Siemens at InnoTrans: The electronic ticket – the key to linking different means of transportation

Congestion on Europe's roads already costs the European Union more than 100 billion Euros every year. Studies predict that motorized passenger transport will increase by 20 percent by 2025. Intelligent electronic ticket solutions and transportation systems networked along the entire mobility chain will ensure that city dwellers reach their destinations conveniently and will help to transfer traffic away from roads to eco-friendly public transportation.

Many major cities and metropolitan areas are already suffering from endless traffic jams, insufficient parking and poor air quality. New solutions are required to make city living more attractive. In order to get from “A to B” quickly and effectively in future, people will let intelligent systems guided them through the urban jungle. They will no longer use just one form of transport but, depending on the traffic situation, will switch from private car to metro or from commuter train to bike and ride on everything with one electronic ticket, which can be mapped on a “smartcard”. This smart card makes it easier to switch between different means of transportation. Users do not have to remember fares, they just pay for the distance travelled, regardless of whether they took a train, hired a bike or used services such as car parking facilities.

Siemens Mobility and Logistics is demonstrating at the InnoTrans 2012 just how easy individual travel and payment can be with such a “smartcard” – a system that charges for the service used or the distance actually traveled, regardless of whether it is for taking a train, renting a bike or parking a car.
Electronic ticketing: one ticket to mobility

A smartcard is the same size as a credit card, comes with an active RFID chip and logs the different means of transportation used as well as the start and finish of the individual journeys. There are two different operating modes. For the “Check in, Check out” mode, the card owner simply places the chip card against a reading surface before and after using every transportation service. In the contactless “Be in, Be out” mode, it is no longer necessary to place the card against a reader because it is “read” automatically without contact by means of spatial registration both at the vehicle entrance and at regular intervals during the journey. In both modes, if a passenger then continues his or her journey with a different means of transportation, the new journey segments are simply added on. The entire journey is processed and reconstructed later and the lowest applicable rate, for example, is either charged to the owner’s credit card or debited from his or her bank account.

From smartcards to billing systems: Siemens has the entire value chain for electronic tickets covered

The smartcards developed by Siemens are the key to linking different means of transportation. The chip card has two different operating modes – “Check in, Check out” and “Be in, Be out” – and not only offers interoperability between public transportation operators, but can even be used in conjunction with car parking, car sharing or cycle hire schemes. Sales, billing and accounting are all performed centrally using the SAP-based Ptnova background system, which is simple to integrate into the IT systems of the institutions involved and makes the information available for Customer Relationship Management. Siemens’ portfolio is supplemented by mobile phone ticketing solutions as an alternative access medium and hardware and software infrastructure for the diverse access systems.

You can find all available information on the Siemens booth at the InnoTrans 2012 at http://www.siemens.com/presse/innotrans2012
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