



The Future of Asia and Pacific Cities Report 2019 Thematic consultation on Smart Cities in Asia and the Pacific

15:00-18:00, 10 July 2018

Room 4812, Level 4, Simpor Junior ballroom, Marina Bay Sands Expo & Convention Centre, Singapore

CONCEPT NOTE and PROGRAMME

I. Background

The speed and scope of urbanization in Asia and the Pacific is unprecedented. Between 1980 and 2010, the region's cities grew by around one billion people, and by 2014, 55 percent of the worldwide population was living in Asia and the Pacific.¹ This growth will continue-- United Nations projections show the region's cities will add another one billion by 2040.² This rapid urbanization has contributed to a number of development challenges; it is estimated up to 65 per cent of the Sustainable Development Goal targets will need to be met in or by cities.³ The region's development prospects will increasingly depend on how its cities are managed, and the future success of sustainability in Asia-Pacific cities will to a great extent determine the future state of the planet and the sustainability of the global population's shared prosperity. As a result, the Asia-Pacific region is primed to serve as a 'possibility space' for re-imagining the built and natural environments that can emerge or be strengthened in cities.

The concept of Smart Cities is one way to re-imagine the region's cities and may provide a pathway towards equitable and sustainable cities. Though there is no universal definition of a Smart City, it generally refers to a city in which traditional infrastructure is integrated and coordinated with ICT and other new digital technologies. Smart Cities promise both the automation of routine functions that serve individual people, buildings, and traffic systems, but also the capabilities and capacities to be able to monitor, understand, analyse, and plan a city to improve the efficiency, equity, and quality of life for its citizens in real time, whilst reducing the city's environmental impacts and emissions. Therefore, Smart City strategies support or encompass some or all of the following: buildings, transportation, energy, water, waste management, public safety, disaster warning and response, education, and governance and administration. The concept is rapidly gaining traction in the Asia-Pacific region. It is estimated that investments in the technologies that enable Smart City initiatives

¹ UN-Habitat and ESCAP, The State of Asian and Pacific Cities 2015 (UN-Habitat and ESCAP, 2015).

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³ Philipp Misselwitz and Jesús Salcedo Villanueva, "The Urban Dimension of the SDGs: Implications for the New Urban Agenda", in *Sustainable Development Goals and Habitat III: Opportunities for a successful New Urban Agenda* (Brussels, Cities Alliance, 2015).

⁽http://www.citiesalliance.org/sites/citiesalliance.org/files/Opportunities%20for%20the%20New%20Urban%2 OAgenda.pdf).

⁴ M. Batty and others, "Smart cities of the future", *The European Physical Journal Special Topics*, 214(1), pp.481-518 (https://link.springer.com/content/pdf/10.1140%2Fepjst%2Fe2012-01703-3.pdf). ⁵ Ibid.

will reach \$28.3 billion in 2018 in the Asia-Pacific region (excluding Japan), and that this spending will accelerate, reaching \$45.3 billion in 2021.⁶

However, there are potential challenges and limitations of developing Asia-Pacific's cities using a Smart Cities approach. For example, top-down or technocratic approaches to Smart Cities risk not being participatory and not capturing or responding to the needs of citizens. Smart Cities in developing countries also need to overcome the digital divide, which falls along social, economic, generational, and gender lines. For example, though the proportion is increasing rapidly, only 43 per cent of people in Asia-Pacific were internet users in 2016. Data for Smart Cities is also an issue, both in the quality availability, ownership, transparency and accountability, security, and whether citizens' rights to privacy and political activity are respected.

There are a variety of examples of Smart City initiatives in the Asia-Pacific region. The ASEAN Smart Cities Network, supported by the Government of Singapore through its ASEAN Chairmanship, aims to facilitate cooperation on Smart Cities development. The initiative will work with 26 pilot cities to catalyze bankable projects with the private sector, and secure funding and support from ASEAN's external partners, whilst recognizing the need to focus on local priorities and cultural contexts. In India, the Smart Cities Mission, administered by the Ministry of Housing and Urban Affairs, seeks to retrofit and redevelop existing areas, including slums, into better planned ones, and develop new greenfield areas around cities in order to accommodate expanding urban populations. Countries such as Singapore and the Republic of Korea are also investing in Smart Cities, with an emphasis on technology, connectivity, efficiency, urban density, and environmental sustainability. These examples represent different approaches in the region, driven by different stakeholders (national government versus city-driven, with different roles for private national and multinational corporations). They also reflect the various understandings and conceptualizations of the term Smart Cities, and the multifaceted and disruptive potential of the concept to contribute to sustainable and equitable cities in the region.

The Future of Asia and Pacific Cities 2019 Report

ESCAP (The United Nations Economic and Social Commission for Asia and the Pacific) is producing a major Report on cities in the Asia-Pacific region, titled the *Future of Asia and Pacific Cities 2019* Report, that will be launched at the seventh Asia-Pacific Urban Forum during Q3 2019. It will be a policy advocacy Report, and its purpose will be to support inclusive and sustainable long-term thinking and decision-making by national and local governments by providing a conceptual framework for solutions to the problem of localizing the global agendas in Asia-Pacific cities. To these ends the Report will critically assess and provide knowledge and best practices of the means of implementation on a range

(https://www.researchgate.net/publication/313074360 Big Data in Smart Cities?enrichId=rgreq-c058b08f04ccd01ff1ff60fe07b338d0-

 $\frac{XXX\&enrichSource=Y292ZXJQYWdlOzMxMzA3NDM2MDtBUzo0NTYyOTE4ODI2NzIxMjhAMTQ4NTc5OTg3MTAwMg%3D%3D\&el=1 x 2\& esc=publicationCoverPdf).$

(http://asean.org/storage/2018/04/Concept-Note-of-the-ASEAN-Smart-Cities-Network.pdf).

⁶IDC, First-ever IDC Smart Cities Spending Guide Expects Technologies Enabling Smart Cities Initiatives to Reach \$28.3 Billion in 2018 (IDC, 22 March 2018) (https://www.idc.com/getdoc.jsp?containerld=prAP43679518).

⁷ Ayona Datta, *Three big challenges for smart cities and how to solve them*, (The Conversation US, 9 June 2016) (https://theconversation.com/three-big-challenges-for-smart-cities-and-how-to-solve-them-59191).

⁸ ESCAP Online Statistical Database based on data from the ITU, 20 February 2018 (Available from http://data.unescap.org/escap_stat/ (accessed 10 May 2018)).

⁹ Archit Grover and Neelu Walia, *Big Data in Smart Cities* (Carleton University, 2015)

¹⁰ ASEAN, ASEAN Smart Cities Network Concept Note (ASEAN, 2018)

¹¹ Ministry of Housing and Urban Affairs, the Government of India, What is Smart City (2017) (http://smartcities.gov.in/upload/uploadfiles/files/What%20is%20Smart%20City.pdf).

¹² Celine Delacharlerie, Asia-Pacific is paving the way for Smart Cities (Innovation Is Everywhere, April 2017) (https://www.innovationiseverywhere.com/smart-cities-asia/).

of urban sustainability areas, including the future of urban finance, smart urban data and technologies, resilient city governance, and urban/territorial planning.

The Report is envisaged as more than a publication, but also seeks to strengthen partnerships formed while creating knowledge for the Report through a diverse array of countries and urban stakeholders. This process will engage partners to co-produce the Report's thematic areas, and to co-convene and co-host a series of consultative meetings throughout the Asia-Pacific region to discuss and provide inputs into various chapters. Through such a process, the Report will be produced both *for* and *by* countries in the Asia-Pacific region, and it is expected that consultations will build champions, with the participants developing ownership over the Report and taking forth knowledge and recommendations. Participants will be contributing to a major policy advocacy Report on cities in the region, and this Report and the process of producing it will inform the thematic areas and structure of the seventh Asia-Pacific Urban Forum.

To these ends, ESCAP and Singapore's Centre for Liveable Cities (CLC) are partnering to develop the Report's chapter on the Future of Smart Urban Data and Technologies, which will focus on how cities in the region can create sustainable communities and contribute to achieving the SDGs through the application of data innovations and Smart City development, and will highlight issues around the governance of Smart Cities, the digital divide, the gaps in technical capacities and skills to implement and run smart systems, data limitations, and privacy concerns.

Thematic consultation on Smart Cities in Asia and the Pacific

As part of this process, ESCAP, in partnership with CLC will host a thematic consultation on Smart Cities in Asia and the Pacific. The purpose of this consultation is to provide stakeholder inputs for the overall *Future of Asia and Pacific Cities 2019* Report on the key thematic area of Smart Cities. It will focus on a review of challenges and future opportunities related to Smart Cities in Asia and the Pacific. The consultation will take place during the afternoon of 10 July 2018 at Marina Bay Sands, Singapore, during the World Cities Summit.

II. Objectives

The overall objective of the thematic consultation on Smart Cities in Asia and the Pacific is to generate valuable inputs into the *Future of Asia and Pacific Cities 2019* Report by engaging stakeholders, senior policymakers, experts, and Smart Cities specialists to:

- Review the overall issues and assess the sustainability of smart cities in Asia and the Pacific, and develop recommendations for public, private and civil society organisations for future urban data and smart cities initiatives.
- 2. Broaden the knowledge base regarding smart cities through the elaboration of international good practices and knowledge partnerships.
- Build ownership for the Report and encourage participants to become champions, to take its knowledge and recommendations forward, and to disseminate, and raise awareness within their networks.

III. Outcomes

The expected outcomes of the thematic consultation on smart cities in Asia and the Pacific are threefold:

1. Validation of the overall narrative and structure of the Report's focus on smart cities, data and technology.

- 2. A more granular and regionally-specific understanding of the challenges and future opportunities of smart cities in Asia and the Pacific, to generate examples of best practices and case studies that can feed into the Report, including empirical evidence on what smart city strategies have and have not worked.
- 3. Confirmation of timeline and thematic working group for the Report on smart cities, technologies and data.

IV. Organisation and participation

In order to obtain multi stakeholder inputs and buy in for the *Future of Asia and Pacific Cities 2019* Report's focus on the issue of Smart Urban Data and Technologies from a wide array of stakeholders and member states in Asia and the Pacific, the participants at the consultation will include a mixture of representatives from national and local governments, civil society organisations, academia, the private sector, and development partners. They will be supported by additional participants from the host city, Singapore, the chapter partner, CLC, and from the organiser, ESCAP.

The programme for the consultation will be organised around five key questions that frame the challenges and future opportunities related to Smart Cities in Asia and the Pacific:

- a. How will smart applications of technologies and data in the region change the built form, environment, and socio-economic fabric of cities in future?
- b. How can smart solutions be scaled up recognizing different challenges within cities, across countries and sub-regions?
- c. What are current good practices and emerging examples of smart cities in the region which address sustainability, taking into consideration compatibility with current systems, greater flexibility and openness, the capacity of stakeholders (such as municipal workers and the public), and the technology's appropriateness to the city?
- d. How can smart city strategies and initiatives be localized through participatory and multi stakeholder processes? What policies and technologies can provide robust ICT infrastructure to help overcome the digital divide and ensure that no one is left behind in making cities smarter?
- e. Who are the different 'smart city champions' that can help distill guiding principles and promote good practices at the city level?

The purpose of the meeting will be communicated to the participants in advance, and there will be a call for ideas, experiences, and good practices which the participants could then present at the event. A networking lunch will be provided for all the participants. In the afternoon there will then be a closed meeting amongst the partners of the Report to take the outcomes of the consultation forward.

V. Programme

The following programme is expected to last three hours:

15:00-15:05	Registration at the door
15:05-15:25	 Opening and Introduction Opening statements from Dr. Stefanos Fotiou, Director, Environment and Development Division, ESCAP and Mr. Teng Leng Lim, Deputy Director, Centre for Liveable Cities, Ministry of National Development, Singapore (5 minutes) Introduction to the Future of Asia and Pacific Cities 2019 Report from Mr. Curt Garrigan, Chief, Sustainable Urban Development Section, ESCAP (15 minutes)
15:25-16:15	 Impact presentations on Smart Cities in Asia-Pacific Presentation from Mr Yimin Zhou, Senior Assistant Director, Research cluster lead (Smart Cities and Complexity) on the challenges, good practices, and future opportunities of Smart Cities in Asia and the Pacific, with a focus on the ASEAN region (10 minutes) Presentation from Ms. Lara Arjan, Urban Development Specialist, Asian Development Bank (TBC) on Smart City applications and financing in Asia-Pacific (10 minutes) Discussant: Mr. Emani Kumar, ICLEI South Asia (5 minutes) Plenary discussion where the participants can give responses to the presentations and provide feedback on the thematic areas of the Report (30 minutes)
16:15-16:30	Coffee/tea break, outside of room (15 minutes)
16:30-17:50	 Breakout group discussions on five key questions around smart cities in Asia and the Pacific (60 minutes). Breakout discussions will be followed by presentations of recommendations by each group in plenary (20 minutes). Participants in each group will be predetermined to ensure there is sufficient relevant expertise on each topic. Each group will discuss one question, and the five questions will be: a. How will smart applications of technologies and data in the region change the built form, environment, and socio-economic fabric of cities in future? b. How can smart solutions be scaled up - recognizing different challenges within cities, across countries and sub-regions? c. What are current good practices and emerging examples of smart cities in the region which address sustainability, taking into consideration compatibility with current systems, greater flexibility and openness, the capacity of stakeholders (such as municipal workers and the public), and the technology's appropriateness to the city? d. How can smart city strategies and initiatives be localized through participatory and multi stakeholder processes? What policies and technologies can provide robust ICT infrastructure to help overcome the digital divide and ensure that no one is left behind in making cities smarter? e. Who are the different 'smart city champions' that can help distil guiding principles and promote good practices at the city level?
17:50-18:00	Next steps and closing remarks from ESCAP and CLC, including evaluation forms (10 minutes total)
	(10 minutes total)

Map to Room 4812, Level 4, Simpor Junior ballroom

