

## PREFACE

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## Commission IV

A smart city is a complex concept, which has been given many definitions. It is a synthesis of instruments covering many scales and connected through multiple networks and sensors. The concept integrates information and technology in the best possible way to record movements of people and or materials and to support the flow of decisions regarding the physical and social existence of the city. Simply, it can be defined as a city overlaid by a digital layer, which is used for the governance of the city.

Since the birth of the Smart City in 1997 to achieve the objectives of the Kyoto protocol, whose goal is take measures against global warming, many smart initiatives and projects have been established all over the world to contribute to sustainable city development. Indeed, smart cities consist of many smart components: smart governance, smart energy, smart building, smart mobility, smart infrastructure, smart technology, smart healthcare, smart citizen and smart data.

The conference from which these papers are drawn is dedicated to the integration of Smart Data and Smart Citizens for Smart Cities with focus on spatial information. The Urban Data Management Society (UDMS) has been a pioneer in promoting spatial information technologies in cities since the early 1970s ([www.udms.net](http://www.udms.net)) and this conference is its 30th event hosted by the society. To reflect the increasing inter-dependence and integration between urban data (always the core focus of UDMS), information and technology for Smart Cities, UDMS has decided to re-shape its regular meetings and discussions and focus on the context of Smart Cities, with two main aims – firstly to provide a forum to focus on advances in Smart City information and technologies, and secondly to provide the opportunity for senior researchers to establish collaborations on new research projects. The topics of the first conference reflect a range of issues related to Smart (Urban) Data, Smart Citizens and Smart Cities as follows:

- Smart data: sensor network databases, on-the-fly data mining, geographic and urban knowledge modelling and engineering, green computing, urban data analytics and big data, big databases and data management (noSQL).
- Smart citizens: volunteered information and systems for public participation.
- Smart cities: systems for intelligent regional management systems for intelligent city management (building, transportation, energy, etc.), 3D modelling 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, geo-visualization devoted to urban problems and disaster management systems.

This volume consists of 21 papers, which were selected from 33 submissions on the basis of double blind review, with each paper being reviewed by three members of the Scientific Committee. 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 first eight papers touch upon issues related to Smart City Planning, the following six papers discuss approaches and technologies to support Smart Urban Environment, three papers present approaches for Smart Services and the last group of four papers discuss issues related to Participatory Planning.

The conference was organized as a collaboration between the Urban Data Management Society, ISPRS and the University of Split, Croatia on 7-9 September, 2016 in Split, Croatia.

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