

# Information Technologies

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Telvent, the Global RealTime IT Company, is specialized in operation and solutions with high technological added value, in the sectors of Energy, Traffic, Transport and Environment in Europe, North America, Latin America and Asia.

With over 40 years experience in industrial supervisory control and business process management systems, Telvent executes projects and provides technical services in the field of mission-critical, real-time control and information management, complemented by a complete offer of outsourcing and consulting services, as a result of this manages technological and IT infrastructures for an extensive international client base.



SECRETARIA DE VIALIDAD Y TRANSPORTE

International Leader in  
the energy, traffic, transport  
and environment sectors



## Executive Summary

In the year 2004, the continued recovery of the Information Technologies industry, which started in the second half of 2003, was clearly evident, although it was more moderate than expected. This is reflected, for example, in the small annual progress registered by the Nasdaq index. It is clear that the geopolitical situation was more uncertain than expected at the beginning of the year, and that the unexpected rise in oil prices, approximately 34% by year's end, has slowed the growth of many economies, which have revised their growth expectations downwards for the last quarter of 2004.

The continuing weakness of the American dollar against the euro, with a devaluation of approximately 8% over the year, has negatively impacted the competitiveness of those companies operating their businesses in the euro zone, resulting in a reduction of growth in those activities conducted in American dollars, as was the case with Telvent.

It is important to point out that during this past year, changes have occurred in the political and government processes in two of the main geographical areas in which Telvent operates: specifically in Spain and United States. These processes of change, although they took place under normal conditions, have resulted in the typical uncertainty that accompanies any major change in the environments in which companies conduct business.

In reference to the RealTime Information Technologies sector of those industries where Telvent operates, a series of trends were confirmed during 2004 that had been become evident at the end of 2003:

- A greater interest expressed by customers in understanding the return on technology investment, giving greater importance to functionality and less to the technology itself.
- A continuous growing demand for solutions fully integrated with the set of business systems.
- A growing interest in the advantages of shared management, or "co-sourcing", of technological solutions.



In this environment, during 2004 Telvent reached an important benchmark in its history on 21 October after placing 32% of its capital on the Nasdaq technology stock market at a price of 9 American dollars per share. This very important step in the development of Telvent's Strategic Plan represents a significant accomplishment and will help facilitate future financing channels for acquisitions and investments in BOT integrated projects, since it provides Telvent with a solid balance sheet and a very low leveraging level.

This achievement has been even more extraordinary considering the fact that the placement was made in the prestigious North American Nasdaq market, which represents a challenge for any public company, since the Nasdaq is regarded as the most demanding and competitive of the existing stock markets. It is also important to note that Telvent is the first Spanish company to be quoted on the Nasdaq through the issue of ordinary shares, as would be the case for a US-based company. This successful initial public offering has resulted in a substantial increase in requests for information on the company and also requires the fulfillment of the rules established by the North American securities market regulator, the Securities and Exchange Commission (SEC).



The entry onto the Nasdaq Exchange also points to the company's success achieved since the 2003 acquisition of the NMS division of Metso, which signifies much more than a simple consolidation of financial figures. Instead, it represents Telvent's new strategic direction and its increased focus on the North American marketplace.

As at the end of 2004, Telvent is a company in which 25% of its approximate 2,400 professionals are now based in North America, with offices in the Houston, Baltimore, Fort Collins, Philadelphia and Athens in the United States and in Calgary in Canada, a position it has achieved in just two years, which began with the acquisition of Metso NMS.

Today, Telvent systems and solutions help to safely and efficiently manage the technology infrastructure for a variety of enterprises operating in the energy, traffic, transport and environmental sectors. The industry statistics corresponding to Telvent's participation include:

- Transportation more than 10,300 million barrels/year of crude and derivatives through more than 280,000 km of oil pipelines.
- Distribution of more than 12 billion cubic feet of natural gas, supplying more than 94 million people.
- Generation of more than 12,500 Gigawatt hours of electrical energy.
- Transportation and distribution of more than 140,000 Gigawatt hours of electrical energy, providing electricity to more than 80 million people.
- Monitoring and controlling of vehicular traffic in more than 6,600 intersections through which 170 million people pass through each day.
- Managing the daily movement of more than five million people through more than 8,700 kilometers of motorways, expressways and tunnels.
- Transportation of more than two billion passengers a year in train and subway networks.
- Ensuring the safe and efficient departure and arrival of more than 60 million passengers a year in more than 70 airports.

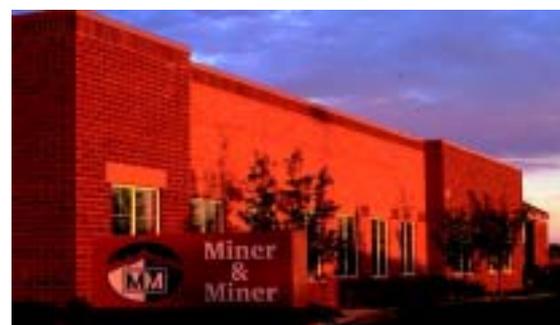
During 2004, three acquisitions were completed that were tremendously strategic for Telvent. Each of these acquisitions, which were considered very carefully beforehand, have the potential to make different contributions that will enrich the overall organization.

The first of these acquisitions, carried out in the month of May, involved the Spanish company ICX, which is specialized in Information Technology solutions for the health industry, a sector in which Telvent has had significant interest in recent years. With this acquisition, Telvent is now provided with a more comprehensive solution for this sector. The acquisition also brings with it, important references in the Andalusian Health Service, as well as a team of professionals specialized in this sector.

In the month of August, the acquisition was completed for the Western Region division of xwave, an IT services enterprise based in Calgary with experience in the development of management solutions for technology infrastructures, focusing in particular on the energy sector. With the addition of this company, Telvent's service offering for the energy sector has been reinforced and complemented.

Finally, in the month of November, the purchase of the majority equity stake in the American company Miner & Miner was successfully completed. This company, which is based in Fort Collins, Colorado, is specialized in the development of GIS (Geographical Information Systems) solutions. Miner & Miner, one of the principal technological partners of ESRI, the leading company in Geographical Information Systems, is the developer of the ArcFM systems that help to efficiently manage energy companies' assets, including geospatial information. Another product in Miner & Miner's solutions suite, Responder, which is an Outage Management System, helps electric utilities to quickly resolve any potential outage situations that might occur in their networks.

There remains as a challenge for 2005 the successful completion of the integration of these three companies, however, based on the experience accumulated with the integration of Metso NMS, and the prior knowledge that existed of these company's personnel expertise and technological solutions, a successful integration outcome is almost guaranteed.



With the goal of improving the profitability of our activities and becoming more efficient in our operations, during 2004 we have continued with the unification process of the general services departments, which provide management services in Human Resources, Administration, Finance, Operations, Systems and Quality from a central unit to all the business units. This structural change follows along with our firm determination to continue maintaining a strict general expense policy, despite the growth in business volume.

In 2004 we continued with the development of specific projects to improve the processes under the 6 Sigma methodology, the success of which has already impacted Telvent's income statement based on the eight projects that were completed during the past year.

This year the trend towards increased activity volume in Outsourcing and Technological Infrastructure Outsourcing has continued, due in large part to the multi-year contracts that Telvent has signed with more than 253 customers, among which are included the following new clients: EnCana, Talisman Energy, Alsa and Merrill Lynch. This activity permits us to be prepared to continue offering solutions of increasing added value in the industries in which we operate. Examples of these value-added offerings include the establishment of Emergency Recovery Centers in our installations, as well as the total or partial outsourcing of the real-time business processes in which our solutions are integrated.

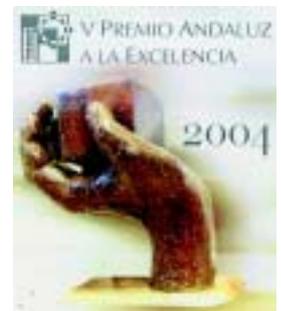
The past financial year also included the awarding to Telvent GIT of the global certificates of Quality Management and Environmental Management that include all the activities and all the work centers of all the Telvent companies previously certified by AENOR in accordance with the ISO 9001:2000 and ISO 14001:1996 standards.

Regarding the EFQM Excellence Model, Telvent achieved the "Seal of European Excellence", Silver



Level, which recognizes surpassing the threshold of 400 points in an official EFQM evaluation.

It is also of interest to mention the granting to Telvent of the "V Andalusian Award for Excellence". This award, presented by the regional government of Andalusia, recognizes those companies that have contributed the most to the economic and social development of Andalusia through management systems based on the EFQM Model.



With regards to Human Resources management, Telvent has continued to make significant improvements in the work environment, including projects such as a childcare center for the children of Telvent staff in the Madrid center. During the past year, it is also important to note that Telvent has gain been chosen, for the fifth consecutive year, as one of the best companies in which to work in Canada.



## Energy

### Electric

In the Electrical Sector, it is possible to mention that the exercise of the year 2004 has been an exercise of transition in which symptoms of recovery in the information technologies market have begun to show, specially, in the generation sector due to the influence of the taking into effect the requirements that the Kyoto's protocol marks. From this point of view, Telvent is confronting an important development effort for its solutions focused on the plants with solar and wind technology, and in the Control Offices that will govern these facilities with a few functioning parameters quite different from the rest generation points in the system.

As for the transmission market, Telvent has supported its positioning as leader of in Mexico, Brazil and Spain, emphasising the important growth on the last one, thanks to the ambitious plan of investments designed by Electrical Network of Spain (REE) to extend its transmission network with High voltage assets acquired to the distribution companies.

In Distribution, Telvent has also continued with the development of integrated applications for network management, sector in which there have been awarded two important projects that will constitute very important worldwide references like Ande in Paraguay and Steg in Tunis. The acquisition of companies with own consolidated solutions in the electrical applications market like Miner and Miner consolidates this strategic line in Telvent with a view to the future of this market in which there is expected a great demand of high value added solutions in the short and half term.

On the Electrical Traction market has been perceived a reduction in the investments of the Spanish government in High Speed as a consequence of the rethinking about the network extension plans, due to the change of the Ministry team. In the same way, Telvent has supported its position of leadership from where it expects to accede to important business opportunities in the next years.

Some of the important milestones for this past year include the following:

In Spain:

- Contract to supply 160 Medium Voltage Distribution Network Tele-control Units for Endesa Distribución.
- Completion of the project to supply Iberdrola with an Integrated Optic Cable System (SICOID). This contract will enable more efficient management of Iberdrola's optic fiber network and, as a consequence, will increase the quality of the service it offers its customers.
- Contract for two new Substation Control Systems for Red Electrica Española (Spanish Electrica Network of Spain), enabling the upgrading of its installation network.
- Contract for the supply of remote monitoring and control systems for Endesa in Andalusia (Sevillana-Endesa), Balearics (Gesa-Endesa), Aragon (Erz-Endesa) and Catalonia (Fecsa-Endesa), including more than 40 integrated control and protection systems for substations and more than 300 remote-control systems for the automation of the half tension infrastructure.



- Engineering and installation contract for the first cell of broadband access for the electric red project from Iberdrola. Telvent has been selected as one of the companies to help expand access in order to assist Iberdrola with its distribution plans for Spain.
- System for the Control of Burners in the Thermal Power Plant of Narcea for Unión Fenosa Generación. This System is responsible for executing the monitoring and control algorithms for the burners of the Plant's Group III's liquid fuel.

## In North America:

- Contract to supply the Substation Automation and RTU equipment to Oncor (the regulated energy delivery subsidiary of TXU Corp). Oncor delivers electricity to residential and business consumers and supports one of the largest energy infrastructures in the world.
- Contract to automate Zone 15 of the New York City Transit Authority's (NYCTA) system. NYCTA carries over 3.5 million passengers per day along 800 miles of track and has over 400 stations. The transit system has three main rail lines to serve the needs of one of the most populated areas of the United States - the Bronx, Brooklyn, Queens, and Manhattan.
- Contract to upgrade the OASys DMS SCADA system for the Chattanooga Electric Power Board (CEPB), which is the 15<sup>th</sup> largest municipal utility in the U.S., supplying 156,000 commercial, household and industrial customers in the southeast portion of Tennessee and the northwest area of Georgia.
- Contract to supply several units of the new SAGE 2200 RTU field device to the following companies: Conectiv Power Delivery in USA, Electricity Commission in Trinity and Tobago, Wabash Valley Power (WVPA) in USA, Hydro Ottawa Limited in Canada, Alabama Electric Company in USA, Niagara Mohawk in USA, Illinois Municipal Electricity Agency (IMEA) in USA, Oncor in EEUU, Sho-me Power in USA, and Exelon in USA.
- Supply of nine RTU units for Georgia Power Company (GPC). GPC has a network of underground substations that supply and control electric power to the downtown area of Atlanta.
- Contract for NSTAR to upgrade its outdated RTUs. NSTAR is Massachusetts' largest investor-owned electric and gas utility. NSTAR has been transmitting and delivering electricity and natural gas for more

than 100 years, and is currently servicing nearly 1.4 million residential customers.

- The North Georgia Electric Membership Corporation (NGEMC) has awarded a contract for the improvement of its electrical distribution systems. NGEMC is located in the heart of the Georgia textile region, and supplies energy to over 93,000 clients.
- The Southwest Louisiana Electric Corporation (SLEMCO), an existing client since 1982, has awarded Telvent the project for the improvement of its electric distribution system. SLEMCO provides energy in Louisiana to over 80,000 clients.

## Latin America:

- Contract for the supply, installation and start-up of the Distributed Control System (DCS) for the Cycle Combined plant for CFE's Hermosillo property in Mexico.
- Contract for the supply, installation and start-up of eleven RTU remote stations for the Electric Energy Distributor Company Electrocosta/ Electricaribe in Colombia.
- Maintenance contract for Light's Distribution Control System (SGD) in Rio de Janeiro, including three years of 24x7 maintenance covering the coordination of all SGD equipped subsystems.

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**OASys DNA**

- Assured Security
- Enterprise Integration
- Industry Applications
- RealTime Performance
- Standards Based
- Everything Internet

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- Control and protection system for Coxipó and Rondonópolis de Areva T&D substations within the Aneel concession for the 230 kV line of Coxipó-Cuibá-Rondonópolis, which was awarded to the Amazonian Consortium.
- Contract for supplying and commissioning of 20 "OCRIS" (telecontrolled post switches) units for the Distribution Control System for the Regional Electricity Co-operative (Cooperativa Regional de Electricidad, CRE) in Santa Cruz de la Sierra, Bolivia.
- Contract for the control and supervision of 20 substations belonging to the electric energy transport system operated by the ONS company in Brasil. The 20 field installation sites are located in Rio de Janeiro, São Paulo, Brasília, Goiás, Mines Gerais and Paraná.

Others:

- Contract for the modernization and improvement of the Distribution Network of Tunis for the Société Tunisienne de l'Electricité et du Gaz (Steg) company.
- Contract for the supply of an integrated, turnkey OASyS DNA SCADA system to the Electric, Gas and Bus Authority (EGO) in the Turkish capital city of Ankara, together with its in-country consortium partners. EGO is responsible for the municipal transport network (buses, subways, light rail) and the city's gas distribution.

Oil and Gas

During 2004, Telvent has launched its new product suite, gasCAT, for remote control of Oil and Gas facilities. With this suite the portfolio of solutions is completed for the complete management of transport and distribution facilities on this market. Other significant facts in this exercise have been the completion of important projects specially in the area of Latin America that continues positioning Telvent as one of the leaders on this market and the beginning of the commercial activities in China that is one of the areas in which a major investment is expected for the following years.

In spite of the reduction of new investments, in the Latin America market, within the Oil and Gas sector,



Telvent has maintained its strong position in the attainment of new projects, principally in Mexico, USA and Canada. In addition important projects have been completed in Peru, and in Ecuador. Some of them are:

In North America:

- Contract for the gas line administration system for PECO Energy Company of Pennsylvania (USA). The system will control an infrastructure consisting of 10,620 kilometers of natural gas transmission and distribution mains, and 29 natural gas gate stations, serving a customer base of 450,000 people.
- Agreement with ChevronTexaco to use Telvent's SimSuite Pipeline High Fidelity Leak Detection System on several of ChevronTexaco's North American pipelines. ChevronTexaco and Telvent will work cooperatively to examine more than 48,280 kilometers of company pipeline to determine the best use of high fidelity leak detection.
- Completed the West Texas Pipeline OASyS SCADA Upgrade Project for Kinder Morgan Energy Partners - L.P (KMP).
- Contract to upgrade the Pembina Quindar SCADA system for the Drayton Valley pipeline system in Alberta, Canada.



- Contract to upgrade BP Cochin's OASyS 5.2.2 SCADA System with the latest OASyS platform technology. The project will include a primary control center, an offsite backup center, 47 Station OASyS sites and a remote operations center. In Canada, BP is a premier producer of natural gas and natural gas liquids.
- Contract with Trojan Pipeline L.P. based in Houston, Texas to provide a new SCADA system and advanced Liquids applications.
- Contract from the Piedmont Natural Gas Company to consolidate its pipeline distribution and transportation systems. Piedmont distributes natural gas to 940,000 clients, including industry clients as well as business and residential consumers.
- Contract from the Portland Pipeline Corporation (PMPL) to replace its pipeline monitoring and control system with an OASyS DNA SCADA system. PMPL operates 375 kilometres of crude oil pipeline, extending from Portland, Maine, in the United States, to Montreal, Quebec, in Canada.
- Contract from Buckeye Pipe Line Company for providing the necessary technology and services for integrating the new acquisitions from Shell Pipeline within the current control system infrastructure.
- Contract with Alyeska Pipeline Services Company to deliver an Integrated Oil Movement System (IOMS) in support of the Trans Alaska Pipeline System.
- Awarding of a contract to supply a new OASyS SCADA system for Great Lakes Gas Transmission (GLGT) company. Great lakes is a major gas distribution company that transports Canadian gas to the Great Lakes region.
- Awarding (adjudication) of the project to replace the Nederland Terminal Sunoco Logistics's SCADA Partners L.P system. Nederland is a major marine terminal that provides inventory management, and storage and distribution services to refineries and other important end users of crude oil.



- Final acceptance for the SEMPRA/SoCal Field SCADA system. SoCal Gas, a division of Sempra Energy is responsible for managing natural gas storage, transmission and distribution.

### In Latin America:

- Definitive receipt of the project for the Applications Management and Control System for the Crude Oil Pipeline (OCP) constructed by Techint in Ecuador.
- Definitive receipt of the project for the Automation of the Camisea Pipeline constructed by Techint in Peru.
- Completed the LMS & GMS Backup Projects at Petrobras, Brazil's state-owned Oil and Gas Company.
- Supply of the iSCADA Control and Communication System for Comgas, the Gas Distribution Company of São Paulo's State in Brazil.
- Awarded the contract for the automation of 11 Storage and Distribution Terminals for Pemex Refinacion. The contract was awarded in three public tenders, which add an additional 17 terminals to the number of installations that have already been automated by Telvent in Mexico.



### In China:

- Contract for the Zhongxian-Wuhan Gas Pipeline project awarded by the PetroChina Pipeline Company Limited. The project scope includes the management of a 1,347 kilometer pipeline linking Sichuan-Chongqing gas fields with the Hubei and Hunan provinces in South Central China.
- Delivered to CPPE (China Petroleum Pipeline Engineering Corporation) an OASYS SCADA and Station Control System that will administer the petroleum pipeline transmission network of TieDa. CPPE is a subsidiary of the China National Petroleum Corporation (CNPC).
- Contract with China Petroleum Chemical (Petrochemical) Corporation (Sinopec) company to design, install and start-up a control and information management system for the new Luwan products pipeline. Sinopec is the major producer and distributor of refined liquid products China and in the rest of Asia.

### In other countries:

- Contract to deliver a control and monitoring system for Pakistan's new products pipeline. The scope of this project includes the supply of OASYS SCADA and information management systems for the Pakistan Arab Pipeline Company's (PAPCO) White Oil Pipeline.
- Gas Management System contract for the Gas Authority of India Limited (GAIL). Telvent will supply its web-based Pipeline Operations Logistics, and Revenue Information System (Polaris) to manage contracts, nominations, gas scheduling, allocations and billing.
- Supply of a Windows-based OASYS DNA SCADA system for the safe operation of the Trans Thailand Malaysia (TTM) pipeline and related facilities. The project involves onshore and offshore pipelines that transport gas from the Malaysian-Thai Joint Development Area (offshore) to the Peninsular Gas Utilization pipeline at Changlun in Kedah, Malaysia.
- Contract with «EGO Ankara Gas Distribution» (EGO) for the design and installation of an OASYS DNA control, measurement, and



information management system for the regional distribution stations.

- Contract for the project to improve the SCADA system for the Public Corporation of Gas in Greece (DEPA) S.A. DEPA is now responsible for the import, transport, and storage of natural gas; the construction and administration of the Transport System; and the sale of natural gas on a national level.
- Factory Acceptance Testing for Telvent's Istanbul Gas Distribution Corporation (IGDAS) project, located in Istanbul, Turkey has been completed. Telvent's systems will supervise and monitor the gas distribution network for the city of Istanbul, consisting of over 2,270,000 clients.
- Telvent received the Final Acceptance Certificate for the BOTAS Project (Turkey). The project included the construction of a new Control Center building, replacement of the current SCADA System, supply and integration of RTUs, and installation of the pipeline management software.



## Traffic

During 2004, Telvent has continued to strengthen its position as a national and international leader in products, applications and services for the Intelligent Traffic Systems (ITS) sector, both in urban and interurban settings, offering global solutions for traffic control problems in cities and for the control, surveillance and management of highways. The installed systems are designed to provide enhanced optimisation of the level of traffic service conditions, while contributing to the overall safety of highway infrastructure.

The level of technological evolution and the consolidation of the national market after 30 years in the sector have been the key factors that have boosted national growth through our own network, with over 20 regional installations in Spain, and seven subsidiaries in various European, South American and Asian countries, the largest being China and Brazil. In this way, Telvent is continuing to reinforce our level client service, one of the most important factors in our growth strategy.

In 2004 we also experienced massive development opportunities in the China market, with a product portfolio of almost 50 million euros estimated for 2005. Telvent has continued to offer support for new business models, linked to City Digital Service and the Operation and Concession of infrastructures with important technological installations.

At Telvent, we have also successfully begun to penetrate the US traffic market, being selected for several interurban traffic control projects in Florida and Texas.

The most important projects during 2004 in traffic sector have been:

In Spain:

- Completion of the Centralization Project for the City of Pontevedra's General Traffic Department.
- Award of the contract to maintain, develop and operate the high capacity network of Vizcaya for a two-year period (which can be extended for a further two years)
- Completion of the ITS (Intelligent Traffic System) Facilities on the Radial-4 Toll Highway, along with



the signalling, safety and control systems for the M-50 false tunnel, which are part of the Concesionaria Madrid R-4.

- Award of the contract to expand the Cañiza tunnel safety and control systems.
- Award of the maintenance contract for the ITS facilities on Autopista del Sol for the Concessionaire, Ausol covering a 20 month period (with a one-year extension option).
- Subsequent to the inauguration of the Forum, in 2004 Telvent achieved the completion of the upgrade and replacement components for CCTV's Infrastructures and optical fiber network, traffic access control system, and the enclosure and the equipment for the Municipal Coordination Center.
- Awarded the project for the signalling and control equipment installation on the M-50 motorway, between the A-1 and A-2 (Madrid).
- Maintenance contract for the traffic light facilities and management of the traffic control center of the City of Lugo, for an additional two years.
- Contract for providing technical assistance for Traffic Safety for the national highway network of western Andalusia.
- Technical Assistance to support different sanction units of the Provincial Traffic Headquarters of the State Traffic Office (Dirección General de Tráfico, DGT).



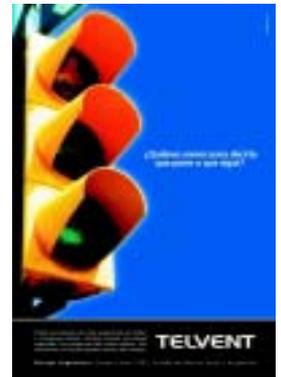
- Two-year extension of the integral conservation of Piedrafita, providing a 24-hour road assistance and vigilance service throughout the year.
- Awarding of the Dynamic Signaling and Traffic Management Project in the A-8, routes: Santander-Castro Urdiales and Torrelavega-Pésues; in the A-67, route: Polanco-Torrelavega-Los Corrales de Buelna; and in the S-20, circumvolution North Santander, for the General Traffic Division.
- Awarding of the Traffic Diversion Works in Avenida Meridiana, Barcelona, aimed at the building of the Metro Interchange in La Sagrera, for the Barcelona Town Council.
- Contract for hardware and software conservation, and for assistance with the Network Gigabit exploitation and Multitunnel Systems of Tunnels from Basic Network of Barcelona 2004-2005, for Council County of Barcelona.
- Awarded the contract to supply and install the systems detailed in the project for the Traffic Management Center in the city of Ceuta.
- Within the Digital City of Almeria project. Telvent will install intelligent management systems for urban traffic, accesses control and systems to help the exploitation of the urban transport. For this project we will be implementing our most advanced of traffic control and road safety systems.

In Latin America:

- Contract for the Anchieta – Inmigrantes Highway Tunnels project (for Ecovías), in Brazil.
- Contract for the ITS system (Intelligent Traffic System) project for the Centrovías Highway in Brazil.
- Supply of an ITS System for Intervías Concessionaire in Brazil that will be used for the management of several roads in the Brazilian state of São Paulo.
- Contract for the extension of the Renovías toll in the state of São Paulo, Brazil.
- Contract for the installation of the Motorway Management System for the Intervías Concessionaire in the state of São Paulo, Brazil.

In China:

- Contract in China (Beijing SuperCenter). The scope of this project includes the installation of retroprojectors in the management control centre in Beijing. This contract for Beijing Capital Highway Development Co. Ltd, also includes the installation of a management system for the motorway access networks and ring roads of the city of Beijing.
- The awarding of the Traffic Centralisation project for the city of Xin Xian, in the Chinese province of Henan, to carry out the centralization of the urban traffic for that city.



- Awarded the contract for Urumqi UTC, for the supply, installation and start-up of an urban traffic management and control system in the Chinese city of Urumqi.
- Awarded the contract for Er Dos UTC, for the traffic centralization project in the city of Er Dos, in China.

In other countries:

- Contract to design, supply, install and commission the Traffic, Toll and Communications System for the Bucharest-Constanza Highway in Romania.
- Contract for the Urban Traffic Centralisation project for the city of Haiphon in Vietnam.
- Renovation of the toll system installed in the Concession of the Envalira Tunnel (Andorra).

As a complement to the Traffic activity, the contracts and important milestones for the systems that have been awarded, include the following:

- Contract for Extension and Modification System of Location of Noses by Satellite of the General Secretariat of Maritime Fishing for General Direction of Patrimony.
- Contract to extend Bermeo's Navigation and Fishing Simulator.
- Provisional receipt of Tactical Malingerer to Naval Military School for the Spanish Navy.
- Contracting of two Malingerers of Liquid Charges to Central Finance Office and Contracts of the General Secretary Community matters, Turkey.
- Contract with the Spanish Navy for the manufacture and supply of a Navigation and Manoeuvring Simulator for Marin's Naval Military School
- Contract to extend Bermeo's Navigation and Fishing Simulator for the Social Maritime Institute of Vizcaya.
- Contract with the Social Maritime Institute of Gijon to extend its Navigation and Fishing Simulator.
- Contract with the Social Maritime Institute of Huelva to extend the Navigation and Fishing Simulator of Isla Cristina.



## Transport

Telvent also successfully finalised our Smart TOLL technological project, launching a whole new range of products on the market, based on Tags and Antennae for the Motorway Teletoll System. These products have been internationally authorized in their use by the European PISTA project, and by German laboratory TUV.

In the sector of railway control and signalling, Telvent has advanced in the development of a new line of applications for automatic train regulation (the REGULA Project), which will mean an important advance in and complement to our current line of products for Traffic Control Centres (TCC) and the Telecontrol of equipment and stations. We have also finalized the installation of a traveller systems in the 10 stations of the Cadiz Commuter network, a totally integrated system which is an innovation in the operation of railway stations.

The most important targets in the national and international area include:

In Spain:

- Contract for the Supply and installation of the Toll system in South Bergara for the AP-1 Vitoria-Eibar Motorway.
- Increase of Centralized Railway Traffic Control System of Barcelona to Maintenance RENFE.
- Strategic partnership between Telvent and Buscom Oy, the first company in the world to introduce contactless-cards within the Public Transport applications.
- Completion of the supply, installation and start-up of the Plaza de España parking project in the Ferrol Northeast parkings (Masaveu Group).
- Awarded the supply and installation of the toll system for Tabasa's System in «Túnel de Vallvidrera».
- Telvent was awarded the Control and Management System of Parking Areas for Trucks that the company Guitrans-Sinragi is proposing in Urnieta (San Sebastian).
- The awarding of the Maintenance of the Ticket Sales and Cancellation System for Bilbao for a one-year period, with an optional extension for a further two years.



- The supply, installation, and maintenance of new Ticketing equipment for the most significant stations of the EuskoTren.
- Contracting to supply the infrastructure, deployment and operation of transactional system for Alsa, through the Movelia Passenger Transport Operator Association.
- The awarding of the contract for supplying and implementing Toll Equipment for Traveller Access Control on Line 3 of the Madrid Underground.
- Contracted to supply and install software for the accomplishment of the " Pilot Test with Technologie Without Contact" to underground from Madrid in the Zone A ( Fuenlabrada Area).

In Latin American

- Multiservice network for Valparaiso underground in Viña del Mar, Chile. All of the control data, video-phone and corporate data will be transported through fiber optic for the management and exploitation of the underground.
- Awarded the toll system expansion project for eight additional routes for the Renovation Concessionary in the region of Sao Paulo, Brazil.

In China

- Contract signed with the Chinese authorities to supply the automatic ticketing system and radio communications system for Tianjin Metro.



## Environment

During 2004, Telvent's Environment business area has undergone significant growth, expanding its international customer base, while maintaining a very strong national presence. As a result, more than 50% of sales now come from the international marketplace. Despite this global success, however, Telvent continues its leadership position in Spain in the Meteorology, Water and Environmental Protection industry sectors. The overall success achieved by this business area has resulted in a 60% sales increase for the fiscal year, compared to the previous year, reaching a total of 20 million Euros.

In Meteorology, it is important to recognize the value of Telvent's relationship with the INM (National Meteorology Institute) and the AENA (Spanish Airport and Air Navigation Authority), which has allowed the company to obtain a privileged position in Latin America as the preferred technological solutions supplier for modernizing that region's HydroMeteorology Observation and Prediction Services. Evidence of this success is illustrated by the Senamhi (Bolivia) reference project.

Telvent's leadership position in Environmental Protection has been reaffirmed both in Spain through the contract award for the Maintenance of the Air Quality Network in Valencia, and in Mexico, with the execution of several Emission Control projects for CFE (Comisión Federal de Electricidad).

In the Water sector, the contract awarded to Telvent and Befesa by the Ministry of Environment, for the high-profile Saih Hydrological Information Automatic System project in the basin of the Duero river, restores Telvent's leadership position in this market in Spain. This project will allow Telvent to deploy its high value-added technology solutions enabling improved resource management and more responsive decision making in the event of potential hydrological alert situations.

Both the international and the national markets have provided important milestones, which are summarized below:

In Spain:

- Contract with the National Meteorology Institute to supply and install Automatic Weather Observation

Systems (AWOS) for the Pamplona and Sabadell airports.

- Contract for the emissions control system for the Arcos de la Frontera Combined Cycle Power Station (Cadiz).
- ATIS (Airport Terminal Information System) Systems for Madrid and Barcelona airports, for AENA.
- Supply for the Air Quality Surveillance Stations (RVCA) in the Madrid-Barajas Airport enlargement.
- Contract with Aena for the supply, installation and subsequent management of the analytical equipment utilized for zone emission monitoring for the Airport System of Madrid, for a two year period.
- Maintenance and preservation contract for the Air Quality Monitoring and Surveillance Network for the Autonomus Community of Valencia (Spain), for a period of one year.
- Renewal of the maintenance contract of the Environmental Vigilance Network of the Los Barrios Thermal Power Station in the Campo de Gibraltar (Cadiz) for Endesa Generación and Endesa Ciclos Combinados.
- The contracting of the Geographical Information System (GIS) for the administration of the Water Framework Directive in the Hydrographical Confederation of the Guadalquivir (Ministry of Environment).
- Contract awarded for the Automatic Water Information System (SAIH) for the basin of the Duero river for the Ministry of Environment. Telvent will fulfil this project together with Befesa (Abengoa's subsidiary for Environmental Services).



- Supply and installation of meteorological equipment to Vitoria Airport, as requested by the National Institute of Meteorology.
- Supply and installation contract for Meteorological equipment for the Santander Airport.
- Project for the supply and installation of Detection of Beams System in Canaries, for the National Institute of Meteorology
- Successfully concluded the installation of the ATIS (Automatic Service of Information of Terminal Area) System for the Barcelona airport. This system will allow data acquisition and processing, in real time, of the meteorological and operational information for the airport, and its broadcasting to aircraft.



### In North America:

- Contract for the OASys DNA project for the water industry was implemented for Southwest Florida Water Management District (SFWMD). SFWMD is the world's largest water control system, with 1,728 kilometers of canals, 1,160 kilometers of dykes, 200 principal ports and water regulation structures, and 27 main pumping stations.
- Water distribution project in the City of Columbus in USA.
- Contract to supply an Emergency Control Center for the City of Houston, which will include a SCADA system that will allow the city to collect and analyze realtime information for all surface water resources, enabling efficient management of the overall system.

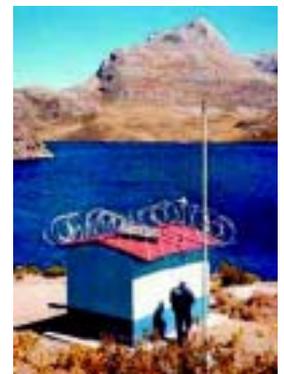
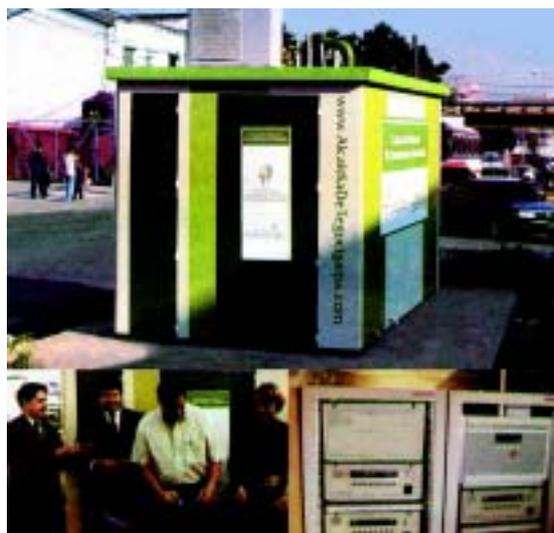
- Contract for an Air Quality Monitoring Network for the cities of Tegucigalpa and S. Pedro Sula (Honduras).

### In other countries:

- Contract for the Control System project for managing the potable water supply of Gran Amman (Jordan). The district of Gran Amman has a surface area of approximately 700 km<sup>2</sup> and supplies a population of almost two million.
- Provisional receipt of the first three of six AWOS installations, in Meknes, Errachidia and Ouarzazate Airports, for National Meteorology Direction (DMN) of Morocco.

### In Latin America:

- Contract for the installation of a network of hydro-climatologic stations for the State Water Commission (CEA) of Querétaro (Mexico)
- Emissions Control System for Guaymas State TPP (Mexico), for CFE (Electrical Federal Commission).
- Delivery of the Emissions Control System for El Sauz TPP (Mexico), for Abener.
- The Emissions Control System was completed for Guerrero Negro TPP (Mexico) for CFE (Electrical Federal Commission).
- Contract for the supply and installation of the meteorological enhancements for the Air Navigation Integrated Systems in A. Gelabert and Tocumen in Panama airports.



### Public Administration, Health, Outsourcing and Technologies Infrastructure Management.

There is a small percentage of our business that historically has provided opportunities to open new business lines that we believe will satisfy one of the following two requirements: potential to transform into a strong sector in the future; possibility to provide access to new technologies or services that can be applied to areas in which we operate (or are conducting research and development activities).

Telvent's strategic plan includes a number of different opportunities in the Public Administration and Health sector.

The most important targets during 2004 include the following:

- Contract for the Regional Government of Andalusia's Backup Center.
- Contracting from Almeria's Excmo Council, for the administrative concession for the design, construction and exploitation development of a Digital Services Advanced Center for the urbanization of "El Toyo" and Almeria's City.
- Completion of the implementation of a CRM solution for the Public Service for the Ministry of Innovation, Science and Enterprise for the Andalusian Government.
- A contract for the platform implementation of Electronic Administration services developed by the Andalusian government.
- The awarding of the Consultancy and Technical Assistance tender for the Maintenance of the Andalusian Public Shows and Games Information System (Sistema de Información de Juegos y Espectáculos Públicos de Andalucía, SISJUEP).
- The completion of the installation of the application servers and the user terminals, together with the adaptation and structured wiring and network electronics for the municipal offices of the La Línea de la Concepción Town Hall.
- Contract renewed with The Andalusian Health Service for its Information Systems Maintenance and Technical Support for seven hospitals in a one-year period.
- Contract for the creation of the corporate SIG of the Health Council of the Castilla León Local Government



- Contract for the Territorial Information System of the Delegation of Almeria.
- Contract for the Integration of radiological image generating modes (Ultrasounds, TAC, Magnetic Resonance and Conventional Radiology) with the Image Archiving System (PACS), enabling consultation from any point in the hospital network, for the Hospitals Juan Ramón Jiménez and Infanta Elena

In reference to the Outsourcing Area and Technologies Infrastructures Management, during 2004, we have consolidated products and contracts, which include the following:

- Completed outsourcing of Metrovacesa's central information systems, including upgrading the platform and system support, including the SAP platform on which all the corporate tools operate.
- Telvent has inaugurated in Seville its fifth Data Center within the Iberian Peninsula. This center is provided with the same technical first level characteristic as all the other centers, and, as with the previous Telvent installations, it has become a Neutral Data Center reference in the south of Spain.
- Contracting with Hewlett Packard (HP) to provide the infrastructure for housing in both the main data centre (Alcobendas) and the backup data centre (Fuencarral) inside the Outsourcing



process of the Uralita information systems ( client of HP).

- Renovation of Red.es contract for housing its information systems and services for Housing, Moving and Administered Services.
- Contracting with Twenty4help to install all of its technological platforma, as well as the Call Center to support operations activity (approximately 40 persons) in the Data Center from Valgrande. Twenty4help it is a company dedicated to the technical support of large companies within the IT sector companies such as Microsoft and Sony Ericcson.
- Contracting with ISP that will embed its technological platform in Valgrande's Data Center, that is currently being hosted in the Data Center of a competitor company.
- Contracting with Selgam Tower for its Call Center supporting its clients in Valgrande. They will start by giving service to its client TPI utilizing a 15 person staff.
- Project of the Tetra Network for the Electricity Federal Commission (CFE) in Monterrey. This project provides private mobile communication for CFE's staff
- Contract with Pimec (Small to Medium Company in Catalunya) to house its systems which will have Internet connectivity in the Barcelona Data Center.
- Contract signed for the in Housing and Internet Access in the Valgrande Data Center in Madrid with

Mundo Social, client of Brújula Telecom. Mundo Social is a Travel wholesaler, whose partners are Marsáns, Viajes Iberia, Halcón and Barceló.

- Awarded the contract for the hosting of the new esmadrid.com web portal. The Madrid Town Council of promotion, belonging to Madrid city council, has awarded Telvent with the hosting of its new web portal esmadrid.com.

