

Report on the first workshop of the RSA Research Network on:

Using ICT to facilitate smart and green regional growth



Workshop organiser: N.Thomopoulos

The first workshop of the RSA Research Network on “Using Information and Communication Technology to facilitate smart and green regional growth” took place in April 2013 during the American Association of Geographers (AAG) annual meeting. The workshop was held in Los Angeles and featured also in the AAG website and events programme of this large international forum which attracted more than 7000 delegates. The RSA hosted various sessions at the AAG building up on the collaboration with UCLA, so there was a large audience with relevant interests which lead in inspiring discussions among delegates.

The theme of this workshop was about “Using ICT to facilitate the development of Green Economy: Diagnosis of threats and opportunities in the transport sector”. Following the Rio+20 summit in 2012 an urgent need has arisen to share experiences between developed and developing countries. Thus, by focusing on the transport sector in particular it was anticipated to stress the increasingly important role of this sector in promoting green economy within regional development plans, whilst offering the opportunity to network with academics and practitioners from California where this workshop took place. Fourteen participants from universities and intergovernmental organisations joined this first workshop attending the two sessions where research outputs from America, Europe, Africa and Asia were presented. Throughout this workshop key issues about current developments of ICT for transport were discussed from different perspectives to establish the main threats and opportunities for the forthcoming research agenda. It was pointed out that alongside the infrastructure projects in progress worldwide, other initiatives such as the open data one provide new opportunities since they were previously inaccessible for business or research purposes. The primary objective of this workshop was to gather empirical evidence from around the globe to create the foundation and provide relevant context for the future events of this Research Network.



Dr N.Thomopoulos providing an overview of RSA activities and membership options.

Therefore, the workshop was launched with the organisers introducing the RSA and the wide range of its activities, while the audience had the opportunity to find out about the different types of RSA membership and also ask questions over tea and coffee. Explicit reference was made to the European and annual RSA conferences as well as to future workshops of this particular Research Network. After the introductory presentation by Nikolas Thomopoulos which set the scene and offered a broad background to all workshop participants about the latest developments of ICT for transport, Bernard Gyergyay talked about how it is possible to alter habitual travel patterns in urban areas through the provision of targeted incentives. By referring to a scheme implemented in London through the use of card readers and a website he illustrated that there is a range of benefits to be gained ranging from reduced congestion and accidents to improved health and well-being. The outstanding question is how to implement such schemes in a larger scale and how to maintain the temporal effect of incentives.



Bernard Gyergyay (Rupprecht Consult) explaining the research objectives of Step2Get in London.

Subsequently, Qiyang Xu added another challenge currently faced in developing countries which is relevant for developed countries too: GPS data accuracy. She suggested using crowdsourcing as a tool to improved data accuracy and thus the social infrastructure of communities with limited

resources. By utilising data of a World Bank project about education and health units in Kenya she demonstrated how input by the public can be turned into a useful asset saving vital resources for governmental organisations. Her conclusion was that if crowdsourcing is well planned and validated, it can be turned into an invaluable community asset.



Qiyang Xu (World Bank) describing the implementation of an innovative approach to improve GPS accuracy in Eastern African regions.

The second session started with Dr Anand Gopal (Lawrence Berkeley National Laboratory) who explained how India is able to make the transport leapfrog due to the wide use of mobile phones. Given the performance of hybrid vehicles in India it may be possible for this emerging economic superpower to reduce its reliance on fossil fuels, showing therefore the potential for national and regional growth through the joint development of ICT and transport technologies. It appears then that it depends on the policies to be adopted to determine the future of India in evolving sectors such as software and car manufacturing.



Dr Anand Gopal introducing the notion of the transport leapfrog to be realised in India through smartphones and electric vehicles.

In contrast, Dr Linda Nijland (Utrecht University) talked about a more traditional topic in The Netherlands i.e. cycling. Yet, her presentation reflected on fringe benefits aiming at more sustainable commuting travel behaviour. She concluded that through better coordination between employers by offering flexible working times or telecommuting options, the use of company cars by senior level employees as well as the provision of rewards for employees who commute more often by bicycle, it is possible to reduce overall costs and CO₂ emissions while improving health and well-being in The Netherlands.



Dr Linda Nijland presenting the impact of fringe benefits in The Netherlands.

The final presentation by Dr Hongmian Gong (City University of New York) revolved around similar themes but it focused on the use of a smartphone application promoting reduced fuel consumption and CO₂ emissions as well as increased well-being benefits. By utilising New York City as a case study, she underlined the potential benefits for a densely populated area such as Manhattan but also pointed out the technological challenges to implement such schemes in large conurbations.



Dr Hongmian Gong presenting the technological challenges of implementing smartphone based schemes in large conurbations such as New York City.

A lively debate about a variety of issues followed both sessions which allowed participants to acquire deeper understanding of the opportunities and threats of each scheme. During the workshop dinner it turned out that there are opportunities for future collaborations between workshop participants since common research interests have been identified. It is anticipated to explore such collaborations further in the near future and discuss them in more detail at the second workshop of this Research Network. Furthermore, the workshop organisers uploaded workshop material and relevant links on this Research Network's blog (sgICTregion.wordpress.com) and informed participants about the option to publish the workshop outputs. The contributions discussed throughout this workshop confirmed the evolving importance of transport for smart and green regional growth, highlighting the need for informed decisions by practitioners and policy makers on the key issues identified. As a result, the second workshop of this Research Network will build on the empirical evidence presented in the first workshop and it will focus on best practice, indicators and evaluation methods of successful schemes in developed and developing regions.