

# FocalPoint 40 Profile: Echelon

## Contact Echelon

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## Echelon Summary

Echelon® (NASDAQ: ELON) is a San Jose, California-based supplier of embedded device network technology to global end-users, manufacturers, system integrators, and service providers. Echelon's solution, the LonWorks® platform, offers a real-time exchange of information between remote devices, people, and business systems.

## Echelon Offerings

Echelon provides infrastructure hardware and software to a dynamic and expanding device networking market. The company ships a line of more than 90 products to original equipment manufacturers (OEMs) and systems integrators in the US and abroad. Beyond OEM use, the LonWorks solution enables end-users to remotely connect, monitor, control, and diagnose intelligent devices, gaining more control over devices and appliances in an environment – from HVAC and lighting in buildings to energy usage in homes. The LonWorks system has been adopted by numerous device and system manufacturers, and has become the de facto standard for monitoring and controlling intelligent devices. The solution allows appliances and systems by multiple manufacturers that use LonMark® certified devices to be networked into a single smart building system.

## Echelon Differentiation

Echelon's LonWorks system boasts open connectivity. The open architecture enables seamless access to devices from anywhere in the network, making systems less expensive to own, operate, and expand. The solution meets the demands of device networking without the hassle of using multi-layered architectures and proprietary controllers that often restrict access to data and create additional complexity. Open systems offer greater flexibility, easier management, higher levels of scalability, and lower life-cycle costs. The LonWorks solution has received recognition as a networking standard by organizations worldwide.

## Enel SpA

### Case Study

Enel, the world's largest publically traded utility, is using Echelon's network infrastructure to transform the Italian power grid into an intelligent services delivery network that, when fully deployed in 2005, will connect to smart, communicating digital electricity meters in more than 27 million Italian homes and buildings. Enel has announced its cost of deployment to be 2 billion Euros. It anticipates savings of 400 million Euros a year beginning in 2005 from cost-cutting and improved efficiency derived from the installation of the smart meters. As of May 2003, over 8.5 million smart meters were in operation with new meters being installed at a rate of 700,000 per month. In addition, the system will allow Enel to provide customers with optional unregulated services, such as remote diagnostics and control of appliances, security monitoring, and medical emergency signaling. This intelligent power grid will be one of the most advanced in the world. Enel will also be in a position to add bandwidth as needed to support future services, a result of Echelon's support of multiple wide-area connection utilities in the same system (power line, telephone, and broadband).



## Echelon Markets

Millions of LonWorks devices have been installed into buildings, factories, semiconductor fabs, transportation systems, homes, utilities, and other applications worldwide. These products can, for example, enable an operations manager to remotely open and close an elevator door in an office building, or collect energy use data from a factory floor via the Internet. From the LonPoint System that integrates new and legacy sensors and actuators in an industrial environment, to Transportation Automation for train control, to video on-demand and networked appliances in the home, to value-add services for manufacturers and service providers, Echelon runs the gamut in terms of market sector coverage.

## FocalPoint Perspective

Echelon is widely known for its work in the building control and industrial manufacturing spaces. The key supporter of the LonWorks standard for device communications (one of the most popular in use today), Echelon has been an energizing force in this market vertical. It has also spent a great deal of time and money promoting the understanding and use of open standards. This is no small task when contending with proprietary systems from the likes of Siemens, Johnson Control, ABB, Invensys, and others. The push to promote open standards has meant that Echelon has had to contend with resistance to change from building managers used to working with market incumbents. But, this has not seemed to slow Echelon down. Its recent flurry of partnerships and its penchant for winning best-in-class design accolades bodes well for the future of Echelon and its role as an M2M innovator.