SIDE EVENT

Advancing Inclusive Technologies for a Society for All Ages: On-device AI, Robotics, Living Labs, and Health Care

12:45-14:15, 21 April 2026 | Room # (TBC), UN Convention Centre, Bangkok, Thailand

Organized by Science and Technology Policy Institute (STEPI), Hanbat National University, Korea Institute of Civil Engineering and Building Technology (KICT), Republic of Korea; UNEC, Azerbaijan and BRIN, Indonesia (tbc)

Hosted by Ministry of Science and ICT, Republic of Korea; Embassy of the Republic of Korea in Thailand; and Asian and Pacific Centre for Transfer of Technology (APCTT) of UN ESCAP

Background

Guided by the theme "Leaving no one behind: advancing a society for all ages in Asia and the Pacific", this session will address demographic trends and socioeconomic priorities, including decent work and full and productive employment across age groups, healthy and active ageing, women's economic empowerment, the future of care, and social integration.

In this context, the region's demographic transition—rapid population ageing in some countries and persistent youth bulges in others—interacts with the megatrends of climate change, urbanization, digitalization and artificial intelligence, requiring economic and social systems to be rethought so that people of all ages can contribute to and benefit from sustainable development through lifelong learning and reskilling and investment in the care economy as a public good.

Advanced inclusive technologies can help translate these priorities into practical solutions, yet significant barriers remain including digital divides, dependence on cloud-based AI, gaps in connectivity and affordability, concerns around data protection, and limited capacity for experimentation in public services.

Against this backdrop, this side event will position on-device AI as the foundation for inclusive digital services in settings with constrained connectivity, affordability challenges and heightened privacy needs, and will showcase service domains such as silver-friendly robotic services and AI-enabled inclusive mobile healthcare to support a society for all ages.

To support responsible scaling, the event will also highlight the role of digital twins, verification and validation frameworks, and living labs as an integrated "trust and scaling" layer that can enable safe experimentation, local adaptation, evidence generation, and policy learning, while creating pathways for regional cooperation and technology transfer facilitated by ESCAP.

Objectives

- Showcase how on-device AI can underpin inclusive, age-friendly services such as silver-friendly robotic services, AI-enabled inclusive mobile healthcare supported by digital twins and living labs.
- Share practical approaches to verification and validation and living lab methodologies that strengthen the safety, usability, and policy relevance of AI-enabled services and support their responsible scaling.

- Identify pathways for regional cooperation and technology transfer, including ESCAP-facilitated partnerships and pilot deployments that promote healthy and active ageing, age-friendly workplaces, and a stronger care economy in Asia and the Pacific.

Key Discussion Topics

- On-device AI as a foundation for inclusive digital services, with emphasis on affordability, low-power devices, offline use and privacy-by-design.
- Service areas for a society for all ages: silver-friendly robotic services for independent living and care, and mobile health care for underserved communities.
- Digital twins, verification and validation (V&V), and living labs as a trust and scaling layer for AI-enabled public services, supporting testing and adaptation to local contexts.
- Scaling through living labs via co-creation with citizens and researchers, evidence generation and policy learning.

Target Audience

Government officials and policymakers on ageing, social development, labour, and digital transformation; national innovation agencies; technology firms and developers; academics and researchers; civil society organizations; and international organizations and development partners working on inclusive, age-friendly solutions.

Tentative Programme

Moderator: Dr. Eun Joo KIM, Principal Researcher, STEPI

Time	Agenda Item	Speaker (TBC)	Note
12:45–13:00	Opening Session • Opening Remarks • Welcome Remarks • Congratulatory Remarks	Dr. Ji Woong YOON *President of STEPI* Dr. Preeti Soni *Head of APCTT* Ambassador of Korean Embassy in Thailand	*Pre-recorded/ On site*
13:00–13:45	Presentation Session Case studies on 1) Foundation: On-device AI (low-power semiconductor); 2) Service Domains: (i) Silver-friendly robotics; (ii) Mobile healthcare; 3) Trust & Scaling: Digital twins, V&V and living labs	1. Prof. Changbeom CHOI *Hanbat National University, ROK* 2. BRIN, Indonesia *National Research and Innovation Agency* 3. Azerbaijan (TBC)	*Virtually online/ Pre-recorded*
13:45–14:10	Panel Discussion From foundation to scale—verification, living labs, and technology transfer across member States	Mr. Byungjin LEE *Expert on ICT, UN ESCAP* APCTT Expert (TBC) Dr. Sang Hwa JUNG, *Head of Andong Center, KICT*	
14:10–14:15	Closing Remarks	Dr. Eun Joo KIM, *STEPI*	