PREFACE

V. Coors[a], P. Rodrigues[a], C. Ellul[b] , S. Zlatanova[c], R. Laurini[d], M. Rumor [e]

[a] Stuttgart University of Applied Sciences, Stuttgart, Germany,
volker.coors@hft-stuttgart.de, preston.rodrigues@hft-stuttgart.de
[b] University College London, United Kingdom, c.ellul@ucl.ac.uk
[c] University of New South Wales, Sydney, Australia, s.zlatanova@unsw.edu.au
[d] INSA, France, Robert.Laurini@insa-lyon.fr
[e] University of Padova, Padova, Italy, rumor@dei.unipd.it

Simply defined, a Smart City is a city overlaid by a digital layer, which is used for the governance of the city. A Smart City uses intelligent technology to enhance our quality of life in urban environments, bringing together people and data from disparate sources such as sensors, demographics, topographic and 3D mapping, Building Information Models and many more. Increasingly, Smart Cities use this data in a variety of ways, to address key challenges related to transportation, communications, air quality, noise, well-being of the citizens, decision making relating to education and health and urban planning, as well as in relation to initiatives such as startups and fostering economic growth and employment within the city. As more data becomes available, the challenges of storing, managing and integrating such data are also multiplied.

The first Urban Data Management Symposium (UDMS) was held in 1971 in Bonn, Germany, made the choice of hosting the 6th international conference on Smart Data and Smart Cities (SDSC) in Stuttgart a very natural one. SDSC was established in 2016 as the successor of the UDMS, and this year we celebrate the 40th anniversary of the series of symposia and conferences. The SDSC 2021 will be part of the scientific week on intelligent cities at HFT Stuttgart. Together four events were held during the week of 14th – 17th September 2021, and alongside SDSC participants were invited to attend the "*Energy, water and food for the cities of the future*" conference, the "*LIS-City – liveable, intelligent, and sustainable City*" workshop, and the mobility day Stuttgart. Participant interaction – and the ability to attend sessions across the four events – was particularly encouraged. SDSC 2021 itself was organised by the Urban Data Management Society (UDMS www.udms.net), ISPRS and HFT Stuttgart (the University of Applied Science Stuttgart), and Professor Volker Coors Chaired the SDSC committee.

As in previous years, three key conference themes were proposed to represent the Smart Cities: **Smart Data** (sensor network databases, on-the-fly data mining, geographic and urban knowledge modeling and engineering, green computing, urban data analytics and big data, big databases and data management), **Smart People** (volunteered information, systems for public participation) and **Smart Cities** (systems of territorial intelligence, systems for city intelligence management, 3D modeling of cities, internet of things, social networks, monitoring systems, mobility and transportation, smart-city-wide telecommunications infrastructure, urban knowledge engineering, urban dashboard design and implementation, new style of urban decision-making systems, geovisualization devoted to urban problems, disaster management systems).

This volume consists of 14 papers, which were selected from 41 submissions on the basis of double blind review, with each paper being reviewed by a minimum of three reviewers. These papers present novel research concerning the use of spatial information and communication technologies in Smart

Cities, addressing different aspects of Smart Data and Smart Citizens. The selected papers tackle different aspects of Smart Cities: 3D; Citizen Engagement; transport, sustainable mobility; dashboards and web GIS; citizen engagement and participation; sensors; urban decision making.

The editors are grateful to the members of the Scientific Committee for their time and valuable comments, which contributed to the high quality of the papers. Reviews were contributed by: Alias Abdul-Rahman, Giorgio Agugiaro, Ken Arroyo Ohori, John Barton, Martina Baucic, Filip Biljecki, Lars Bodum, Pawel Boguslawski, Azedine Boulmakoul, Matteo Caglioni, Caesar Cardenas, Eliseo Clementini, Volker Coors, Youness Dehbi, Abdoulaye Abou Diakité, Adil El Bouziri, Claire Ellul, Tarun Ghawana, Gesquiere Gilles, Didier Grimaldi, Ori Gudes, Stephen Hirtle, Martin Kada, Lamia Karim, Robert Laurini, Christina Mickrenska-Cherneva, Christopher Petit, Alenka Poplin, Ivana Racetin, Dimos Pantazis, Preston Rodrigues, Camilo Leon Sanchez, Genoveva Vargas Solar, Nils Walravens, Parag Wate, Besri Zineb, Sisi Zlatanova. We are also grateful to the work of the local organising committee at HFT Stuttgart, without whom this conference would not have been possible.