## **PREFACE**

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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.

This increasing interest in Smart Cities world-wide, along with a growing understanding of the importance of integrating "Smart" data with other data and wider applications for the benefit of citizens, made the choice of hosting the third Smart Data, Smart Cities conference in Delft – in conjunction with three other conferences – a very natural one. Together the four conferences were held during the week of  $1^{st} - 5^{th}$  October 2018, and alongside SDSC participants were invited to attend the ISPRS Technical Commission IV Symposium, the  $13^{th}$  3D GeoInfo Conference and the  $6^{th}$  International FIG Workshop on 3D Cadastres. Participant interaction – and the ability to attend sessions across the four events – was particularly encouraged. SDSC 2018 itself was organised by the Urban Data Management Society (UDMS www.udms.net), ISPRS and TU Delft (the Delft University of Technology), 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 7 papers, which were selected from 34 submissions on the basis of peer review. These papers present novel research concerning the use of spatial information and communication technologies in Smart Cities, addressing different aspects relating to Smart Data. Selected papers tackle different aspects of Smart Cities: transport, sustainable mobility; dashboards and web GIS; citizen engagement and participation; sensors; urban decision making.

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