development.

LEARNING OUTCOMES

At the end of the programme, participants are expected to:

- **Understand fundamental concepts of frontier ICTs, particularly Artificial Intelligence, Blockchain, Internet of Things;**
- **Comprehend the challenges and risks linked to the effective and efficient application of frontier ICTs for sustainable development as well as the measures to address them;**
- **Appreciate the importance of information security and privacy and related concepts; identify threats to security and privacy; and**
- **Assess existing information security policy in terms of international standards of information security and privacy protection.**

TARGET PARTICIPANTS

The programme is targeted to potential trainers who can serve as DAP's local resource persons in its future training programmes for central and local government officials.

CONTACTS

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PROGRAMME

**Philippines Training of Trainers on
Frontier ICTs and Cybersecurity for Sustainable Development
11 to 14 April 2023
09:00am – 17:00pm, Manila time (UTC+8)**

Time	11 April 2023 (Tuesday)
08:30 – 09:00	Registration
09:00 – 09:30	Opening Session <ul style="list-style-type: none"> ▪ Welcome Remarks ▪ Self-introduction by the participants ▪ Group Photo
	Frontier ICTs for Sustainable Development <i>Resource Person: Ms. Sukkyoung Kim, Ph.D., Invited Professor, School of Business and Technology Management, Korea Advanced Institute of Science and Technology (KAIST)</i>
09:30 – 10:30	Session 1: Introduction to Frontier ICTs for Sustainable Development <ul style="list-style-type: none"> ▪ Introduces the structure and utilization of the Academy module. ▪ Introduces the definitions and types of frontier ICTs, the trends and emerging directions of frontier ICTs adoption in the public sector, and the roles and importance of frontier ICTs for sustainable development.
10:30 – 10:45	<i>Break</i>
10:45 – 12:00	Session 1: Introduction to Frontier ICTs for Sustainable Development (continued)
12:00 – 13:30	<i>Lunch</i>
13:30 - 15:00	Session 2: Artificial Intelligence (AI) <ul style="list-style-type: none"> ▪ Introduces the definition, scope, and features of AI. ▪ Examines the role and importance of AI in achieving the SDGs; provides major challenges, barriers, and risks to be considered in developing and introducing AI. ▪ Provides the current status of policies related to AI and global cases applied in the public sector.
15:00 – 15:15	<i>Break</i>
15:15 - 16:30	Session 3: Artificial Intelligence (AI) (continued) <ul style="list-style-type: none"> ▪ Suggests and discusses policy recommendations and international cooperation measures for effective and efficient development and application of AI. ▪ Exercise: Drawing considerations and recommendations for AI adoption and promotion (using provided template)

Time	12 April 2023 (Wednesday)
08:30 – 09:00	Registration
09:00 – 09:30	Exercise Review
09:30 - 10:30	Session 4: Blockchain <ul style="list-style-type: none"> ▪ Introduces the definition, scope, and features of blockchain; examines the role and importance of blockchain in achieving the SDGs ▪ Provides major challenges, barriers, and risks to be considered in developing and introducing blockchain ▪ Provides the current status of policies related to blockchain and global cases applied in the public sector
10:30 – 10:45	<i>Break</i>
10:45 – 12:00	Session 5: Blockchain (continued) <ul style="list-style-type: none"> ▪ Provides the current status of policies related to blockchain and global cases applied in the public sector ▪ Suggests and discusses policy recommendations and international cooperation measures for effective and efficient development and application of blockchain.
12:00 – 13:30	<i>Lunch</i>
13:30 - 15:00	Session 6: Internet of Things (IoT) <ul style="list-style-type: none"> ▪ Introduces the definition, scope, and features of Internet of Things (IoT) ▪ Examines the role and importance of IoT in achieving the SDGs ▪ Provides major challenges, barriers, and risks to be considered in developing and introducing IoT ▪ Provides the current status of policies related to IoT and global cases applied in the public sector
15:00 – 15:15	<i>Coffee Break</i>
15:15 - 16:00	Session 7: Internet of Things (IoT) (continued) <ul style="list-style-type: none"> ▪ Suggests and discusses policy recommendations and international cooperation measures for effective and efficient development and application of IoT.
16:00 – 16:30	Discussion & Wrap-up

Time	13 April 2023 (Thursday)
	<p align="center">Information Security and Privacy</p> <p align="center"><i>Resource Person: Mr. Freddy Tan, Managing Director, EPIC Cybersecurity</i></p>
08:30 – 09:00	Registration
09:00 - 10:30	<p>Session 1: Introduction to Information Security and Privacy training module</p> <ul style="list-style-type: none"> ▪ Introduces the fundamental concepts of information security and security and structure of this training module.
10:30 – 10:45	<i>Break</i>
10:45 – 12:00	<p>Session 2: Need for Information Security</p> <ul style="list-style-type: none"> ▪ Explains the concept of information and information security; and ▪ Describes standards applied to information security activities.
12:00 – 13:30	<i>Lunch</i>
13:30 - 15:00	<p>Session 3: Information Security Trends and Directions</p> <ul style="list-style-type: none"> ▪ Provides an overview of threats to information security; and ▪ Describes countermeasures against such threats.
15:00 – 15:15	<i>Coffee Break</i>
15:15 - 16:30	<p>Session 4: Information Security Activities</p> <ul style="list-style-type: none"> ▪ Provides examples of information security activities of various countries to serve as a guide in information security policymaking; and ▪ Highlights international cooperation in implementing information security policy.

Time	14 April 2023 (Friday)
08:30 – 09:00	Registration
09:00 - 10:30	<p>Session 5: Information Security Methodology</p> <ul style="list-style-type: none"> ▪ Describes internationally used administrative, physical and technical information security methodology.
10:30 – 10:45	<i>Break</i>
10:45 – 12:00	<p>Session 6: Protection of Privacy</p> <ul style="list-style-type: none"> ▪ Traces changes in the concept of privacy; describes international trends in privacy protection; and ▪ Provides an overview and examples of Privacy Impact Assessment.
12:00 – 13:30	<i>Lunch</i>

13:30 - 15:00	Session 7: CSIRT Establishment and Operation <ul style="list-style-type: none">▪ Explains how to establish and operate a national Computer Security Incident Response Team (CSIRT); and▪ Provides models of CSIRT from various countries.
15:00 – 15:15	<i>Break</i>
15:15 - 16:30	Session 8: Lifecycle of Information Security Policy <ul style="list-style-type: none">▪ Give an overview of the information security policymaking process; and▪ Discuss issues that policymakers must consider in information security policymaking.
16:30 – 17:00	Discussion and Wrap-up Closing