



United for Smart Sustainable Cities (U4SSC) initiative
Fifth meeting of the United for Smart Sustainable Cities initiative
Virtual meeting, 9 October 2020

Meeting Report - version 9 November 2020

1. Introduction

The ["United for Smart Sustainable Cities" \(U4SSC\)](#) is a United Nations initiative coordinated by the International Telecommunication Union (ITU), the United Nations Economic Commission for Europe (UNECE), and the United Nations Human Settlements Programme (UN-Habitat). U4SSC is supported by the following 14 UN Agencies and Programmes:

- Convention on Biological Diversity (CBD)
- Economic Commission for Latin America and the Caribbean (ECLAC)
- Food and Agriculture Organization (FAO)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nations Development Programme (UNDP)
- United Nations Economic Commission for Africa (UNECA)
- United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women)
- United Nations Environment Programme (UNEP)
- United Nations Environment Programme Finance Initiative (UNEP-FI)
- United Nations Framework Convention on Climate Change (UNFCCC),
- United Nations Industrial Development Organization (UNIDO)
- United Nations Office for Partnerships (UNOP)
- United Nations University-Operating Unit on Policy-Driven Electronic Governance (UNU-EGOV) and
- World Meteorological Organization (WMO).

U4SSC was conceptualized to achieve **Sustainable Development Goal 11: "Make cities and human settlements inclusive, safe, resilient and sustainable"**. Since its inception in 2016, it has been a global platform advocating for public policy and encouraging the use of ICTs to facilitate and ease the transition to Smart Sustainable Cities (SSCs).

The [**Fifth meeting of the U4SSC Initiative**](#) was organized by the United Nations Economic Commission for Europe – UNECE, the International Telecommunication Union – ITU and the United Nations Human Settlement Programme - UN-Habitat on 9 October 2020, from 10:00 to 16:05 CET (Geneva time). The meeting took place online on WebEx with a limited onsite participation at the Palais des Nations, Geneva, Switzerland. This meeting brought together leading specialists in the field, such as city planners, engineers, designers, policymakers, government officials, regulators, academia, and standards experts.

The list of participants (onsite and online) can be found in Annex 1.

2. Objectives and Programme

The objectives of the Fifth U4SSC meeting were to:

- Discuss the application of KPIs for smart sustainable cities to support achieving SDG11 and other urban related SDGs;
- Provide updates on the U4SSC activities;
- Provide updates on the work of the U4SSC thematic groups; and
- Discuss U4SSC working methods the draft Terms of References and the draft Work Plan 2020-2021.

The programme and the presentations of the Fifth U4SSC Initiative can be found at: <https://www.itu.int/en/ITU-T/ssc/united/Pages/202010/meeting.aspx>. The list of participants is in Annex 1.

3. Highlights of the discussions

3.1. Opening of the Meeting

The meeting was opened by **Ms. Olga Algayerova, UNECE Executive Secretary**, who underlined the importance the U4SSC as a global platform for the exchange of best practices and knowledge to assist cities with the implementation of the 2030 Agenda for Sustainable Development and achieving urban-related SDGs. She thanked the ITU and the UN-Habitat, members of the U4SSC secretariat, for their support and cooperation. Ms. Algayerova further highlighted that UNECE continues to work on several initiatives on Smart Sustainable Cities and has applied the U4SSC KPIs in 23 cities in the UNECE region. UNECE convened the First UN Forum of Mayors on “City Action for a Resilient Future” (Geneva, 6 October 2020). The Forum gave a voice to the cities in the formal UN process, and culminated in the adoption of the Geneva Declaration of Mayors.

Mr. Chaesub Lee, Director of the ITU Telecommunication Standardization Bureau, congratulated the U4SSC for creating an ecosystem which urban stakeholders who can turn to for guidance on SSC transitions. Mr. Lee highlighted the role that ITU plays in working with its Member States, Sector Member and Academia Members along with other partners, to help cities improve urban infrastructures, leverage ICTs and emerging technologies including artificial intelligence (AI) and the Internet of Things (IoT) for responding to climate change, attaining the Sustainable Development Goals (SDGs), and other targets within the New Urban Agenda (NUA). He further elaborated on the importance of the ITU-T Study Group 20 on the Internet of Things and Smart Cities & Communities in conducting standardization activities relating to overarching urban goals, key measures to monitor SSC progress, and determining critical capabilities for the incorporation of technologies to become SSCs.

Mr. Raf Tuts, Director, Global Solutions Division, UN-Habitat, outlined UN-Habitat’s commitment to utilizing technology for all facets of life in cities, especially during the COVID-19

pandemic and announced the creation of their flagship programme on “People-focused Smart Cities” to realize sustainability, inclusivity, prosperity and human rights within the urban realm.

Mr. Nasser Saleh Al Marzouqi, Chairman of the U4SSC, thanked all the partners, members and meeting participants for supporting the U4SSC throughout the novel-corona virus pandemic. With the U4SSC KPIs being implemented in over 100 cities, he acknowledged and appreciated the commitment and dedication of the partners in continuing to help cities become SSCs.

The U4SSC Chairman commended the ongoing work of the U4SSC Thematic Group on “Economic Recovery in Cities and Urban Resilience-Building in the Time of COVID-19” which has facilitated the inclusion of COVID-19 as a topic, leading the way toward concrete solutions for dealing with the pandemic in the urban context.

Mr. Al Marzouqi also noted the launch of the following U4SSC deliverables:

- Accelerating city transformation using frontier technologies;
- A Guide to Circular Cities; and
- Blockchain for Smart Sustainable Cities.

3.2. Welcome Remarks

Ms. Beatrice Ferrari, Director International Geneva, Canton of Geneva; and Board Member of the Geneva Cities Hub, highlighted the importance of U4SSC meetings in fostering collaboration between local governments and international bodies, as they help raising awareness of and facilitating the dialogue on issues of data transparency and storage for SSCs, while encouraging citizen engagement in the overall process.

3.3. Session 1: Application of U4SSC KPIs for smart sustainable cities to support achieving SDG11 and other urban related SDGs

This session was moderated by Ms. Kari Eik, Secretary-General of the OiER.

The session addressed the following questions:

- a) How can the application of KPIs for smart sustainable cities help cities to achieve SDGs and promote the implementation of the 2030 Agenda on Sustainable Development?
 - b) What are the experiences and good practices?
 - c) What are the recommendations that urban stakeholders can adopt in the future based on existing SSC practices?
- **Ms. Cristina Bueti**, ITU Focal Point on Smart Sustainable Cities, provided a brief overview of the role of ITU in contributing to the global SSC standards landscape. Ms. Bueti highlighted the activities of ITU-T Study Group 20 on IoT and Smart Cities and Communities in developing international standards (known as ITU-T Recommendations) to enable the smart and sustainable transformation of cities and communities worldwide. These standards cover a range of areas on urban operations interoperability, planning, guidance for city leaders, stakeholder management, smart city security, accessibility, emergency response etc. In addition to serving as the U4SSC Secretariat, ITU is working closely with the U4SSC on the implementation and updating of the U4SSC KPIs and all

Thematic Groups including *City Platforms* and *U4SSC Index*.

- **Ms. Agata Krause**, Consultant, UNECE Housing and Land Management Unit, underscored the development of Smart Sustainable City Profiles for 17 cities, including for cities in Norway, Nur-Sultan and Almaty, Kazakhstan; Bishkek, Kyrgyzstan; Grodno, Belarus; Tbilisi, Georgia; and Podgorica, Montenegro. To further aid the use of the U4SSC KPIs, UNECE has encouraged the development of Voluntary Local Reviews (VLRs) for cities to document their progress towards the implementation of the 2030 Agenda for Sustainable Development.
- **Mr. Kristian Mjøen**, Head of Geneva UN Charter Centre of Excellence on Sustainable Development Goals City Transitions in Trondheim, presented updates on the first national U4SSC KPIs project in Norway. The Centre is spearheading its efforts to measure and report on the smart sustainable journey both at the local and national levels. In this context, the Centre is working closely with the U4SSC Implementation Programme (U4SSC-IP) for data collection, identification of knowledge-based methods, and development of national and local testbeds for sustainability. With ten Norwegian cities forming a part of the evaluation progress (and 20 more expected to follow), this national project has been recognized by the European Commission and has paved the way to the establishment of the first city network of excellence.
- **Mr. Zhassulan Kenzhagaliyev**, Head of the Centre for the Development of Innovation Ecosystem and International Cooperation of “Astana Innovations”, City of Nur-Sultan, Kazakhstan, presented updates on the implementation of the U4SSC KPIs in the city of Nur-Sultan. Mr. Kenzhagaliyev highlighted that the U4SSC KPIs were being leveraged for garnering additional investments for the SSC transition. The presentation underscored that the Nur-Sultan’s KPIs project had evolved from an initial cooperation between UNECE and Astana Innovations on an SSC pilot project to the development of an SSC profile for the city. Following the training to the relevant staff, the city’s data for 2019 was collected for verification and analysis based on the U4SSC KPIs. The results were presented at the 81st session of the UNECE Committee on Urban Development, Housing, and Land Management in October 2020 in Geneva. In 2021, the Centre plans to collect data for U4SSC KPIs for the year 2020.

Towards the end of the session, it was noted that the U4SSC KPIs are expected to be refined based on feedback received from city implementation experiences. To expedite the process of reporting, a web-tool will be developed by ITU in 2021, using which cities can directly provide data for the verification process. This tool will provide the facility to secure sensitive data (as per GDPR and other privacy rules within a given country), while including the provision for making certain types of data public based on the city’s consent. WMO pointed the need to review the U4SSC KPIs based on the experience learnt from cities that have implemented them and called for a joint UN effort to achieve this goal.

3.4. Session 2: Update on U4SSC activities

This session “Update on U4SSC Activities” was moderated by Ms. Cristina Bueti, ITU Focal Point on Smart Sustainable Cities.

The session provided an overview of the different U4SSC deliverables:

- **Ms. Soumaya Ben Dhaou**, Research Coordinator, UNU-EGOV and Leader of Thematic Group on Blockchain 4 Cities [[Presentation](#)], provided a snapshot of the report on “Blockchain for Smart Sustainable Cities” which explores the role of blockchain technologies in designing an efficient, secure and scalable distributed architecture, to address the significant challenges related to interoperability protocols, security and privacy, data collection and sharing, data analytics, and latency within aspiring smart cities. Through the analysis of various use-cases, the report proposes the ‘4S’ framework (Situation, Sustainability, Smartness and the Suitability) and a series of recommendations for consideration before using blockchain technologies in smart cities.
- **Mr. Sang Ziqin**, China Information Communication Technologies Group, China; and **Mr. Tomás Llorente**, Collado Villalba town, Spain; the Leaders of the Thematic Group on the impact of frontier technologies in cities [[Presentation](#)], underscored the findings of the published U4SSC report on “[Accelerating city transformation using frontier technologies](#)”, which delves into the transformative potential of frontier technologies – such as AI, IoT, digital twins, unmanned aerial vehicles/drones, wearable technologies, and virtual/augmented reality – in cities. The report highlighted the technical urban challenges encountered when implementing these technologies through various case studies. It concluded with a brief examination of the vital role of standardization in addressing challenges associated with the incorporation of frontier technologies in cities (with a view to achieve the SDGs and targets within NUA). This deliverable was published in September 2020.
- **Mr. Okan Geray**, Strategic Planning Adviser, Smart Dubai Office, UAE, and Leader of Thematic Group on Guidelines on strategies for circular cities [[Presentation](#)], presented the published report on “[A Guide to Circular Cities](#)”, which underlines a four step methodology to be followed by cities looking to promote circularity and urban sustainability. This deliverable was published in June 2020.
- **Ms. Kari Eik**, Secretary General, OiER, highlighted the aim of [U4SSC Implementation Programme \(U4SSC-IP\)](#) in the implementation of projects and initiatives for the establishment of SSCs worldwide. As a part of its first national endeavor, the 5-year U4SSC project in Norway is underway. Deriving from Norway’s experience, national hubs will be established to build bridges between cities in various regions and lay the foundation for facilitating collaboration between stakeholders to share experiences relating to their respective SSC transitions.

3.5. Session 3: Update on the work of the U4SSC thematic groups

The session was moderated by Mr. Robert Lewis-Lettington, Chief of Land, Housing, and Shelter Section at the Urban Practices Branch, Global Solutions Division, UN-Habitat.

This session presented the latest updates on the U4SSC Thematic Groups for the coming year:

- **Mr. Alberto Bernal**, City of València, Spain [[Presentation](#)], presented information on the progress of work of the **Thematic Group on City Platforms** on behalf of Ramón Ferri, Smart City Officer, the Thematic Group Leader. This Thematic Group aims to describe the best practices in integrated city management using city platforms (Working Group 1), the state of ICT in intelligent public health management (Working Group 2), new architecture of city platforms predicated on emerging technologies (Working Group 3), and the prospects of implementation in different environments including on health management (Working Group 4). Over 100 submissions are expected from experts including researchers, technical experts, relevant professionals, regulations and standards, and smart cities.
- **Ms. Gulnara Roll**, Secretary to the Committee on Urban Development, Housing and Land Management, UNECE, and Leader of the **Thematic Group on Economic Recovery in Cities and Urban Resilience Building in the Time of COVID-19** [[Presentation](#)], informed the participants about the activities of this Thematic Group. This new Thematic Group aims to facilitate exchange of experiences and information on economic recovery in cities and building urban resilience in the time of COVID-19 and post-COVID-19. In line with its illustrated work plan, this thematic group will function between 2020-2021 and is expected to develop a report along with related case studies on city action plans for economic recovery in cities and urban resilience building during COVID-19 times.
- **Ms. Nadia Yeremenko**, Coordinator of the **Thematic Group on Innovative Financing Instruments for Smart Sustainable Cities**, and **Mr. Raul Garcia**, UNECE expert on innovative financing [[Presentation](#)], presented information on the activities of their Thematic Group. The Guidelines were prepared under the auspices of this Thematic Group and cover a range of topics including outlining SSC projects, SSC investor framework and their objectives, investable projects for sustainable development, and the impact of COVID-19 on SSC investments. In the wake of the COVID-19 crisis, the Thematic Group aims to develop a “Compendium of Best Practices of Financing Sustainable Smart Cities Projects”, underscoring the importance of SSC financing instruments for recovery from the pandemic.
- **Mr. Okan Geray**, Strategic Planning Advisor, Smart Dubai Office, UAE, and Leader of the **Thematic Group on Guiding Principles for Artificial Intelligence in Cities** [[Presentation](#)], informed the participants about the activities of this Thematic Group. This Thematic Group focuses on developing principle-based frameworks for the adoption of AI in cities. The overall framework will cover governance principles, implementation methodologies and case studies on AI integration in SSCs. As the next step, the leadership structure of the Thematic Group was designated. For the further work of this Thematic

Group, a unified draft document on WG deliverables will be compiled and finalized (in Q2 of 2021).

- **Ms. Soumaya Ben Dhaou**, Research Coordinator, UNU-EGOV, and **Ms. Judy Backhouse**, Senior Academic Fellow, UNU-EGOV; leaders of three **Thematic Groups on Simple Ways to be Smart, The Practitioner Guide to Measure Smart Sustainable Cities and Practitioner Guide to Monitor Smart Sustainable Cities** [[Presentation](#)], provided information on activities of the Thematic Group on Simple Ways to be Smart. This thematic group focuses on underscoring smart solutions to improve city administration, decision-making, infrastructure, quality of life, economic success and communication. The deliverable being developed by this Thematic Group will cover cost effective solutions for SSC transitions, while creating a step by step approach for stakeholders to conceive their own SSC solutions for deployment. The draft of this deliverable is expected to be made available by the end of October 2020 for its finalization.
- **Mr. Warren Smith**, Global Digital Marketplace Programme Director, Government Digital Service, UK, and Leader of the **Thematic Group on Procurement Guidelines for Smart Sustainable Cities** [[Presentation](#)], reported on activities of this Thematic Group. It explores public procurement of ICTs (in terms of digital buying) as a catalyst for achieving the SDGs. It has successfully engaged with various cities across 16 countries. This Thematic Group will create a roadmap to map new features and meet user needs that emerged during the research and testing phases, thereby allowing for exchange for information and direct learning for user-experience.
- **Ms. Barbara Kolm**, Director of Austrian Economics Centre, and Leader of the **Thematic Group on U4SSC Index** [[Presentation](#)], provided information on activities of this Thematic Group. It is working on a global city ranking based on KPIs for benchmarking a city's performance as part of its strategic goals and SDGs. This Index is being developed based on feedback from U4SSC KPIs pilots in over 100 cities worldwide, along with inputs from key experts. It will allow cities to learn from each other in a transparent way while providing the margin for meaningful comparisons as and when required.

Information on progress of work of the U4SSC thematic groups is available at <https://www.itu.int/en/ITU-T/ssc/united/Pages/thematic-groups.aspx>.

3.6. Session 4: U4SSC working methods and Terms of References and Annual Work Plan

This session was moderated by Ms. Paola Deda, Director, Forests, Land and Housing Division.

UNECE informed the participants that this session was open to U4SSC Partners only.

- **Management Team:** Proposals for new Vice-Chairs were circulated by the U4SSC Secretariat prior to the meeting:
 - ITU proposed the appointment of the following candidates for the Vice-Chair position:
 - H.E. Ms. Katrina Naut, Ambassador, Permanent Representative, Mission of the Dominican Republic to the UN in Geneva; and

- Ms. Tania Marcos, Head of Quality and Smart Cities, Spanish Association for Standardization.
- UNECE proposed one candidate for the Vice Chair position:
 - Mr. Giampiero Bambagioni, Vice-Chair of the Committee on Urban Development, Housing and Land Management of UNECE, Italy.

Partners agreed with aforementioned appointments and welcomed the new Vice-Chairs to the U4SSC.

- *Feedback on U4SSC processes:* Representatives of the partner organizations were invited to share their experiences on the organization of work, working methods and related processes:
 - UNU-EGOV raised concerns on the receipt of comments and inputs on the scope of deliverables during the finalization process. Based on the discussions, the meeting agreed to invite UN entities to provide their input/perspectives during the initial drafting phases. It was agreed that comments on the final draft would be reserved for correcting factual mistakes or editorial oversight.
 - The meeting agreed that the quality of deliverables and their development would be the responsibility of the sponsor(s) and author(s).
 - It was agreed that henceforth, the U4SSC disclaimer would state that the concerned deliverables have been through an editorial review to ensure quality control and factual correctness of the content.
 - Due to connection issues experienced during the meeting, UNU-EGOV provided additional comments via email.
- *U4SSC Partners list:* It was noted that the email list of U4SSC partners which comprises representatives of the UN bodies designated as focal points for the U4SSC needs to be updated based on active representatives. U4SSC partners were invited to provide confirmation of their respective focal points.
- *U4SSC Terms of Reference:* The updated draft U4SSC Terms of Reference (ToR) was circulated with U4SSC Partners on 8 October 2020 (a day before the meeting) and comments were invited on the revised draft:
 - ITU raised concerns on concluding this meeting without the approval of the ToR. It was further noted that given the limited time for review, many organizations would not have the time to provide inputs on the current draft ToR.
 - In keeping with the time limitations, UNECE invited member to provide their feedback by 9 November 2020. An online meeting with all partners will be adjourned following the receipt of comments in order to adopt the revised Terms of Reference.
- *Annual Work Plan:* While Thematic Group leaders presented their work during the course of this meeting, no work plan document was prepared. It was agreed to develop the annual work plan shortly after the meeting. The updated Annual Work Plan will be circulated to all partners. It is included as Annex 2 with this meeting report.

4. Closure of the session

Ms. Paola Deda thanked the U4SSC participants for their dedication towards the initiative and expressed her gratitude to them in taking the work further through the various Thematic Groups and deliverables.

Ms. Paola Deda reiterated that discussions on the Work Plan and the Terms of Reference will continue in a session to be organized by the end of 2020 with the participation of the U4SSC Partners and the Management Board.

This session ended at 16:00.