When Carrefour, one of the largest food retailers in the world, expanded its presence of hypermarkets across three continents, they hired security system integrator UTI to establish loss prevention systems within their unique shopping environment. The security company met the challenge, providing one of the most secure hypermarkets, equipped with state-of-the-art video surveillance equipment from American Dynamics™.

Created in 1959, Carrefour has grown from a single supermarket in France’s Haute-Savoie region to more than 11,080 stores in 29 countries.

“We found it very easy to install and integrate the American Dynamics equipment with the other products,”

Roxana Tudosescu
UTI Systems
Operations range from supermarkets stores and a variety of other outlets to convenience. But what Carrefour is known for above all else is the hypermarket.

A hypermarket is, essentially, a super-sized supermarket that typically stocks some 70,000 items and has a sales floor as big as 20,000 square meters or approximately 215,000 square feet. Carrefour introduced the concept to Europe in 1963, opening its first one in the south of Paris. The trend caught on and Carrefour hypermarkets sprang up across the continent. As they increasingly became part of daily life for many western Europeans, more stores opened in Latin America, Asia, and the South Pacific.

But as of 1999, no one in Romania had yet seen a hypermarket—at least not on their home turf. Carrefour executives noticed the void, and the opportunity. So they devised a plan: open two hypermarkets a year in every Romanian city with a population of 300,000 or greater. Joining forces with their franchisee Hyparlo, they created Hiproma, a 50-50 joint venture to manage the effort.

Seizing the Opportunity—and Securing It

A crucial part of any retail endeavor is loss prevention. Shoplifting and employee theft or internal shrinkage can take a balance sheet from black to red, and often do. According to Jack Hayes, who conducts an annual retail theft survey, these are serious crimes that not only take a toll on retailers’ bottom-line profits but also “hurt our economy, costing consumers higher prices at the cash register, and causing a loss of jobs when retailers are forced to close stores or even go out of business.”

The problem affects merchants everywhere in Europe draining as much as 29 billion euros annually from shopkeepers’ coffers. And it’s especially severe in Romania.

If Carrefour’s ambitious expansion into the Eastern European nation was to succeed, the new hypermarkets would require the toughest and tightest security available. Fabrice Besson, the security manager tasked with protecting Carrefour’s merchandise, personnel, and patrons at all of the new stores throughout the country, knew this as well as anyone.

His most immediate challenge was to find an installer and supplier capable of handling such a large scale, geographically dispersed project. But he needed more than that. With Carrefour being a newcomer to the region, he needed an established organization that he could trust.

“Because Romania is so far from our home base in France, I wanted to make sure that if there was a problem, someone would be there to fix it,” he said.

About this time, UTI Retail Solutions’ Managing Director Simona Dinca heard about Carrefour’s plans to enter Romania. She called to see if they could help.

Just as Carrefour is one of the largest retailers in the world, UTI is the largest security system integrator in Romania. And like Carrefour, UTI isn’t just big. It’s ubiquitous, with a network of regional branches that enables the organization to provide an equally high level of service in every major city. “This was a strong point for us,” Dinca recalls.
Another strength was UTI’s security equipment. As Tyco Fire & Security’s distributor for the region, they had the technology to address security issues unique to the mega-sized hypermarket. Besson tested the products in their showroom and was very impressed with the quality and performance. So Dinca assembled a team and together they set about designing a security system tailored to hypermarket specifications.

**Rolling It Out**

The first store, Carrefour Militari, located in Bucharest right where the Bucharest-Pitesti highway begins, was slated to break ground in 2000 and would feature a sales floor of 10,500 square meters stocked with 50,000 products. There would be 58 cash registers at checkout and another 6,500 square meters of commercial gallery space housing 34 smaller shops.

That’s a lot to keep an eye on, especially considering the unprecedented temptation such a vast selection of goods posed to the potential shoplifter who was unaccustomed to a market economy.

The UTI team addressed the challenge with two SensorRail video systems, 18 SpeedDome® Ultra VII programmable dome cameras, four SpeedDome Optima programmable dome cameras, multiplexers, analog video recorders, and a VM96 matrix switcher system. All are from American Dynamics, part of Tyco Fire & Security’s Access Control and Video Systems business unit.

When the Carrefour Militari opened its doors for business, it was one of the most secure hypermarkets in the company’s portfolio. Besson had full video coverage of everything—from the commercial areas to the warehouses—just as he had requested.

The SensorRail, in particular, gives security staff a vantage point over all of the hypermarket’s enormous display aisles. It’s ideal for warehouses or high-ceilinged buildings like a hypermarket, serving as a motorized perch for domes that noiselessly move along its tracks the same way a train does, only inverted, to close in on wherever the action is. “The SensorRail enhances the roving perspective that the SpeedDome Optimas offer,” said Viorel Luta, UTI’s technical manager for the project. “Combined, they expand your ability to cover broad expanses of retail space far beyond what you can manage with a dome camera by itself.”

“We’ve used it whenever something has looked suspect,” added Besson. “Sometimes an organized team comes into the hypermarket and tries to steal. The security staff can follow them all over the store simply by maneuvering the dome along the track.”

At the time the Carrefour Militari began construction, digital recording had not yet reached Eastern Europe. It wouldn’t arrive until 2001. By then, Besson had seen the equipment from American Dynamics in action and he knew he could trust it to perform. He decided to retrofit the Carrefour Militari for the upgrade from analog video recorders to digital as soon as American Dynamics’ Intellex® digital video management system became available to his area.
Because Intellex digitally records, displays, and stores the video from Besson’s security cameras, no one has to change tapes or check periodically to make sure that it’s recording the way they would with an analog video recorder. Images are more reliable and higher in quality too. Plus, Intellex has advanced search capabilities that can retrieve footage for a specified time and date or other criteria within seconds, saving hours that would otherwise be spent hunting through the database. Intellex also enables Besson and his security personnel to establish a perimeter around certain areas, such as the place where employees make cash drops, so that anyone who crosses into these areas triggers an alarm. They can set alarms to go off based on the speed, direction, or size of an object in motion as well. For instance, someone entering the hypermarket through an exit door could trigger an alarm that would appear on the monitor screen.

Besson found Intellex so effective at Carrefour Militari that he had it, along with its companion product Network Client Remote Management Software, installed at Carrefour’s second hypermarket in the region: the Orhideea Commercial Center.

Network Client grants Besson and his staff remote access to the system; it can be installed on any PC and links to the Intellex units on-site at the store. Besson can simply add each new hypermarket to Network Client as it completes construction, viewing and controlling surveillance cameras at every store in Romania without leaving his desk at the main office in Bucharest. If he chooses to go on the road, he can bring Network Client along on a laptop and maintain the same access by simply plugging in anywhere there’s an Internet connection.

As further protection against shoplifting, UTI outfitted the cash registers and entrances at all Carrefour stores with Acousto Magnetic Electronic Article Surveillance (EAS) from Sensormatic, another of Tyco Fire & Security’s brands to improve loss prevention measures. Sensormatic EAS systems help curb shoplifting by tying together electronic article surveillance, video, and point-of-sale systems, and delivering real-time intelligence to the store or corporate office.

The stores use a full range of product tags for theft detection and deterrence. Sensormatic’s Ultra-Post and Ultra-Max anti-shoplifting devices activate audible and visual alarms if a patron tries to leave the store without the tag being removed. The net result is a sophisticated yet easy to use high tech security system that gives Besson and his employees video surveillance of any area within or near a hypermarket where an alarm has been triggered.

“We found it very easy to install and integrate the American Dynamics equipment with the other products,” said Roxana Tudosescu of UTI Systems, who was in charge of the project.

Orhideea’s security system has since become the blueprint for all hypermarkets built in Romania. Installations for each new store incorporate the latest version of equipment available, like the SensorRail III and SpeedDome Ultra VII Day/Night programmable domes.
The SpeedDome Ultra VII Day/Night programmable domes feature infrared capability that automatically kicks in when light grows dim. “They’re perfect for guarding the parking lots outside of the hypermarkets,” said Dinca, “because they enable whoever is manning the controls to see what’s going on even in poor lighting conditions.”

A Wholesale Success

Today, Carrefour has four hypermarkets in Romania: the Commercial Center Carrefour Militari, Orhideea Commercial Center, and Carrefour Coletentina, all in Bucharest, and the Carrefour Brasov. Merchandise turnover has exceeded expectations. Business is going so well, in fact, that those in charge have decided to speed up their expansion and open another four hypermarkets by late 2006.

Security, as Besson anticipated, has proven pivotal to Carrefour’s success. The security installation at the first store alone paid for itself in the recovery of stolen merchandise within 18 months, helping them catch an average of 10 wannabe shoplifters daily.

The Orhideea Commercial Center has emerged as the third busiest of Carrefour’s hypermarkets in the world, rigorously testing UTI’s integrated system with a constant, nearly unparalleled flood of foot traffic.

“We’re enormously pleased with how well our high tech surveillance equipment is performing,” said Besson. As he and his staff have found, it does more than stop shoplifters. Stores remain open as late as 10 p.m. and the surveillance cameras outside have helped deter car theft and acts of violence that are more prone to happen at night.

Other benefits have accrued, too. Intellex has saved time and money in the efficient training of Besson’s security personnel. “The menus are extremely user friendly, making it simple to operate,” he said. “Learning it goes very quickly.”

Recovered merchandise, safer parking lots, and cost effective training have convinced Besson that he made the right choice. As Carrefour executives map out where in Romania the next hypermarkets will be, he is already conferring with UTI and Tyco Fire & Security about duplicating their security installation at every new site.

System Summary

Project: Carrefour Hypermarket

Location: Romania

Products: Domes, cameras, SensorRail, and Intellex.