



WNEPT 2006

Workshop on Networking in Public Transport

(in conjunction with QShine 2006)
 Jointly sponsored by ICST, Create-Net, and the EU (IST-FET)
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OVERVIEW

Public transport (PT) systems, including buses, taxis, trains, ships and airplanes, are used daily by millions of people worldwide, ranging from regular commuters in metropolitan areas to long-distance business and leisure travellers. The ability to communicate and access information during travel is becoming increasingly crucial to maintain productivity or provide entertainment for PT passengers. However, despite phenomenal advances in mobile wireless networking technologies in recent years, commercial deployments of special networking solutions to support PT passengers remain scarce (except in airplanes). For the most part, mobile end users can only communicate by connecting directly to their individual wireless service providers. This prevailing situation offers a very limited and often inadequate support for the wide range of applications and needs of PT passengers, such as broadcast of multimedia entertainment and travel-related updates, and interactive multiplayer games. Additionally, networking support to PT vehicles is necessary to enable other PT-specific applications that do not directly involve the passengers, such as real-time surveillance, remote telemetry, and management of PT-specific road infrastructure (e.g. traffic lights on priority bus lanes and rail crossings). All of these require the deployment of integrated on-board network solutions to connect between passengers, content/application servers and other vehicle-mounted devices, neighboring vehicles, roadside infrastructure, and the Internet. Moreover, some inherent features of PT, such as the repetitiveness and predictability of routes and timetables, can be used to design specialized network protocols to further improve the quality of service perceived by PT passengers.

SCOPE

Authors are invited to submit original full papers on any aspect of public transport networking. Contributions describing theoretical research, protocol design, experiments and measurements, commercial deployments, business models, or position/vision statements are all encouraged. Descriptions of work in progress, test trials, and future work plans are highly appreciated. Topics of interest include, but are not limited to:

- Broadband access to trains and airplanes
- Mobile routers and network mobility
- Intra-vehicle networks
- IP and IPv6 mobility support for public transport
- Multiple access networks in public transport
- Authorization and authentication in public transport
- Inter-vehicular communications, VANETs
- Intermittent-connectivity and delay-tolerant networks
- Protocol design for predictable mobility
- Signalling between public transport and roadside infrastructure
- Content distribution and on-board caching
- Location privacy for public transport passengers
- Novel public transport applications and services
- Billing and charging for public transport networking
- Experimental results and practical deployments

Submitted papers will be reviewed by at least two independent experts in the field. Proceedings of the workshop will be published together with those of QShine. Authors of accepted papers will be required to register in order for the paper to appear in the workshop proceedings.

IMPORTANT DATES

Paper Submission Due	May 15, 2006
Notification of Acceptance	June 16, 2006
Camera Ready Versions Due	July 11, 2006 (extended)

For submission instructions and further information, visit <http://www.wnept.org>

