

## 'Spotlight 2030'

# Smart Cities International Conference (SCIC) 8th Edition, December 3-4, 2020



**PROGRAM** 

#### **VENUE**

Online event using the Cisco Webex platform https://snspa.webex.com/meet/sala.zece



#### **SCIENTIFIC COMMITTEE & REVIEWERS TEAM**

Professor PhD. **Vasile BALTAC**National University of Political Studies and Public Administration, Bucharest;

Professor PhD. Lasse BERNTZEN
University of South-Eastern Norway;

Professor PhD. **Stanisław WRYCZA** University of Gdańsk, Poland;

Professor PhD. **Nicoleta CORBU**National University of Political Studies and Public Administration, Bucharest;

Professor PhD. **Adrian FLOREA** University "Lucian Blaga" of Sibiu;

Professor PhD. **Marta-Christina SUCIU**Bucharest University of Economic Studies;

Professor PhD. **Florina PÎNZARU**National University of Political Studies and Public Administration, Bucharest;

Associate Professor PhD. **Jacek MAŚLANKOWSKI**University of Gdańsk, Poland;

Associate Professor PhD. Florin **Codruţ NEMȚANU**Politehnica University, Bucharest;

Associate Professor PhD. **Dragoș DINCĂ**National University of Political Studies and Public Administration, Bucharest;

Assistant Professor PhD. **Mauro ROMANELLI** University of Naples Parthenope, Naples, Italy;

Associate Professor PhD. **Milena YORDANOVA-KRUMOVA**Technical University-Sofia, Bulgaria;

Lecturer PhD. **Sergiu ȚÂRA**Politehnica University, Bucharest;

Lecturer PhD. **Diana Mariana POPA**Politehnica University, Bucharest;

Lecturer PhD. **Cătălin VRABIE**National University of Political Studies and Public Administration, Bucharest;

Lecturer PhD. **Vilma TOMCO**Faculty of Economics, University of Tirana, Albania;

**Parvin NEGINRAZ**, PhD. Islamic Azad University, South Branch, Iran;

Andrea BECCALLI

Internet Corporation for Assigned Names and Numbers (ICANN).



#### **CONFERENCE SESSIONS**

Thursday - December 3, 2020

09.00 - 10.50

**OPENING SESSION: WELCOME ADDRESSES AND KEYNOTE SPEECHES** 

(EET) Chairs: PhD. Cătălin VRABIE, SNSPA, Bucharest, Romania

PhD. Diana - Camelia IANCU, SNSPA, Bucharest, Romania

Alexandru Mihai GHIGIU, Vice Rector, SNSPA, Bucharest, Romania

Welcome address

Cristian BULUMAC, Policy Advisor, European Parliament

Data - the foundation of a smart approach

H.E. Mr. Søren JENSEN, Ambassador, Embassy of Denmark in Romania

Title to be confirmed

Milena YORDANOVA-KRUMOVA, Technical University of Sofia, Bulgaria

Business Based on Smart City Open Data

Parvin NEGINRAZ, Economic Counsellor of the Islamic Republic of Iran Embassy in Romania

Electronic Trade: challenges and strategies in Iran

Vasile BALTAC, SNSPA, Bucharest, Romania

The Smart City - between trend and needs

10.50 - 11.00

**BREAK** 

**PLENARY SESSION (I): SMART GOVERNANCE** 

11.00 - 12.50 (EET)

Chairs: PhD. Milena YORDANOVA-KRUMOVA, Technical University of Sofia, Bulgaria

PhD. Crina RĂDULESCU, SNSPA, Bucharest, Romania

Homayoun YAZDANPANAH, Smart City Chief Officer, Qom municipality, Iran

Qom Smart City Road Map

Assem KALKAMANOVA, University of Szeged, Szeged, Hungary

Governance and E-governance in Authoritarian Regimes.

Rio Yusri MAULANA, University of Ljubljana, Slovenia

Overview of Smart Governance: A New Approach to Jambi City Policy Innovation

Iulia-Maria C. TOADER, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania

Tale of Two Smart Cities

Zola Innocentia MANTENTA, North-West University, Vanderbijlpark, South Africa

Loraine Boitumelo MZINI, North-West University, Vanderbijlpark, South Africa

Performance assessment of public funded school food gardens projects in the Sedibeng District

Municipality

Manuela PANAITESCU, Danubius University of Galați, Galați, Romania

Galați – Smart City? Desideratum or Reality

Ileana CIOBANU, Elias University Hospital, Bucharest, Romania

Andreea MARIN, Elias University Hospital, Bucharest, Romania

Mihaela ZAMFIR, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania

Mihai ZAMFIR, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Rozeta DRAGHICI, 'Ana Aslan' National Institute of Gerontology and Geriatrics, Bucharest, Romania

Mihai BERTEANU, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Smart living in an ageing society - two Active and Assisted Living ICT-based solutions for a better life

Assistant Rapporteur: Mihaela VLAD, SNSPA, Bucharest, Romania



13.00 - 14.50 (EET) PANEL 1: SMART LIVING & PEOPLE (Panel dedicated to the COVID-19 Pandemic)

**Chairs: PhD. Mihaela CĂRĂUŞAN,** SNSPA, Bucharest, Romania **PhD. Cătălin VRABIE,** SNSPA, Bucharest, Romania

**Robert MÜLLER-TÖRÖK,** University of Public Administration and Finance, Ludwigsburg, Germany **Alexander PROSSER,** University of Economics and Business Administration, Vienna, Austria The Corona Warning App of the German Federal Government – How perceived data protection issues hindered any effectiveness

Jacek MAŚLANKOWSKI, University of Gdańsk, Poland

Patrycja KRAUZE-MAŚLANKOWSKA, University of Gdańsk, Poland

Activities of Public Administration Institutions in Poland in the Times of COVID'19 – Social Media Analysis

Mihaela ZAMFIR, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania Ileana CIOBANU, "Elias" University Emergency Hospital, Bucharest, Romania Andreea Georgiana MARIN, "Elias" University Emergency Hospital, Bucharest, Romania Mihai-Viorel ZAMFIR, Faculty of Medicine, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania

Smart dwellings. Architectural perspectives opened by COVID-19 pandemic

Amitava BASU, Centre for Environmental Management & Participatory Development, New Delhi, India

Smart Redevelopment of Slums Prevent Epidemics

**Lilian ONESCU,** General Secretariat of the Government, Bucharest, Romania **Daniela FLORESCU,** National Agency for Fiscal Administration, Bucharest, Romania Adapting fiscal policies for the COVID-19 pandemic. Setting up a fiscal system appropriate for the digital world

Mamoun Walid ARIDAH, The Bucharest University of Economic Studies, Romania Ghanim Ahmed KAMIL, The Bucharest University of Economic Studies, Romania Areej Ahmad HAMAD, Jordan University, Amman, Jordan

The effect of adding corporate environmental reports in the annual financial reports on corporate governance and Sustainable Development of companies in Jordan

Hasan MAKKAWI, Academy of Economic Studies, Bethlehem, Palestine
Mamoun Walid ARIDAH, Academy of Economic Studies, Aqaba, Jordan
Improving risk management in (SMEs) insurance companies and adapting them to the Corona crisis

Assistant Rapporteur: Anamaria - Gabriela VLAD, SNSPA, Bucharest, Romania

14.50 - 15.00 BREAK

15.00 - 16.50 PANEL 2: SMART TECHNOLOGY (I)

(EET) Chairs: PhD. Jacek MAŚLANKOWSKI, University of Gdańsk, Gdańsk, Poland

PhD. Teodora Ioana BIŢOIU, SNSPA, Bucharest, Romania

**Bartosz STEMPSKI,** Nanotec Sp. z o.o., Toruń, Poland **Grzegorz GRODZICKI,** Nanotec Sp. z o.o., Toruń, Poland

Production of surface agents for limiting the growth of bacteria and fungi based on silver nano and microparticles made by electrochemical methods on an industrial scale

Lukasz PORWOL, Insight Centre for Data Analytics, Galway, Ireland

The Immersive Technologies: How VR is going to disrupt the digital media and online communication sphere?

**Monica-Mihaela FRANGULEA,** Ion Mincu University of Architecture and Urbanism, Bucharest, Romania

Intelligent safety and emergency lighting solutions in disaster situations



**Piotr MATUSZAK,** Goldcitadel Sp. z o.o., Toruń, Poland **Bartosz STEMPSKI,** Goldcitadel Sp. z o.o., Toruń, Poland

Technology of auscultatory data analysis obtained in a non-invasive home examination of the fetal heart rate in the prevention of prenatal diseases and defects

**George-Cristian GAVRILOAIA**, Department of Public Administration and Management, Cluj-Napoca, Romania

Ionelia-Bianca BOSOANCĂ, Faculty of European Studies, Cluj-Napoca, Romania

The path of digitalization of services in Romania - from good practices to challenges in the current situation

Mariusz CZERWIŃSKI, Globedata Sp. z o.o., Toruń, Poland Piotr MATUSZAK, Globedata Sp. z o.o., Toruń, Poland

Technology of multidimensional contextual analysis using the Internet of Things, data with a large volume of Big Data as well as cloud and mobile solutions

**George SUCIU,** BEIA Consult International, Bucharest, Romania *Visible Light Communication for Smart Cities* 

Assistant Rapporteur: Mihaela VLAD, SNSPA, Bucharest, Romania

16.50 - 17.00 BREAK

17.00 - 18.50 (EET) PANEL 3: FUTURE TRENDS - SMART(ER) COMMUNITIES (I)

Chairs: PhD. Cătălin VRABIE, SNSPA, Bucharest, Romania

PhD. Diana - Camelia IANCU, SNSPA, Bucharest, Romania

**Marica DUMITRAȘCO**, Institute of Juridical, Political and Sociological Research, Chișinău, Moldova *Romania's Position in the Global Value Chains in Comparison with European Countries* 

**Tsvetka STOENCHEVA,** University of National and World Economy, Sofia, Bulgaria *The Regional Policy of Bulgaria and the European City* 

Crina RĂDULESCU, SNSPA, Bucharest, Romania Teodora I. BIŢOIU, SNSPA, Bucharest, Romania Cristina Elena NICOLESCU, SNSPA, Bucharest, Romania Smart Economy Through International Academic Mobility...Where To?

**Florentina POPA**, Danubius University of Galați, Galați, Romania Communication with citizens - the smart solution for Smart City Galați

**Bissera ZANKOVA,** Media 21 Foundation, Sofia, Bulgaria Smart societies, gender and the 2030 spotlight - are we prepared?

**Valentin-Stelian BĂDESCU**, Institute of Legal Research of the Romanian Academy, Bucharest, Romania

Ruxandra Ioana BĂDESCU, Academy of Economic Studies, Bucharest, Romania

Weirder than we can imagine: the historical evolution / involution of the region in Romanian law. Special focus on the Argeş-Muscel geo-historical space

**Robertina ZDJELAR,** University of Zagreb, Croatia **Nikolina Žajdela HRUSTEK,** University of Zagreb, Croatia **Anamarija MUSA,** University of Zagreb, Croatia

Open data availability in Croatian local government: Improving the quality of life

Assistant Rapporteur: Oana - Georgiana SECUIAN, SNSPA, Bucharest, Romania

18.50 - 19.00 BREAK



19.00 - 20.50 (EET) PANEL 4: FUTURE TRENDS - SMART(ER) COMMUNITIES (II)

Chairs: PhD. Cătălin VRABIE, SNSPA, Bucharest, Romania

PhD. Diana - Camelia IANCU, SNSPA, Bucharest, Romania

**Sorayya SAGHA**, Department of Quran and Hadith, University of Islamic Studies, Qom, Iran **Kamran OVEYSI**, Department of Quran and Hadith, University of Islamic Studies, Qom, Iran *Learning religious knowledge in the context of a smart city* 

**Larisa-Florentina BADEA,** SNSPA, Bucharest, Romania *Use of Six Sigma (6σ) in public administration* 

Thekiso MOLOKWANE, University of Botswana, Gabarone, Botswana
Alex NDUHURA, Uganda Management Institute, Kampala, Uganda
Tshombe -Muhiya LUKAMBA, North West University, Vanderbijlpark, South Africa
Innocent NUWAGABA, Uganda Management Institute, Kampala, Uganda
The Role of Public Private Partnerships in Smart Cities - Lessons for Cities in Sub-Saharan Africa

**Nikolay STOENCHEV,** University of National and World Economy, Sofia, Bulgaria **Yana HRISCHEVA,** University of National and World Economy, Sofia, Bulgaria *Prospects for the development of smart cities in Bulgaria* 

Marta-Christina SUCIU, Bucharest University of Economic Studies, Bucharest, Romania Oktay MUTLU, Institute of Social Sciences - Okan University, Istanbul, Turkey Importance of using IoT, AI and cloud technologies for modelling the possible upcoming urban renewal projects in Bucharest

**Alina DICU**, Katell Media, Bucharest, Romania *Political leaders need to become SMART. ASAP* 

Archil PRANGISHVILI, Georgian Scientific Academy, Tbilisi, Georgia
Nugzar IASHVILI, Georgian Scientific Academy, Tbilisi, Georgia
Yuri KHUTASHVILI, Georgian Technical University, Tbilisi, Georgia
On the need to create a monitoring system for safe gas consumption in multi-apartment residential buildings for a smart city

**Xiao-Yong WEN,** Guangdong Administration College, Guangzhou, China City Intelligent Life: A Case Study on Shenzhen City Intelligent Classification of Domestic Waste

**Assistant Rapporteur: Anamaria - Gabriela VLAD,** SNSPA, Bucharest, Romania



#### Friday - December 4, 2020

09.00 - 10.50

**PLENARY SESSION (II): KEYNOTE SPEECHES** 

(EET)

**Chairs: PhD. Diana - Camelia IANCU,** SNSPA, Bucharest, Romania **PhD. Cătălin VRABIE,** SNSPA, Bucharest, Romania

**Lasse BERNTZEN,** University of South-Eastern Norway *Public Transport in Smart cities* 

**Mircea ILIE,** IKEA Romania, Bucharest, Romania *Smart city – sustainable city* 

**Eduard DUMITRAȘCU,** Romanian Association for Smart City, Bucharest, Romania *The society of tomorrow and digital transformation* 

**Iliana FRANKLIN,** Mediaframe Ltd, London, United Kingdom From Fairy Tales to Smart Concepts

**Mauro ROMANELLI,** University of Naples Parthenope, Naples, Italy *Rediscovering urban intelligence within cities* 

10.50 - 11.00 BREAK

11.00 - 12.50

**PLENARY SESSION (III): SMART SECURITY** 

(EET)

Chairs: PhD. Milena YORDANOVA-KRUMOVA, Technical University of Sofia, Bulgaria PhD. Crina RĂDULESCU, SNSPA, Bucharest, Romania

Juliana NOVAES, University of Sao Paulo, Sao Paulo, Brazil

Private information in public spaces: data protection in the times of privatization of public services

Ion BOLUN, Technical University of Moldova, Chişinău, Moldova Rodica BULAI, Technical University of Moldova, Chişinău, Moldova Călin ROSTISLAV, Technical University of Moldova, Chişinău, Moldova The infosecurity polygon concept

**Christian SCHACHTNER,** IUBH University of Applied Sciences, Bad Reichenhall, Germany Smart Government in local adoption – authorities in strategic change through Al

**Jacek MIKUCKI,** University of Warsaw, Warsaw, Poland
The nervous system of the city: ICT and media in smart city Berlin and smart city Warsaw

**Lukasz PORWOL,** Insight Centre for Data Analytics, Galway, Ireland **Munir PODUMLJAK,** Partnership for Social Development, Zagreb, Croatia *The Internet is Broken, but how can we save it?* 

Ana-Maria TUDOR, BEIA Consult International, Bucharest, Romania George SUCIU, BEIA Consult International, Bucharest, Romania George Valentin IORDACHE, BEIA Consult International, Bucharest, Romania Gabriela BUCUR, BEIA Consult International, Bucharest, Romania Smart City Cyber-Physical Security

**Mircea BOŞCOIANU,** University Transilvania of Brasov, Romania Intelligent Systems for Smart Cities in the context of Industry 4.0 revolution- smart solutions for finance in emerging markets

Assistant Rapporteur: Oana - Georgiana SECUIAN, SNSPA, Bucharest, Romania

12.50 - 13.00 BREAK



13.00 - 14.50 (EET)

**PANEL 5: SMART ECONOMY** 

Chairs: PhD. Jacek MAŚLANKOWSKI, University of Gdańsk, Gdańsk, Poland

PhD. Teodora BITOIU, SNSPA, Bucharest, Romania

Stefany CEVALLOS, National University of Public Service, Budapest, Hungary Analysis of Local Information Systems of Ecuador and the importance of Urban marketing

Ani MATEI, SNSPA, Bucharest, Romania Menachem ZILBERKLANG, SNSPA, Bucharest, Romania Creative Philanthropy and Smart Cities

Cristina BALACEANU, BEIA Consult International, Bucharest, Romania George SUCIU, BEIA Consult International, Bucharest, Romania Oana ORZA, BEIA Consult International, Bucharest, Romania Sabina BOSOC, BEIA Consult International, Bucharest, Romania Improvement of the quality of Smart Toilets

Wilheminah Nthabiseng MOFOKENG, North-West University, Vanderbijlpark, South Africa Loraine Boitumelo MZINI, North-West University, Vanderbijlpark, South Africa Budget allocation and funding of community food security projects in Gauteng Province

Cosmina-Andreea MANEA, University of Bucharest, Romania Costinel ŞERBAN, SNSPA, Bucharest, Romania

Dynamics of access to written culture in the urban-rural interfaces of municipalities in southern and southwestern Romania

Andrada S. VÄSII, Independent researcher, Bucharest, Romania Intelligent energy consumption practices within the European Union: empowering consumers towards a smarter consumption

Ghanim Ahmed KAMIL, Academy of Economic Studies, Bucharest, Romania Cristian-Silviu BANACU, Academy of Economic Studies, Bucharest, Romania Mamoun Walid ARIDAH, Academy of Economic Studies, Bucharest, Romania The economic importance of transportation and the circular economy of Iraq

Assistant Rapporteur: Mihaela VLAD, SNSPA, Bucharest, Romania

14.50 - 15.00 **BREAK** 

15.00 - 16.50

**PANEL 6: SMART MOBILITY & ENVIRONMENT** 

(EET)

Chairs: PhD. Florin Codrut NEMTANU, Politehnica University, Bucharest, Romania PhD. Cătălin VRABIE, SNSPA, Bucharest, Romania

Marta-Christina SUCIU, The Bucharest University of Economic Studies, Romania Marco SAVASTANO, Sapienza University of Rome, Italy

Gheorghe-Alexandru STATIVĂ, The Bucharest University of Economic Studies, Romania

Irina GORELOVA, Sapienza University of Rome, Italy

Smart Mobility: Urban Transportation Challenges in Romania and Italy

Florin Codruţ NEMŢANU, Politehnica University, Bucharest, Romania Connected and automated mobility

Ioan GÂF-DEAC. Costin C. Kiritescu National Institute for Economic Research, Bucharest, Romania Bucharest Digital Transformation. Best practices case study in the 4th District local public administration

George SUCIU, BEIA Consult International, Bucharest, Romania Ioana PETRE, BEIA Consult International, Bucharest, Romania Andrei SCHEIANU, BEIA Consult International, Bucharest, Romania Cristian BECEANU, BEIA Consult International, Bucharest, Romania Denisa PASTEA, BEIA Consult International, Bucharest, Romania Innovative automatic sorting system of the Construction and Demolition Waste materials



Amir SODAGARAN, Shiraz Municipality, Shiraz, Iran

Smart mobility in Shiraz: Toward an Intelligent Traffic Information System

Michael GALUKANDE-KIGANDA, Uganda Management Institute, Kampala, Uganda

Overcoming the challenges of managing urban parking space in developing cities: Lessons of engaging public private partnerships (PPP) in Kampala Capital City Authority

Mihaela Hermina NEGULESCU, Ion Mincu University of Architecture and Urbanism, Bucharest, Romania

Smart mobility - challenges for mobility policies and spatial planning

Assistant Rapporteur: Oana - Georgiana SECUIAN, SNSPA, Bucharest, Romania

16.50 - 17.00 BREAK

17.00 - 18.30 PANEL 7: SMART TECHNOLOGY (II)

(EET)

Chairs: PhD. Florin POPA, SNSPA, Bucharest, Romania PhD. Cătălin VRABIE, SNSPA, Bucharest, Romania

Ikrame SELKANI, University of Cordoba, Cordoba, Spain

Smart museums: enjoying culture virtually. Case of Virtual Museum of the National Museums Foundation. Rabat – Morocco

**Alexandra UNGUREANU**, Ștefan cel Mare University of Suceava, Romania *The impact of smart city infrastructure on the global economic growth* 

**Babak ZIYAE,** Faculty of Entrepreneurship, University of Tehran **Mehran REZVANI,** Faculty of Entrepreneurship, University of Tehran **Mohammad EYNOLGHOZAT,** Faculty of Entrepreneurship, University of Tehran **Erfan MORADIYAN,** Faculty of Entrepreneurship, University of Tehran

Conceptualization of the municipalities' role in development of IoT-driven smart city venture as urban entrepreneurship: A survey of Mashhad Metropolitan Area

Loredana IVAN, SNSPA, Bucharest, Romania

**Joost VAN HOOF**, The Hague University of Applied Sciences, The Hague, The Netherlands **Dorin BEU**, Technical University of Cluj-Napoca, Romania *Smart Cities and Age-Friendly Cities in Romania: An Analysis of Current Projects and Practices* 

**Joshua Olusegun FAYOMI,** Kaunas University of Technology, Kaunas, Lithuania **Zainab Abdulqadir SANI,** University of Debrecen, Hungary

The future of Work in the Smart City: Managing virtual work by leveraging smart cities to achieve organizational strategy

**Navid ZOHDI,** Mashhad Municipality, Iran **Ali MOTEVALIZADEH**, Mashhad Municipality, Iran *Transforming Mashhad into a smart city* 

**Akhmad Yusuf ZUHDY,** Sepuluh Nopember Institute of Technology, Surabaya, Indonesia **Aan FAUZI,** Sepuluh Nopember Institute of Technology, Surabaya, Indonesia *Surabaya towards a smart city constrained by COVID-19* 

Assistant Rapporteur: Anamaria - Gabriela VLAD, SNSPA, Bucharest, Romania

18.30-19.00 CLOSING CEREMONY & SMART CITIES CONFERENCE 2021



### **ORGANIZING COMMITTEE**

Lecturer PhD. **Cătălin VRABIE, Chair**National University of Political Studies and Public Administration (SNSPA), Bucharest

Associate Professor PhD. **Dragoș DINCĂ**National University of Political Studies and Public Administration (SNSPA), Bucharest

#### SECRETARIAT:

PhD. candidate **Luminiţa MOVANU**National University of Political Studies and Public Administration (SNSPA), Bucharest

