

**Date**

Tuesday 14th July 2009

**Title of session**

Workshop: Volunteer Geographic Information

Managing Megacities with Urban Sensing

**Name of presenter/chair**

Mark Corey, Assistant Deputy Minister, Earth Sciences, Natural Resources Canada  
– Chair

Robin McLaren, Know Edge Ltd, UK - Presenter

**Name of rapporteurs**

Emily Dover & Luke Hampson

Robin McLaren began his presentation by explaining that there were currently 39 megacities today each of which is growing. He added that 50% of the world's population currently lives in cities and asked how spatial data could help us to manage this. He then introduced the idea of Urban Sensing – enabled because we all carry around such a number of trackable devices – phones, credit cards etc.

In mega cities, stable planning systems often don't exist and informal development can get out of control. Better information systems for city managers is needed and urban sensing, including through the use of Radio Frequency Identification (RFID) could be the answer. The technology is already in use at the US border with Mexico where RFID driving licenses give Customs Officers secure occupant information as they pass through border control.

He accepted that there were concerns about this with regard to privacy, surreptitious surveillance and this is not helped by the fact that there is currently very little legal protection. However, RFID could allow planners to better understand the patterns of movement of citizens and enable better targeting of transport and other infrastructure. The fact that the location of cellular phones is routinely used in UK court cases suggests this is becoming a way of life. With particular regard to mobile (m) - government we can deliver services via a mobile phone and avoid some of the problems associated with the digital divide. Even in developing countries, mobile phones are evenly distributed across society.

In a more formal sense, crowd sourcing has already helped produce applications like Open StreetMap. One of the most successful examples of crowd sourcing has been amongst bird watchers but it can be used successfully in emergency disaster situations and even in times of political crisis to provide real-time updates. It can help citizens but also authorities looking to prioritise aid.

Concerns about the quality of crowd sourced information can be alleviated as more and more people get involved and the data is cross checked by a larger pool of individuals. Using crowd sourcing and urban sensing all aspects of life can be understood. However, whilst this approach will produce answers it will pose new questions and open opportunities for public discourse.

<b>Questions/Comments</b>	<b>Answers</b>