

Summary

Executive summary

The term Intelligent Transport Systems (ITS) refers to information and communication technology applied to transport infrastructure and vehicles. Berg Insight's definition of ITS for public transport includes systems installed in public transport vehicles as well as at terminals, stops, depots and similar. Included are also backoffice IT systems which ensure that public transport services can be planned, scheduled and managed to achieve efficient operations. An important part of ITS for public transport is further solutions providing travellers with updated information about routes, departure times, possible disturbances and connecting services. The history of these different types of solutions dates back several decades and current state-of-the-art solutions include for example real-time intermodal journey planners, open automated fare collection systems using contactless cards or mobile ticketing, and on-board infotainment solutions with information about nearby points of interest.

Public transport plays an increasingly important role in societies as a result of continuing population growth in cities and shifting consumer preferences. With ridership growing steadily across markets worldwide, a total of 57.6 billion and 13.8 billion public transport passenger journeys were carried out in the EU28 and North America respectively in 2014. Available modes include for example local and regional buses and trolleybuses, regional and suburban rail transport, metros and trams, and local waterborne passenger transport services. In 2014, the number of registered buses and coaches in Europe and North America reached 764,000 vehicles and 439,000 vehicles respectively, not including school buses. The economic value of public transport services in Europe is estimated to around € 150–200 billion per year, while the corresponding number in North America is around € 60–70 billion.

Berg Insight is of the opinion that the market for ITS in public transport is in a growth phase which will last for several years to come. Increased funds made available to infrastructure spending and demands from travellers contribute to a positive market situation. Individual markets may however experience temporary fluctuations, depending on the political climate, austerity measures and local developments. The total market value of public transport ITS for buses and trams in Europe is forecasted to grow at a compound annual growth rate (CAGR)

of 7.2 percent from € 1.35 billion in 2015 to reach € 1.91 billion by 2020. The penetration of on-board computers with GPS location functionality and wireless communication in buses and trams in Europe is estimated to increase from 70.9 percent in 2015 to 85.0 percent in 2020, however varying considerably between regional markets. In North America, the total market value of public transport ITS is forecasted to grow at a CAGR of 8.1 percent from € 0.59 billion in 2015 to reach € 0.87 billion in 2020 and the penetration rate is estimated to increase from 76.4 percent in 2015 to 88.5 percent in 2020.

A group of international aftermarket solution providers have emerged as leaders on the market for public transport ITS. Major providers across Europe and North America include Canada-based Trapeze Group and Germany-based INIT with significant installed bases in both regions. IVU is furthermore a dominant player primarily in the German-speaking part of Europe and has also expanded in the North America. Clever Devices and Xerox hold leading positions on the North American public transport ITS market, and the latter is also an international provider of fare collection systems. Additional companies with major market shares in North America include RouteMatch, Cubic-owned NextBus, Avail Technologies and TransLoc. Examples of companies with major market shares on national markets in Europe include Ineo Systrans which holds a leading position in France, and Vix which is a major provider on the UK market. Other significant players include the Spanish groups Indra, GMV and Grupo Etra, Swarco's subsidiary Swarco Mizar in Italy, Atron in Germany, Italy-based PluService, Norwegian FARA and the Austria-based company Kapsch CarrierCom. Volvo Group is moreover a notable player from the vehicle OEM segment, offering the ITS4mobility system in partnership with Consat Telematics in Europe and North America. Scania, Daimler, New Flyer and Iveco offer some conventional OEM telematics features for their buses.

The outlook for the public transport ITS market is positive, as several major developments encourage increased investments in such technologies. The ITS market is likely positively affected by international public transport-related initiatives such as the EU project EBSF_2 as well as APTA's standards programs for public transport vehicles and ITS. Recent focus of ITS system deployments has been on increasing the level of integration and utilising technology advancements for fare collection purposes. Another major driver is the ongoing global developments related to the concept of smart cities, where ITS in general and public transport ITS in particular constitute key elements to enable sustainable smart mobility.