Workshop 7. The "uberisation" of public transport and mobility as a service (MaaS): implications for future mainstream public transport

Chair: Professor Corinne Mulley
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The widespread adoption of wearable internet-connected devices such as smartphones, with easy-to-install customised apps for handling a number of services and tasks, has opened up new possibilities in the transport sector. For example, sharing real-time location data and preferences between potential passengers and vehicle providers through apps has given birth to a range of ride-hailing companies, such as Uber and Lyft, as well as new car-sharing services, such as BlaBlaCar and Zipcar, with the impact being particularly strongly felt in the traditional taxi market. In some cities and countries, the new services have been welcomed and even facilitated, while in others there have been clashes with regulators as well as with incumbent operators.

In the early years of the Thredbo Conference series, the taxi market was given much attention, in particular relating to efforts aimed at market opening and deregulation. The impact of various forms of taxi services has also been a recurrent theme in discussions of the sometimes informal, unregulated part of the transport sector, notably in developing countries. This workshop highlights the need to revisit the taxi market and study how changes in ownership and competition create a new landscape. There appears to be an abundance of more or less documented cases from many countries. Coupled with the visible effects and experiences gained, fundamental questions arise on how to treat the new entrants. What kind of regulation is appropriate in order to create "fair" conditions in the market and perhaps set minimum standards? Will such efforts lead to market exit or collaborations to provide door-to-door services? Are the business models of the new entrants really sustainable or are new business models needed and, if so, what might they look like? The collected knowledge of previous Thredbo conferences should make it possible to give a contribution to these and other current issues. Papers looking at the various experiences and regulatory reactions in different geographical settings and contexts are welcome.

The shared economy and technological developments made possible by digitalization, which have broader implications for public transport to consider, are also part of this workshop. Can a wider implementation of the practices of the ride-hailing companies lead to new ways of creating flexible and truly on-demand urban bus services? Are there special implications for transport services for passengers with reduced mobility? Will the adoption of new technologies such as autonomous vehicles and new mobility and business models such as mobility as a service (MaaS) open up mobility options that respond to user needs? How might the various players (existing and new) position themselves to benefit by new possibilities offered as a result of digitalization? Will the way public transport is organized and financed ultimately be disrupted – and what will be viable in terms of competition, contracts and governance? What implications are there for traffic congestion, and who really benefits?

We welcome research on institutional, social and economic aspects (in particular regarding Thredbo cornerstones like ownership and competition) related to the assessment, planning and implementation of less conventional and innovative solutions. Papers relating to countries where car ownership is low (as in many developing economies) as well as countries with high car ownership are equally welcome.

Workshop 7. Plan

The presenting author is shown in <u>underlined</u> font. The number in square brackets [0] refers to the number of the electronic paper file.

Monday 14 August	
Workshop session I	
13:30	**Setting the stage for discussion** • Introductions • Membership of workshop – composition • Motivation for the Workshop • Boundaries for the Workshop • What are the aspirations?
14:15	<u>David A. Hensher</u> Future bus transport contracts under mobility as a service regime in the digital age: are they likely to change? [2]
	This paper looks at one of the core Thredbo notions – that of contracting – in the era of MaaS **Discussion questions:** How does MaaS or uberisation challenge the status quo in terms of contracting; how might the stakeholders vary in the future; what are the issues that need to be highlighted for the workshop?
15:00	*Afternoon tea*
Workshop session II	
15:30	<u>Yale Z. Wong</u>, David A. Hensher and Corinne Mulley Emerging transport technologies and the modal efficiency framework: a case for mobility as a service (MaaS) [44]
	<u>Göran Smith</u>, Jana Sochor and Marianne Karlsson Mobility as a service: implications for future mainstream public transport [146]
	These are papers with conceptual frameworks relating to the development of MaaS **Discussion questions:** In a conceptual framework, are there new actors and what might be their roles; how important is digital technology in the delivery of MaaS; what are the challenges for existing stakeholders in their ongoing delivery of public transport; are there regulatory or legislative barriers that need to be considered/overcome; what implications might there be for emerging business models?
16:50	*Short break*
Workshop session III	
17:00	<u>Anders Gullberg</u> Urban transport: eliminating blind spots and missing links in the era of the fourth industrial (r)evolution [91]
	Sam Lockwood, <u>Paula Ruoff</u> and Christoph Schaaffkamp Owning your customers: How digital brands are creating political pressure by mobilising their customers [80]
	These papers point to the role of the new digital area in future urban/public transport **Discussion questions:** If digital is not the silver bullet how can it be harnessed to work for better allocation; how to meet the challenge of accessibility in a new area of uberisation; how does sharing bring about changes or disruptions to the market and what are the potential implications for regulating for change?
18:00	*Close*

Tuesday 15 August		
Workshop session IV		
09:00	María J. Alonso-González, Niels van Oort, Oded Cats and Serge Hoogendoorn	Urban demand responsive transport in the mobility as a service ecosystem: its role and potential market share [137]
	Chinh Q. Ho, David A. Hensher, Corinne Mulley and Yale Z. Wong	Prospects for switching out of conventional transport services to mobility as a service subscription plans – a stated choice study [1]
	This session will focus on how MaaS might be taken up. **Discussion questions:** What sort of bundles do customers want; how might these impact on public transport usage into the future; what are the challenges in defining the bundles and what sort of business models might this imply; how difficult is it to devise the SP experiments to elicit responses; how useful are pilot schemes already undertaken?	
10:30	*Morning tea*	
Workshop session V		
11:00	Lauran Huefner	Mobility as a service can only carry you so far - why ridesharing is only part of the public transport solution [29]
	Jørgen Aarhaug and Silvia Olsen	Implications of ridesourcing and self-driving vehicles on the need for regulation in unscheduled passenger transport [82]
	These papers both look to a future which is uncertain. **Discussion questions:** What pointers for regulation come from regional operation or the scenarios that need to be put in place; what does the future look like; what is the role of autonomous vehicles?	
12:30	*Lunch*	
Workshop session VI		
13:30	Peter Kavanagh, Parry Serafim and Stuart Dawson	DRT, public policy and the Victorian bus industry [25]
	Laize Andréa de Souza Silva, Maurício Oliveira de Andrade and Maria Leonor Alves Maia	How does the ride-hailing systems demand affect individual transport regulation? [65]
	Marianne Vanderschuren and Jennifer Baufeldt	Ride-sharing: a potential means to increase the quality and availability of motorised trips while discouraging private motor ownership in developing cities? [147]
	These papers contrast experience in a developing country context – papers #65 and #147 (Paper 65's setting is in Brazil which, although having the largest economy in Central and South America, still has features of a developing country in terms of per capita income and other aspects which are influenced by transport) with experience in Australia. **Discussion questions:** What are the wider issues for implementation; are the legal issues a real inhibitor to rideshare development; is there a lack of critical mass or is it other factors which impact on success; is regulation needed to control externalities, particularly congestion; will ridesharing decrease private car use and/or increase use of shared mobility by choice travellers and what is the likely impact on car ownership rates; what is the impact of introducing DRT services in a low density environment but where the population has high smart phone adoption in contrast to a higher density environment; Can lessons be transferred between developed and developing countries?	
15:00	*Afternoon tea*	

	Workshop session VII	
15:30	Minoru Nomura and Yoshinori Takahashi	Uberisation in rural Japan: a case of community transport in Tango Peninsula, Kyoto Prefecture [36]
	Corinne Mulley, John D. Nelson and Steve Wright	Public transport meets mobility as a service: on the road to a new a flexible future [8]
	Community based transport is very different in Australia and Japan but papers #36 and #8 have synergies in the way MaaS/Uber provides for community needs. **Discussion questions:** Can 'uberisation' or Community Transport provide services that the community want at a price that can be afforded; what are the constraints to making successful services for the community in rural or regional areas or for the aged and frail; Does providing more of a community based offering link into the public transport portfolio and if not, should it and what would need to be done to do this?	
16:50	*Short break*	
	Workshop session VIII	
17:00	Discussion of issues raised throughout the workshop sessions, in preparation for reporting back to the Conference	
18:00	*Close*	
	Wednesday 16 August	
	Workshop session IX	
09:00	**Discussion of Communication and Usage Issues** What messages does our workshop have for: • Researchers? • Public servants/ practitioners providing impact statements of public transport investment? • Governments? • Public sector transport planners and operators? • Private sector investors and operators?	
10:30	*Morning tea*	
	Workshop session X	
11:00	**Discussion of Policy Issues and Recommendations (some questions for starters)** • What kind of regulation is appropriate in order to create "fair" conditions in the market and perhaps set minimum standards? • Will such efforts lead to market exit or collaborations to provide door-to-door services? • Are the business models of the new entrants really sustainable or are new business models needed and, if so, what might they look like? • Can a wider implementation of the practices of the ride-hailing companies lead to new ways of creating flexible and truly on-demand urban bus services? • Are there special implications for transport services for passengers with reduced mobility? • Will the adoption of new technologies such as autonomous vehicles and new mobility and business models such as mobility as a service (MaaS) open up mobility options that respond to user needs? • How might the various players (existing and new) position themselves to benefit by new possibilities offered as a result of digitalization? • Will the way public transport is organized and financed ultimately be disrupted – and what will be viable in terms of competition, contracts and governance? • What implications are there for traffic congestion, and who really benefits?	
12:30	*Lunch (end of workshop sessions)*	