



2021-22 International Mayors Forum

24-27 January 2022 8-10:30 pm (Seoul) 6-8:30 am (New York)

Capacity Building Programme for Implementation of Smart Cities for Inclusive and Sustainable Society in the Post-COVID-19 Pandemic Era

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1. Background

- The call from developing countries to support enhancement of capacity building in the field of science, innovation and technology for promoting smart city development
- UNCRD' experience of supporting capacity building of developing countries in the field of regional/urban development planning and implementation towards the 2030 Agenda and SDGs through its integrated approach, linking key and relevant sectors such as transport, energy, water and sanitation, waste management and disaster risk reduction.
- UNCRD's accumulated knowledge and nowhow accumulated is useful to carry out capacity development programmes focusing on smart city development, in coordination with the Government of Japan.



2. Ojective

To contribute towards achieving the 2030 Agenda/SDGs and the Paris Agreement, the smart city programme aims to contribute to Goal 11 - "Building Sustainable Cities and Communities" and Target 11.3, 11.5 which have direct implication & synergies with other SDGs such as

Goal 1 "Poverty Reduction"

Goal 3 "Good Health and Well-being"

Goal 4 "Quality Education"

Goal 5 "Reduce Inequality"

Goal 6 "Clean Water and Sanitation"

Goal 7 "Affordable and Clean Energy" and Target 7.3

Goal 8 "Decent Work and Economic Growth" and Target 8.2, 8.3

Goal 13 "Climate Action" and Target 13.2



3. Outcomes

The Programme is expected to accomplish the following:

- Enhancement of sustainable and resilient urbanization in the implementation of SDG 11, particularly through the promotion of quality infrastructure including safe, affordable, accessible, and sustainable transport systems.
- Enhancement of safe water and sanitation service provision, energy efficiency, inclusive economic growth and productivity, and integration of climate change measures in urban services in the implementation of SDG 6, 7, 8 and 13.



4. Activities

- 1. To conduct forum/expert meetings and training workshops with a study/technical tour in Japan on smart city development
- To conpile a catalogue of good practices and lesson learned about smart city development, including quality infrastructure, to be used for training
- To expand the network with UN system and other international/multinational organizations engaged in promoting smart city development by participating in international conferences/expert meetings on smart city development



Positioning of Smart Cities - Relationship between SDGs, Society 5.0, and Smart Cities

- By 2050, approximately 70% of the world's population will live in cities. Cities have a high concentration of social issues to be solved
- As a means to solve social issues, digital technologies such as data, AI, IoT, and robotics are being used in various fields such as healthcare, mobility, energy, and cashless. Use of technology has been proposed (=> Society 5.0)
- "Social issues identified in the SDGs" × "Solving social issues through technology" ⇒ "Realization of smart cities"



Social issues as indicated by the SDGs

Solutions through digital technology



Smart City

If we destroy the natural environment, we will not be able to become a smart city.



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Positioning of Smart Cities - Relationship between SDGs, Society 5.0, and Smart Cities



Target areas of smart cities being considered and planned by local governments VS Expected areas of smart cities by the general public

According to a survey of citizens conducted by Intage Inc., the top five service areas expected of smart cities are:

- (1) "Disaster prevention and mitigation"
- (2) "Services to watch over the elderly"
- (3) "Services to watch over children"
- (4) "Transportation (3D location analysis, automated driving, drones, etc.)"
- (5) "enhancement of healthcare"

Implementation of smart city model projects

Collect and visualize a variety of data

of entire cities and regions

Details



A public competition was held for consortiums consisting of private businesses and local governments, and <u>15 projects were selected as</u> "Leading Model Projects" that will take pioneering initiatives that will lead the nation

Positioning smart cities as a basic concept for urban development, accelerating smart city initiatives, and promoting their horizontal

- The findings from the model project will be
- Promote the development of mechanisms and systems to support local initiatives, such as the establishment of a public-private

Smart City Catalog

In October of this year, we compiled and published a catalog of smart city case studies that incorporate new technologies such as IoT, AI, and big data into Japan's past urban development achievements.

Japan's Smart Cities: Solving the SDGs and Other Global Issues with Japan's Society 5.0

Three pillars of our country's characteristics



1) Eco-city (environmentally symbiotic city)



2) TOD Public transport oriented (Urban Development)



(3) Building a Disaster-Resistant City (Resilient City)

Challenges and Solutions

1) Realization of a safe and secure society at the highest level in the world (ex. crime prevention, disaster prevention, reduction of traffic accidents, etc.)

2) Maximize the capacity of transportation and logistics infrastructure

(ex.MaaS, automated driving, car sharing, etc.)

3) Efficient use of energy and realization of energy conservation and zero emissions

4) Realization of the world's highest level of recycling-oriented society

5) Infectious disease control and public health that will astonish the world

- 6) Expand access to education and improve quality of education
- (distance and online education)
- 7) Use of tourism resources to attract the world

Smart City Catalog URL

Main report: https://www.kantei.go.jp/jp/singi/keikyou/pdf/Japan's Smart Cities-1(Main Report).pdf Examples: https://www.kantei.go.jp/jp/singi/keikyou/pdf/Japan's Smart Cities-2(Cases and Examples).pdf

Source: Ministry of Land, Infrastructure, Transport and Tourism

About ASEAN Smart City Network & High Level Meeting

About ASEAN Smart City Network (ASCN)

- A platform proposed by Singapore, the 2018 ASEAN chair, for about three cities in each of the ASEAN member countries to work together to develop smart cities.
- Goals of ASCN
- (1) Promotion of cooperation among cities involved in smart city development
- (2) Developing promising projects in cooperation with the private sector
- (3) Promote cooperation in fundraising and other activities from partners outside the region
- Each city selects priority areas (transportation, water quality, energy, public services, ICT, etc.) according to its own needs

ASEAN countries and demonstration cities (26 cities in 10 countries)				
Indonesia (Jakarta, Banyuwangi, Makassar)	Cambodia (Phnom Penh, Battambang, Siem Reap)	Singapore	Thailand (Bangkok, Chonburi, Phuket)	Philippines (Manila, Cebu, Davao)
Brunei (Bandar Sri Bhagawan)	Vietnam (Ho Chi Minh City, Da Nang,Vietnam) (Hanoi)	Malaysia (Kuala Lumpur, Kuching, Johor Bahru, Kota Kinabalu)	Myanmar (Yangon, Mandalay, Nay Pyi Taw)	Laos (Vientiane, Luang Prabang)

ASEAN-Japan High-Level Meeting on Smart City Network

• This event was held to effectively disseminate information on Japan's smart cities and "high-quality infrastructure" to ASEAN countries, which are experiencing rapid urbanization, and to cooperate in the promotion

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By utilizing the international networks and multilateral frameworks of UNCRD, it is possible to promote the overseas development of Japan's knowledge, technology, and know-how regarding urban and regional policies and measures.



<u>Main Urban Challenges</u>



Environmental footprints of cities are quite alarming and can threaten the natural resources required to sustain the economic development and poverty alleviation rates. Maintaining economic growth, while creating sustainable livable cities for all, is the biggest urban challenge.

> Sources: compiled from UN Environment, & United Nations, 2012, UN HABITAT, 2016 http://web.unep.org/asiapacific/sustainable-cities



United Nations Centre for Regional Development (UNCRD)

Release of "Handbook for SDGs Monitoring by Local Governments"



Thank you very much for your attention!

