

# On the up



## **MALAVIKA SRINATH charts the dynamic rise of road user charging in Eastern Europe**

**While the mature economies in Europe move towards creating integrated transport policies, emerging Eastern European countries are searching for ways to strengthen their transport infrastructure through technology.**

Lower operating costs have created business opportunities within this region and its geographical proximity to other eastern markets has made it a prime transport corridor. As a result of traffic congestion and growing road management costs, road building and development have now become critical needs in the region, forcing government ministries to find ways to finance these projects. As a result, charging transporters for using main roadways has become an important source of funding development. With road transport growing almost 20 per cent each year, road toll charges offer a significant, constant source of finance for the construction and maintenance of road infrastructure.

In the last two years, efforts have been aided by technological advancements that revolutionised road user charging in Western Europe. Similar developments are

surfacing within Eastern Europe, giving rise to the expectation that every country in Eastern Europe will have a sophisticated road user charging system in place by 2013.

### **An evolving market**

Due to the depth of government involvement in the sector, tolling in Europe is heavily dominated by political goals. Although technological innovation was often not encouraged, countries like Germany, Austria, and Switzerland developed highly sophisticated tolling systems. As a result of this, the market has been forced to shift from manual and automatic tolling booths to satellite and microwave-based electronic systems.

With the success of satellite-based tolling in Germany, Western Europe is likely to see the spread of this system in the near future. But as the countries of Eastern Europe are in various stages of infrastructural development, there has been a lopsided upgrading of tolling systems within this region. For example, countries such as Poland and Hungary have rolled out tenders in order to select

more technologically advanced systems, while countries like Lithuania are still operating manual and automatic “vignette” sticker systems.

However, figures show that electronic toll collection systems currently dominate the European road-user charging market, holding 84 per cent of total road toll revenues across the region. Market movements also indicate that, following the initial success of the Czech Republic’s call for tender to install microwave-based tolling on its roadways, this technology is likely to be adopted in Eastern Europe on a large scale in the coming years - especially as these states are heavily influenced by system choices made in neighbouring countries.

Nevertheless, the success of satellite-based systems in Germany has prepared the European market for further technological growth. As more sophisticated systems are adopted worldwide, Eastern Europe will be forced to keep up. The growth of technologically advanced tolling systems is being driven by efforts to achieve Europe-wide interoperability in tolling, which meets standardisation norms.

### Interoperability and environmental stability

Recent years have witnessed the issuing of several EU directives aimed at creating an interoperable tolling system throughout the European region.

The CENT C 278 standard was one of the earliest initiatives within this area, and the preliminary standard

was defined as early as 1991. The Eurovignette Directive followed in 1996, introduced to limit problems within road freight caused by the existence of different methods and levels of charging in different countries. Subsequently, a directive issued in July 2003 continued to focus on interoperability, prescribing the conditions necessary to put such systems in place at the earliest in all European countries. But despite such governmental efforts, the problem remains unsolved, primarily due to the differing stages of infrastructural development in the countries of Eastern Europe. Some are still unsure of

the wisdom of investing large amounts to upgrade their tolling systems.

However, trends indicate that this is likely to change. With the launch of the European satellite Galileo in 2008, it is hoped that satellite-based tolling will alleviate the problem of non-interoperable systems. Satellite systems will also drive the amalgamation of busi-

ness processes, information technology, and mobile communications.

The road user charging market in Eastern Europe has already begun to see an influx of systems providers and telecom operators, driven by potential investment opportunities. Increasing private investments will serve as sources of finance for governments, enabling them to focus efforts on other developmental measures.

Future directives will begin to address the enforcement of sophisticated charging systems, and the focus will shift towards adapting this framework to reflect both internal and external costs. Compliance with the princi-

**“ETC systems currently dominate the European road-user charging market”**



## Eastern Europe

ples of both environmental and developmental sustainability will become key. Today, most road charges in Eastern Europe are levied only on heavy vehicles, but charges have already begun to filter down to car users.

A case in point is the congestion charge applied on vehicles within cities such as Warsaw, Poland. More countries in Eastern Europe will begin to see such developments, as environmental wellbeing becomes critically important.

### Forecast for market development

With more states entering the European Union, the demarcation between the East and West of Europe will begin to diminish. Although technologically – and even economically – there are still significant differences between the two regions, a common transport policy will hugely aid development. United in their purpose, all countries in Europe will work towards building an interoperable, environmentally sound transportation policy.

Sustainable mobility of freight will also depend on developing a multimodal transport network, and the future is likely to see an increased use of rail and waterways across Europe as road toll charges become higher.

Nevertheless, the market will continue to witness significant technological advancements in road toll systems. On urban and inter-urban roads, congestion charging maintains its dominant position as more cities enter the scheme. This will be supported by the devel-

opment of Advanced Traffic Management Systems and Traffic Information Systems such as variable message signs, in order to manage road congestion within urban areas better.

In Eastern Europe, transport ministries will continue to welcome private investment in the form of road concessions and build-operate-transfer projects to support the development of roadways. Poland, Hungary and the Czech Republic currently offer the most attractive opportunities for investment in the road tolling market – especially as over 50 per cent of traffic from new member states into Western Europe comes from these three countries. Roads connecting Russia to Europe are also likely to be high road revenue earners for players in the market.

### Look East

As traffic begins to move east, the developing countries in the Eastern European region will begin to play pivotal roles in the expansion of an all-European transport network. It is therefore inevitable that sophisticated technology will become the backbone of road tolling systems in this region. **TH**

*This article is based on Frost & Sullivan's research entitled "Strategic Analysis of the Road User Charging Markets in Eastern Europe" published in February 2006.*

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