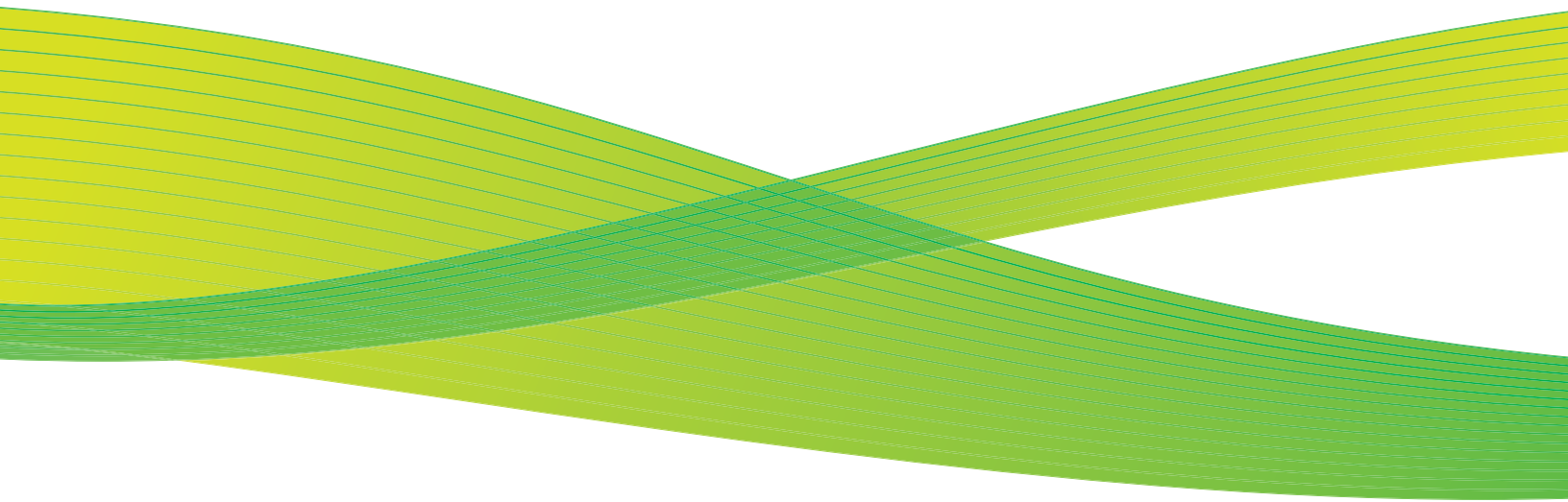


# Paris needed better ticketing for its coaches and buses. We showed them the light.

We developed contactless ticketing  
for 4,000 coaches and buses.



# 70 coach and bus companies in Greater Paris came together under a single, Millennial ticketing system.

## The Challenge

The millions of people who use public transportation public every day in the Ile-de-France region around Paris first got to know contactless ticketing in late 2001 on RATP Métro and buses. The city wanted to extend the success of the system to 4,000 coaches and buses in Greater Paris, opening a single contactless ticketing area across the city and its region.

## The Solution

ACS, teaming with Professional Transport Organisation (OPTILE), deployed the entire system in just one year's time. Newly installed validators are either 100% contactless or mixed, so that occasional passengers could validate magnetic tickets. The validators communicate with central systems on the operators' premises.

The next step involved linking all system components with the Ile-de-France Transport Authority (STIF) central system. That enabled OPTILE data to merge with RATP and SNCF (French national railways company) data, at a rate of 14 million connections per day.

To strike a balance between marketing analysis and individuals' privacy, ACS and OPTILE worked in partnership with the CNIL – the French National IT and Liberties Commission. The result: original architecture that separates personal data from information on the journeys. It includes an "anonymised" file with the detail

of the journeys (dates, times, stops), as well as a file containing information on passengers, their card numbers and season ticket types. No link can be made between the two files.

## The Results

The ACS system guarantees operators extremely high data return reliability, on a par with the standards set by financial institutions. Secure counting of validations and computer-managed revenues ensures that the different companies receive their fair share of fare income and STIF subsidies. Of course, contactless ticketing also means a tighter check on tickets than is possible when passengers simply show them to the driver.

The use of wireless technology ensures secure transfer of data received by the on-board validators to the data concentrators at the depot. The concentrators act as real "black boxes," feeding directly into the system, with no possibility of human intervention or falsification.

## Key Stats

- 3,700 driver consoles PCE 311
- 360 portable control terminals LDP 415
- 5,600 contactless validators VPE 415
- 2,200 magnetic validators VME 414
- 1,500 contactless kits for magnetic validators
- 39 station data concentrators (SST)
- 104 depot data concentrators (SSC)



**Sector:** Public Transportation

**Solution:** Ticketing

**Client:** Greater Paris

**Challenge:** A 21st century ticketing solution for 4,000 coaches and buses

**Result:** A secure mixed magnetic/contactless system

## 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

The city of Paris wanted to deploy a contactless ticketing system to 4,000 coaches and buses in Greater Paris. Teaming with Professional Transport Organisation (OPTILE), we deployed the entire system in

just one year's time. It includes new validators, as well as networking that links all system components with the Ile-de-France Transport Authority (STIF) central system.



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