2002 Sustainable Development Report



ARCHITECTS OF AN INTERNET WORLD



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The production process is compliant with environmental laws and regulations. "Quality and Environment Management System" according to ISO 9001 and ISO14001 standards.

Message from the Chairman and CEO



Our company, as a world leading communication solutions supplier, is a true economic and social development enabler and, as such, is fully aware of its role to promote sustainable development.

This year we are publishing our first sustainable development report which can be considered as a key milestone in our long standing commitment to combining economic development while fulfilling our social and environmental responsibilities. This is also the opportunity to underline how much our telecommunication solutions themselves enable sustainability. Meeting the challenge of the digital bridge is a key target for the coming decade

and Alcatel can help thanks to innovative technologies and business approaches.

2002 was a very challenging year for Alcatel. The company had to operate in an environment of economic upheaval and adapt to unpredictable markets. Our customers, being telecom operators or service providers, had to sharply curtail their investments, therefore seriously impacting our business.

While restructuring, we had to undertake painful adjustments to lower our break even point and drastically reduce our workforce to align our costs with sales that were reduced by 30% in 2002. We committed ourselves to conducting job reductions in the most responsible manner, in concert with our social partners. We also proceeded in a future safe way in order to safeguard our skills and our know-how.

We monitor and constantly improve the environmental performance of everything we do thanks to a strong, preventive "life cycle" product approach. Alcatel is also very active in forming partnerships with its stakeholders to develop and improve environmental regulations and procedures.

By the same token, in terms of ethics, it is Alcatel's policy to conduct its worldwide operations in accordance with the highest business ethical standards. We created an Ethics Committee at the end of 2002 to oversee the implementation and the evolution of our business practices worldwide.

Understandably, much remains to be done. Sustainable development is a long-term concern. And the whole company is fully committed to achieving it.

Serge Tchuruk



Alcatel's businesses at the heart of sustainable development

Sustainable development is "development that meets today's needs without compromising the ability of future generations to meet theirs".

" (World Commission on Environment and Development - Brundtland Commission, 1987).

The growth of information technologies will continue to have a profound effect on society. Accelerated international trade, sharp increases in high-speed information traffic and affordable access to information for everyone, no matter where they are in the world, are already having numerous social and political effects on countries and populations, manufacturing and services, education, work, and recreation.

In its July 2002 report, "Sustainability at the Speed of Light", WWF (formerly known as the World Wildlife Fund) one of the world's largest and most respected conservation organizations, stressed the usefulness of new technologies in achieving sustainable development. Contrary to conventional wisdom, the WWF report shows that, in an area such as energy use, consumption in the USA fell 3% annually between 1996 and 2000, a period of sharp Internet growth. The decline was triple the rate of reduction of the 10 previous years, despite the proliferation of computer equipment. This report showed that by "dematerializing" a portion of the world's exchanges, information technologies can promote economic growth while reducing environmental impacts.

Information technologies at the service of development

The dissemination of information technologies in emerging countries has become a major objective of development programs. In the words of the United Nations Development Program (UNDP), "Those nations that succeed in harnessing the potential of ICT can look forward to greatly expanded economic growth, dramatically improved human welfare, and stronger forms of democratic government." * Information and communication technologies spur both growth and progress.

"Information and communications technologies (ICT) have become an indispensable tool in the fight against world poverty." *

^{*} United Nations Development Program (UNDP), Fast Facts, October, 2000, "Driving Information and Communications Technology for Development".

Alcatel, a telecommunications leader

SOLUTIONS

Networking

- Data networks high-speed Internet access routers
- Mobile networks
- · Voice networks
- · Intelligent networking
- Network services

Optics

- Terrestrial and submarine optical networks
- · Optical fibers
- · Opto-electronic components
- · Point-to-point microwave

e-Business

- Voice/data network infrastructures for business
- · Application software
- Intelligent contact centers
- Services
- Mobile terminals

Space and Components

- Telecommunications networks (satellites, ground networks and related services)
- Space systems for weather, science, observation and environmental management
- Mobile infrastructure components, mechanical components for telecom systems, batteries

ACTIVITIES

KEY FIGURES

STRATEGY AND OBJECTIVES

- Networking and connectivity, from wire and radio technologies to switching and routing functions for operator networks
- Design, integration and installation of fixed and mobile networks
- €8.2 billion in sales
- World leader in ADSL, 7.8 million lines delivered in 2002
- 22% of the ATM market
- 123 GSM customers in 88 countries
- Over 330 million circuit switching lines installed (18% of the world's inventory)
- · 800 network management customers

- Work with operators in their need to generate new revenues by migrating their fixed and mobile systems to more value-added services
- Provide network management systems for optimal operation and maintenance
- Provide broadband solutions that stimulate the use of multimedia services
- · Capitalize on a position as world leader in ADSL

- Activities associated with optical transport
- Development and supply of turnkey optical, submarine and terrestrial network solutions
- Development, manufacture and marketing of opto-electronic components, optical fibers and point-to-point microwave
- €3.5 billion in sales
- · World leader in optical networks
- No. 3 worldwide in optical fibers and optoelectronic components
- · World leader in point-to-point radio networks
- Capitalize on a position as world leader in terrestrial and submarine optical network solutions
- Take advantage of growth in the metropolitan network market
- Optimize operators' total network ownership cost

- Business changeover to voice/data convergent solutions
- Application software development
- · Portable phone design and marketing
- €2.3 billion in sales
- · World leader in multimedia contact centers
- 12 million portable phones sold in 2002
- · Capitalize on:
- extensive software expertise
- a voice/data convergence offer
- hosted services by operators/service suppliers
- multi-channel distribution
- · Form mobile phone alliances

- Development of satellite systems for telecommunications, navigation, optical observation and radar, weather and science
- Development and manufacturing of electromechanical components

- €3 billion in sales
- Europe's leading supplier and No. 3 worldwide in commercial satellites
- No. 2 worldwide in radio-frequency systems
- Maintain a leadership position in the space telecommunications segment (Internet and multimedia)
- Consolidate leading positions in the components market

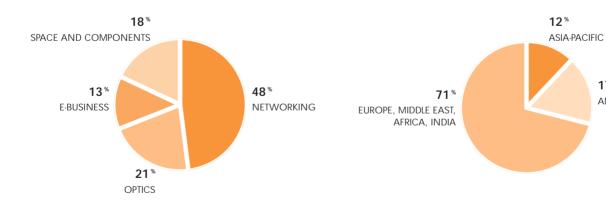
Alcatel provides end-to-end communications solutions, enabling carriers, service providers and enterprises to deliver content (voice, data or multimedia) to any type of customer, anywhere in the world. Leveraging its long-term leadership in telecommunications network equipment as well as its expertise in applications and network services, Alcatel enables its customers to focus on optimizing their service offerings and revenue streams. With sales of Euro 16.5 billion in 2002, and 76,000 employees at the end of 2002, Alcatel operates in more than 130 countries.

Distribution of sales in 2002

Headcount per geographic area in 2002

17 %

AMERICAS



Cornerstones of Alcatel's sustainable development

Alcatel has been involved in sustainable development for many years. Its commitment is formally laid out in a set of documents based on the company's values. A core team is responsible for spearheading sustainable development vis-à-vis the company's stakeholders.

Alcatel's values: a company-wide commitment

Alcatel has identified four values that guide the actions of its teams all over the world. They are:

- · customer satisfaction;
- · innovation;
- · teamwork; and
- · accountability.

Alcatel's commitments are primarily described in:

- the Statement on Business Practices;
- the Customer Commitment Charter:
- the Environmental Charter;
- the Internal Mobility Charter, a key component of its corporate Human Resources policy;
- the Ethics Committee Charter.



Teamwork in an Alcatel Research and Innovation center.

> The Statement on Business Practices

The Statement on Business Practices sets forth Alcatel's commitment to carrying out its activities in accordance with the strictest business ethical standards, the laws and regulations in effect in the countries in which it operates, and locally accepted principles of good corporate citizenship.

Specifically, Alcatel is committed to promoting and ensuring compliance with a set of basic human rights and anti-discrimination principles. The Statement on Business Practices underscores Alcatel's pledge to fight national and international corruption, uphold social values and protect the environment.

Spearheading sustainable development

A core team, supported by a network of worldwide correspondents, leads Alcatel's sustainable development initiatives. The team, which is responsible for the cohesion of sustainable development, includes representatives from the environment, purchasing, human resources, communication, legal, financial communication and institutional relations departments. It monitors the implementation of Alcatel's charters and submits proposals to the Executive Committee.

The sustainable development team calls upon the expertise of:

- An **Environment working group**, composed of representatives from business groups and manufacturing sites, proposes strategy and coordinates all environmental protection initiatives. It is supported by a network of correspondents.
- The **Human Resources Department** and its representatives in the different countries in which Alcatel operates are responsible for managing social concerns.
- An Ethics Committee, created at the end of 2002, is responsible for the enforcement of the Statement on Business Practices.

Effective in 2003, the **Internal Audit Department** will include specific items in the audits it performs in Alcatel's units around the world, to assess implementation of the Statement on Business Practices and initiatives related to it.

> The Ethics Committee chaired by a member of the Board of Directors, is comprised of directors from the legal, human resources, financial communication and institutional relations departments. The committee is responsible not only for implementing and updating the Statement on Business Practices, but also for the treatment of allegations of misconduct. The Ethics Committee holds regular meetings on a quarterly basis and when required by the circumstances.

The Customer Commitment Charter



Preparing the future

2002 was another tough year for the telecommunications industry which has been battered by the bursting of the Internet bubble and its effects on the industry. The major telecommunications carriers, penalized by their debt levels, slashed their spending in 2002, a move that had a direct impact on equipment suppliers such as Alcatel.

Confirming Alcatel's strengths and leadership

Focusing on its key activities

Alcatel's strategy of focussing on telecommunications reflects its strong belief in the industry's vitality and growth potential. The 21st century will be the century of information exchange, as growing demand by end-users, both individuals and companies, shows. To prepare for this new era, Alcatel is reinforcing its offer in areas with high growth potential.



ADSL solutions enable interactive games on TV through the home telephone network.

World leadership in broadband

Alcatel is the world leader in broadband with 20 million DSL lines deployed by late 2002. Alcatel has over 70 international carrier customers providing DSL access, and almost 40 % of the world market. The company continues to enhance its line of broadband solutions so that its customers can meet growing subscriber demand for high-speed services.

ADSL technology simultaneously transmits telephone conversations, Internet and video data on a single, copper-wire phone line. It will enable carriers to offer new services such as video-on-demand, interactive games and television broadcasts through the telephone network.

Mobile infrastructure: a market with high growth potential

Having installed over 150 networks worldwide, Alcatel is a recognized player in GSM networks and equipment. For example Alcatel is the GSM market leader in Africa, based on the number of installed networks, and has references in 47 African countries. The company has installed a total capacity there of 8.5 million mobile lines.

Strengthened by its alliance with the Japanese firm Fujitsu, Alcatel has also put together a solution for third-generation or UMTS networks. UMTS supports multimedia services, for business and individuals, on mobile terminals.

New opportunities in applications and services

Alcatel is investing heavily in the development of software applications to enhance the services it offers its customers, boost their productivity and help them generate additional revenue. Creating new value-added services is a key factor in the competitiveness of operators. Alcatel offers an extensive portfolio of competitive applications. It has recognized expertise in CRM (Customer Relationship Management) solutions, including telemarketing, electronic messaging, call center management, e-commerce management and the hosting of electronic networks.

Sustained R&D investment for continued technological leadership

Despite the current difficult context, Alcatel has opted to maintain a high level of R&D investment: in 2002, the company spent 13.5% of its total sales on research and development. At the end of 2002, 18,700 Alcatel engineers around the world were working on R&D. Alcatel has six Research & Innovation centers. They are located in North America (Plano, Texas, United States; Ottawa, Canada), Europe (Marcoussis, France; Stuttgart, Germany; Antwerp, Belgium) and Asia (Shanghai, China, opened in 2002).

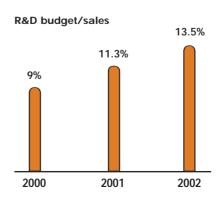
The R&D efforts have been focussed on innovations designed to optimize existing networks and to facilitate integration of new high-value added services. All high-potential projects have been maintained, especially in the broadband communications fields (fixed and mobile), and in applications and services. Due to its dynamic research efforts, Alcatel files roughly 900 patents a year. Income earned from licenses has increased by 25% a year since 2001.



The Research and Innovation Center in Marcoussis, France.



Airport equiped with an infrastructure enabling wireless access to high-speed Internet.



Preparing the future

As a "Borderless Enterprise", Alcatel has created an extensive network of partnerships with its external stakeholders. This ability to work as a partner is a real asset in light of the company's positioning as a communication solutions integrator.

Strengthening synergies with partners

Distribution partnerships

In 2002, Alcatel finalized partnerships that enabled the implementation of a new indirect model for distributing its enterprise offer.

In January 2002, for example, Platinum Equity took over Alcatel's European subsidiaries specializing in sales and services to enterprises. In addition, as part of efforts to develop Alcatel's distribution channels in the United States, two major agreements were signed, one with NextiraOne, a Platinum Group company, and the other with Verizon, a leading operator in the US.

Scientific partnerships worldwide

Alcatel believes that a long-term strategy of cooperation with the industry and the international scientific community is vital for technological innovation. Alcatel contributes to numerous national and international research programs such as EUREKA and its 170 R&D projects in Europe. Launched in late 2001, the "Alcatel Research Partnership" continues to increase the number of its partnerships and exchanges with the most prestigious academic research centers in the world. Examples include CNRS (National Scientific Research Center), INRIA (National IT and Automation Research Institute) and the Groupement des Écoles de Télécommunications (GET) in France; IMEC in Belgium; Stuttgart University and Heinrich Herz Institute in Germany; Sarnoff Institute of Princeton, MCNC in North Carolina and the University in Canada. More



Carleton University in Canada.

specifically, the program has been very innovative in the field of new services, broadband applications and network management systems.

A high level of involvement in industry debates

Alcatel is an active participant in information and communication technology industry debates. The company proposes initiatives with its industry partners via associations and forums. Alcatel is a founding member of EICTA, the European Information, Communications and Consumer Electronics Technology Industry Association, which focuses on telecommunications, IT and consumer electronics in Europe. Alcatel supports international standard-setting organizations to help the industry develop the harmonized "standards" it will need to deploy telecommunications equipment and infrastructure worldwide.

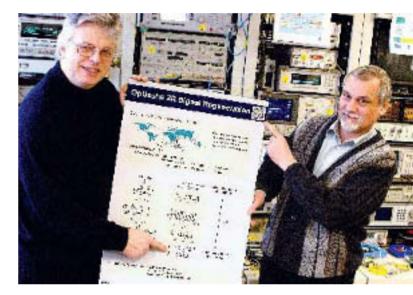
Internationally, Alcatel is leading the agenda on broadband expansion policy in the GBDe (Global Business Dialogue on e-Commerce), a forum that brings together all the major players in the multimedia value chain.

Regular, transparent communication with financial partners

Alcatel's Investor Relations Department acts as an interface between individual or professional investors and the financial markets. Its two major objectives are to provide shareholders with transparent information on a regular basis, and to provide management with feedback about its financial partners.

Besides the information it is legally required to supply to the stock markets where it is listed, Alcatel communicates the data it believes is most relevant to understanding the company as a whole. Annual reports, shareholders' newsletters, management presentations to the financial community: the entire gamut of financial information is available on the www.alcatel.com website.

Alcatel publishes quarterly earnings. In addition, to meet the needs of different investors, it schedules regular meetings between management, analysts and investors in main financial centers worldwide. Meetings with individual shareholders are also organized on a regular basis in major French cities. A dedicated team answers to any questions shareholders or investors may have.



Researchers from the Heinrich Herz Institute in Berlin, Germany.

> "My Alcatel"

An online extranet sales platform for both large and small companies, "My Alcatel" serves 1,500 resellers worldwide, or about 14,000 people. It features a constantly updated catalog of 8,000 items from which resellers can order. All resellers have customized access tailored to their needs and their position (marketing manager, technician, etc.). The platform is integrated directly into the sales & marketing process, from

supply chain to customer service, and creates substantial productivity gains: faster order management, inventory reduction, immediate and updated dissemination of sales, technical and marketing information, retailer loyalty and end-user satisfaction. Two years after its initial deployment, all of Alcatel's enterprise customers have access to the platform, which handles 99% of all orders.

Acting as a socially responsible company

Faced with the sudden slowdown in the telecommunications market, which caused its sales to decline by more than 30% in 2002, Alcatel had to reduce almost a third of its staff between late 2000 and the end of 2002. Downsizing was carried out in each country in consultation with labor organizations, as well as at European level through ECID, the European Committee for Information and Dialogue created in 1996.

Despite this context, Alcatel intends to maintain a dynamic human resources policy, based on training, career management and international mobility programs.

Adapting human resources to market conditions

Alcatel reduced staffing by 23% in 2002, from 99,300 at the end of 2001 to 76,000 by late 2002. These workforce reductions affected every country in which the company operates. In North America and in Europe reductions ran as high as 30% to 35%. On the other hand, in Asia Pacific, the workforce increased due to the integration of Shanghai Bell* employees into Alcatel. To carry out these workforce reductions, Alcatel favors downsizing solutions that preserve employment. Examples include outsourcing measures involving cooperation agreements with manufacturing partners and the sale of businesses.

When job reductions are unavoidable, Alcatel implements a package of measures (transfers, voluntary terminations, early retirement) and offers support to redundant staff, through career change assistance provided as part of plans jointly negotiated by social partners and management.

Outsourcing in the framework of manufacturing partnerships

In 2001 and 2002 Alcatel outsourced, to specialized manufacturing partners, several production units for which it did not have a sufficient work load in the medium term. Outsourcing reduces Alcatel's fixed costs and offers the sites involved a lasting solution for the preservation of local employment.

"Career Centers" in the United States

The abrupt collapse of the telecom market in North America prompted Alcatel to reduce its staff in the United States by nearly one third. Alcatel opted to support its American employees by creating "Career Centers." With the help of

a specialized consulting firm, the centers offer training and job-hunting workshops, as well as coaching for interviews. A work space (office, phone, computer, Internet connections, etc.) is also provided for employees looking for jobs.

^{*} Alcatel Shanghai Bell was inaugurated in July 2002.

In 2001, for example, Alcatel reached an agreement with Flextronics, one of the world's major electronics co-contractors, to take over all of Alcatel's European manufacturing operations for GSM mobile phones, including the Laval facility in France and its 800 employees.

In 2002, three factories employing 1,300 workers (Toledo, Spain; Gunzenhausen, Germany; Cherbourg, France) were sold to Sanmina SCI, another major international electronics co-contractor. In France, the Brest factory (700 employees) was sold to the Jabil Circuit Group.

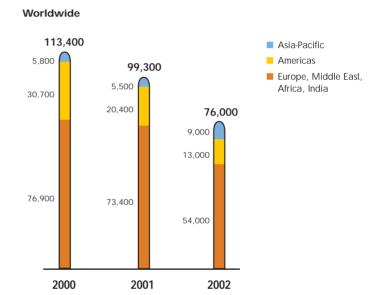
Sale of businesses

Alcatel also sold certain activities which had become peripheral to its strategy to companies wanting to reinforce their core businesses. The sale of Alcatel's enterprise distribution operation to Nextira One led to the transfer of 6,500 employees in 17 European countries. ST Micro-electronics' takeover of Alcatel Micro Electronics involved 1,200 employees, mainly in Belgium.

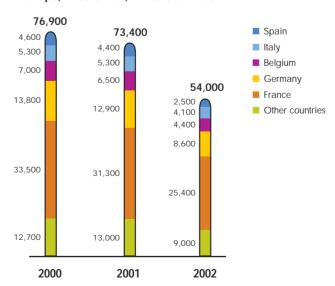
Workforce reductions

When a decline in orders leads to redundancies in one of Alcatel's core businesses, the company encourages transfers to another unit, voluntary departures and early retirements. Alcatel also offers assistance to employees affected by workforce reductions to help them find new jobs. These measures are tailored to the situation in each of the countries affected. Alcatel has signed agreements to offer support and assistance for employees concerned by restructuring with the staff representatives of its main units, notably in France, Spain, Germany and Belgium.

Workforce evolution worldwide



In Europe, Middle East, Africa and India



Acting as a socially responsible company

Developing skills and expertise

In a highly competitive and technological world, Alcatel's success depends largely on the quality of its people. Despite the downturn the company has maintained its longstanding dynamic human resources policy.

Fourteen training centers worldwide

53% of the training hours are provided by Alcatel University. Founded in early 1999 to optimize the training opportunities already available at Alcatel, it comprises 14 training centers worldwide (8 in Europe, 4 in America and 2 in the Asia-Pacific area). Alcatel University offers a comprehensive program of technical, managerial and product training to Alcatel employees as well as to its customers.

Career management

Alcatel has introduced a career management policy to help employees evolve within the company. It is based on annual performance reviews in which objectives and achievements, as well as the employee's training needs are assessed. Alcatel plans to extend this practice to all managers and professionals by 2005.

Career management must also identify future managers at all levels of the company and help them develop, especially in the key areas corresponding to Alcatel's values: customer satisfaction, innovation, team work and accountability. In this context approximately 3,000 employees identified as "high potentials" benefit from a personalized career development program.

"Alcatel Technical Academy"

Technical experts are a highly strategic group of employees for Alcatel. Launched in 2000, the "Alcatel Technical Academy" program acknowledges engineers who have made remarkable scientific and technical contributions. After a rigorous formal selection process (comprehensive application forms, committees of experts, etc.), the winners are awarded the title of



The first seven Alcatel Technical Academy "Fellows" were inducted by Alcatel's Chairman and CEO Serge Tchuruk, on July 10th 2002.

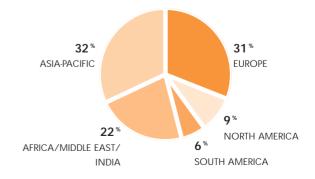
"Member," "Distinguished member" or "Alcatel Fellow" of the Academy.

While the Alcatel Technical Academy recognizes skills and competences, membership also implies the sharing of knowledge.

Careers: international opportunities

Alcatel has operations in 130 countries and strongly encourages mobility: in 2000, 2001 and 2002 about 2,000 employees were working outside their home countries, of which 1,000 for periods of over one year. The resulting cultural mix is a major asset to the company. It encourages employees to share experiences and know-how, helps provide the expertise to carry out

Breakdown of expatriates by host country in 2002



challenging projects and strengthens the international coverage of Alcatel's businesses. An intranet site is dedicated to mobility and features job vacancies, sample contracts, and country specific information about working and living conditions.

Whereas in 2000 and 2001 the "Go USA" mobility program allowed as many as 320 European engineers to pursue a career in the US, 2002 was characterized by increased mobility towards China. When Alcatel created its 6th Research and Innovation center in Shanghai, a multicultural team of 38 expatriates, representing 11 different nationalities, joined the management team of Alcatel Shanghai Bell.

Providing a quality working environment

Encouraging information and dialogue in the company

Alcatel's internal communication policy encourages the exchange of information at all levels of the company. All employees have access to the intranet, most of them at their desk, or if not, through a shared connection at production sites. Updated daily, the intranet keeps people informed in real time about the main activities and markets of the company and supports interactive communication between employees and management. Everyone can express his or her opinion or ask questions that are answered individually.

A competitive compensation system

Alcatel has an equitable hiring and compensation policy based on employee merit without discrimination regarding gender, culture or ethnic origin. The company's compensation policy takes into account local needs and each country's requirements and aims to be sufficiently attractive to recruit and keep high-level specialists. Despite the crisis in the telecommunications industry, Alcatel endeavours to offer its employees competitive compensation packages.



The "Rencontres" program put in place by Alcatel CIT in France aims at developing a real dialogue with the employees, through a whole day discussion on each site every two weeks. This long term program started in 2001. By February 2002 28 days of discussion had taken place.

The European Committee for Information and Dialogue

In 1996, Alcatel and its union representatives created a "European Committee for Information and Dialogue." ECID aims to facilitate the exchange of information in Europe, on Alcatel's strategy and organization, as well as on

its business situation and social context. ECID's 30 staff representatives from 15 countries meet in full session twice a year; its officers gather at the request of the Chairman and CEO as events require (eight meetings in 2002).

> e-learning

Alcatel's online training program already offers more than 1,000 modules. 14% of employee training is made via these new technologies, this figure should reach 25% in 2005.

Acting as a socially responsible company

Encouraging teleworking

Alcatel is stepping up initiatives to promote teleworking—a growing trend aimed at better balancing private and professional life—both among its employees and the general public. It has drawn up a company-wide teleworking charter which sets out this option, always on a voluntary basis.

Safe working conditions

In high-tech companies, problems of safety at the workplace are relatively few. At Alcatel, health and safety policies are implemented and managed locally. Exposure levels to electromagnetic fields at workplace are assessed based on existing standards. Personnel involved receive appropriate health and safety training.

Moreover Alcatel is pooling its experience, for example with that of French partners such as EDF (Electricité de France), RTE (le Réseau de Transport d'Electricité) and TDF (Télédiffusion de France) and mobile network carriers to standardize recommendations concerning human exposure to electromagnetic (EM) fields. These partners have produced a joint industry recommendation approved by France's UTE (Union Technique de l'Electricité et de la communication) and published in September 2002.

25% of Alcatel employees in Belgium telework



In 2001 Alcatel introduced a major teleworking project in Belgium, the country where its broadband Excellence center is located. Today over a quarter of its employees (about 1,000 in all) do part of their work from home, and 80% of managers are happy with the results. Alcatel supplies employees with the full range of communication tools they need to stay connected to their teams and offices. Most employees participating in the program are positive about the time saved in travel and improved quality of life. The program will be extended to France in 2003 and then gradually to Europe.

For more information, go to www.alcatel.com



An Alcatel teleworker in Ottawa, Canada.

A network based work style

Because of Alcatel's geographical scope, organization and wealth of communication tools, management encourages a network and project-based work style. The way the sustainable development team works is a good example of this.

Respecting ethics and human rights

Alcatel's Statement on Business Practices stipulates that "It is Alcatel's policy to conduct its worldwide operations in accordance with the highest business ethical considerations, to comply with the laws of the countries in which Alcatel operates and to conform to locally accepted standards of good corporate citizenship. This policy applies to all units of Alcatel and to all employees regardless of function, grade or standing."

"Alcatel supports and respects the protection of human rights within its sphere of influence, in particular the elimination of all sorts of compulsory labor and child labor, and makes this a criterion in the choice and management of its suppliers and subcontractors."

Alcatel recently stepped up its vigilance with respect to labor and ethical issues. Since 2001, contracts with subcontractors and suppliers must include a clause in the appendix requiring the vendor to comply with Alcatel's Statement on Business Practices. The clause reads as follows:

"Vendor recognizes having been made fully acquainted with Alcatel's Statement on Business Practices and undertakes to apply the principles set out therein with respect to the performance of this Agreement contract, in particular with reference to non-discrimination of employees, combatting bribery of domestic and foreign public officials, protection of international human rights and environmental responsibility. Vendor recognizes that violation of such principles will be considered as a breach of contract."

The Statement on Business Practices was updated in early 2003. At the same time the company also published the Alcatel Ethics Committee Charter.

40 years of vigilance

Since 1961, Alcatel has had a subsidiary dedicated to monitoring contract commissions, called Alcatel Standard. For the last two years training sessions

on how to tackle corruption have been organized for sales managers in each geographical region.



Videoconference in the multimedia room in Shanghai, China.

Preserving the environment: a "life cycle thinking"

Environmental protection, a key element in any sustainable development policy, is a global concern for which we must all do our part. Internally, Alcatel shows its commitment to the environment by enforcing its Environmental Charter. Externally, Alcatel formalizes its environmental commitments with suppliers, subcontractors, customers and manufacturing partners and listens carefully to the public.

Fostering strong internal initiatives

In keeping with the objectives of its Environmental Charter, Alcatel's short-term priorities are to expand the use of its ecodesign approach and its system of environmental declarations, and to implement a product end-of-life management for all new products.

Products are developed by a multidisciplinary team that is organized into a project unit. The process features decisive steps involving environmental choices that are laid out in an in-house standard, called APEM (Alcatel Product Environment Management). A self-evaluation system involving the Quality Assurance department measures results.

Closely involving personnel

Employees are increasingly involved in Alcatel's environmental initiatives and information about them is available on an intranet site. A module to educate employees about environmental issues and a training program will be offered to all teams beginning in 2003.

Highlights of 2002

In 2002 Alcatel

- established an in-house standard that formally spells out how to integrate environmental concerns into every step of the product development process;
- contracted with suppliers and subcontractors to increase awareness of environmental issues and take them into account at every step in the supply chain;
- closely monitored the "mobile telephony and health" issue.

Specialized programs for buyers and R&D staff are being implemented concurrently. 90% of buyers will be trained by the end of 2003, 100% by the end of 2004. R&D teams will be trained by local environmental correspondents in 10 countries in late 2004.

Designing products that are more and more environmentally friendly

Taking action at the manufacturing stage is not sufficient. Alcatel has committed itself to limiting the impacts of its activities throughout the life cycle of its products. It aims to design products that are increasingly environmentally friendly and to strictly manage production sites, in order to implement processes that will optimize the recycling of products which have reached the end of their lives.

1 Design 2 Production 3 Use

A life cycle approach starting from the product design stage

Much of the environmental impacts of products throughout their life cycle depends on design choices. Taking these issues into account early on, by environmentally conscious design, can substantially reduce the total impact of products by:

- · Improving manufacturing processes
- Reducing material and energy use
- Improving the recycling of products at the end of their lives.

EIME: an eco-design methodology

Eager for a tool to help them gain more control over the environmental impacts of products, Alcatel and major manufacturers in the electrical and electronics industry teamed up to develop a joint methodology, based on a common language and shared databases. The tool was intended to help design teams add environmental factors to the usual mix of parameters such as cost, quality and safety. EIME (Environmental Information & Management Explorer) methodology is based on three principles: taking into account the life cycle of products; assessing their environmental impacts (energy use, materials, etc.);

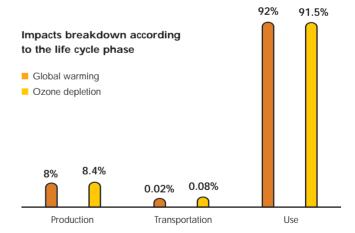
and continually improving their environmental performance.
For example, an environmental analysis based on multiple impact indicators (greenhouse effect, reduction of the ozone layer, etc.) for an Alcatel fixed network switch (Alcatel 7510) shows that:

— the active components in printed circuits boards account for over 90% of its manufacturing impact;

— its useful life of 10 years accounts for 84 to 92% of the total impact throughout the product's life cycle.

The above analysis thus points to two major avenues for improving the product's

environmental performance.



The EIME analysis of the environmental impacts of the Alcatel 7510 underlines the preponderant part of the use phase. The improvement of the environmental performance of this product is therefore focussed on the energy consumption reduction during the use phase.

Preserving the environment: a "life cycle thinking" approach

"Dematerialization" of equipment

One of the major challenges for Alcatel is to make products that use less energy and materials. This approach called "dematerialization," leans upon consumption reduction programs which, when combined with major technological innovations, have already and will in the future support sharp decreases in the total "energy budget" of products.

At the same time, these technological innovations have sharply reduced the use of materials.

For most Alcatel professional products in the last three years, the decrease in energy and material consumption was approximately 40%. One of the company's objectives is to continue reducing equipment energy consumption by an average of 20% per year over the next three years.



The equipment shown replaces the old generation of equipment that can be seen in the background.

Considerable strides have also been made in the field of mobile phones. The use phase represents 70 to 80% of the total energy consumption of a portable telephone over the whole of its life. Between 1998-2002 Alcatel quadrupled cellular phone autonomy, thereby substantially improving their energy efficiency.

Monitoring the environmental effects of production

The production of telecommunications equipment currently has a limited and controlled effect on the environment. As early as 1992 Alcatel voluntarily committed itself to an internal "environmental management plan" aimed at monitoring and improving the performance of all its manufacturing sites: better waste management, less residue, lower water and energy consumption, reduced risk of accidental pollution, etc. Alcatel sites whose best practices meet an internal standard can obtain the HPE ("Highly Protected Environment") label.

70% of Alcatel telecom-only production sites are ISO 14001 certified

Now that Alcatel has refocussed its activities and sold most of its non-telecom production facilities, its direct environmental impacts have dropped still further. Current impacts involve electric power, gas and fuel consumption and the production of waste, most of it non-hazardous, which Alcatel continues to manage under its "environmental plan". In addition, all telecom sites have an Environmental Management System (EMS) and 70% have had it certified under the international ISO 14001 standard. Factories whose products are not Alcatel's core business—printed circuit boards, towers and antennas, batteries and power systems, vacuum pumps, etc.—have established an EMS that is in conformity with the ISO 14001 standard.

Outsourcing production without compromising high standards

Since Alcatel's decision to outsource much of its production, the company has rigorously monitored the environmental impact control of its supply chain. Its outsourcing contracts with CEMs ("Contract Equipment Manufacturers") contain clauses, for example, that require them to maintain the EMS's created by Alcatel after they take over the operation.



Managing product end-of-life

Current regulatory changes are shifting the responsibility for equipment that has reached the end of its useful life. Responsibility was formerly assumed to lie with the product's last user/owner, but the European rules for example are gradually transferring it to the producers of consumer goods and business equipment. Producers will now have to manage the environmental impacts of their products until their end-of-life.

Alcatel is preparing to meet these new obligations by adopting solutions tailored to the wide range of its products.

Batteries and storage cells

Alcatel already treats batteries and storage cells, whose disposal is regulated. Alcatel belongs to European battery endof-life organizations: SCRELEC in France, GRS in Germany and Stibat in the Netherlands. Alcatel meets the collection and treatment requirements for storage cells in the products it markets. In addition, Saft partners with its customers to manage the endof-life of the storage cells it produces.

Other products

In order to comply with upcoming regulations affecting business equipment and consumer telephone products, Alcatel is taking part in pilot experiments in several countries. It recently became involved in a study of management of wastes from large electric appliances (France's "Elen" project). The pilot experiments found that logistics play a key role in collection schemes, and provided valuable feedback for understanding how to set up complete product recovery systems. Since recycling does not fall within Alcatel's area of expertise, the company intends to develop its solutions with the help of outside partners. Following the analysis of the constraints associated with product end-of-life management in 2003, Alcatel will specify internal procedures and standards in 2004 which will be implemented in Europe in 2005.

Preserving the environment: a "life cycle thinking" approach

Working with partners to protect the environment

No environmental policy can be effective unless stakeholders are genuinely involved and the actions taken at every step in the supply chain are coherent.

With this in mind, Alcatel listens to the expectations of its customers, actively participates in discussions about evolutions in regulations and standards and involves suppliers and subcontractors in its program.

Alcatel, an involved partner

With other manufacturers: Alcatel anticipates regulatory changes by being involved in partnerships with other telecommunications manufacturers to establish standard tools—for example, the committees that elaborate environmental declarations—and implement eco-design tools and reprocessing operations.

With its suppliers and subcontractors: Alcatel strives to involve its suppliers and subcontractors very closely in its environmental initiatives. Consequently, it has incorporated environmental requirements into its purchasing process since 2002. Specific criteria are used to select suppliers and subcontractors and a program to train buyers is under way.

Transparency in relation to customers

Alcatel supplies its customers, industry professionals and the general public with information about the environmental performance of its products through a system of environmental impact statements that is based on the ECMA (European Computer Manufacturers Association) TR/70 international standard. Alcatel helped draft the standard, which can be read online at www.alcatel.com.

These ecodeclarations inform customers about many environmental attributes, including energy consumption, packaging type, the presence of regulated substances, associated emissions (noise, electromagnetic waves), recyclability, length of use.

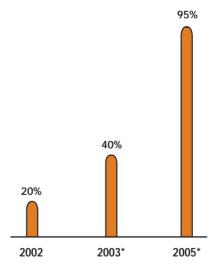
Environmental clauses in contracts

Alcatel's contracts now require suppliers and subcontractors to comply with its environment requirements and with current and upcoming environmental regulations.

In 2002 Alcatel introduced a program to assess the environmental performances of its partners based on written declarations.

Each supplier must now provide a compliance document, in the form of an environmental declaration or questionnaire (created by Alcatel based on the ECMA TR/70 industry standard). The program will be expanded in 2003. Supplier selection will be contingent on whether statements conform to Alcatel's environmental requirements.

Percentage of new products with an ecodeclaration



* Objective.

Mobile telephony and health

The fast development of mobile telephony and the installation of large numbers of base station antennas have raised public's concerns about the possible effects of electromagnetic waves on health. Alcatel works in close relation with the relevant organizations and authorities so that it can provide clear answers to questions from the public.

The experts mandated by government authorities in many countries have reached a consensus that electromagnetic waves have no established health effects. Over 400 scientific studies coordinated by the World Health Organization (www.who.int/peh-emf/) have investigated the potential health effects of the electromagnetic waves emitted by mobile phones and base stations. More than 100 million euros have been spent on these studies since 1995. Alcatel, an active member of the "Mobile Manufacturers Forum" (MMF) whose members include all major mobile telecommunications equipment manufacturers, funds research programs initiated by such public organizations as the European Commission. The MMF provides extensive information on mobile telephony and health through its website www.mmfai.org.

Informing the public

All Alcatel products comply with standards and regulations and usually with a large margin. The SAR (Specific Absorption Rate) values of its mobile phones are below the exposure limits specified by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), which were adopted by the European Union.

Alcatel's "One TouchTM 715" has a maximum SAR level of 0.35 W/kg, compared to a maximum value of 2 W/kg set by the standard. SAR values are mentioned in the user's guide of Alcatel's most recent models and on its Internet site for older models.







Helping promote local development

Because Alcatel's solutions foster communication and relationships, they are central to local development. As a good corporate citizen, Alcatel is involved in the local fabric of every country in which it operates.

Reducing the digital divide: the "Alcatel Digital Bridge" initiative

Access to telecommunications is now a major issue in emerging countries. Vast, hard-to-reach areas, sparsely populated or with low income, can now be linked to the rest of the world more cheaply through GSM or satellite phone technologies. Two-thirds of the world's mobile networks use GSM technology, which is much cheaper than fixed infrastructure. In Africa, for example, which has more than 30 million subscribers, the number of portable cellular phones now exceeds the number of fixed lines.

As part of an innovative business strategy, Alcatel has teamed up with a number of partners (international institutions, carriers, local authorities) to develop the "Alcatel Digital Bridge" initiative. This initiative seeks to work closely with local partners to satisfy real, clearly defined needs in the field. The goal is to shrink the digital divide, while creating strong added value regionally.

Alcatel has long cooperated with many telecommunications carriers in Africa to equip countries with fixed and mobile

telephone networks large enough to meet their needs. About 2,000 people work for Alcatel in Africa, either at software development centers or network construction sites, which hire many local subcontractors.



Training in Egypt of technicians from Uganda.

Internationally recognized expertise
 Alcatel is working with the International Telecommunications
 Union (ITU) on an information technology training program for managers and experts in emerging countries

Sharing expertise and technologies

Alcatel supports the development of local markets by fostering the emergence of high-level expertise. Its research centers are strongly linked to the local scientific and academic community and contribute to the emergence of centers of expertise in the countries in which they are located.



Mobile research center, Timisoara, Romania.

Over 1,000 researchers and engineers in China

Alcatel Shanghai Bell, China's first foreign invested company limited by shares in the telecommunications sector, was created on May 28, 2002. Alcatel holds 50% plus one share of the company. The new firm combines the assets and resources of Alcatel and Shanghai Bell, a Chinese equipment maker with a solid foothold everywhere in China. It is now positioned to be a leader in both the Chinese and global telecom markets. As a consolidated company, it has access to all of Alcatel's technologies, which will enable it to offer a complete portfolio of telecommunications solutions to its customers, while drawing on a local high quality industrial base.

Alcatel's sixth Research and Innovation center was created in Shanghai on Alcatel Shanghai Bell premises.



Nile Vision Plus network installation, Egypt.

Installing Meteosat receiving stations in 45 African countries

In November 2002 Alcatel won a contract to supply and install 47 receiving stations for Meteosat Second Generation weather satellites in 45 African countries. The project initiated by the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), and the European Commission, will sharply improve weather forecasting in Africa and the Indian Ocean. It will also provide the African continent with an efficient system for monitoring the environment based on more timely information to help predict natural disasters and ensure more efficient water use.

In Jordan Alcatel was selected by Jordan Telecom to connect 65 schools, scattered all over the country, to the Internet via broadband. The project is phase one of a major government initiative to provide high-speed Internet access to the entire country. It is considered a major step in the monarchy's efforts to modernize Jordan.

Helping promote local development

Health: Cyber-Pediatricians

The Saint-Louis region in Senegal has one pediatrician for every 10,000 children. In an effort to offset this shortage, the "Afrique Initiatives" association is introducing, with Alcatel's help, a pilot project that will use the Internet to link a thousand children to one doctor. The association records the children's weight twice a week and sends the data by Internet to the hospital. The doctor notes any abnormal weight curves and contacts local correspondents, who alert the family and arrange a hospital consultation.

Intervening in emergency situations

In emergency situations, natural disasters, industrial accidents, attacks or conflicts, Alcatel provides technological and financial assistance in setting up or restoring the telecommunication networks that are crucial at such times.



Alcatel teams provide assistance during the 2001 earthquake in India.

Strong local involvement

As a good corporate citizen with operations in 130 countries, Alcatel encourages and supports many local educational, cultural and sports initiatives in order to actively participate and be part of communities where it operates.



The International Photography Festival in Pingyao, China.

Culture: The International Photography Festival in Pingyao

In 2002 Alcatel sponsored the second Pingyao International Photography Festival, an event that features both Chinese and Western photographers. An international panel of judges comprised of well-known figures from the art and publishing worlds awarded the "Alcatel Prize for the Best Chinese Photography Book" at the festival. First prize, of 50,000 yuans (5,600 euros), went to photographer Wang Fuchun, for his book "Chinese On The Train," in September, 2002.

Sports and health: Alcatel at the Ottawa Marathon

Alcatel has been a sponsor of Canada's most popular marathon for two years. It simultaneously collects funds to fight cancer at a family "sports weekend" for Alcatel employees: the event has raised 400,000 Canadian dollars (255,000 euros) in two years.

Education: BrailleNet in France

The BrailleNet association was created to promote and expand access to information, education and culture on the Internet for the blind and visually impaired. BrailleNet has set up an Internet server for special-needs publishing, called the "Hélène" server. Centers that produce Braille or large-print copy may access French-language literary, academic, technical and scientific resources through the server.

Alcatel donated 30,000 euros in 2002 to help develop three Internet servers for special-needs publishing.



An Internet classroom in a pilot school in Stuttgart, Germany.



D21 initiative, "Women and IT", Germany.

Education: the "D21 initiative" in Germany

Major German companies are spearheading the "D21 Initiative," with the goal of transforming German industrial society into an information society.

As part of the program, Alcatel is involved in the "Women and IT" project, which encourages women to choose careers in information and communication technologies (ICT). In addition, it also offers training programs for women who have decided to pursue the ICT field. Alcatel contributes to the program by permitting some of the company's woman engineers to be "D21 Initiative Ambassadors," to pass on their knowledge and skills to younger women.

In addition, as part of a project to expand Internet and multimedia access in German schools, Alcatel has provided equipment for six "Internet classrooms" that enable students to incorporate multimedia techniques into their education.

For more information, consult our alcatel.com web site, corporate citizenship.

Sustainable development indicators

Social indicators	2001	2002	Perimeter
Research and Development			
R&D budget/Sales	11.3%	13.5%	100%
Headcount			
Total headcount	99,314	75,940	100%
Total non-Alcatel workforce	4,316	3,701	100%
Number of recruitments	13,379	2,645	100%
Headcount increase due to acquisitions	1,068	5,686	100%
Headcount reduction due to outsourcing or transfers	3,072	10,473	100%
Headcount reduction due to redundancies	11,319	15,028	100%
Headcount reduction due to natural departures			
(retirements + end of temporary contracts)	11,998	5,813	100%
Women			
Percentage of women/headcount	26%	26%	France ⁽¹⁾
			30%(2)
Women amongst "high potentials"	16.2%	16.7%	100%
Disabled persons			
Number of disabled employees	387	405	France
Training			
Training budget/payroll			
(not including wages and transportation)	2.1%	1.6%	60%
Average number of training hours per employee	27	19	60%
Percentage of training hours through e-learning technologies	6%	14%	60%
Mobility			
Number of expatriates worldwide	2,107	1,942	100%
Expatriates by host country			
Europe	798	602	
North America	330	171	
South America	173	124	
Africa/Middle East/India Asia-Pacific	315 491	426 619	
Security			
Number, per employee, of days absent		0.28	France ⁽¹⁾
due to work-related accidents		or one day	30%(2)
		out of 1,000	

⁽¹⁾ Figures concerning France represent 95% of the workforce in France.

⁽²⁾ France represents approximately 30% of the perimeter.

NB: More detailed indicators concerning France can be found in the 2002 annual report.

Environmental indicators	Units	2002	Perimeter	
Consumption of electric power	GWh MWh/employee	1,118 18.1	Europe, USA	
Other energy consumption	GWh MWh/employee	577 9.4	Europe, USA	
Total energy consumption	GWh MWh/employee	1,695 27.5	Europe, USA	
CO ₂ emitted (only for activities performed by Alcatel and its employees) calculated or estimated using the reporting methodology recommended by the GHG ⁽¹⁾ Protocol: – Direct emissions of CO ₂ – Emission of CO ₂ linked	Ton Ton∕employee Ton	123,617 2 329,710	Europe, USA	
to electricity purchase	Ton/employee	5.3		
Consumption of drinking water	m ³ m³/employee	3,644,000 59.1	Europe, USA	
Production of toxic waste	Ton Kg∕employee	7,264 118	Europe, USA	
% of toxic waste reused for material or energy purposes, i.e., not released and not burned without energy recovery	%	51%	Europe, USA	
Production of non-toxic waste	Ton Kg/employee	35,894 582	Europe, USA	
% of non-toxic waste recycled	%	53%	Europe, USA	
% of telecom production plants with ISO 14001 certification	%	70%	Europe, USA	
Metric tons of solvents emitted into the air	printed circuits and final asser	mbly before testing. The so	aning agents, in particular for c-called bleaching agents have in the whole of the telecommu-	
Other gases released into the air (Halogenated hydrocarbon, etc.)	CFCs have been eliminated from production since 1996. The only CFC emissions are from cooling equipment, and they are not significant since they are brief (leaks), and do not depend directly on Alcatel's business and operations. They are monitored in accordance with regulations.			
Discharge into water (heavy metals)	Discharges of heavy metals into water from Alcatel's operations are not significant for operations associated with telecommunications.			
% of new products covered by eco-declaration (95% by end of 2005)		20%	40% ⁽²⁾ 100%	
% of purchasing and project managers trained in environmental awareness		30%	90% ⁽²⁾ 100%	
% of purchasing volume—for production—covered by eco-declarations or questionnaires		30%	60% ⁽²⁾ Europe	

⁽¹⁾ GHG: Greenhouse Gas Protocol.

^{(2) 2003} target.

Glossary

ADSL (Asymmetric Digital Subscriber Line)

ADSL transforms an operator's existing copper twisted pair investment into a multimedia broadband distribution system. Always online and fast, ADSL provides easy and quick Internet access via a simple mouse-click. Working on an existing copper telephone line, ADSL's transmission speed is up to 200 times faster than today's analog modems. ADSL's speeds range up to 8 megabits per second. ADSL supports high-speed data communications as well as traditional telephone service on a single telephone access line.

APEM (Alcatel Product Environmental Management)

An internal standard formalizing the integration of environmental concerns throughout the product development process.

ECD (Environmental Conscious Design)

An environmentally Conscious Design consists in integrating environmental concerns starting from the product design stage.

ECMA (European Computer Manufacturers Association)

An international association dedicated to information and communication systems standardization.

Ecodeclaration

Declaration of product related environmental attributes according to the ECMA TR 70 industry standard.

The ecodeclaration presents the environmental characteristics of a product such as energy consumption, physical emissions (such as noise) or chemical ones (such as volatile organic components). This document shows the conformity of the product to legislation in terms of substances and/or components. It also provides information related to the end-of-life of the product. As part of its environmental program, Alcatel provides an ecodeclaration for each of its new products.

EIME (Environmental Information & Management Explorer)

A methodology (software and data base) developed for the electronics industry that assesses a product's environmental impacts throughout its life cycle.

EMS (Environment Management System)

The EMS is Alcatel's set of internal tools that tracks the environmental impacts of all activities at a plant, indicates ways to reduce the impact and measures the results.

HPE (Highly Protected Environment Label)

Alcatel's internal label awarded to manufacturing sites following a successful environmental audit verifying conformity with Alcatel standards.

ISO

The International Organization for Standardization is a world-wide federation of national standards bodies from some 140 countries to promote the development of standardization and related activities in the world. ISO's work results in international agreements which are published as International Standards. (Source: www.iso.ch).

ISO 14001

The ISO 14001 standard is an International Standard which identifies those elements of an EMS necessary for an organization to manage its impacts on the environment effectively. Compliance with that standard can be certified by an accredited third party, on a voluntary basis.

SAR (Specific Absorption Rate)

The SAR indicates the quantity of energy absorbed when using a mobile phone. It is the rate of energy absorbed by mass unit Watts per kilogram(W/kg).

UMTS (Universal Mobile Telecommunications System)

Technology planned for the next generation of GSM (Global System of Mobile communications). UMTS will support data transfer rates from 144 Kbit/s to 2 Mbit/s.

Sustainable development objectives

> Social Objectives

- Put in place systematic annual performance reviews for all Alcatel managers and professionals by 2005,
- Maximize the use of online training (e-learning) to reach 25% of the training volume in 2005,
- Reinforce international mobility and cultural diversity within management teams.

> Environmental Objectives

- Reduce the energy consumption of Alcatel products by an average of 20% per year over the next three years,
- Provide ecodeclarations with all Alcatel products by 2005,
- Define internal procedures and standards for equipment end-of-life by 2004 and from 2005, be in a position to provide for the equipment collection and recycling in Europe.

> Economic Objectives

- Reach an operating breakeven target in 2003,
- Reach breakeven in net income from continuing operation (pre-goodwill) before the end of 2003,
- Continue to improve the working capital position particularly focusing on improved inventory turns.



CORPORATE COMMUNICATIONS