ITU-T Study Group 20 "IoT and Smart Cities and Communities"

International Telecommunication Union (ITU)

WHO WE ARE:

ITU is the UN specialized agency for information and communication technologies (ICTs)

WHAT OUR ROLE IS:

To facilitate peaceful relations, international cooperation between peoples, and economic and social development by means of efficient telecommunications services

PROMOTING GLOBAL COLLABORATION FOR A CONNECTED WORLD

International Telecommunication Union (ITU)

OUR MEMBERS:

193

MEMBER STATES

900+

COMPANIES, UNIVERSITIES, AND INTERNATIONAL AND REGIONAL ORGANIZATIONS

3 SECTORS:

Each sector has separate mandate, but all work cohesively towards connecting the world

STANDARDIZATION

DEVELOPMENT

RADIOCOMMUNICATION

ITU Resolutions on IoT and Smart Cities and Communities (1)

Resolution 197 – Facilitating the Internet of things and smart cities and communities

Resolves,

- to promote investment in and development of IoT in order to support the SDGs;
- to continue and further develop studies and activities on IoT and SSCCs, in order to promote their development.

Instructs the Directors of TSB and Radiocommunication Bureau:

1 to support the work of relevant ITU-T and ITU-R study groups on IoT and SSCCs and to facilitate the emergence of diverse services in the globally connected world, in collaboration with relevant sectors;

2 to continue cooperation with relevant organizations, including SDOs, for exchanging best practices and disseminating information to increase interoperability of IoT services, through joint workshops, training sessions, joint coordination activity groups and any other appropriate means;

3 to encourage the development of IoT and SSCCs, taking into account the outcomes of the work of the relevant ITU study groups on various aspects of IoT and SSCCs.

ITU Resolutions on IoT and Smart Cities and Communities (2)

Resolution 98 - Enhancing the standardization of Internet of things and smart cities and communities for global development
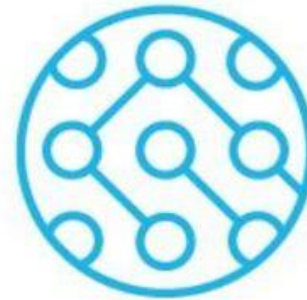
Resolves to instruct Study Group 20 of the ITU-T:

- to develop ITU-T Recommendations aimed at implementing IoT and SC&C, including on issues related to emerging technologies and vertical industries;

- to continue to work on the design of a roadmap and harmonized and coordinated international telecommunication standards for the development of IoT, taking into account the needs of each region and fostering a competitive environment;

- to collaborate with IoT-related standards organizations and other stakeholders such as industry forums and associations, consortia and SDOs, as well as other relevant ITU-T study groups, and to take into account relevant work;

- to collate, evaluate, assess and share IoT use cases from the interoperability and standardization standpoints for data and information exchange.

Connect 2030 Agenda: Innovation

GROWTH   INCLUSIVENESS   SUSTAINABILITY   INNOVATION   PARTNERSHIP

Goal 4 – Innovation: Enable innovation in telecommunications / ICT in support of the digital transformation of society

Resolution 200 (Rev. Dubai, 2018)
Connect 2030 Agenda for global telecommunication / information and communication technology, including broadband, for sustainable development

Target 4.1: By 2023, all countries should have policies / strategies fostering telecommunication / ICT-centric innovation

How ITU supports IoT and Smart Cities and Communities

SUSTAINABLE DEVELOPMENT GOALS

GROWTH INCLUSIVENESS SUSTAINABILITY INNOVATION PARTNERSHIP

Joint IEC-ISO-ITU Smart Cities Task Force

JCA-IoT and SC&C:
Joint Coordination Activity on IoT and Smart Cities and Communities

U4SSC:
United for Smart Sustainable Cities initiative

ITU:
International Telecommunication Union – the UN specialized agency for ICTs

ITU-T Study Group 20:
ITU Study Group on IoT and Smart Cities and Communities

ITU-T's focus on IoT and Smart Cities and Communities

ITU-T Study Group 20 is responsible for:

- studies relating to Internet of things (IoT) and its applications, and smart cities and communities (SC&C);

- studies relating to big data aspects of IoT and SC&C, e-services and smart services for SC&C.

ITU-T Study Group 20: IoT and Smart Cities & Communities

o **Lead Study Group 20 Roles:**

  o Internet of things (IoT) and its applications

  o Smart cities and communities, including e-services and smart services

  o Internet of things (IoT) identification

WP1/20

Q1/20 Interoperability and interworking of IoT and SC&C applications and services

Q2/20 Requirements, capabilities and architectural frameworks across verticals enhanced by emerging digital technologies

Q3/20 IoT and SC&C architectures, protocols and QoS/QoE

Q4/20 Data analytics, sharing, processing and management, including big data aspects, of IoT and SC&C

WP2/20

Q5/20 Study of emerging digital technologies, terminology and definitions

Q6/20 Security, privacy, trust and identification for IoT and SC&C

Q7/20 Evaluation and assessment of Smart Cities and Communities

ITU-T SG20 - Management Team (1)

Chairman: **Nasser Saleh Al Marzouqi**
(Telecommunications and Digital
Government Regulatory Authority
(TDRA))

Vice-Chairmen:

Fabio Bigi (Ministero Dello Sviluppo Economico (Dipartimento Comunicazioni))	**Hyoung Jun Kim** (Electronics and Telecommunications Research Institute (ETRI))	**Oleg Mironnikov** (Ministry for Communication and Informatization)	**Toru Yamada** (NEC Corporation)
Héctor Mario Carril (CeSPI, Universidad Nacional de la Plata)	**Guy-Michel Kouakou** (ARTCI)	**Achime Malick Ndiaye** (Ministere Des Postes Et Des Telecommunications)	
Bilel Chabou (Ministère Des Technologies De La Communication Et De L économie Numérique)	**Abdurahman M. Al Hassan** (National Cyber Security Authority (NCA))	**Ziqin Sang** (China Information Communication Technologies Group)	
Ramy Ahmed Fathy (National Telecom Regulatory Authority)	**Tania Marcos Paramio** (Spanish Association for Standardization (UNE))	**Bako Wakil** (Nigerian Communications Commission)	

ITU-T SG20 - Management Team (2)

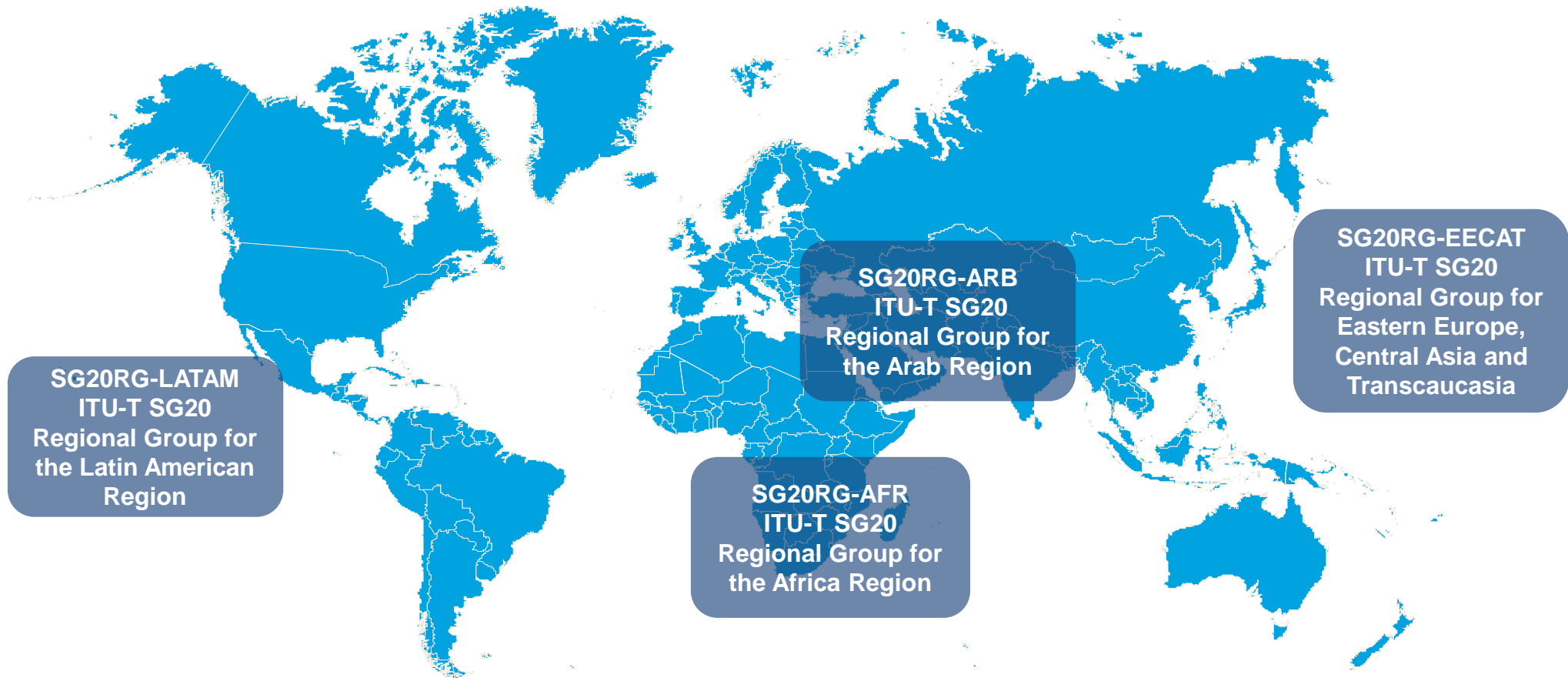|			
WP1/20 Co-chairmen:	**Ramy Ahmed Fathy** (National Telecom Regulatory Authority)	WP2/20 Co-chairmen:	**Harinderpal Singh Grewal** (IMDA)
	Hyoung Jun Kim (Electronics and Telecommunications Research Institute (ETRI))		**Ziqin Sang** (China Information Communication Technologies Group)
WP1/20 Vice-chairman:	**Leonel Hochman** (Ente Nacional de Comunicaciones, Argentina)	WP2/20 Vice-chairmen:	**Abdulhadi Aboualmal** (Etisalat)
			Tania Marcos Paramio (Spanish Association for Standardization (UNE))
		Counsellor:	**Cristina Bueti** (ITU)
		Administrative Assistant:	**Chiara Co** (ITU)

ITU-T SG20 - Regional Groups

SG20RG-EECAT
ITU-T SG20
Regional Group for Eastern Europe, Central Asia and Transcaucasia

SG20RG-ARB
ITU-T SG20
Regional Group for the Arab Region

SG20RG-LATAM
ITU-T SG20
Regional Group for the Latin American Region

SG20RG-AFR
ITU-T SG20
Regional Group for the Africa Region

ITU-T SG20 Regional Group for Latin America (SG20RG-LATAM)

SG20RG-LATAM - Management Team

SG20RG-LATAM Chairman: **Juan Pablo Martín**
(Universidad Tecnológica Nacional, Argentina)

SG20RG-LATAM Vice-chairmen: **Héctor Budé** (URSEC, Uruguay)

Neil Checo
(Instituto Dominicano de las Telecomunicaciones (INDOTEL))

Last Meeting:

📅 13-14 October 2020

📍 Virtual via MyMeetings

ITU-T SG20 Regional Group for Eastern Europe, Central Asia and Transcaucasia (SG20RG-EECAT)

SG20RG-EECAT - **Management Team**

SG20RG-EECAT Chairman: **Alexey Borodin** (PJSC «Rostelecom»)

SG20RG-EECAT Vice-chairman: **Umida Musaeva** (Uzbekistan)

Last Meeting:

📅 16-18 March 2021

📍 Minsk, Belarus

ITU-T SG20 Regional Group for the Arab Region (SG20RG-ARB)

SG20RG-ARB - Management Team

SG20RG-ARB Chairman: **Abdurahman M. Al Hassan**
(National Cyber Security Authority (NCA))

SG20RG-ARB Vice-chairmen: **Ali Abbassene**
(Ministère de la Poste, des Télécommunications, des Technologies et du Numérique (MPTTN))

Abdulhadi Aboualmal (Etisalat)

Khaled Al-Azemi (CITRA)

Bilel Chabou (Ministère Des Technologies De La Communication Et De L économie Numérique)

Ramy Ahmed Fathy
(National Telecom Regulatory Authority)

Last Meeting:

📅 7 October 2019

📍 Riyadh, Saudi Arabia

ITU-T SG20 Regional Group for Africa (SG20RG-AFR)

SG20RG-AFR - Management Team

SG20RG-AFR Chairman: **Bako Wakil** (Nigerian Communications Commission)

SG20RG-AFR Vice-chairmen: **Ali Abbassene**
(Ministère de la Poste, des Télécommunications, des Technologies et du Numérique (MPTTN))

Bilel Chabou (Ministère Des Technologies De La Communication Et De L économie Numérique)

Ramy Ahmed Fathy (NTRA)

Melvin King (Sierra Leone)

Guy-Michel Kouakou (ARTCI)

Emmanuel Manasseh
(Tanzania Communications Regulatory Authority)

Achime Malick Ndiaye
(Ministere Des Postes Et Des Telecommunications)

Next Meeting:

📅 3 June 2021

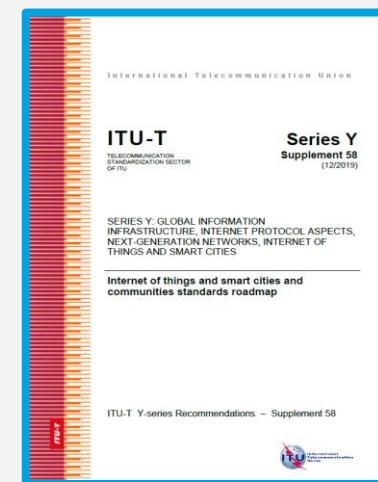📍 Virtual via MyMeetings

Joint Coordination Activity on Internet of Things (IoT) and Smart Cities and Communities (SC&C)

Coordinating ITU-T work on IoT and SC&C

Providing contact point for IoT & applications, including SC&C activities

Presenting the JCA-IoT and SC&C roadmap
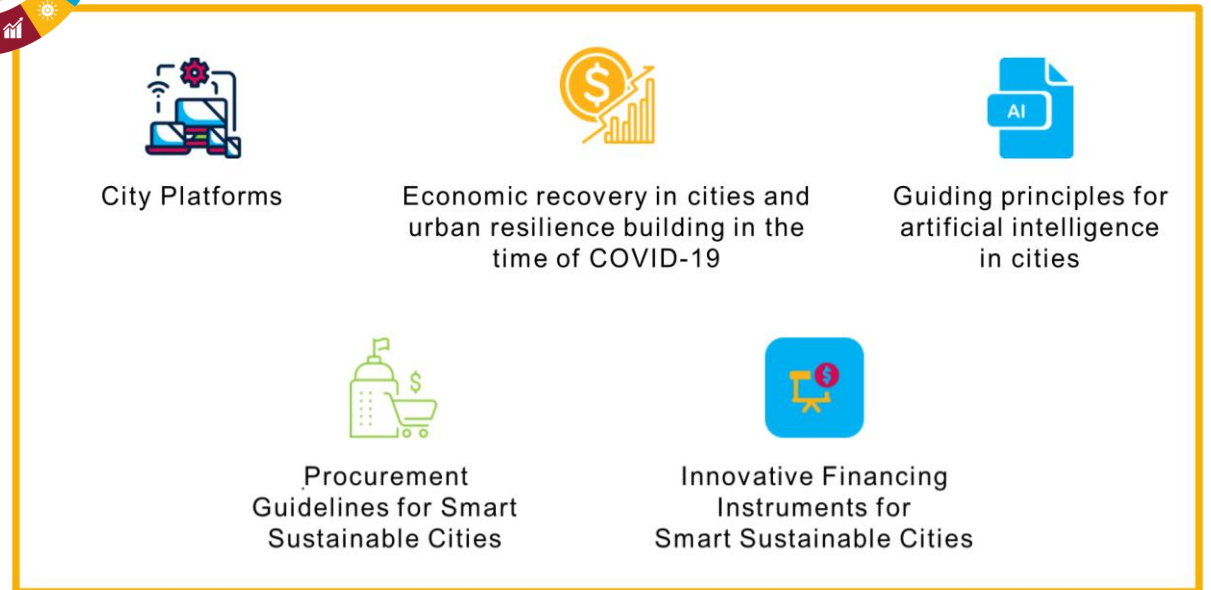
Joint Smart Cities Task Force

United for Smart Sustainable Cities (U4SSC)
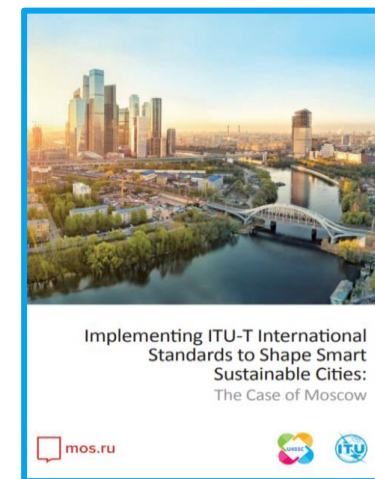
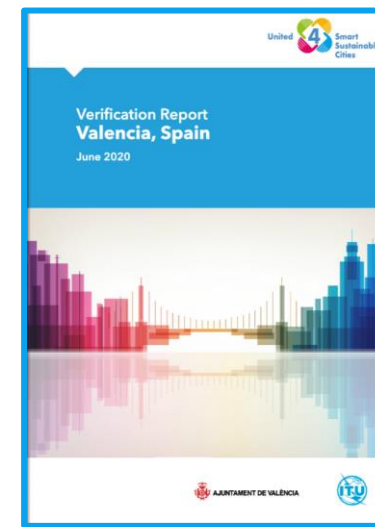

U4SSC Partners

U4SSC Thematic Groups

- City Platforms
- Economic recovery in cities and urban resilience building in the time of COVID-19
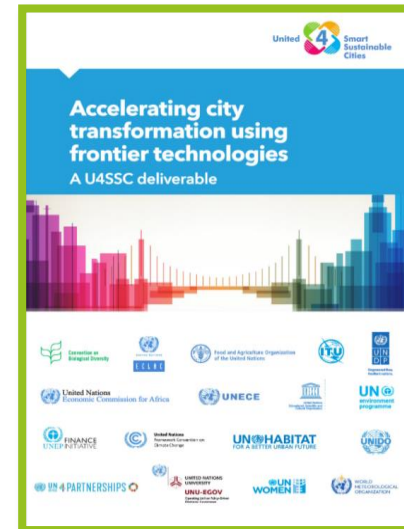- Guiding principles for artificial intelligence in cities
- Procurement Guidelines for Smart Sustainable Cities
- Innovative Financing Instruments for Smart Sustainable Cities

U4SSC KPIs

Collection Methodology for Key Performance Indicators for Smart Sustainable Cities

Currently implemented in:

Dubai	Wels
Singapore	Rana
Moscow	Asker
Riyadh	Haugesund
Valencia	Molde
Bizerte	Trondheim
Montevideo	Bærum
Krimpen aan den Ijssel	Karmøy
Ålesund	Pully
Kristiansund	and **150 more cities**!

City Snapshot
Mashhad, Iran
July 2021

Verification Report
Valencia, Spain
June 2020

Factsheet
Riyadh, Saudi Arabia
June 2020

Implementing ITU-T International Standards to Shape Smart Sustainable Cities:
The Case of Moscow
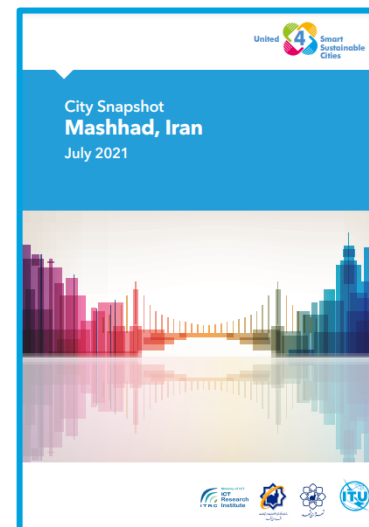
U4SSC Latest Publications
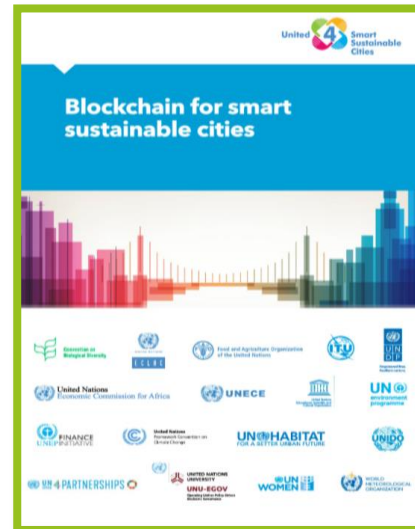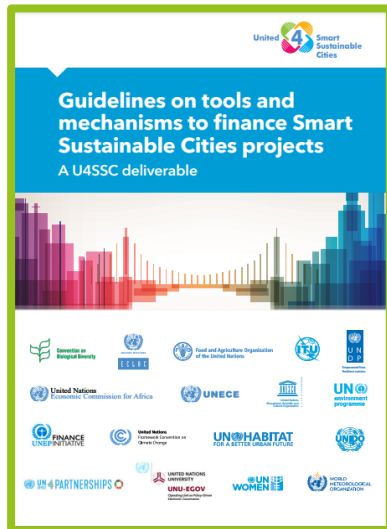
ITU's Global Portal on Environment and Smart Sustainable Cities

Smart Sustainable Cities

Cities' actions to tackle COVID-19

Frontier technologies

Energy efficient ICTs

E-waste and circular economy

Climate Actions

A global resource for policy-makers, regulators, academia and cities

Thank you!

Questions? Interested in learning more?
Let us know!

Email

u4ssc@itu.int

Website

SG20: IoT and Smart Cities and Communities