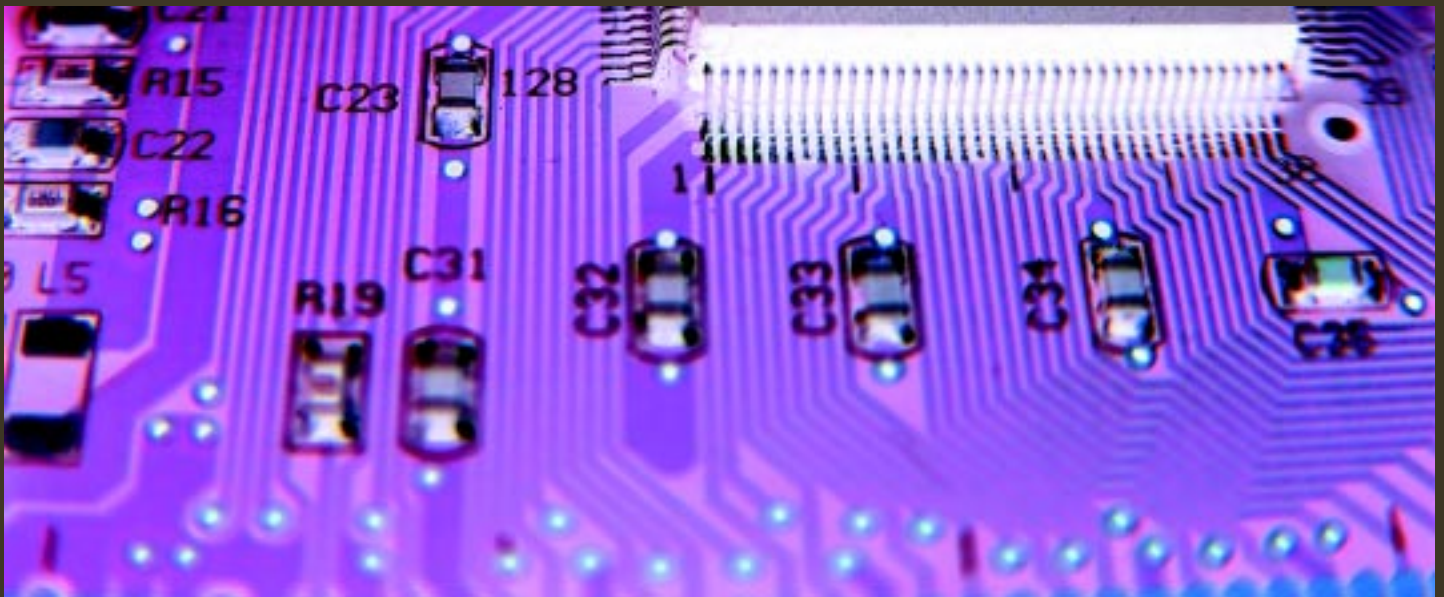


# Information Technology

- System and service development and integration. Systems: control and information systems, private telecommunication networks, payment systems and business process automation for the energy, environment, traffic, and transport sectors and the public administration. Services: co-location, management, administration and maintenance services for technology infrastructure.



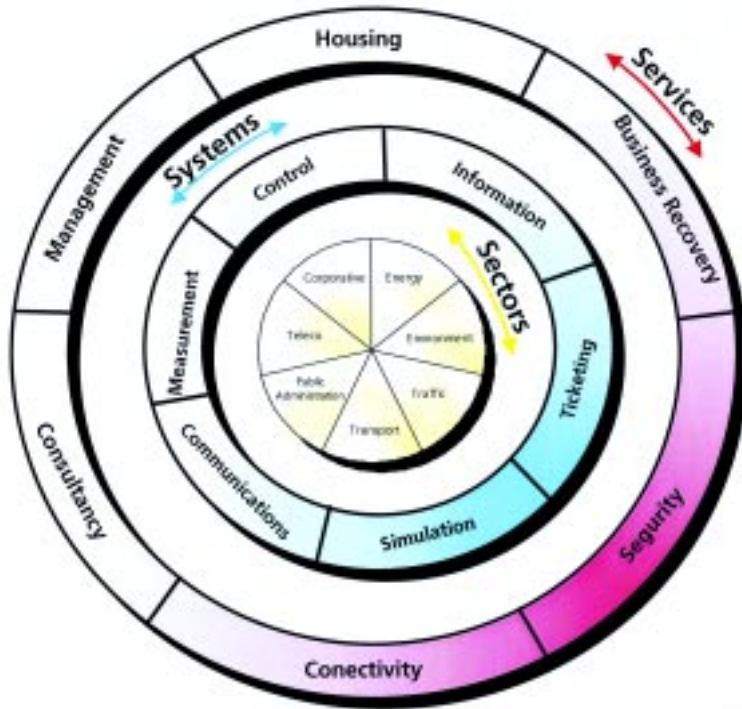
# Information Technology

The adjustment cycle experienced by the Information Technology (IT) sector following the bursting of the technology bubble continued into 2002. Companies therefore cut back on spending in this area globally, and IT companies suffered a fall in sales and profits, with the ensuing avalanche of profit warnings. The uncertainty clouding the sector also resulted in the destruction of direct and indirect jobs in the sector and a lack of sources of financing.

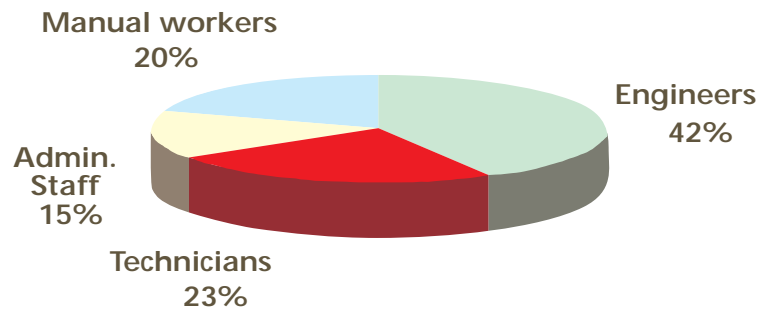
In spite of this gloomy scenario, Telvent, implementing a management system based on workforce talent, technological innovation and a strict control of overheads, succeeded in achieving growth that was above the average rate for the sector, exceeding targets set for the year in the budget. It reported an 11% increase in sales on 2001, a 45% increase in EBITDA, a 72% increase in net cash-flow and 5% job growth.

We have concentrated efforts not only on the economic bottom line, but also on the ongoing process of improvement carried out in our organisation. In 2002 we therefore succeeded in completing a series of qualitative projects that have put us in a better and stronger position to meet the growth targets set in our Strategic Plan 2002 - 2005, making us a more focused, more solid and more efficient organisation.

At the end of 2001 telecommunication network deployment was transferred to the Industrial Engineering and Construction business segment, leaving Telvent with technological systems and services, hence the change in name from "Systems and Networks" used up to 2001 to "Information Technology" established in 2002. As a result, we have divided Telvent's offerings for the energy, environment, traffic, transport and naval sectors, public administrations, telcos and corporations into two broad groups, namely systems and services.



## Telvent



Engineers	694	42%
Technicians	386	23%
Admin. Staff	241	15%
Manual workers	323	20%
<b>Total</b>	<b>1,644</b>	

# Information Technology

An important development in 2002 was the acquisition of Metso Corporation's Network Management Solutions Division. The division, which provides solutions for power and water transmission and distribution networks, is a world leader in technological innovation for SCADA (Supervisory Control and Data Acquisition) systems and advanced applications. It has offices in Canada (Calgary) and the United States (Houston and Baltimore), which will now become Telvent Canada and Telvent USA respectively.

This acquisition, which was formally finalised on 31 January 2003, will reinforce Telvent's information technology growth plan, complementing organic expansion in each of Telvent's areas of business. Furthermore, it adds 420 professionals to our workforce and a large number of companies to our customer base, including Chevron Texaco, Williams, Transcanada, Conoco, Shell, Duke Energy, British Petroleum, Saudi Aramco, Florida Power and Light, Carolina Power and Light, Petrobras, Petróleos de Venezuela and New York Subway.

The process of integration in Telvent, which will be carried out over 2003, is sure to run smoothly, as we have maintained a commercial relationship with the division for the past ten years, during which time we have installed SCADA OASyS systems for customers including Iberdrola, Unión Fenosa, Pemex, Repsol YPF, Electrobras, Mexican Federal Electricity Commission (CFE), Renfe, Metro de Barcelona and AVE Madrid Barcelona.

In 2002 we consolidated Telvent's structure with the full integration of Telvent Outsourcing and organisational changes in the structures of Sainco, Sainco Tráfico, Sainsel, Carrierhouse, Sainco México and Sainco China.

The synergy created in the administration departments and human resources departments has allowed us to reduce our overheads and increase EBITDA and profits in 2002, although the full effect of these changes will not be felt until 2003, when we will continue to take advantage of the new structure to optimise costs in the procurement and quality departments.



# Information Technology

One of our key management priorities is to keep a strict control on all expenditure, which is clearly reflected in the fact that overheads were reduced from 11.6% of sales in 2001 to 10.2% in 2002.

In 2002, efforts to deploy the competency management system throughout Telvent were stepped up, and we have now produced job profiles for all positions in the company, specifying the technical and general competencies required for optimum job performance. By processing this information into recruitment, training and evaluation tasks, we were able to formulate career plans to promote the personal development of the individual in the organisation and the development of the organisation through each one of the individuals who form part of it.

We continued work on the implementation of the quality management systems in all Telvent's companies, placing particular emphasis on all the activities aimed at promoting process management excellence and the establishment of a continuous self-assessment culture based on the EFQM (European Foundation for Quality Management) model.

Also with a view to achieving advances in process management, in particular, the optimisation of each process, we set the 6 Sigma Programme into motion with the implementation of four Radical Improvement Projects. The results will be assessed in 2003, once the organisation's first Champions and Black Belts (in 6 Sigma terminology) have been trained to lead the preparation and implementation of the second round of projects planned for 2003.

Telvent continued to invest in research, development and innovation in 2002, as in previous years, earmarking 3.2% of sales for RDI efforts aimed at developing technological solutions as a solid foundation on which to build our growth strategy and leadership position in the medium and long term. To this end, we are cooperating with European technology companies and participating in international projects, in some cases led directly by Telvent under the ITEA (Information Technology for



European Advance) scheme, in which we formed part of the Steering Group along with Nokia, Siemens, Phillips, Thompson Multimedia, Thales, Italtel, Alcatel and Robert Bosch

At Telvent we believe that in order to ensure continuity in the creation of value in our companies, it is not enough to focus solely on the economic bottom line, we must also make principles of social equity and environmental protection issues part of our business strategy and operations. We therefore consider sustainable development a strategic factor; in addition to incorporating this principle in our general business strategy through environmental quality and human resources policies, we have also participated in schemes and conferences, which are working on ways to achieve sustainable development, and we recently joined the United Nations Global Compact for corporate leadership to promote the adoption of shared values and principles, with a view to giving a more human face to the global market.



# Information Technology



## System development and integration

### Energy and environment

Our intense technological innovation and development drive continued in 2002, with a further strengthening of Telvent's commitment to technology, in the belief that these efforts are the key to gaining an advantage over our competitors.

This year, we successfully completed Insonet, a major EU home networking project led by Telvent. It involved designing a system for broadband communications using the low-voltage mains network and basic technology, such as microelectronic design and digital signal processing. Now that the objectives of the project have been met and the basic technology resolved, it provides an interesting line of research into its application both indoor and outdoor.

This research complements research into medium-voltage communications, where Telvent has achieved landmark developments and made significant progress. We secured the Iberoeke seal for a project to research the application of these technologies to Latin American networks and improved the performance of our products thanks to a new signal processing concept.

As a result of ongoing innovation to keep our product portfolio on the leading edge, we have continued to add new equipment this year, such as new signal input/output cards, communication cards, etc. Also in 2002 the first models of our new remote terminal for meteorological networks, Saimet, came out; the range will be completed in 2003.

# Information Technology

In the environmental sector, Telvent's meteorological area once again achieved particularly good results both in Spain and abroad.

Telvent has been providing solutions in the meteorological sector in Spain for the past twenty years and has installed automated weather observation systems (AWOS) at almost all of Spain's airports, airfields and military bases. Spain has a mature meteorology sector, with the most sophisticated, state-of-the-art systems available worldwide. Important contracts awarded to Sainco are proof of its commitment to innovation and technological leadership in the meteorological sector:

- Wind shear detection systems at Tenerife Sur and Bilbao airports for the National Meteorology Institute.
- Extension of air navigation aid systems at Barajas airport in Madrid.

Telvent also won similar contracts abroad in 2002:

- Supply of automated weather observation systems (AWOS) for the six main airports in Ecuador for the Civil Aviation Department.
- Supply of AWOS for six airports in Morocco for the National Meteorology Department.
- Supply of AWOS for the five main airports in Mozambique for the National Meteorology Institute, as part of an ambitious project awarded to Telvent for the automation of the country's meteorological system.
- Contract for high-altitude weather radars for Mexico's National Water Commission, which was completed in record time. As a result, the five radars in the country used to monitor high-altitude atmospheric phenomena were updated and put into operation.
- As part of the EU PRRAC programme with Nicaragua, work began in 2002 on the installation of a GOES satellite communications meteorological network for INETER.



Significant projects in the water sector include:

- Contract for the hydrological control system of the Mantaro river basin in Peru for the electricity company Electroperú.
- Contract to provide maintenance for the Guadalquivir automatic hydrological information system (SAIH) in temporary consortium with Abensur, further strengthening Telvent's position in the hydrological sector.

In the environmental protection sector, the maintenance contract for the air quality monitoring network was renewed for a further year by the Regional Environment Department of the Andalusian regional government.

Significant projects in the electricity sector in 2002 included major contracts in the area of integrated control and protection systems in Brazil, further strengthening our leadership position in Mexico and Brazil:

- Project to rehabilitate the Maranhão transmission system.
- Tucuruí-Villa do Conde and Coxipó-Jaurú interconnections for Eletronorte.
- Xingó-Angelim-Tampina Grande interconnections for Furnas.



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- Successful completion of the second phase of the emergency control system of the transmission network for the Brazilian national operator ONS and the extension of the Macaé plant for El Paso Energy.

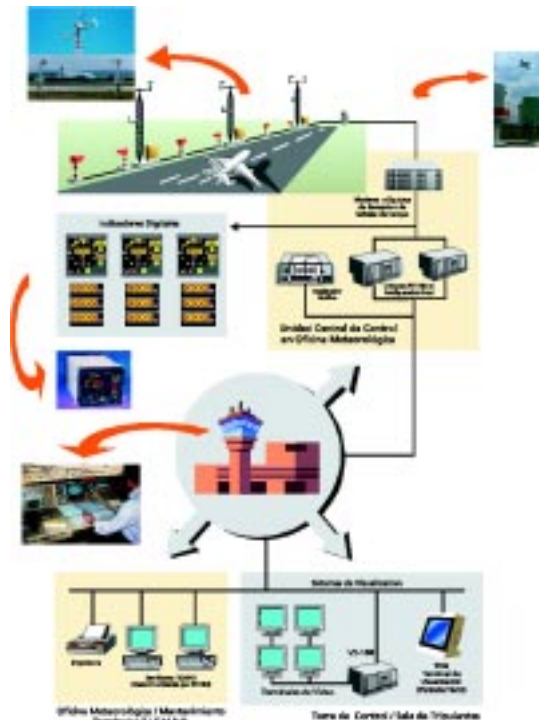
In Mexico, we completed the control, protection and communication systems for the substations included in the Pidiregas project parts 410 and 403, and we won contracts for the systems in parts 408 and 402 and the distributed control system for the El Sauz combined-cycle power station.

Significant projects in the power dispatching sector include:

- Contract for the telecontrol and communications system of the distribution network in the metropolitan area of Asunción in Paraguay and Iberdrola's central generation dispatch.
- Completion of the telecontrol and communications system in the city of Cochabamba, Bolivia, for Elfec.
- Completion of the installation of the second phase of the distribution management system in the city of Rio de Janeiro for Light. The project is scheduled for completion in the first quarter of 2003.
- Start-up of twenty-one integrated control and protection systems for Endesa distribution substations, with a further fifty-five currently being manufactured, bringing the total in the past three years up to over 110.

These contracts, together with the systems supplied in 2002 to Unión Fenosa and to REE for the substations that will power the high-speed train, make Telvent a national leader in this sector.

- The project for the power control system for the high-speed line that will link Madrid and Zaragoza in 2003 and be extended in the future to the French border is progressing according to schedule. The work is due to be completed in the first quarter of 2003.



In the oil and gas sector, contracts were won in 2002 for major projects in Latin America, strengthening our leadership position in this market:

- Contract for the Yacuiba–Rio Grande gas pipeline metering station supervisory control system for Transierra in Bolivia,
- Contract for the SCADA of the two natural gas and LPG pipelines in Camisea (Peru) for Techint.
- Emergency shutdown systems for five pumping stations for Transredes in Bolivia.
- Successful completion of the control and communications system for the extension of the Pto. Rosales–La Plata pipeline in Argentina for Repsol YPF.
- Completion of the control project for the heavy crude oil pipeline in Ecuador for OCP Limited.





In Mexico:

- Completion of the integrated terminal operation control and monitoring systems (SIMCOT) in southeastern Mexico for Pemex Refinación,
- Delivery of the fire & gas and emergency shutdown systems for EPC-2 and EPC-3 for Pemex Exploración y Producción.
- Contracts for new projects, such as the safety system for the AKAL-L (IPC-78-B) platform that Dragados Off-Shore is constructing for Pemex Exploración y Producción and the fire & gas system for the Ixtoc-A platform also for Pemex Exploración y Producción.

In the private telecommunications networks sector, we achieved a significant increase in business and sales in 2002 and ended the year with excellent growth prospects for the coming year.

- Contract for the communications systems of the Coxipó-Jaurú interconnection in Brazil,
- Contract to deploy the communications infrastructure of the distribution network telecontrol system in the metropolitan area of Asunción in Paraguay
- Completion of the supply and factory testing of national communications system equipment for Conpet in Romania. Network deployment is scheduled for completion in the first half of 2003.

## Traffic and transport

In 2002, Telvent consolidated the sustained growth achieved in recent years, winning new contracts worth over one hundred million euros.

Factors contributing to the performance of this sector include the opening of new international markets in southeast Asia and the leadership position achieved in the transport payment systems sector. Important contracts were won in 2002 for access control facilities–payment systems–for major public transport operators in Spain.

The RDI drive in this area continued in 2002. Significant achievements included completion of the tagging devices and antennas for the SmartTOLL road toll collection system developed over the past three years. This made Telvent the leading producer of equipment of this kind in Latin America. The equipment complies with European standards, providing interoperability for the entire network of toll operators throughout Europe.

We also added to our range of fare payment systems–ticket dispensing and cancelling machines–designed to handle all types of tickets including Edmonson, ISO-2 and embedded-chip contactless tickets.





# Information Technology

The technological advances achieved by Telvent have earned it a leadership position in traffic and transport markets. Through more than twenty regional offices in Spain and seven subsidiaries in various countries in Europe, the Americas and Asia, it has strengthened its commitment to customer attention and service, one of the company's key strategic focuses.

Significant achievements in Spain include the following:

- Fare payment and access control systems for Metro de Madrid: completion of lines 8 and 10, and a contract awarded within the execution period for the new Metrosur stations to install 116 access gates with 236 ticket validating machines; 16 station data concentrators and 64 new ticket dispensing machines. Integrated control and management software is included.
- Access control and communications equipment for all the RENFE stations forming the Cadiz local train network, as part of an ambitious RENFE project to "technify" its local train infrastructures throughout Spain.
- Project, supply, deployment and maintenance of hot-box detector systems on the Madrid-Puigverd de Lleida section for the high-speed train. Madrid-Barcelona high-speed train line (AVE) for RENFE.
- Design of the new automatic ticketing machine developed by the subsidiary Arce Sistemas. The Consorcio de Transportes de Bizkaia chose this new technology for its line 2 project and awarded us a contract to update the 105 machines installed by Arce Sistemas on line 1, for Metro Bilbao
- Inauguration in July of the Piedrafita tunnels section on the A-6 motorway. Sainco Tráfico has installed the control centre that manages and controls all the tunnels on this section and the systems installed on it: ventilation control, lighting, fire detection, signs, traffic lights, access control, clearance control, traffic metering, emergency telephones, CCTV, weather stations, communications, power supply and automatic incident detection system inside the tunnel, for the Development Ministry.
- Contracts for maintenance and overhaul of traffic regulation and control facilities on the M-40 and M-45 Madrid approach road network and the Madrid traffic management centre; facilities and



- control centre for the motorways to Oviedo, Avilés and Gijón, on the so-called " Asturian Y" , for the Traffic Department.
- Operation integration project for the Malmasín tunnels for the Bizkaia provincial council.
- Completion of significant interurban projects for the Traffic Department, including a particularly large project for traffic control on the motorways to the northeast-Galicia- and Asturias, among others.
- Control and management equipment and systems for a large number of short-stay car parking schemes all over Spain for important customers, such as Smas S.A. (Barcelona municipal parking company) and Cintra, belonging to the Ferrovial Group.

# Information Technology

The following projects were carried out abroad:

- Contract with World Bank funding for an urban traffic control system in the city of Ho Chi Minh in Vietnam, where we will deploy our adaptive traffic control system known as ITACA.
- Contract for a project to supply the traffic control and safety system on the downhill carriageway of the Dos Imigrantes highway in the state of Sao Paulo in Brazil for concessionaire Ecovias. This project is integrated in the control centre installed by Telvent previously for the uphill carriageway and includes the integration of the tunnels on the downhill carriageway. Overall, the project will provide the most advanced road control system installed in the country.
- New contracts in China awarded to our local company there, Sainco Electric Traffic. Urban traffic centralisation in the city of Wuhan and the extension of traffic control systems to the cities of Chanchun, Nanning and Beijing.
- Completion of the traffic centralisation projects in Zhengzhou and the traffic control project on the Yantian-Bagan motorway and Shandong expressway.
- Inauguration of the traffic control centre and traffic light system in the cities of Santo Domingo (Dominican Republic) and Belo Horizonte in Brazil and completion of the passenger access control project—fare payment systems—for the light train also in this Brazilian city.
- Continuation of maintenance services for traffic light systems in Buenos Aires, Córdoba and Rosario in Argentina and for the Öresund link in Denmark, where extensive work was carried out to extend the facilities and install new control software subsystems for the link.

Telvent attended numerous events and conferences over the year, participating actively with specialised papers, accrediting its service and leadership vocation in the areas of business in which it operates. Some of the most important events were Traffic 2002 in Madrid, Intertraffic 2002 in Amsterdam, Eurailspeed in Madrid, World Congress on Intelligent Transport Systems in Chicago and the Congress on ITS Spain in Palma de Mallorca.



## Defence and naval systems

Significant projects and activities carried out in 2002 in the civil and military sectors included the following:

- In the civil sector, the maritime traffic control centres of Ceuta and Melilla were delivered, the installation of nine centres for the Spanish DGPS network was completed, and work began on providing integrated maintenance of the global DGPS network in Spain. Another significant project was the installation of a control centre remote station in Cabo Peñas.
- In simulation for civil applications, a contract was won for the first visual system designed as a support for navigation and fishing simulators for the Social Navy Institute, which was developed on the basis of experience and expertise acquired during the single-channel display R&D project carried out in 2002 with funding from the Ministry of Science and Technology.
- In the fleet monitoring sector, a fleet monitoring system was developed, in cooperation with Sainco Tráfico, for road maintenance services provided by the Traffic Department in Andalusia. A commercial



# Information Technology



relationship was also established with cleaning companies, with the local police and with PEMEX for the transport of hazardous materials.

- In the military sector, activities involving the F100 frigates continued. Important developments included the start of work on the S80 programme Spanish submarine consoles and completion of the R&D project with the Ministry of Defence to develop a prototype WECDIS navigation console.
- Involving both the military and civil sectors, ownership of the project with the Royal Navy of Morocco was transferred to supply a navigation simulator with a seven-channel visual system.
- In military air-sea tactical simulation, using the solution developed for the Spanish Navy Training Centre (CPT-CIA), known as SITAC, the Galeón project for the Spanish Navy has been accepted, and a twin simulator has been purchased by the Chilean Navy. Additionally, the navies of Peru, the United Arab Emirates, Greece, Egypt, Turkey and Tunisia have all shown interest in acquiring similar tactical simulators.

- Telvent's commercial activities focused on the markets of Central America, South America and Eastern Europe. It has already established a permanent presence in Mexico D.F. with a commercial company, and is now targeting Peru, Uruguay, Chile, Romania and Poland as priority markets with the support of the Spanish Ministry of Defence.

## Process automation

In 2002 Telvent enjoyed market recognition of the product strategy defined in its Strategic Plan.

TiWorks, a solution for the public administration, which has proved a great success, has been implemented in the regional government of Andalusia, Public Works (EPSA), Employment and Finance. TiWorks has also been implemented in the Ministry of Economy and the National Council of Lawyers.

The public sector was the main source of growth in 2002, accounting for 75% of total sales. Significant projects were carried out in the areas of authentication and digital signature, administrative process automation, data processing centres, back-up and business continuity systems and geographic information system (GIS).

Existing technological partnerships in the public sector were strengthened with Hummingbird and Metastorm, and a new partnership was established with ESRI in the field of GIS.

In the utilities market, efforts focused particularly on energy companies in 2002, in which the Ti-SGD solution has been implemented as a valuable and powerful tool for asset and workforce management. One of the most significant achievements in this area was the development of power dispatching for self-generators, allowing them to participate in the electricity pool run by the market operator OMEL.



# Information Technology

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In international markets, attention focused on Mexico in 2002, as the result of a contract awarded by the Port Authority of Veracruz, a pioneer in the use of digital signature in administrative processes in Mexico.

R&D increased by over 60%, following the product policy established for the year. R&D efforts focused on the areas of digital signature, content management, power distribution management systems and component families. The Ministry of Science and Technology supported these efforts, largely as a result of our involvement in the EU ITEA Steering Group. Telvent Interactiva lent its support to the creation of the Andalusian Centre for Information Technology and Telecommunications Innovation (CITIC), as a founding member, demonstrating once again its commitment to the development of the information society.

## Service development and integration

### Outsourcing

In 2002 Telvent finalised the process of defining its service offerings and began to offer the services it currently provides to Abengoa companies to other customers outside the group. Telvent Outsourcing has therefore been fully integrated in the Information Technology business segment, changing its name from "Siatec" to "Telvent Outsourcing".

Telvent currently provides outsourcing services for information system and communications engineering, including project management, installation, operation, monitoring, administration, maintenance, security, technical consultancy, incident resolution, system techniques and connectivity. It also designs, develops and implements information systems for business processes.

Telvent offers a full menu of services for information system, communications and business process outsourcing, geared to:

- Outsourcing information systems and communications, including engineering, project management, installation, operation, system techniques, monitoring, administration, maintenance, security, technical consultancy, incident resolution, system techniques and help desks.
- Managing and optimising non-core business processes, enabling customers to concentrate on core business.

The optimisation of information technology leads to a significant increase in competitiveness, as result of lower information system and communications costs.

Significant developments in 2002 include:

- Consolidation of its outsourcing business, regularising the activity by establishing service level agreements (SLA) with all the companies for which it provides outsourcing services, and the creation of an SLA web portal, where clients can consult service levels online. Consolidation of the teleworking facility SiatecNet, which currently provides services for 600 people.
- Creation of a corporate voice and data network for Abengoa companies.
- With regard to service provision, it fulfilled the target of a 90% service level for the resolution of incidents reported by users set at the beginning of 2002. The service is currently provided for 140 companies in 40 countries; it has over 4,000 IT users and over 100 locations in Spain; in 2002 the help desk dealt with 30,000 incidents.

In 2002 Telvent Outsourcing received the AENOR company registration and environmental management certificate in compliance with UNE-EN ISO 9001:2000 and UNE-EN-ISO-14001:1996.

# Information Technology

## Hosting

Telvent has built up a strong position on the market in 2002 with a full menu of differential quality offerings in housing, hosting and managed services, substantiated by the fact that institutions and well-established, big-name companies have chosen to place their trust in Telvent for high-performance services ensuring the efficient and reliable operation of their corporate systems from its data centre.

Institutions and companies who have chosen to become Telvent customers in 2002 for full Internet access and operation services with the highest service quality levels include:

- Entidad Pública Empresarial Red.es. Co-location, Internet access and 24x7 services for the operation of its servers, including the Spanish primary domain name server ".es"
- Portal Madrid. The Madrid City Council portal is designed as a unified gateway to services for all the citizens of Madrid and a central point for the promotion of the city.
- Race.net. The Spanish Royal Automobile Club, as a private entity, has an information and project management portal in Internet Datahouse, with corporate hosting solutions and management of its international communications network, ensuring around-the-clock operation of all its branches in Spain and throughout the world.

One of the most important developments in 2002 was that the NAP of the Americas – Madrid chose to become a Telvent customer. Telvent provides co-location, operation and administration services for its Internet traffic exchange facility. The NAP (Network Access Point) is the first major hub providing Internet access and traffic routing and digital communications of its kind in Europe. It is one of just five tier 1 network access points in the world;



the other four, one of which is the NAP of the Americas – Miami, with which it is interconnected, are located in the US. All the tier 1 NAPs are carrier neutral.

As a result of the increase in the number of Telvent customers in 2002, revenues from monthly service charges were 189% up on the previous year. It also enjoyed the continued loyalty of customers already housed at the Data Centre in a highly competitive market, where the key players are now carving out their niches. Telvent therefore reported a positive EBITDA figure in the last quarter of 2002.

The development of new products resulted in the implementation and commercialisation of the following:

- pay-per-use or dedicated-service data storage solutions
- backup, contingency and continuity centre services (BRS – business recovery services)
- 24x7 intruder detection and contents protection
- virtual private network (VPN) deployment and management

# Information Technology

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- complex corporate hosting, integrating full telematics security solutions, data housing and application servers
- BM AIX, DB2 and WebSphere technology system administration
- products integrated in ASP model for digital mapping solutions, telesupport, alert engine, SMS gateway, event forwarding, content management and e-mail marketing

In 2002 the Telecommunications Market Commission extended Telvent's general type C authorisation to act as a national Internet access provider, using the communications facilities of legally established operators. This means that services can be provided for clients outside their own facilities and enables Telvent to extend its network and stand-alone system to new locations as required in the future.

Important new customers and the expansion of its network to other national locations has led to a 260% increase in Internet traffic on Telvent's network. Peering agreements with first-line national operators and the Latin American connection capabilities provided by the NAP of the Americas – Madrid means that Telvent offers one of the best Internet access services available nationally.

Telvent continued work on the IDEAL research project on Internet Data Centres for Spain and Latin America funded by the Ministry of Science and Technology through the Profit Programme. The programme has been extended to create new NAPs in Latin America, taking advantage of the synergy with the NAP of the Americas – Madrid initiatives.

In 2002 AENOR awarded Internet Datahouse company registration certificate ER-0717/2002 covering operation and maintenance service outsourcing for software platforms in the

information technology and e-business sectors, including housing, hosting and communications, including Internet connectivity, domain name management, point-to-point links, virtual private networks, operation, monitoring, administration, security, backup copies and value-added services (system reboot, remote hands), in compliance with the requirements of the UNE-EN ISO 9001:2000 standard.

## Housing

In 2002 Telvent was successful in maintaining its leadership position and confirming its status as a landmark company in outsourcing services for third-party technology facilities (operators, carriers, XSPs and companies).

Its customer base, which increased spectacularly in 2001, grew by almost 60% in 2002, bringing the total number of customers up to more than 80. New clients included big names such as ATT and Deutsche Telekom. ATT chose Carrierhouse as its strategic location in Portugal, while Deutsche Telekom, through T-Systems Eltec, chose the Carrierhouse buildings Madrid2 and Barcelona1 as its points of presence for the Spanish market.



# Information Technology

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Average occupancy of the Carrierhouse buildings (Madrid1, Madrid2, Barcelona1 and Lisbon1), totalling over 60,000 m2, is now approaching 50% (46%).

Another important commercial and image-building development was the selection of the Madrid 2 building as the centre to house the NAP of the Americas – Madrid, a tier 1, carrier-neutral facility, which will operate as a major hub for Internet traffic exchange. Telvent has a 20% shareholding in the NAP, the first European network access point.

The building was recently incorporated in the Ministry of the Interior's Civil Emergency Plan, through the Telecommunications Department of the Ministry of Science and Technology.

Telvent has already secured the financing required to continue its housing business, proof of the company's solid position in a sector that is currently in a difficult situation and its credibility in the eyes of financial institutions.

All these factors combined—number of clients, connectivity, reliability and business solvency—put Telvent in a position to implement its new strategy targeting the corporate sector, particularly housing and the operation of backup centres providing disaster recovery and operational continuity.

In 2002 Carrierhouse further strengthened its commitment to quality, extending the scope of its Company Registration Certificate ER-0407/2001 to include the facilities Madrid 2 and Lisbon. This certification was also adapted to the UNE-EN ISO 9001:2000 standard. In recognition of this achievement, AENOR awarded Carrierhouse a bronze reproduction of the ER logo at the 4th Quality Summit in Galicia.