

PRT Heathrow conference

As the site of the potentially first PRT system in the world, London Heathrow was the ideal setting for a conference on PRT from 22 until 24 September. The two and a half day event, which supported by CityMobil, saw a broad range of presentations on PRT and similar systems addressing a wide range of aspects including ongoing and planned implementation of automated systems, modelling and simulation, and public procurement. Delegates also enjoyed the opportunity to take a ride on the ULTra system at London Heathrow's Terminal 5. ULTra, or Heathrow Pod as it has been branded, is currently undergoing passenger trials prior to opening fully to the travelling public.

During the conference, delegates learned about other PRT schemes being implemented or considered in other countries around the world. These include, in addition to the Heathrow Pod, the 2getthere system under construction in Masdar (United Arab Emirates) and Vectus, a rail-based PRT system, which will be piloted in one of five Swedish cities applying for central government funding (winner to be announced at the end of October). Other cities that have expressed an interest in PRT and are the subject of PRT modelling and/or design studies include the historic city of Bath, a science park in The Hague/Rotterdam area, Daventry, Delhi and Shanghai. In addition, two CityMobil demonstrators (Rome and La Rochelle) were presented although these are not PRT systems strictly speaking but rather Cybercar systems which are fully automated and can operate in an open environment on a normal road.

Some interesting points coming out of the discussions included the role of PRT in changing travel behaviour, particularly moving away from the private car but also the potential shift from soft modes (walking and cycling). This discussion clearly pointed to the need for further research on the potential impact of PRT in a multi-modal city. There was a discussion around individual and collective ridership of a PRT system. Clearly on sustainability and efficiency grounds, it makes more sense to encourage passengers to share rides; however, this was perceived as moving away from the philosophy of PRT, ie, an individualised, origin to destination service (like a car), towards a mass transit type system. The age-old debate of 'freeing up road space through PRT could lead to more cars on the road' was also briefly discussed.

Although local authorities are an important client group for PRT, efforts to persuade local authorities, in Europe particularly, to consider PRT have so far produced little. This is primarily due to the risk-averse nature of local authorities who prefer tried and tested solutions. Other important obstacles for local authorities are cost, visual intrusion and privacy. Despite many PRT modelling studies showing that the system can pay itself back over a given period of time, the huge initial capital outlay to design and build the system is dissuasive. The mainly elevated track of a PRT system is cited as a major barrier by transport planners, especially in historic cities. However, the PRT design produced for the historic city of Bath, in the CIVITAS project Renaissance, shows that it is possible to find sympathetic design solutions that can be reasonably well integrated into the urban landscape. The elevated track can also be a source of privacy issues, where it passes in front of a bedroom especially. A counter argument for this is the prevalence of elevated roads in cities and double decker buses in UK cities especially (passengers on the upper deck can also see into bedroom windows!).

The discussion also briefly touched upon land value which could rise for home owners in the vicinity of the PRT network (as happens for land around railway and underground stations). It was proposed that an increase in land value could offset the intrusion and privacy aspects; however, studies have shown that land value increases would not benefit all neighbouring homes and indeed, those homes immediately next to the track could see their house price go down. Other ways of dealing with privacy loss and visual intrusion include route selection (ie, avoiding the most sensitive streets), screening, improving the street at ground level (eg, building street lighting into the track, enhancement schemes) and compensation. When appraising a system, it was recommended that the visual and privacy impacts be quantified and weighed up against the wider benefits of a PRT scheme.

The future of PRT was the focus of the final session of the conference. It became clear that awareness of PRT as a transport solution is still relatively low and furthermore, PRT lacks credibility due primarily to the absence of an operating system. A successful launch and operation of the Heathrow Pod and/or Masdar PRT system could help to dispel myths but it was concluded that more needs to be done to raise awareness and importantly to spell out the real benefits and potential impact of PRT over a conventional transport service, eg, a bus. The conference demonstrated that there is a wealth of research findings on the benefits and potential impact of PRT. It was proposed that these findings be pulled together, possibly through the PRT association ATRA, and new communication tools be devised, drawing on the research findings, targeting potential implementers of PRT. In this regard, the Niches+ guidelines for implementers of PRT were cited as a good example.