ITS in Ireland – The Big Picture



Challenges and Opportunities for the Irish Smart Mobility Ecosystem



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ITS Ireland - Who We Are?

- ITS Ireland was established in 2010 as a non-profit Organisation to promote greater awareness of Intelligent Transport Systems (ITS).
- ITS Ireland is a true public and private partnership, with members collectively working together in an advocacy role.

www.itsireland.ie





Real Solutions for Real Needs

ITS is about Delivering Outcomes, Not Implementing Technology

- Combining policy, planning, infrastructure delivery and ITS delivers Real Solutions for Real Needs
- Ireland has many success stories that demonstrate this

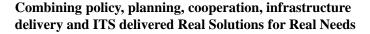
Challenges and Opportunities for the Irish Smart Mobility Ecosystem



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Case Study – Real Solutions for Real Needs

- M50: Upgrade to ORT combined with major infrastructural improvements
- Dublin Tunnel combined with variable tolling to divert HGVs from City Centre
- Introduction of Dublin HGV Management Strategy led to HGV numbers on City streets down from 5,000 per day to under 500
- Dramatic Reduction in accidents. (2011 ETSC report classed Dublin as having the safest roads of any capital city in Europe)
- Facilitated Smart Mobility initiatives e.g. significant increase in cycling in City Centre











Smart Mobility in Ireland

- Smart Mobility in Ireland is deployed in many different sizes, shapes and forms
- Cycling schemes such as Dublin Bikes also deployed in Cork, Galway and Limerick
- Public Transport Automatic Vehicle Location and Passenger Information systems
- Multi Modal Journey Planner
- eCAR electric vehicle charging infrastructure and supporting ITS systems

All such initiatives have achieved success but much more could be achieved if we develop a fully integrated Digital Transport Network Ecosystem







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Smart Mobility is a Subset of ITS

- ITS (Intelligent Transport Systems) is the application and integration of advanced sensor, computer, electronic and communication technologies to promote safer, more efficient and sustainable systems for the movement of people and goods
- Smart mobility refers to using modes of transportation <u>alongside</u> or even instead of car ownership
- A Smart Mobility Ecosystem promotes intelligent, efficient and integrated transport solutions to optimise movement around a region, providing safe, accessible and integrated public transport and active travel choices



Digital Transport Network Ecosystem

- Digital Transport Network refers to Connectivity, Cooperation and Harmonisation amongst systems, operations and stakeholders.
- Digitalisation of the transport network will contribute to a plurality of transport policy objectives aimed at improving road safety, reducing congestion, optimising transport efficiency, enhancing mobility, improving journey times/experience, reducing energy use and environmental impacts, and supporting economic development. [European Commission]
- A Smart Mobility Ecosystem is a subset of a Digital Transport Network Ecosystem
- What does this ecosystem look like and what are the challenges and opportunities for the Irish Smart Mobility Ecosystem?

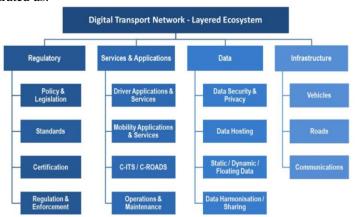
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Digital Transport Network Ecosystem

 A Digital Transport Network Ecosystem can be defined in horizontal layers illustrated as:



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Smart Mobility in Ireland - Challenges

- We are now in the Digital Age where connectivity leading to convergence of everything!!!
- Keeping pace with rapid technology changes requires a lot of resources
- Lack of real information makes it difficult to justify budget requests
- Over-Hype leads to false perception that Smart Mobility is only for large cities.
- There are other practical challenges such as roles and responsibilities of Transport, Communications & Environment authorities?
- Demographics impacts on the Business Case.



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Smart Mobility in Ireland - Challenges



- George Orwell said that political language consists largely of "euphemism, question-begging and sheer cloudy vagueness".
- The same can be said about the language around Smart Mobility and MaaS.
- More discovery needed to understand impact of disruptive technologies and how best to optimise socio-economic benefits
- This requires sharing and leveraging on each others' experiences which will only be of benefit if we simplify our language



MaaS in Ireland - Points to Ponder

- Mobility as a Service (MaaS) is a relatively new concept even though it utilises traditional public transportation. To a certain extent, integrated ticketing schemes such as LEAP and the National Journey Planner provide significant elements of MaaS.
- There is a business case for MaaS in Dublin but removing private vehicle ownership is not straight-forward for non-resident commuters.
- More integration of existing applications is needed (e.g. integrating toll tags with Park-and-Ride and LEAP could be a step forward).
- MaaS outside of Dublin has a less obvious business case (MaaS is a commercial concept) but there are significant socio-economic benefits.

MaaS will be enabled by Cooperation amongst systems, operators, regulators and users



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ITS in Ireland – Further Information

E: john.davis@itsireland.ie

W: www.itsireland.ie



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