Since NECTAR combines research about both transport and communications, this book series was considered as an ideal setting to expand on the topic of ICT for transport. The idea about this book was first discussed at a NECTAR Cluster 1 Networks meeting between the editors. Piet Rietveld’s role was instrumental, so a NECTAR Cluster 1 workshop took place, focusing on the intersection of transport with social issues. Interestingly, a lot of contributions in that workshop addressed the challenges of contemporary technological developments for the transport sector. Such concerns revolved around privacy or the values used within transport appraisal. However, one of the workshop conclusions was that conventional approaches in the transport sector appear to be narrow. Given also the anticipated launch of the Galileo satellite navigation system in Europe and the inclusion of ‘smart’ and ‘green’ policies as a major component of Horizon 2020, the European Union research programme 2014–20, this book is deemed to be a timely contribution to broaden and expand the debate about these pertinent issues.

One of the impressive aspects of this book is that it features chapters by experts across continents, providing a holistic view from a transport sector perspective which is beneficial for practitioners in the ICT sector. Each chapter has been written individually addressing the selected topic, yet all chapters highlight key challenges relevant to the overall book theme based on their respective context. Utilizing empirical evidence from a wide range of countries and transport modes, this volume summarizes major opportunities and threats which need to be considered locally and globally. As a result, the last chapters outline future objectives to be addressed by researchers, policy makers and practitioners in a range of sectors, based on the evaluation of reported experience and the assessment of transferability to other geographical areas to meet wider objectives.

This book is intended for anyone interested in understanding the opportunities, threats, principles and practical challenges faced by those who aim at better understanding the use and deployment of ICT in the transport sector. The book is of interest to academics, researchers, software developers, technology and innovation managers, multinational organisations, as well as local and national policy makers worldwide. The book’s
contents and bibliography provide up-to-date knowledge and expertise based on state-of-the-art research in Europe, America, Asia and Africa, but one need not be a professional or field expert to follow the main arguments and findings presented. This volume will be a valuable source of information for those interested in being at the forefront of the upcoming challenges in the evolving field of ICT for transport. This wander through the various threats and opportunities will assist them in making more informed decisions about the future use of ICT in transport and for the benefit of society.