

# Transit operators were still punching tickets. We steered them to a more efficient solution.

We implemented Eastern Europe's first electronic ticketing system, increasing revenues and reducing fraud.



# We equipped the metro system with a magnetic fare collection and contactless ticketing system.

## The Challenge

The multiple public transportation systems of Warsaw, Poland, are managed by ZTM, which provides customers with quality service while ticketing more than two million journeys per day. The company coordinates three local public operating companies:

- MW (metro)
- MZA (buses)
- TW (trams)

When ZTM decided to replace the old punch ticketing system, they turned to ACS.

## The Solution

ACS equipped 1,600 buses, 900 trams and 15 stations of the Warsaw metro system with a magnetic fare collection and contactless ticketing system – the first dual ticketing system in Eastern Europe. The equipment we provided includes:

- The central management system
- 9,100 magnetic and contactless ticketing validators for buses and trams
- 2,190 onboard control units for buses and trams
- 360 retail ticket office machines

- 200 portable reader-decoders
- 230 access control gates for the metro
- 3 magnetic ticket-making machines

Our ticketing system allows operators to set more than 100 different ticket parameters – full rate, discounted rate, etc. Contactless ticketing means that single-journey tickets can be replaced with rechargeable multi-journey cards.

All magnetic tickets have a forgery-proof serial number, and sophisticated software records attempted infringements. Warsaw is the only locale in Europe where this prevention technique is used for single-journey tickets.

Any equipment installed in Poland must be approved for time management. GUM, the official time-measuring organisation, checks differences between the time set throughout the system and that of the onboard equipment, as announced by the manufacturers.

## The Results

Introduction of the new fare collection system quickly led to a significant increase in revenue. One reason: a decrease in fraud, resulting from systematic ticket validation. The contactless cards, which were initially reserved for season-ticket holders, are now scheduled to be extended to the majority of users.



**Sector:** Public Transportation

**Solution:** Magnetic fare collection and contactless ticketing system

**Client:** Warsaw, Poland

**Challenge:** Replace dated punch ticket system with an electronic solution

**Result:** Increased revenue, reduced fraud

## Contact Us

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## About ACS

ACS is part of Xerox's \$22 billion global enterprise, with 130,000 employees serving our clients in 160 countries.

You can learn more about us at [www.acs-inc.com](http://www.acs-inc.com).

## The Bottom Line

When ZTM, which manages the multiple public transportation systems of Warsaw, Poland, decided to replace its old punch ticketing system, they turned to ACS. We equipped the metro system with a magnetic

fare collection and contactless ticketing system – the first dual ticketing system in Eastern Europe. The system quickly increased revenues and reduced fraud.



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