SUSTAINABLE DEVELOPMENT REPORT
2004

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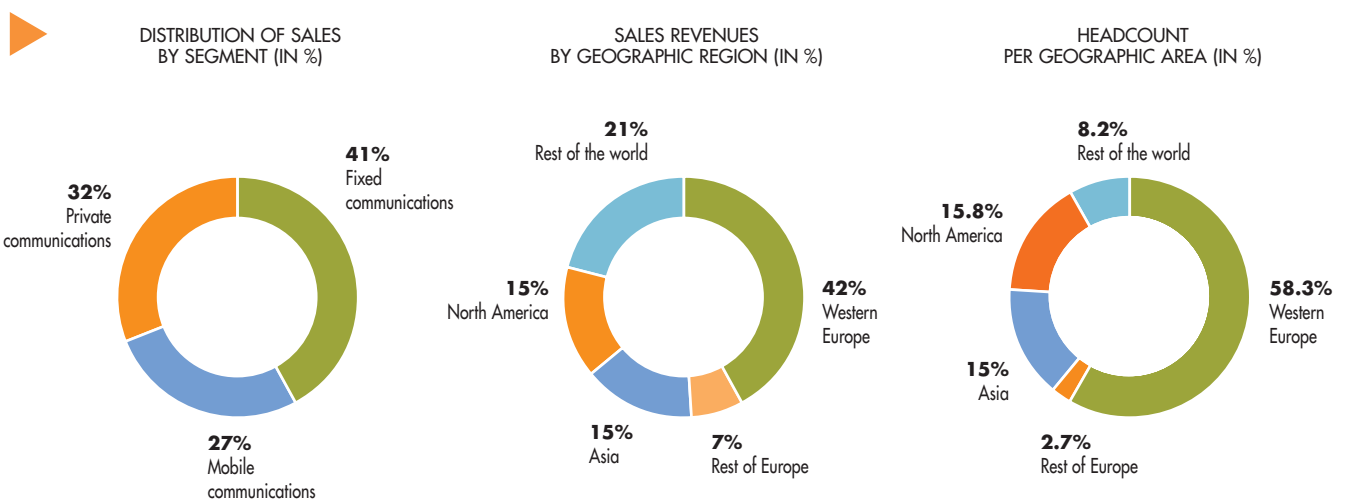
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ALCATEL

PROFILE

Alcatel develops and integrates technologies, applications, and services to offer innovative global communications solutions. These solutions enable telecom operators, Internet access providers, companies, and public administrations to deliver the multimedia services (telephony, fast Internet access, and video) their customers or users need in a broadband world.

These high value-added services are made possible by technological innovation and a strong position on the fixed, mobile, and specialized communications markets: the company is a world leader in broadband access and optical transmission, a recognized player in new generation mobile networks and IP technologies, a pioneer of video software application development, and an integrator of satellite telecommunications solutions and signaling networks for transport solutions. Thanks to the variety of its technology portfolio and integration capabilities, Alcatel is able to offer its customers a unique range of services.

In 2004, with operations in 130 countries, and a 56,000 workforce, Alcatel earned € 12.3 billion euros in sales with a net profit of € 281 million.

DISTRIBUTION OF SALES BY SEGMENT (IN %)

- **41%** Fixed communications
- **32%** Private communications
- **27%** Mobile communications

SALES REVENUES BY GEOGRAPHIC REGION (IN %)

- **21%** Rest of the world
- **15%** North America
- **15%** Asia
- **7%** Rest of Europe
- **42%** Western Europe

HEADCOUNT PER GEOGRAPHIC AREA (IN %)

- **8.2%** Rest of the world
- **15.8%** North America
- **15%** Asia
- **2.7%** Rest of Europe
- **58.3%** Western Europe

*Note: Fixed and mobile communications are solutions for telecom operators.
These solutions comprise networking infrastructures, as well as applications and associated services, and are developed with the operators'end users in mind, whether private customers or businesses.
Private communications target large companies, public and private institutions, local authorities and are developed for the companies own communication needs.

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OF ALCATEL'S SOCIAL RESPONSIBILITY

COMMITMENTS IN ACTION

REFERENCE AND INDICATORS

▶ MESSAGE FROM THE CHAIRMAN AND CEO

After three years of severe industry crisis and in an extremely competitive worldwide market, Alcatel returned to growth and profitability in 2004.

This result confirms that the company's strategy is the right one: a technology portfolio focused on broadband and Internet Protocol, from the core of the network to the end-user, a presence in all the regions of the world, and a cultural diversity that allows us to adapt to customer needs and markets around the globe.

But the company's recovery is also due to extensive efficiency improvement programs imposed by a market that was transformed by the telecom industry crisis. It was our team's energy and fighting spirit that made it possible to accomplish the transformation of these last years.

2004 was also a year in which we continued to strengthen our sustainable development commitments.

In the social area, we elaborated a **Social Charter** that complements our Statement on Business Practices. It sets the rules for work relations within the company. This charter applies to every employee and constitutes a shared foundation that goes beyond local legislation and culture. We publicized it throughout the year and will continue to do so in 2005.

> ❝ 2004 was also a year in which we continued to strengthen our sustainable development commitments. ❞

We also set the stage for a **Global Performance Management Program** in order to favor homogenous career development throughout the company, thereby ensuring equity and solidarity among teams. Knowing how to recognize and develop talent, wherever it might be, is one of the aspects of our cultural diversity that Alcatel's management is particularly proud of. 2005 will be the first year the new Global Performance Management tool will be implemented and will be an opportunity for Alcatel's managers to renew and deepen the dialogue with their teams.

In this context, we will undertake steps in 2005 to increase the number of women in management. It is a fact that the overall number of women at Alcatel fully reflects the market average for our industry. However, the presence of women in management is lower compared to their male colleagues. We have therefore set up a **5-year action plan to increase parity** in this area.

Concerning our commitment to the environment, the company is focusing on two big European projects that concern our industry: the coming into force of the **"WEEE" directive** (Waste Electrical and Electronic Equipment) in August 2005 and the July 2006 deadline for the **"RoHS" directive** (Restriction of the use of certain Hazardous Substances) which particularly limits the use of lead.

Multidisciplinary teams were set up to manage Alcatel's compliance with these directives which have an impact on the entire product life cycle - from design to disposal - and influence our relationship with our suppliers and customers. These teams regularly report to top management on their activities and recommend solutions.

As of today, we can affirm that we will be ready to meet the 2005 and 2006 deadlines.
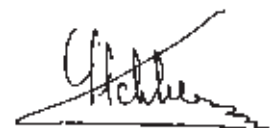
The third aspect of our 2004 sustainability activities that will be continued in 2005 is our sustainable development policies vis-à-vis our suppliers and sub-contractors.

We are focusing on training our purchasing community, formalizing what we expect from our suppliers and reinforcing dialog with them. **The goal is to ensure that the principles of our Statement on Business Practices are known and respected by our suppliers,** in all aspects of their work: social, ethical business standards, and environmental responsibility. We recently carried out a large supplier survey that can serve as the basis for case-by-case action plans, if needed.

These projects show how Alcatel lives its Sustainable Development commitments on a day-to-day basis as well as for the long term.

Thanks to concrete programs we reinforce our team's support of the societal challenges we face. Alcatel employees must understand the importance of these commitments vis-à-vis our customers and other stakeholders. Therefore we will continue to promote our action plan within the company.

We owe it to our shareholders to remain profitable over the long-term. Maintaining our research efforts, respecting ethical business principles, reducing the environmental impact of our products, developing skills, and offering motivating career paths to our employees are the foundations of this commitment.

SERGE TCHURUK

Alcatel in 2004

Despite a still unstable telecommunications market and unprecedented pressure on prices, Alcatel succeeded in returning to growth and profitability in 2004 thanks to the increasing demand for services and networks, associated with new ways of consuming content. 2004 was a pivotal year which proved that the efforts of the last few years paid off. The reorganization of activities by customer type (fixed, mobile, private), each one contributing to the company's revenues at a similar level, shows Alcatel's unique position in the network, applications, and solutions markets for operators as well as its accelerated penetration in private and institutional markets. In order to preserve its technological leadership and its strategic vision, Alcatel pursued its policy of substantial R&D investment in 2004 (13% of sales revenues), complemented by some selective technology acquisitions.

WORLD LEADER IN BROADBAND ACCESS AND TRANSMISSION: TOWARDS "TRIPLE PLAY" SERVICES

With the December 2004 delivery of its 54th million ADSL line, Alcatel confirmed its leadership in the fast growing broadband market. This success, combined with its world-wide No. 1 position in optics and its recognized ability to design end-to-end solutions, puts it in the perfect position to capitalize on the new market for "triple play".

Triple play is high speed Internet, IP telephony, and interactive broadband video over a single connection. For example, television over ADSL (IPTV) is a very different experience from traditional TV broadcasting because it allows not only inter-activity between viewers and programs, but also interactivity between viewers located in very different places (real-time exchange of messages and photos). As a forerunner with this technology, Alcatel made its TV over ADSL world premier in November 2001. Alcatel has signed nearly 20 contracts this year on "triple play" services, thus validating its strategy. The largest triple play contract was for $ 1.7 billion over five years with US operator, SBC Communications.

By providing a platform that can deliver 20 megabits per second to each end-user, Alcatel enables operators to give their customers access to the latest technologies, like high-definition TV and videoconferencing.
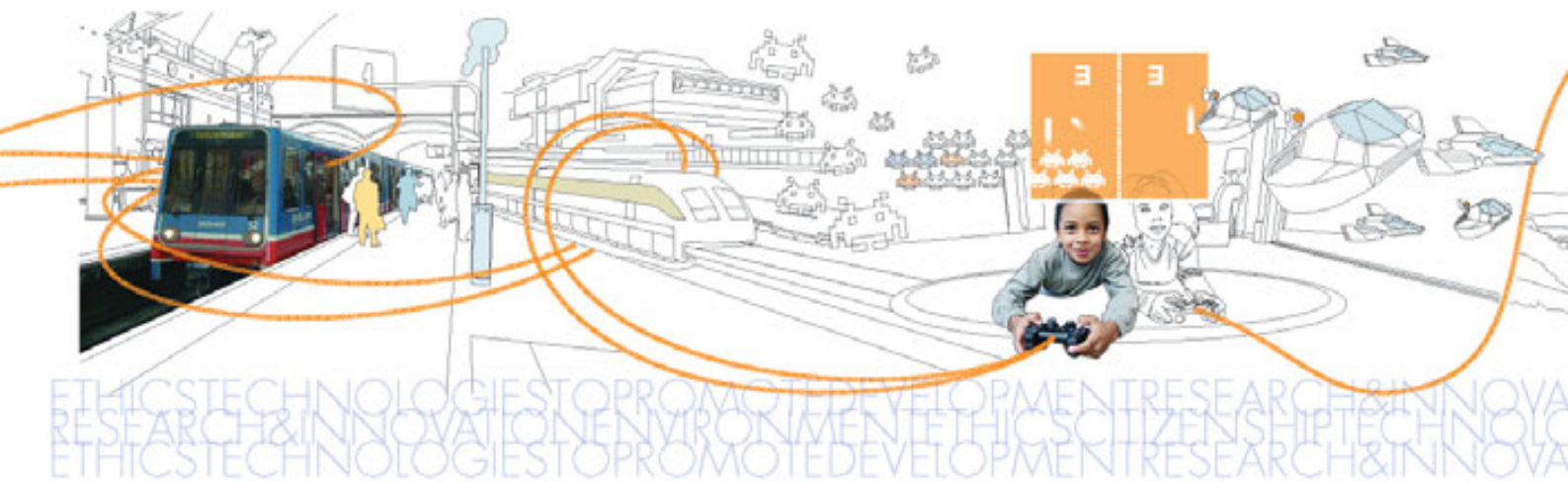
A DYNAMIC MOBILE COMMUNICATIONS STRATEGY: TOWARDS RICHER MOBILE SERVICES

The company reinforced its leading position in the mobile markets of many emerging countries. While entering new countries, Alcatel continued to increase its market share by modernizing 70 GSM networks around the world. Alcatel upgrades mobile networks by increasing their bandwidth and their capacity to offer multimedia services with a full range of new software technologies like GPRS and EDGE for GSM networks, and HSDPA for 3G networks. In this way, triple play broadband services will soon be available over mobile networks (voice, sending and receiving video and music, payment solutions). Moreover, the partnerships signed in 2004 with Sony and Universal Music have already generated new revenues for operators by broadcasting customized video and music programs on mobile phones.

Also in 2004, Alcatel gained a competitive advantage in mobile core networking by acquiring Spatial Wireless. It provides an innovative technology preparing a mobile networks' evolution towards IMS (IP Multimedia Subsystems), a worldwide multimedia standard for converged fixed/mobile networks.

CUSTOMIZED COMMUNICATIONS SOLUTIONS FOR ENTERPRISES

On the one hand, users want the same telecommunications services at home and at work. On the other hand, companies want to help their employees be more efficient. In order to meet these requirements, Alcatel equips enterprises with customized, turnkey communication systems.

In 2004, sales from VoIP solutions and applications continued to rise because they significantly reduce an enterprise's telecommunications costs. Alcatel is now No. 1 in Europe with 23% of this market share. For example, Alcatel won a contract to install IP communication solutions at many of Nestlé 1,500 locations, replacing some of its 200,000 voice lines. Nestlé employs over 254,000 people worldwide.

New unified communication solutions complement Alcatel's offer to meet enterprises needs. In 2004, Alcatel signed a contract with six large taxi companies in Scandinavia to design and manage their call center and transmit needed information to the taxis. Lastly, thanks to the recent acquisition of eDial, Alcatel can offer advanced e-conferencing and collaborative work applications.

RAMPING UP IN VERTICAL MARKETS

Alcatel provides network solutions to meet the specific needs of industries like transportation, energy, defense or security, and the public sector.

With growth of more than 20% per year for the last two years, Alcatel keeps winning contracts throughout Europe to modernize rail signalizing systems (Spain, Estonia, Romania) while integrating the associated communication networks that link all the control centers in order to improve traffic safety and passengers security. In the energy sector, Alcatel won a contract to integrate the whole telecommunication network of Gazprom, a Russian gas producing company undergoing a complete modernization process.

Also in 2004, but in the defense and security sector, the successful launch of the Helios IIA satellite confirmed Alcatel's leading position in the delivery of high resolution earth observation instruments.

In the public sector, or more precisely in the health sector, Alcatel was chosen as the key partner for the "112" medical emergency number for the countries of the European Union. Alcatel is at the origin of the EGNOS system which considerably improves the precision of the GPS positioning system. Thanks to satellite-assisted location, rescue services (firemen, ambulance, police) can immediately locate a caller and send help in record time.

Alcatel, No. 1 in the European space sector

As announced in June 2004, Alcatel signed in January 2005 a memorandum of understanding to merge its space activities with Finmeccanica to form the European leader in infrastructures and satellites services (pending EU approval). Alcatel is also a leading industrial and commercial partner in the "Galileo" project, a European constellation of geo-location satellites.

Alcatel, pioneer in network management and maintenance for operators (insourcing)

These new services consist of managing – partially or totally – an operator's networks so that the operators can concentrate their resources on developing new services for their customers. In 2004, Alcatel won a contract with the Belgian mobile operator, BASE, to operate and maintain its network that was built by an Alcatel competitor.

Other successes include Brazil Telecom and Telemar, in Brazil. These contracts put Alcatel in a strong position for the future evolution of these networks.

USER-CENTRIC BROADBAND: MORE SIMPLICITY IN NEW TECHNOLOGIES

Alcatel's market studies reveal that the end-user wants to use the most sophisticated voice, Internet, music, and video services, from home or on the move, from any device (fixed line, mobile phone, PDA, PC, or interactive TV), simply, without losing the connection or compromising data security.

In 2004, new services like TV over ADSL or mobile music and video appeared in the market. These new applications mean that telecoms systems must evolve to provide additional bandwidth while integrating software for broadcasting new content and services. Another example of innovation: in the context of its project "Bluephone", British Telecom asked Alcatel to supply them with a convergence solution that would allow them to offer their customer a single phone for all calls – at home or on the move. The customer will then only have one telephone number. In order to respond to these new requirements, Alcatel designs and builds networks and applications that are progressing towards a unique standard, IP (Internet Protocol), leading the way to fixed mobile convergence and more services that benefit the end-user.

▶ RESEARCH & INNOVATION
FOR TOMORROW'S TELECOMMUNICATIONS

In order to leverage its investments, Alcatel adopted an organization structure that brings its R&D centers closer to its main markets. In particular, Alcatel has Research and Innovation centers in Europe (Antwerp – Belgium, Marcoussis (near Paris) – France, Stuttgart – Germany), North America (Dallas – Texas, Ottawa – Canada), and Asia (Shanghai – China). In this way, Alcatel can take advantage of the innovation and creativity potential of every region in which it operates for the benefit of its customers.

Invent and develop
new telecommunications technologies

One of Alcatel's strengths is knowing when to bring new technologies to market which provide value to operators, enterprises and end-users. This is exemplified by its recent growth in broadband access and "triple play" services. Alcatel uses its innovation skills to help customers develop new revenue streams while making new services more accessible to end-users. Therefore, Alcatel devotes a substantial part of its research efforts to imagining tomorrow's telecommunications, planning network evolution and elaborating new services for consumers. Today, 60% of R&D investments are spent on developing softwares, for example for payment solutions, messaging and video.

In 2004, Alcatel created its "R&D Council", bringing together the heads of R&D and strategy from Alcatel's three business groups to even better coordinate its research policies with the company's strategy. This council meets to identify priorities and allocate resources to the different R&D programs. It bases its recommendations on reports made by the Network Strategy group within the Chief Technology Office, whose mission is to develop a medium-term vision of market needs.

Continuous improvement
of product performance

One of the key missions of Alcatel's R&D teams is to analyze the product life cycle in order to reduce production costs and improve product performance and competitiveness. To this end, product design and evolution are reviewed on a regular basis and Alcatel's suppliers are required to do the same.

Making the most of patents

Given its technology leadership, particularly in DSL and optical networks, Alcatel works to protect and enhance its technical assets. A dedicated team is in charge of marketing its patents' portfolio to generate additional revenues for the company.
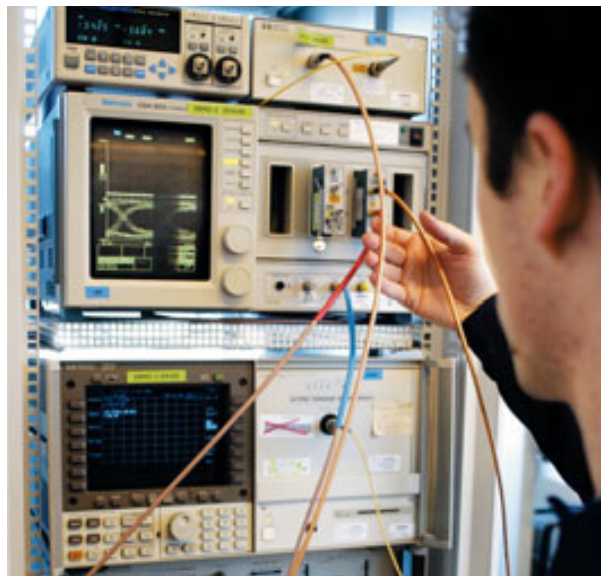
→ 6 international Research and Innovation centers: Dallas, Ottawa, Marcoussis, Stuttgart, Antwerp, Shanghai.

→ 23 main development centers in 10 countries

→ A research community of 16,000 people

→ R&D budget 2004: 1.6 billion euros (13% of sales revenues).

→ 700 new patents registered in 2004

THE FOUNDATION
OF ALCATEL'S SOCIAL RESPONSIBILITY

While Alcatel's sustainable development strategy is long-term, it can be seen in the company's daily activities, particularly through relations with its stakeholders. For the last 10 years, Alcatel has pursued its efforts of reconciling economic development with its social and environmental responsibilities. To make these commitments more tangible, the company has published a set of policies and charters that describe its values and ethical principles. Alcatel has also set up processes to ensure their respect throughout the company, as well as a dedicated organization to define the overall strategy, in accordance with the principles of the Global Compact.

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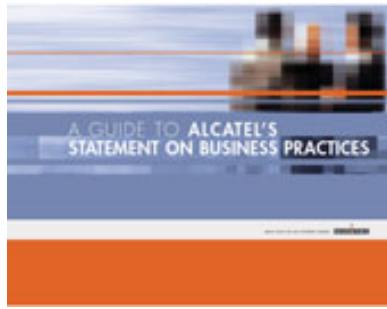
Alcatel and sustainable development:

A REINFORCED COMMITMENT IN 2004

Alcatel is publishing its third sustainable development report this year. On this occasion, the company decided to describe the key milestones of its commitment. As highlighted through this chronology, Alcatel's sustainable development strategy has been an ongoing progress commitment for ten years.
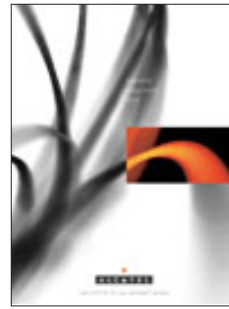
1992	1997	1999	2001	2002
PUBLICATION OF THE ENVIRONMENTAL CHARTER	PUBLICATION OF THE STATEMENT ON BUSINESS PRACTICES AND THE CUSTOMER COMMITMENT CHARTER	PUBLICATION OF THE MOBILITY CHARTER	**1** DIGITAL BRIDGE INITIATIVE — SUSTAINABLE DEVELOPMENT DEDICATED PAGES IN THE ANNUAL REPORT 2001	**2** CREATION OF THE ETHICS COMMITTEE — PUBLICATION OF THE FIRST SUSTAINABLE DEVELOPMENT REPORT

1

DIGITAL BRIDGE INITIATIVE

"Our business is in itself able to reduce the digital divide, therefore offering great opportunities for sustainable development."
Serge Tchuruk

In partnership with international institutions, local authorities, and operators, Alcatel is committed to reducing the digital divide and helping emerging countries gain access to telecommunications.
(see p. 35)

2

CREATION OF THE SUSTAINABLE DEVELOPMENT STEERING COMMITTEE AND OF THE CORRESPONDENTS NETWORK

The Steering Committee comprises representatives from all the departments involved (Human Resources, Environment, Risk Management, Purchasing, Communication, Quality and Customer Relations, Marketing, Audits, Digital Bridge, Financial Communications, Legal, R & D, Public Affairs). The network combines sustainable development correspondents in more than 15 countries.
(see p. 15)

3

LAUNCHING SEVERAL TARGETED INTERNAL AUDITS

Social and environmental internal audits were carried out at different Alcatel locations around the world in order to verify the good dissemination and application of the company's charters.
(see p. 14)

4

CREATION OF THE ENVIRONMENTAL TECHNICAL COMMITTEE

The ETC is a multidisciplinary working group striving to improve environmental quality of products. It comprises representatives from the company's operational units and is in charge of coordinating activities and evaluating progress.

5

SUSTAINABLE DEVELOPMENT REPORTING TOOL

The setting-up of a specific tool dedicated to indicators allows the reinforcement and efficiency of data collection and processing, as well as the formalization of intermediate controls.
(see p. 51)

▶ Alcatel's charters

- 1992 → Environmental Charter
- 1997 → Statement on Business Practices
       → Customer Commitment Charter
- 1999 → Mobility Charter
- 2004 → Social Charter
       → Quality Charter
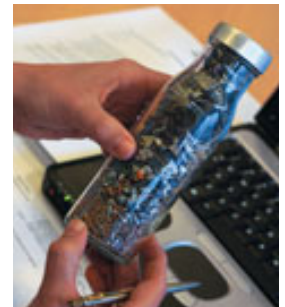   → Purchasing Charter

2003

SIGNATURE OF THE **GLOBAL COMPACT**
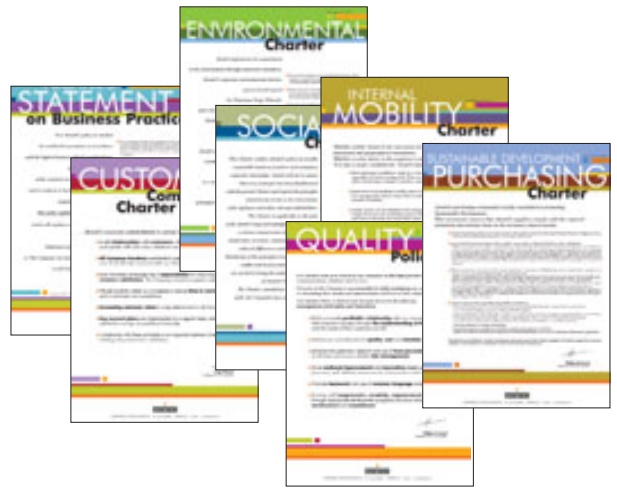
2 CREATION OF THE SUSTAINABLE DEVELOPMENT STEERING COMMITTEE AND CORRESPONDENTS NETWORK

STATEMENT ON BUSINESS PRACTICES EMPLOYEE INFORMATION CAMPAIGN

3 LAUNCHING OF **SEVERAL TARGETED INTERNAL AUDITS**

4 CREATION OF **THE ENVIRONMENTAL TECHNICAL COMMITTEE**

THREE-YEAR PLAN **TO REDUCE ENERGY CONSUMPTION OF PRODUCTS**

2004

5 SETTING-UP OF A **SUSTAINABLE DEVELOPMENT REPORTING TOOL**

6 ALCATEL QUOTATION RENEWED IN THE **FTSE4GOOD**

PUBLICATION OF THE **SOCIAL, QUALITY AND PURCHASING CHARTERS**

7 GLOBAL PERFORMANCE MANAGEMENT PROGRAM

ANALYSIS OF OUR SUPPLIERS' COMMITMENT TO SUSTAINABLE DEVELOPMENT

2005

8 EUROPEAN **WEEE** DIRECTIVE COMPLIANCE

9 "WOMEN IN LEADERSHIP" PROGRAM

10 RELATIONS WITH SUPPLIERS

2006

11 EUROPEAN **RoHS** DIRECTIVE COMPLIANCE

FURTHER **REDUCTION OF ENERGY CONSUMPTION** OF NEW PRODUCTS

6

ALCATEL QUOTATION RENEWED IN THE FTSE4GOOD

The FTSE4Good is one of the main social investment rating agencies in the world. The selection criteria to be quoted on this index are: environment, stakeholder relationships, and respect for human rights. 700 companies are listed in the FTSE4Good of which 24 are French (in December 2004).

7

GLOBAL PERFORMANCE MANAGEMENT

The Global Performance Management is a tool that allows Alcatel employees around the world to be evaluated on a common set of criteria, pertinent for the whole company. *(see p. 28)*

8

EUROPEAN WEEE DIRECTIVE COMPLIANCE

In 2003, the European Union published its WEEE directive concerning electrical and electronic waste management. It will take effect in mid-2005. Alcatel established a project team in 2004 in order to make sure that the company will meet the compliance deadline. *(see p. 39)*

9

"WOMEN IN LEADERSHIP" PROGRAM

Launching of a program aiming at introducing more gender diversity in Alcatel's management. *(see p. 31)*

10

RELATIONS WITH SUPPLIERS

Alcatel has reinforced the dialog with its stakeholders, in particular with its suppliers, thanks to an in-depth analysis of their commitments in the ethical, social and environmental fields. *(see p. 21)*

11

EUROPEAN RoHS COMPLIANCE

In 2003, the European Union published a directive on the "Restriction of the use of certain Hazardous Substances" (RoHS). This directive will take effect mid-2006. Alcatel established a project team in 2004 in order to make sure that the company will meet the required changes and compliance deadline. *(see p. 40)*

THE CHARTERS

ALCATEL HAS CLEARLY DEFINED, IN A SERIES OF CHARTERS, THE RULES OF GOOD CONDUCT THE COMPANY ADHERES TO. COVERING ETHICAL BUSINESS PRACTICES, SOCIAL RESPONSIBILITY AND ENVIRONMENTAL PROTECTION, THESE PRINCIPLES APPLY TO ALL UNITS AND ALL ALCATEL EMPLOYEES IN THE WORLD.

The Statement on Business Practices

Alcatel issued its Statement on Business Practices in 1997 and has updated it several times since then. With this Statement, the company commits to carrying out its activities all over the world in accordance with the strictest ethical business standards, as well as conforming to legislation in the countries where it operates and to local standards regarding corporate citizenship.

Comprising 16 articles, it covers topics such as confidentiality, intellectual property, transparency, conflicts of interest and insider trading, corruption, respecting employees, human rights and the environment.

Alcatel employees must adhere to the Statement on Business Practices. Copies of the Statement were distributed to all Alcatel offices in the world. An online training course on the subject is available on the company's intranet as well as dedicated pages in 10 languages.

The Environmental Charter

This charter, published in 1992, outlines the company's commitments to environmental protection. The charter also stipulates that "employees must be properly informed and, where relevant, properly trained to conduct their activities in an environmentally responsible manner".

All subsidiaries and units must apply the charter in their day-to-day operations.

The Customer Commitment Charter

The company has defined four values to guide Alcatel teams throughout the world. Customer satisfaction is the first of the four: "Increasing customer value is a key determinant in all company decisions". "Compliance with these principles is an important element of each employee's training and performance evaluation".

▲ *Alcatel's four values are:*
Customer focus, Innovation,
Teamwork, Accountability.

The Quality Charter

The principles stated in the charter constitute the foundation of Alcatel's quality policy. The latter is defined and driven in accordance with clearly identified management principles and behaviors: the emphasis is notably put on continual improvement and innovation based upon efficient business processes, well-defined measurements, best practices and customer surveys.

The Internal Mobility Charter

This charter defines and organizes the internal mobility of employees, a key element of Alcatel's social policy.

The Social Charter

◄ The Social Charter complements the Statement on Business Practices, and sets the rules for the company's social policy. Approved by the Ethics Committee, it has applied to all Alcatel units since 2004.

The charter states Alcatel's position on human rights, health and safety, freedom of association, anti-discrimination, supplier and sub-contractor relations, working conditions, and professional and local development.

The Sustainable Development Purchasing Charter

Alcatel expects its suppliers to adhere to its principles regarding the environment, social policy and ethics. Therefore, a Sustainable Development Purchasing Charter was issued in 2004. It stipulates that clauses concerning ethics must be included in all purchasing contracts. When pertinent, environmental clauses must also be mentioned.

The purchasing community ensures that suppliers comply with the required Alcatel standards and develops actions for improvement where needed.

ETHICS COMMITTEE

The Alcatel Ethics Committee, created in 2002, is a permanent structure responsible for the enforcement of the Statement on Business Practices throughout the company. Its members, the heads of the Legal, Human Resources, Marketing departments, and the deputy CFO were appointed by the CEO. The Ethics Committee is chaired by Jean-Pierre Halbron, Member of the Board and former President of Alcatel.

> A special email address and telephone helpline are available to employees needing to contact the Ethics Committee. Strict confidentiality is guaranteed.

The mission of the Ethics Committee is: to update the Statement on Business Practices, to handle any allegations of misconduct and to coordinate local ethics committees, which mirror the composition of the corporate committee. The Committee meets every quarter or as circumstances require.

The Ethics Committee met five times in 2004. During those meetings the Committee:
→ approved an update of **the Statement on Business Practices,**
→ **interviewed the managers** in charge of internal audit, security, and distributor and consultant relations,
→ **reviewed local ethics committees reports** (USA, China, Italy),
→ **debated employee questions** primarily about human resources topics.

The Ethics Committee met one additional time in order to examine the situation created by the accusations of corruption in Costa Rica.

COSTA RICA

Beginning in early October 2004, Alcatel learned that investigations had been launched in Costa Rica by the Costa Rican Attorney General and the National Congress, regarding payments alleged to have been made by a consultant on behalf of an Alcatel subsidiary to various state and local officials in Costa Rica, two political parties in Costa Rica and representatives of ICE, the state owned telephone company, in connection with the procurement of several contracts for network equipment and services from ICE. Upon learning of these allegations, Alcatel immediately commenced and is continuing an investigation into this matter, and took legal action against two employees and a local commercial agent who are suspected of misappropriating the company's funds and violating its business practices principles. The US Securities and Exchange Commission and the US Department of Justice, whom Alcatel had contacted to inform them of these matters, are conducting an inquiry into these allegations, which is still ongoing when publishing this 2004 Sustainable Development report.

CORPORATE GOVERNANCE

Alcatel has applied the strictest recommendations regarding corporate governance, both in France and in the United States. Two years ago, the Directors' Charter was amended. Internal rules, specific to the Board of Directors and its committees, were adopted to ensure a better operation of the company's corporate bodies and the improvement of financial information. The functionning of the Board of Directors is based on a high level of independence of its members and on an adequate information of the directors.

The Audit Committee has reviewed the nature and the level of the missions which could be assigned to the statutory auditors besides the statutory audit of the financial statements, in order to preserve their independence vis à vis the company.

In addition, studies were conducted on the requirements of the Sarbanes Oxley Act applying to Alcatel, as a New York listed issuer, in terms of internal control procedures. This process resulted in the formalization of new procedures and the setting up of a team dedicated to the enhancement of the system's efficiency.

Alcatel publishes each year in its annual report, information describing the activities of the Board of Directors and of its committees as well as on the implementation of the internal control procedures.

THE AUDITS, A MEANS TO MONITOR ADHERENCE TO SUSTAINABILITY

TO SUPPORT ALCATEL'S ENGAGEMENT IN ITS SUSTAINABLE DEVELOPMENT PROGRAM, A SERIES OF INTERNAL AUDITS WERE LAUNCHED IN 2004. WHILE THESE AUDIT REVIEWS ALLOW ALCATEL TO ASSESS COMPLIANCE WITH ESTABLISHED RULES AND REGULATIONS WITHIN THE COMPANY AND DESIGN ACTION PLANS TO REINFORCE IT, THEY ALSO CONTRIBUTE TO REINFORCING THE CORPORATE MESSAGE THROUGH DIRECT COMMUNICATION WITH EMPLOYEES AROUND THE WORLD.

Environmental audits

The objectives of these audits were to:

- evaluate the effectiveness of the organization and process in place to achieve Alcatel's objectives in terms of eco-design and ecodeclaration, and
- evaluate the level of compliance as regards to the European directives: RoHS (Restriction of the use of certain Hazardous Substances, applicable by July 2006), and WEEE (Waste Electrical and Electronic Equipment, applicable by August 2005).
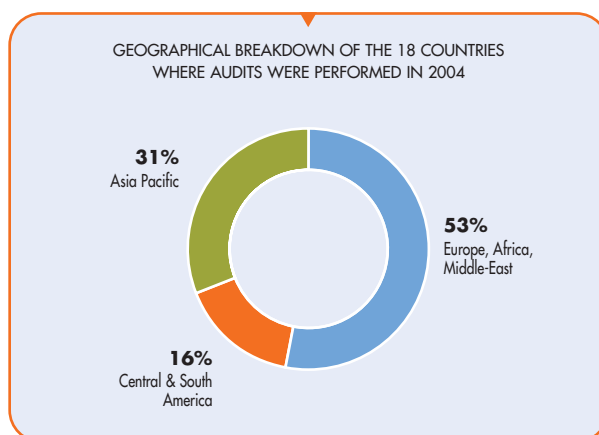
Social audits

The objectives of these audits were to:

- ensure the existence, in frame contracts with suppliers and contractors, of a clause related to the Alcatel Statement on Business Practices addressing the protection of human rights, and
- evaluate internal controls and processes to assess the respect of this clause by suppliers and contractors.

During the fourth quarter of 2004, after an internal information campaign about the Social Charter, **a new series of audits have been launched, with the following objectives:**

- evaluate the effectiveness of the communication campaign on the Social Charter,
- ensure the enforcement of the Social Charter, through the existence of an adequate alert mechanism to identify infringement of the Charter, of a business practices clause addressing human rights in supplier's frame contracts and of internal controls and processes to assess the respect of this clause by suppliers.

GEOGRAPHICAL BREAKDOWN OF THE 18 COUNTRIES WHERE AUDITS WERE PERFORMED IN 2004

31% Asia Pacific

53% Europe, Africa, Middle-East

16% Central & South America

Action plans resulting from audits are rigorously followed-up to make sure corrective actions are timely implemented. New audits are planned for 2005.

Alcatel Group Audit Services, established as a corporate function back in 1995, reports directly to the Group Executive Committee and Audit Committee of the Board. It is composed of 50 independent professionals from 12 different nationalities. A majority are Certified Internal Auditor, Certified Information Systems Auditor, Certified in Control Self-Assessment, Chartered Accountant, Certified Public Accountant or have a combination of these certifications.

The department is certified "ISO 9001:2000" since 2001, and received in 1999 and in 2002 the "Commitment to Quality Improvement" Award from the Institute of Internal Auditors, Inc.

With a management team at the Headquarters and three geographically delocalized regional groups based in Americas, Asia Pacific and Europe, the internal audit department has the ability to understand and respect specific cultural differences, while at the same time spreading the same global corporate messages.

A SUSTAINABLE DEVELOPMENT ORGANIZATION WITH A MULTICULTURAL APPROACH

The Sustainable Development Steering Committee is made up of representatives from the following departments: Human Resources, Environment, Global Risk & Insurance, Purchasing, Quality & Customer Relations, Audit, Financial Communications, Legal, Research & Innovation, Digital Bridge, Public Affairs, Marketing, and Communications. Each department relies on its own network to make sure that objectives are met within its area of responsibility.

The Steering Committee meets once a month to define the priorities, give project up-dates, discuss sustainable development related matters and current issues.

Examples of decisions taken in 2004 by the SD Steering Committee:

→ elaboration and publication of a Sustainable Development Purchasing Charter,

→ launch of internal audits in the social and environmental areas,

→ and purchase of a dedicated reporting tool.

The Sustainable Development network comprises thirty correspondents in 15 countries on five continents. Representing different departments, these correspondents are tasked with publicizing and implementing the sustainable development policy, and gathering information from the field. In order to optimize and share the information collected, the Sustainable Development Department developed a database that contains reports, case studies, stakeholder questionnaires, etc. Every quarter, an internal activity report is published to highlight the network activities and best practices.

The most efficient internal communications tool is of course the intranet, one section of it being devoted to sustainable development. This section is highly visible on the corporate homepage. Articles are written and published locally on various subjects, such as environmental and cultural initiatives.

It is also the role of the Sustainable Development team to explain policies in a culturally-sensitive way, as the approach to a given topic may vary from one country to another, while respecting the common values shared by all.
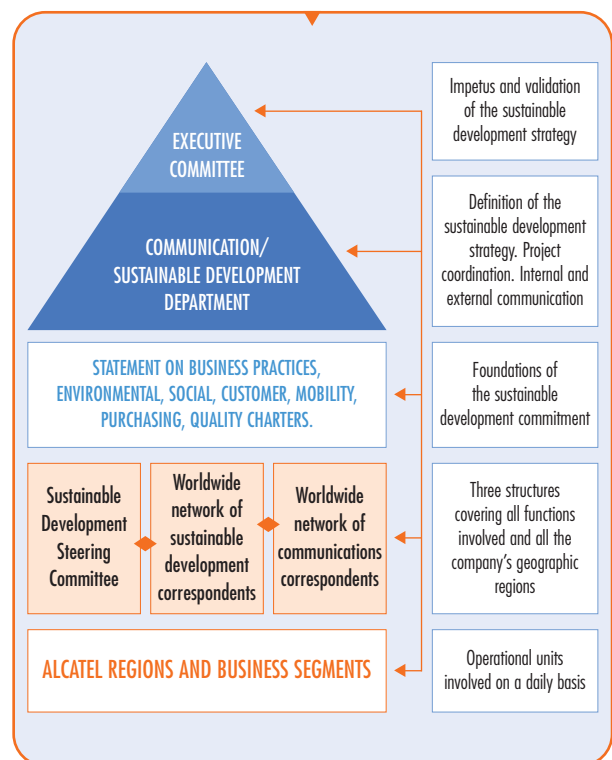
▲ *At a corporate level, the Sustainable Development Department is part of Corporate Communications. This central team works in close collaboration with the Steering Committee and a network of sustainable development correspondents around the world. Every year, sustainable development objectives and action plans are approved by Alcatel's Executive Committee.*

10 PRINCIPLES OF THE GLOBAL COMPACT		**ALCATEL**
HUMAN RIGHTS		
1/ SUPPORT AND RESPECT THE PROTECTION OF INTERNATIONALLY PROCLAIMED HUMAN RIGHTS	**Statement on Business Practices** *(section 11)* The Statement on Business Practices, basis of Alcatel's ethical policy, states the company's commitment to conduct its worldwide operations in accordance with the highest business ethical rules, to comply with the laws and rules in force in the countries in which Alcatel operates. "Alcatel will support and respect, within its sphere of influence, the protection of international human rights	set out in the United Nations' Universal Declaration of Human Rights, the International Labor Organization's fundamental conventions and the Global Compact. In particular, the company supports the effective elimination of all forms of compulsory labor and child labor as defined by the ILO. It will make this a criterion in the management of its suppliers and sub-contractors."
2/ MAKE SURE THAT THERE IS NO COMPLICITY IN HUMAN RIGHTS ABUSES	**Social Charter** *(section 7)* "Alcatel expects suppliers and subcontractors to adhere to the same high standards of social responsibility. In	particular, Alcatel will make the respect of human rights a decisive criterion in the management of its suppliers and subcontractors. Alcatel reserves the right to monitor
LABOR STANDARDS		
3/ UPHOLD THE FREEDOM OF ASSOCIATION AND THE EFFECTIVE RECOGNITION OF THE RIGHT TO COLLECTIVE BARGAINING	**Social Charter** *(section 4)* "The company respects the freedom of thought, opinion and expression and is committed to fostering an open dialogue with its employees and, when available, with	their representatives on important decisions directly affecting them. Consequently, Alcatel recognizes that employees should be free to lawfully establish or join organizations of their own choosing and will not
4/ UPHOLD THE ELIMINATION OF ALL FORMS OF FORCED AND COMPULSORY LABOR	**Social Charter** *(section 6)* "Alcatel respects the rights and dignity of its employees and considers all forms of threats or abusive disciplinary practices unacceptable. Accordingly, Alcatel will	not accept repercussions against or dismissals of employees because they make use of their legitimate rights. Moreover, the company forbids any form of corporal punishment, verbal or psychological violence,
5/ UPHOLD THE EFFECTIVE ABOLITION OF CHILD LABOR	**Social Charter** *(section 2)* "In particular, the company supports the effective elimination of all forms of compulsory labor and child	labor as defined by the ILO".
6/ UPHOLD THE ELIMINATION OF DISCRIMINATION IN RESPECT TO EMPLOYMENT AND OCCUPATION	**Statement on Business Practices** *(section 2)* "Alcatel will not discriminate against any employees for any reason such as age race, ethnics origin, gender, sexual orientation, marital status, religious belief, national extraction or disability, and will treat everyone	with dignity and with full respect for their private lives. This is expected also to apply to relations between members of personnel."
ENVIRONMENT		
7/ SUPPORT A PRECAUTIONARY APPROACH TO ENVIRONMENTAL CHALLENGES	**Environmental Charter** "Assess the environmental impact of processes before starting and before decommissioning a facility or leaving a site."	"Develop and manufacture products and services that are safe for their intended use, energy-efficient, respect the environment and that can be recycled or disposed of safely, including their packaging, by advising the customer where relevant."
8/ UNDERTAKE INITIATIVES TO PROMOTE GREATER ENVIRONMENTAL RESPONSIBILITY	**Sustainable Development Purchasing Charter** "Alcatel's Purchasing entities ensure that contracts with suppliers contain the following "Business Practices" oblig-	atory clause, and the "Environmental Requirements" clause when appropriate."
9/ ENCOURAGE THE DEVELOPMENT AND DIFFUSION OF ENVIRONMENTALLY FRIENDLY TECHNOLOGIES	**Sustainable Development Purchasing Charter** Environmental requirement mentioned when appropriate in contracts: "Seller is responsible for complying with industry standards regarding environmental care as well as with the specific standards required per Seller's region. Buyer reserves the right to invoke the requirement for ISO 14001 requirements. Upon request from Buyer and for all delivered items to	Buyer, Seller undertakes to provide an eco-declaration in conformance with the ECMA-TR70 standards or to return to Buyer the Alcatel Environmental Questionnaire after filling it. More specifically, Seller is responsible for compliance with the substances and product end of life European regulations. In addition, Seller is responsible for complying with additional environmental standards."
ANTI-CORRUPTION		
10/ WORK AGAINST ALL FORMS OF CORRUPTION, INCLUDING EXTORTION AND BRIBERY	**Statement on Business Practices** *(sections 3,4,6)* "In its relations with governmental agencies, customers and suppliers, the company will not, directly or indirectly, engage in bribery, kick-backs, payoffs, or other activities which may be construed as corrupt business practices. The use, directly or indirectly, of company funds for political contributions to any organization or to any candidate for public office is strictly prohibited, where such contributions are forbidden by applicable law. Where such contributions are lawful, they must be made in a fair and prudent way and must be approved by the most senior Alcatel officer in the country." "Sales and marketing agents, representatives and consultants	("Agents") will be retained and paid only if they operate independently from Alcatel and in conformity with applicable legislation. All contracts and agreements must be in writing. Compensation must be comparable to that paid to similar Agents for similar work and in accordance with the applicable detailed policy." "Employees may offer tips, gratuity or hospitality of a customary amount or value for routine services or courtesies received, to which the payee is entitled. A tip, gratuity or hospitality may be offered to a government employee only if such act is customary and is not illegal under applicable law. All such expenditures must be reported and recorded in the company's book of accounts."

All Alcatel's charters are available on the company's Internet website at **www.alcatel.com**

GUIDELINES	ALCATEL ACTIONS
Social Charter *(section 2)* "Alcatel will support and respect the principles of international human rights set out in the United Nations' Universal Declaration of Human Rights, the International Labor Organization's fundamental conventions and the Global Compact within its sphere of influence." compliance with these principles and commits itself to cooperate with its suppliers to respect these high standards."	 • The Statement on Business Practices was distributed at all Alcatel locations worldwide and was translated in 10 languages. • An e-learning module and dedicated web pages on the subject are available on the intranet for all employees.
discriminate against or treat unfavourably any employee due to their membership or non-membership in a trade union." or harassment, as it is inconsistent with a respect for human dignity." **Social Charter** *(section 5)* "Alcatel is a global company attached to diversity, tolerance and equal opportunity for all. Consequently and in accordance with International Labor Organization standards, Alcatel will not discriminate against any employee."	• The Social Charter is the result of a joint initiative from the human resources and legal departments. It was approved by the Ethics Committee, widely communicated within the company and published on the intranet. • It states Alcatel's position on human rights, health and safety, freedom of association, anti-discrimination, supplier and subcontractor relations, working conditions, and professional and local development. • Internal audits are conducted regularly to ensure that the clause related to the Statement on Business Practices is included in contracts with suppliers and sub-contractors. • Installation project managers are responsible for controlling within the different sites the respect of Alcatel's principles by suppliers and subcontractors. • A questionnaire was sent to Alcatel's suppliers in 2004 in order to evaluate their own commitment towards social and environmental matters.
	• The environmental policy of Alcatel relies on a life-cycle approach, starting with the product design. This commitment is shared with its suppliers and subcontractors. • Internal audits are conducted regularly to monitor the level of awareness and the application of the charter. • Alcatel continues to broaden the use of its eco-design approach, its system of environmental declarations for each new product, and is implementing a product end-of-life management.
Environmental Charter "Promote the adoption of the same principles by its contractors and suppliers."	• Environmental questionnaires are sent to suppliers.
Environmental Charter "Develop and improve operations and technologies, taking into consideration the efficient use of energy and raw materials, giving preference to renewable resources, minimising waste and adverse environmental impact, disposing of residual waste safely end responsively."	• E-learning, teleconference, teleworking are becoming more and more commonly used within the company.
Sustainable Development Purchasing Charter Any contractual document signed with a supplier must contain a "Business Practices" clause, stating that: "Seller recognizes having been made fully acquainted with Alcatel Statement of Business Practices (…) and undertakes to apply the principles set out therein (…) in particular with reference to non-discrimination of employees, combating bribery of domestic and foreign public officials, protection of international human rights and environmental responsibility. Seller recognizes that violation of such principles will be considered as a breach of contract."	• Training sessions on how to tackle corruption are organized for sales managers in each geographical area. • E-learning courses regarding the Statement on Business Practices are available on the intranet.

Alcatel's stakeholders

AT THE HEART OF ITS SUSTAINABLE DEVELOPMENT STRATEGY

The stakeholders of a company comprise all the actors that are involved in its development or affected by its activities.
In 2004, Alcatel further developed relationships with its stakeholders in order to better take into account their expectations. The company endeavours to live this commitment on a day-to-day basis. To do so, Alcatel established three priority objectives: reinforce the quality policy towards its customers, formalize a permanent dialog with its financial partners and evaluate the respect of ethical, social and environmental requirements by its suppliers.

ALCATEL'S STAKEHOLDERS
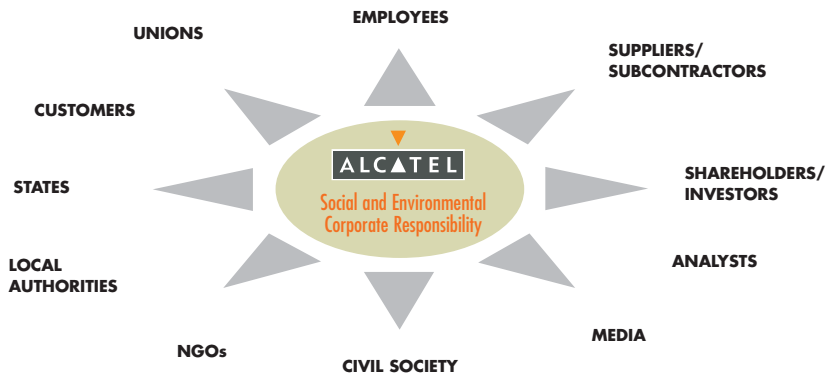
UNIONS
EMPLOYEES
SUPPLIERS/
SUBCONTRACTORS
CUSTOMERS
ALCATEL
Social and Environmental
Corporate Responsibility
SHAREHOLDERS/
INVESTORS
STATES
ANALYSTS
LOCAL
AUTHORITIES
NGOs
CIVIL SOCIETY
MEDIA

CUSTOMER SATISFACTION AND QUALITY, A CONTINUOUS IMPROVEMENT PROCESS BASED ON DIALOG

ALCATEL'S CUSTOMER SATISFACTION & QUALITY ACTIVITIES ARE DRIVEN BY THE CUSTOMER COMMITMENT CHARTER AND THE QUALITY CHARTER.

Since the company's guiding principle is customer satisfaction, it is regularly seeking customers' feedback on its performance, through customer satisfaction survey programs, customer score-cards and acknowledgment of the achievements of Alcatel's commitments.

In line with customers' expectations and targeting prevention more than correction, key quality performance indicators have been identified. Customer facing teams regularly track them through their quality dashboards and deploy improvement plans accordingly.

Regarding the most important indicators, improvement targets are defined for the whole company.

- **OTD** *(On Time Delivery),* measuring Alcatel's improvements to meet customers' requested delivery dates,

- **CMM** *(Capability Maturity Model),* which supports organizations in assessing and improving the maturity of their capability to develop and maintain softwares,

- **CNQ** *(Costs of Non-Quality),* to identify, monitor and correct the inefficiencies,

- **GPE** *(Global Process Efficiency),* a self-assessment mechanism created to help Alcatel entities to determine their efficiency level in using preventive quality tools and methods, to identify areas for improvement, and to track progress over time.

Improvement plans are placed within the global objective of being compliant with TL9000 standard and upgrading current ISO9001 registrations to TL9000 ones. TL9000 standard is a set of requirements and measurements issued and continuously improved by the QuEST Forum.

▲ Together with the most important players in the telecommunications market Alcatel is member of QuEST Forum: this mutual approach guarantees the relevance of the program for the long-term relationships with customers.

Specific quality training modules have been developed and are used in order to enhance quality awareness, ensure that the company's policy and improvement plans are fully shared within the company and in order to improve the professional skills of Alcatel employees.

EXTRACT

Quality Charter

- Build a mutually **profitable relationship** with our customers, ensuring their long-term success, through **the understanding of their needs** and the needs of their customers as well.
- Achieve our commitments for **quality, cost** and **schedule.**
- Enhance the systematic research and use of **best preventive practices** at all levels and ensure reliable risk management.

- Drive **continual improvement** and **innovation** based upon efficient business processes, well-defined measurements, best practices and customer surveys.
- Promote **teamwork** and use of **common language** and **processes.**
- Develop staff **competencies, creativity, empowerment** and **accountability** through appropriate development programs and show strong **management involvement** and **commitment.**

SHAREHOLDER AND INVESTOR RELATIONS

ALCATEL IS COMMITTED TO PROVIDING REGULAR, CLEAR, CONSISTENT, AND HIGH QUALITY INFORMATION THAT FULLY COMPLIES WITH THE REQUIREMENTS MADE BY THE STOCK MARKET AUTHORITIES WHERE THE COMPANY IS LISTED. ALCATEL PROVIDES FINANCIAL INFORMATION TO INDIVIDUALS, INSTITUTIONAL INVESTORS, AND FINANCIAL ANALYSTS ON THE COMPANY'S STRATEGY, DEVELOPMENTS AND OBJECTIVES.

A strong presence

Information meetings open to all stakeholders are organized several times a year particularly around quarterly and annual results.

The Annual Shareholder's Meeting is one of the highlights of the year as it allows individual shareholders to participate in the company's business by voting on resolutions. It is also a time when shareholders can speak directly with Alcatel's Chairman and CEO, Serge Tchuruk. In 2004, the Shareholder's Meeting was held on June 4th with more than 1,500 shareholders in attendance. They approved, by electronic vote, all the resolutions proposed by the Board of Director's. Live and recorded webcasts of the Shareholders' meeting, were made available over the Internet.

Alcatel won the corporate governance prize in the "Best of shareholder meetings awards", sponsored by "Le Revenu" magazine and Publicis Consultants. This was in recognition for having the heads of the Audit and of the Compensation Committees speak at the Shareholder's meeting.

During the year, numerous shareholder meetings where held in cities around France, including Nantes, Toulouse and Lyon. These meetings were well-attended; in Marseille, for example, Alcatel presented the corporate strategy to an audience of more than 500 shareholders.

The "Salon Actionaria" tradeshow was also a good opportunity for Alcatel to meet with private shareholders. At that meeting, shareholders met Claire Pedini, Alcatel's Deputy Chief Financial Officer. In 2005, Alcatel has plans to also hold meetings of this kind in Lille, Tours and Bordeaux (France). Lastly, to help shareholders better understand Alcatel's telecom activities, the company will continue holding educational seminars at its corporate headquarters.

After each quarterly results announcement, Alcatel executives meet with financial analysts in the main financial centers of Europe (Paris, London, Milan, Geneva, Zurich, Frankfurt), North America (New York, Boston, Chicago, San Diego, San Francisco, Montreal), and Asia (Tokyo, Hong Kong, Shanghai). Additionally, Alcatel held its own Analyst Day in Paris on December 2, 2004. Throughout 2004, the company organized more than 300 financial information meetings (an average of one per working day).

Renewed information tools

The Shareholder/Investor website (**www.alcatel.com**) was revised in early 2004. A new **"Email Alert"** button allows web surfers to register to receive email notification of an event and of news bulletins.

The new format of the quarterly **"Shareholders Network"** newsletter makes it easier to read. It also contains a new section that explains a key telecommunications technology in layman's terms.

A growing relationship with socially responsible funds

During 2004, meetings with ethical and socially responsible funds were held in Paris. In 2005, Alcatel will reaffirm its commitment to sustainable development by holding regular meetings with relevant players in Europe.

SOCIAL RESPONSIBILITY AND THE SUPPLY CHAIN

IN 2004, THE PURCHASING DEPARTMENT CONFIRMED ITS COMMITMENT TO WORKING IN A SOCIALLY RESPONSIBLE WAY BY PUBLISHING ITS SUSTAINABLE DEVELOPMENT PURCHASING CHARTER AND BY LAUNCHING A SUPPLIER SURVEY DESIGNED TO BETTER EVALUATE SUPPLIERS' COMMITMENT TO SUSTAINABLE DEVELOPMENT.

The purchasing charter covers two aspects of sustainable development within the supply chain:

1. reinforcement of the contractual obligations of suppliers by adding two new clauses to contracts: one based on respecting Alcatel's Statement on Business Practices (related to business ethics, see box) and the other regarding Alcatel's environmental requirements;

2. working with suppliers to help them meet Alcatel requirements, if needed.

In 2004, Alcatel's purchasing community was trained on identifying and managing the main sustainable development issues with suppliers and subcontractors.

The purchasing team ensures that suppliers comply with Alcatel requirements and helps them meet these requirements.

Communication with suppliers on this topic has been reinforced notably thanks to the creation of dedicated Internet pages.
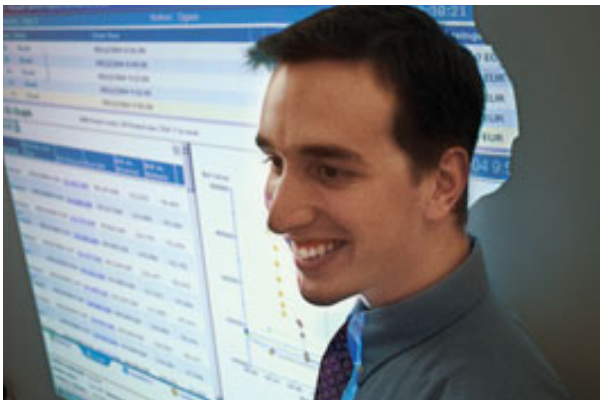
Clauses on ethics, social and environmental standards have been integrated into nearly all active purchasing contracts. Numerous internal audits have been carried out by the Auditing Department, to ensure that these clauses have indeed been added.

Installation project managers are also called upon to verify that sub-contractors respect Alcatel's ethical, social and environmental rules.

Procedures and tools have evolved to take these new requirements into account.

Environmental information about products and components purchased by the company are entered into databases, permitting R&D teams to design products that better respect the environment.

The **purchasing community** participates actively in drawing up the ecodeclarations delivered with each Alcatel product and in modifying product design in accordance with the requirements of the two European environmental directives (Restriction of the use of certain Hazardous Substances and Waste Electrical and Electronic Equipment).

% OF PRODUCTION PURCHASE VOLUME COVERED BY SUPPLIERS' ECODECLARATIONS OR RETURNED QUESTIONNAIRES

2002	2003	2004
30%	65%	85%
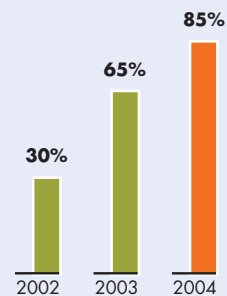
▲ 85% *of purchase volumes centrally negotiated for production, are covered by supplier environmental information, either with an ecodeclaration in accordance with ECMA TR70 (worldwide recommendation for electronic products), or with the Alcatel environmental questionnaire.*

An extensive survey was launched in 2004 with Alcatel's major **suppliers.** The analysis of responses allowed Alcatel to set up a risk map of its supply chain. An action plan for 2005 has been defined accordingly.

CONTRACTUAL "BUSINESS PRACTICES" CLAUSE

"Seller recognizes having been made fully acquainted with Alcatel Statement of Business Practices (as updated from time to time and permanently available at: www.alcatel.com) and undertakes to apply the principles set out therein with respect to the performance of this agreement, in particular with reference to non-discrimination of employees, combating bribery of domestic and foreign public officials, protection of international human rights and environmental responsibility. Seller recognizes that violation of such principles will be considered as a breach of contract."

COMMITMENTS IN ACTION

Alcatel's commitment is reflected by tangible actions in all areas of sustainable development. In the social area, Alcatel develops responsible human resources policies, focused on performance management and dialog. The company also continues to reduce the environmental impact of its activities and products in order to comply with new regulations. In addition, Alcatel participates in reducing the digital divide thanks to its technologies and expertise to help emerging countries, and isolated regions in developed countries, gain access to information. Lastly, the company invests in communities where it operates by developing local activities in the areas of education, health and culture.

ETHICSTECHNOLOGIESTOPROMOTEDEV
RESEARCH &INNOVATIONENVIRONMEN
ETHICSTECHNOLOGIESTOPROMOTEDEV

The Human Resources strategy

AN INTERNATIONAL APPROACH

▶ **2004 highlights**

- Responsible management of structural change
- Global rollout of the **"HR Vision for One company"**

- CLIP (Corporate Learning Improvement Process) award to Alcatel University
- Worldwide communications campaign on the Alcatel Social Charter

▶ **HR milestones for 2005**

➔ Global implementation of the **"HR Vision for One company"**.

➔ World-wide rollout of the **"Global Performance Management Program"**.

➔ Maximization of the use of e-learning to cover **25% of all employee training.**

➔ Reinforcement of international mobility and **cultural diversity.**

➔ Launch of the **"Women in Leadership"** program.

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RESEARCH&INNOVATIONENVIRONMENTETHICSCITIZENSHIPTECHNOLOG
ETHICSTECHNOLOGIESTOPROMOTEDEVELOPMENTRESEARCH&INNOVATIO

A RESPONSIBLE MANAGEMENT
OF STRUCTURAL CHANGE

ALCATEL'S WORKFORCE WAS RELATIVELY STABLE IN 2004 COMPARED TO THE STAFF REDUCTIONS DURING THE TELECOM CRISIS YEARS.

The number of employees went from 60,000 at the end of 2003 to 56,000 at the end of 2004. The reasons for this variation are:

- Cession or partnering of activities that did not have sufficient critical mass or activities that were not part of Alcatel's core business.
- Acquisition of technology companies to reinforce the company's portfolio in specific areas.
- Network management for operators and integration of the employees concerned within the Alcatel workforce.
- Finalization of restructuring plans announced and started in 2003 associated with skills updating programs.

Evolution of the perimeter

PARTNERING ACTIVITIES AND CESSION

In July 2004, Alcatel and Draka announced the combining of their respective global optical fiber and communication cable businesses in a company that is 50.1% owned by Draka and 49.9% owned by Alcatel. Eight sites and nearly 1,300 employees were concerned by this transaction.

In September 2004, Alcatel and TCL Communications, one of the main manufacturers of mobile phones in China, created a joint company, 55% TCL-owned and 45% Alcatel-owned. The 600 Alcatel employees working in the mobile phones division were transferred to the new company, with offices in France and China. Alcatel's strengths in R&D and the geographical complementarity of the two companies will permit the new company to become a leader in this highly concentrated market largely dominated by Asian players.

In January 2005, Alcatel finalized the sale of its power system activities to Ripplewood, a private equity management firm. The power system activities provide high-quality power solutions, securing and protecting critical business equipment against failures or disturbances. This cession concerns 1,300 employees in 16 countries.

TECHNOLOGY ACQUISITIONS

To keep pace with the rapid evolution of telecommunications, Alcatel has been making targeted technology acquisitions in the last few years in order to complement its R&D investments (13% of sales). In 2004, acquisitions were focused on highly innovative sectors and included the following companies:

- eDial and Right Vision to reinforce Alcatel's enterprise offer.
- Spatial Wireless, headquartered in Texas (USA), a leader in software-based mobile switching solutions.
- WaterCove Networks, headquartered near Boston, Massachusetts (USA), a specialist in next generation mobile networking equipment.

REINFORCEMENT OF SPACE ACTIVITIES

Alcatel and Finmeccanica have agreed to merge their space activities, pending EU approvals, to create the European leader in infrastructure and satellite services. The intention is to create two companies: the first, Alcatel Alenia Space, of which Alcatel owns 67% and Finmeccanica 33%, combines the activities of Alcatel Space and Alenia Spazio and numbers nearly 7,200 employees; the second company of which Finmeccanica owns 67% and Alcatel 33%, combines Telespazio and the operations and services activities of Alcatel Space and employs nearly 1,400 people.
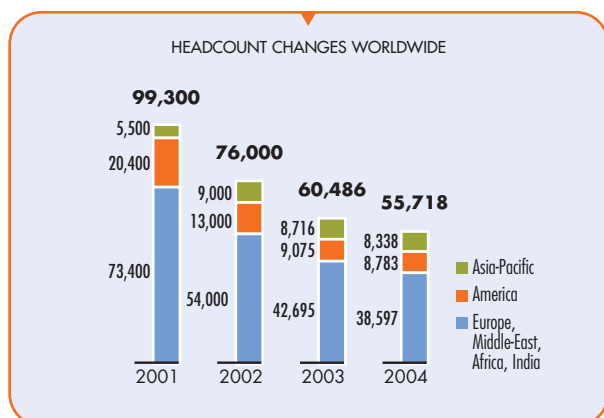
SERVICES AND NETWORK MANAGEMENT

Throughout 2004, Alcatel continued to develop its network management insourcing activity started in 2003. In this offer, an operator (or enterprise) turns all or part of its network operations and maintenance over to Alcatel. Doing this allows the operator to concentrate on its core business, customer relations. Usually this calls for the transfer of employees to Alcatel, which was indeed the case with customers in Brazil and Austria.

HEADCOUNT CHANGES WORLDWIDE

Year	Asia-Pacific	America	Europe, Middle-East, Africa, India	Total
2001	5,500	20,400	73,400	99,300
2002	9,000	13,000	54,000	76,000
2003	8,716	9,075	42,695	60,486
2004	8,338	8,783	38,597	55,718

Retraining and placement for employees at the Illkirch (France) industrial site

In 2001, Alcatel concentrated mobile terminal manufacturing activities in its Laval (France) plant and subsequently sold it to Flextronics. In order to compensate for stopping this activity on its Illkirch industrial site, it was decided to convert the Illkirch site (1,500 employees in December 2001) into an optronics production center. Starting in June 2001, training programs were offered to employees and the production lines were converted to accommodate the new activity. But the components market suffered terribly because of the crisis in the telecoms industry and Alcatel had to put an end to the project. The "Intraprise" project was set up **in 2002** with the goal of subcontracting external manufacturing projects at the Illkirch site.

The workload was not sufficient to keep it going however, and **in March 2003** Alcatel was obliged to put in place an employment protection plan ("plan de sauvegarde de l'emploi"). The goal of the plan, based on voluntary participation, was to retrain and help find jobs for all the Illkirch employees.

In 2004, the objective was achieved with the placement of 773 employees, individually or collectively, internally, externally, or by early retirement. Agreements were signed with two Alsatian electronics companies, Asteel Développement and Oristano, which in 2004 last quarter hired from Illkirch 130 and 60 employees respectively.

At the end of 2004, the Illkirch site employed 1,100 people working in R&D and services.

Keeping skills up-to-date

Redeployment plans will enable the company to manage the decrease in activity in some sectors, such as traditional fixed-line networks, and the rapid growth in other areas, such as mobile networks and applications.

It was with this in mind that in March 2004 Alcatel CIT, the main French subsidiary, signed a union agreement calling for the updating of skills in order to harmonize resources and workload within the company both in terms of activity and on the different work sites.

The agreement included:

- an internal harmonization of resources and workload in the company in terms of activity, skills, and sites for the 900 employees concerned;
- the recruitment of approximately 450 people in 2004/2005, of which more than 100 are transfers from other Alcatel units, to obtain the skills needed for working on evolving technologies;
- a workforce reduction of approximately 500 people, primarily by early retirement and a special plan allowing employees to choose part-time work.

In 2004 in Germany, Alcatel SEL continued to adapt its workforce to technological evolution by transferring teams where they were most needed due to decreased activity in switching and optical transmission manufacturing, and rapid growth in mobile, transport solutions, and services. Additionally, the transmission manufacturing activity was sold. At the end of 2004, an additional restructuring plan was launched to cope with the decreasing demand in voice switching equipment. With 5,160 employees, Alcatel SEL is Alcatel's second largest European subsidiary.

Legal litigation

ALCATEL CABLE FRANCE

In December 2003, former employees of Alcatel Cable France who had left the company under compromise agreements in 2002, filed suit demanding the reversal of their terminations and their rehiring into the company. The case is still before the courts. In November 2004, the court of appeals in Versailles ordered the rehiring of 171 employees and Alcatel Cable France complied with this order. Starting December 1, 2004, these employees have been receiving pay that takes into account the annual collective salary increases that had been made since they left the company, even if they are now employed by another company. Alcatel Cable France has made an appeal to the labor court for this case.

Since February 2004, the activities of Alcatel Cable France were sold to the Dutch company Draka Comteq of which Alcatel owns 49.9%.

ALCATEL OPTRONICS

180 former Alcatel Optronics employees, dismissed in 2002, filed suit demanding that the reason for their dismissals be changed to a "dismissal for economic reasons". The court's decision is expected in April 2005.

"HR VISION FOR ONE COMPANY"

IN THE COMPANY'S SOCIAL CHARTER, ALCATEL STATES ITS COMMITMENT TO INVEST IN THE "LIFELONG LEARNING AND PROFESSIONAL DEVELOPMENT" OF ITS EMPLOYEES.

The HR strategy to achieve this goal led to the ambitious transformation program called "HR Vision for One company". During 2004, Alcatel's global HR teams focused on making this vision a reality through the further development and implementation of processes and tools aimed at facilitating the career development of employees all over the world.

Sharing best practices and dialog

The success of any HR program depends on effective communications. In 2004 a steering team made up of HR managers was established to represent the HR teams of the major countries and all three business regions (Europe and South, Asia Pacific and North America). By sharing best practices and innovative ideas, this multicultural team ensures the successful dissemination of Alcatel's HR policy throughout the organization.

In addition, a new intranet site "People@Alcatel" was launched in 2004. It provides information on all the "HR Vision for One company" programs and initiatives.

> The Alcatel HR Vision is essentially about people. In today's competitive markets, the company is focusing efforts on attracting, motivating, developing and retaining the best talents for its business.
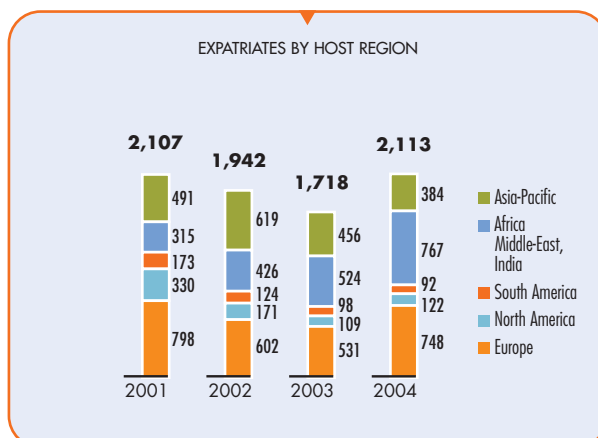
A competitive stock options policy

Alcatel's stock option plan is one of the most competitive in Europe and is comparable to those of its North American competitors.

The stock-option plan, created in 2001, is characterized by:

→ the number of beneficiaries (36,000 at the end of 2004)

→ the granting of stock options in 75 countries

→ a willingness to **associate all managers** and **professionals** in the plan, from the start of their careers in the company,

→ an annual granting of options.

Fostering international mobility

With a presence in 130 countries, Alcatel encourages cross-cultural and cross-national exchanges. Fostering employee mobility helps to drive personal and professional development as well as better meet the demands of a global customer base.

EXPATRIATES BY HOST REGION

Legend:
- Asia-Pacific
- Africa Middle-East, India
- South America
- North America
- Europe

Year	2001	2002	2003	2004
Total	2,107	1,942	1,718	2,113
Asia-Pacific	491	619	456	384
Africa Middle-East, India	315	426	524	767
South America	173	124	98	92
North America	330	171	109	122
Europe	798	602	531	748

Alcatel's International Mobility Program is in continuous evolution to meet the needs of the business. Best-in-class tools and guidelines are consistently applied all over the world through a global network of international mobility managers. Alcatel's best practices in this domain are presented in many international forums and publicized through regular participation in external surveys. Alcatel is also present in the academic world through, for example, the collaboration on expatriate research projects with the University of Manitoba in Canada and advice on the research dissertations of French graduate students.

The importance of the family's role in the success of an international assignment is recognized in Alcatel. This concern resulted in the recent membership of the non-profit-making association, Partnerjob.com, offering expatriate partners a tool to help them seek work at their new location.

As a member of the HEC Foundation*, Alcatel promotes exchanges with Asia

Alcatel joined the HEC Foundation in 2004 to support the international development of one of the best European schools of management.

Alcatel will help the foundation through two main channels. On the one hand, the company's contribution will allow Asian students to integrate each year either the HEC curriculum or a MBA program within HEC. On the other hand, Alcatel will offer internships to Asian students within its Chinese entity, Alcatel Shanghai Bell, as well as within its European entities.

* Created in 1972, the HEC Foundation strives to ensure alignment between students' education and the needs of their future employers.

GLOBAL PERFORMANCE MANAGEMENT

PERFORMANCE MANAGEMENT IS NOT A NEW CONCEPT AT ALCATEL. FOR SEVERAL YEARS, PERFORMANCE MANAGEMENT HAS BEEN IMPLEMENTED IN VARIOUS WAYS AT THE COMPANY'S REGIONAL AND COUNTRY-LEVEL OPERATIONS.

In 2004, Alcatel has deployed the Global Performance Management Program worldwide to align all Alcatel entities to one Performance Management process and one supporting tool.

> **By the end of 2005, all managers and professionals will have each year:**
>
> → their **objectives set,**
>
> → their **performance reviewed,**
>
> → an **individual development plan,**
>
> using the common Global Performance process and tool.

Global Performance Management was launched as a pilot program in 2003 and continued throughout 2004, with nearly 9,000 professionals participating. In 2004, Spain and Italy joined the countries from North America, Latin America, Asia-Pacific, and Europe (including UK and France) that were already participating in the program.

The extensive training and communications regarding the Global Performance Management program achieved during the last quarter of 2004, paves the way for a smooth roll-out to all Alcatel entities in 2005. Communication and training are supported by a dedicated website, a comprehensive set of tutorials and e-learning modules.

Talent management, a bottom up process

A key element in Alcatel's talent management is the Organization and People Review (OPR) system, a bottom up process applied globally.

Talent management begins at the team level of the organization with two questions:

What are the challenges the organization is confronted with, and what are the associated human resources implications? Who are the potential managers best able to face these challenges in the future? At this stage, succession plans are established and talent pools for critical positions are set-up.

A second set of questions is based on identification and review of talent. At this point, the quality of the career development plans is screened and if necessary career reviews are initiated with the respective individuals.

The consolidated view adopted within a Business Group or at a regional level is then discussed with top executives of the company.

The outcome of the OPR is the identification and tracking of Alcatel's global talent, as well as the creation of succession plans and succession pools for all critical positions in the company.

ALCATEL EXCOM

BRANCH/UNIT

DEPARTMENTS

TEAMS

EMPLOYEES

Annual Review Documents

OPR *

Team Reviews

Performance Management

* Organization and People Review
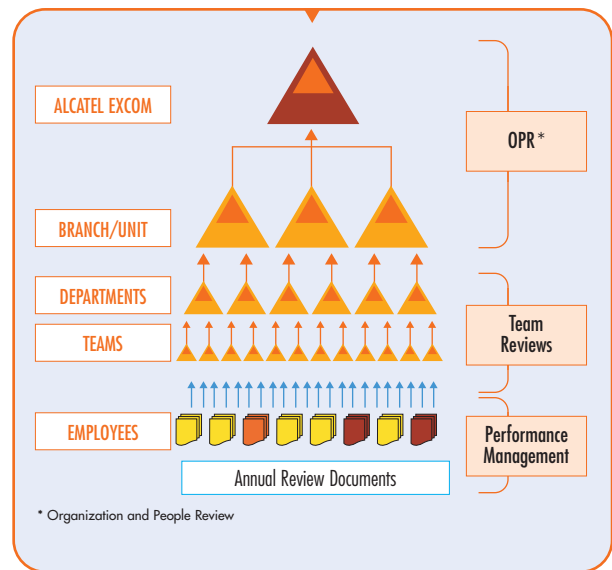
[Employees in Alcatel are encouraged to take ownership of their own careers.
The HR function is supporting this approach by providing the means to enable everyone in the organization to realize their full potential through, for example, the continued development of web-based self-service tools.

ADAPTING TRAINING TO EMPLOYEE AND BUSINESS NEEDS

ALCATEL UNIVERSITY IS A GLOBAL NETWORK OF EDUCATION AND TRAINING CENTERS THAT PROVIDES LEARNING OPPORTUNITIES FOR EMPLOYEES AND CUSTOMERS. THE MISSION OF ALCATEL UNIVERSITY IS TO CAPITALIZE ON THE COMPANY'S GLOBAL RESOURCES TO PROVIDE HIGH-QUALITY, STATE-OF-THE-ART TRAINING, WHETHER VIRTUAL OR FACE TO FACE.

By developing "just in time" training that supports current business needs, Alcatel University helps promote a culture of continuous learning.

A global reach

Alcatel University continued its global integration efforts in 2004, and now manages about 2/3 of Alcatel's training investments for its own employees through the University's presence in 15 of the 20 main Alcatel units. In 2004, special attention was given to the Asia-Pacific area: China and Australia set up common capabilities for training and development on sales and sevices. The international team, created within Alcatel University in Shanghai, trains employees and customers from all entities in Eastern Asia.

Maximize the use of e-learning

Through the Learning Management System (LMS), employees now have access to 2,100 individualized learning titles. Already 20% of the management, functional and technology training participation of Alcatel employees with Alcatel University has been virtualized using these individualized courses. Meanwhile, virtual classrooms using web-conferencing technologies are becoming the preferred learning mode of Alcatel's remote teams for product information updates.

Supporting key priorities

One of the key training priorities to support Alcatel's corporate strategy is in Sales and Marketing. In response, an integrated development program for sales and account managers, was designed and launched in 2004.

In parallel, an intensified certification scheme focused on qualifying sales support engineers with respect to the newest technologies was developed to ensure optimal pre- and post-sales support at the local level.

Accreditation activities at Alcatel University

As part of the dedicated focus on developing Alcatel employees and in order to better respond to clients' needs, Alcatel University has established a major certification and accreditation program for Project Managers and Project Directors. A training program combining e-learning, classroom courses and self-study allows Project Managers to prepare for the external PMP certification awarded by the Project Management Institute, one of the most highly recognized institutions. For Project Directors, the training track is completed by an internal accreditation process, culminating in an awards ceremony attended by Alcatel senior executives.

CLIP award to Alcatel University

In 2004, Alcatel University's position as one of the leading corporate universities was formalized by the reception of the CLIP (Corporate Learning Improvement Process) award. CLIP recognizes quality and innovation in corporate training, based on a comprehensive assessment process to determine strong and weak points in educational programs and innovative capacity. In June 2004, Alcatel University was one of the 5 recipients of the CLIP award from the European Foundation for Management Development (EFMD), an internationally recognized institution.

> *Alcatel University's processes for coordinating the activities of 15 decentralized training centers are among the best in the profession. The internal certification process for ensuring quality of training practices throughout the system is outstanding.*
>
> International review committee,
> European Foundation for Management Development

SOCIAL CHARTER AND DIALOG

Communication on the Social Charter

Throughout 2004, communications for Alcatel's Social Charter were cascaded down the organization from management committees and HR executives to employees worldwide. Communications methods included presentations at staff meetings, posting the Social Charter on internal websites and incorporating information about the Charter within induction materials for new recruits.

In China, at Alcatel Shanghai Bell, the Human Resources department conducted more than 60 communication meetings to all managers and HR staff, established an intranet website on introducing the Social Charter and sent an email to all employees. In addition, 5,000 bookmarks printed with the articles of the Social Charter were sent out to all employees. Posters were hung in most employee offices as well as in the lobbies of key buildings. Feedback was collected from employees on the Charter through Alcatel Shanghai Bell's regular internal monthly survey.

A further example of communications carried out across Alcatel on the social charter was provided by HR operations personnel in Canada and the US. Employees were trained on the principles of the Social Charter and a presentation was organized across North America in December 2004. In addition, community relations partners in the US were informed of the Social Charter as well as Alcatel's expectation that they will abide by its terms and conditions.

ECID- the European Committee for Information and Dialogue

The European Commitee for Information and Dialogue provides information and facilitates an exchange of views at the European level between management and staff representatives. Items on the agenda range from the Group's strategy, organization and competitive position, to changes in employment, particularly following any transfer of activities and changes in company structure.

The ECID has 30 staff representatives from 15 countries that meet in a full session twice a year. An additional coordinating committee maintains contact between the Chairman and CEO and the ECID between the bi-annual sessions. There were three meetings of this committee in 2004.

Health and safety

Due to the evolution of the company's business activities, Alcatel's global health and safety network mainly deals with topics such as the effects of computer work, road safety and safety conditions for working at heights (mainly for networks maintenance and supervision).

Concerning electromagnetic environment, a new intranet site was created to answer employee questions. Internal information sessions and specific conferences are also organized by the Health and Safety Committees.

THE ALCATEL CIT "RENCONTRES" PROGRAM

Alcatel CIT, the main French subsidiary, pursued its "Rencontres" program launched in 2001 to foster ongoing dialog between top management, middle management, and employees on all its sites. Since its inception, 63 one-day meetings were organized on all 11 Alcatel CIT sites. Twenty "Rencontres" were held in 2004 and the program will continue in 2005.

ALCATEL BELL'S BEST PRACTICE

Alcatel Bell in Belgium runs a networking initiative called "Face 2 Face" aimed at bringing upper management and employees closer together. Started two years ago, "Face 2 Face" enables employees to meet top executives in small groups. Every month, a number of employees are chosen at random and invited to participate in a "Face 2 Face" meeting. "Face 2 Face" has proven to be a valuable and motivating experience for both sides. This relatively simple process has had excellent results: over 98% of participants have given positive feedback.

ALCATEL AND DIVERSITY

ALCATEL HAS NOTABLY TAKEN STEPS TO SUPPORT DIVERSITY BY FORMALIZING THE STRONG PRINCIPLES THAT GOVERN ITS OPERATIONS THROUGH THE STATEMENT ON BUSINESS PRACTICES WHICH STATES:

"Alcatel will not discriminate against employees for any reason such as age, race, ethnics origin, gender, sexual orientation, marital status, religious belief, nationality or disability, and will treat everyone with dignity and full respect for their personal lives. This is expected also to apply to relations between members of personnel."

This stance on diversity was complemented by the publication of the Alcatel Social Charter.

Alcatel is a global company attached to diversity, tolerance and equal opportunity for all.

Social Charter, section 5

Cultural diversity is particularly evident among management. In 2004, Alcatel's 350 top managers represented more than 20 different nationalities.

Gender diversity within its workforce is one of the areas for which Alcatel is looking to improve.

In 2004, women made up 24% of the Alcatel workforce, 19% of High Potentials and 7% of the top management positions. Indeed, women are hired by the company at entry level in approximately equal proportion to their availability in the labour market, but women often do not see the same career evolution as their male colleagues. Women's career progression was studied in 2004 and will be subject to a specific follow-up in order to come up with initiatives which will improve gender diversity throughout different levels of management. To this end, Alcatel launched a program entitled *"Women in Leadership"* to encourage women's career progression towards management positions.

In parallel to these corporate-based activities, there are a number of gender diversity related initiatives already

% OF WOMEN /HEADCOUNT BY REGION (2004)

Europe, Africa, Middle east, South America	North America	Asia-Pacific
22.3%	25.2%	27.8%
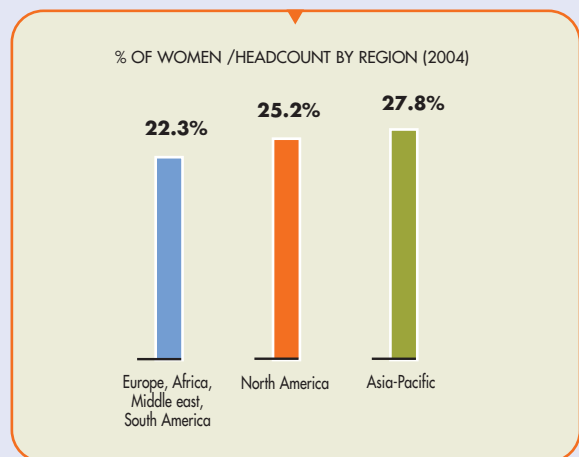
being run locally. For example, Alcatel in the USA has entered into a partnership with the Women's Bureau of the US Department of Labor, to pilot an e-mentoring financial security and retirement savings project.

Access to information

A VEHICLE FOR DEVELOPMENT

Since the global economy is increasingly linked to information and communication networks, reducing the growing inequalities in access to technologies becomes a priority. Alcatel is playing an active role in bridging the digital divide not only in developing countries, but also in isolated areas of developed ones. With one of the most diversified technology portfolios in the world, providing for transmission, access, connectivity and services, Alcatel is able to deliver innovative solutions to local partners, adapted to their needs.

ALCATEL HELPS BRIDGE THE DIGITAL DIVIDE IN THE HIMALAYAS.

▶ BHUTAN

The Kingdom of Bhutan, situated high in the Himalayas, is a very decentralized country. Among the 201 administrative counties only 79 are connected to a telecommunication network.

The high mountains exclude cables as an alternative, so Alcatel designed a turnkey network solution to provide rural areas with voice and data services based on microwave radio and wireless voice over IP solutions. Each subscriber will be equipped with a solar cell, a telephone set and a small antenna able to receive data from a central radio base station in the village.

The project is to be implemented before the end of 2006 and will see installation of equipment in the Himalaya Mountains up to 4,700 meters altitude. Some of the sites are situated 3-4 days walking distance from the nearest road. Most of the sites will be solar powered.

This network will be an important tool for social and economic development, and will bring deep changes in the field of education and communication to the counties concerned.

ALCATEL AND THE UN AGENCY, UNITAR, PARTNER TO TRAIN LOCAL AUTHORITIES ON INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT).

Alcatel signed a partnership in 2004 with the United Nations Institute for Training and Research (UNITAR) to sponsor three training centers for local authorities in China, Poland and South Africa. Its purpose is to foster best practices and share technical expertise in information technologies with local authorities and other local players such as public and private enterprises, as well as academia.

This partnership with public and private organizations will provide a good tool for local authorities to develop sustainable approaches for their ICT programs, taking into account their specific regional environment.

The agreement between Alcatel and UNITAR covers a first year pilot phase of a program which will enable local authorities in China, South Africa, Poland and Central Europe to meet in 3 to 5-day workshops, during which they will share best practices from real case studies, evaluate their own capabilities according to an evaluation grid developed jointly by UNITAR and Alcatel, and benefit from subject-matter expertise provided by Alcatel employees.

UNITAR

UNITAR was established in 1965 as an autonomous body within the United Nations with the purpose of enhancing the effectiveness of the organization through appropriate training and research. UNITAR is committed to supporting programs that will have a sustainable impact. The Institute operates on the principle that only carefully designed and implemented training programs can make a lasting contribution to national development.

Three workshops are scheduled to take place during the course of the 2005.

Results of the sessions, including reports of project follow-ups, will be presented at the second World Summit of local authorities on the Information Society, to be held in Bilbao, Spain, November 9-11, 2005, as well as at the World Summit of Information Society in Tunis, also in November 2005. The results will also be used for a worldwide database of relevant case studies and provide a platform for international debate and exchange of experiences.

▼ E-Government

Local authorities are increasingly involved in the deployment of "e-government" applications, using Information and Communication Technologies.

Alcatel has extensive experience working with local authorities in emerging and industrialized countries, as well as with telecom players large and small. As a result, the company can deliver turnkey solutions to local authorities.

In emerging and advanced countries alike, local authorities and Governments are now using ICT to better serve their citizens, to boost economic development by improving their territory attractiveness and bridging the digital divide, as well as to enhance their own efficiency.

As local authorities are rethinking how they deliver services and communicate with citizens, Alcatel is supporting them with the communications aspects of this challenge. High-speed, broadband access for all public sites and administration facilities offers access to services by anyone at any time.

New information technology enables elected representatives to establish an interactive, ongoing relationship with constituents, as well as civil servants to be even more effective in the way they handle their work.

ICT EDUCATION LAYS FOUNDATION
FOR NEXT GENERATION

AS A MEMBER OF THE UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS COMMITTEE, ALCATEL IS COMMITTED TO SUPPORT INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) INITIATIVES AROUND THE WORLD.

By providing training, establishing student grants, and supporting local technical institutes, Alcatel is taking a leadership role in providing the next generation of students with the skills and technical knowledge necessary to make an impact in their countries.

In Cambodia, Alcatel set up a grant program for top students at Phnom Penh's Institute Technology Cambodia. In the first year, 28 top students were given scholarships to cover one full year of tuition fees. The three year program was established to help train Cambodia professionals for being actively involved in the local telecom development. Alcatel will also play a critical role in organizing and guiding a series of technical programs as part of the local curriculum.

In 2004, Alcatel University set up two educational partnerships with technical institutes in Brazil in order to offer advanced telecommunications training to young Brazilian professionals.

On the one hand, a partnership was formed with the SENAI-DF (the National Service for Apprenticeship of the Federal District). After a period of course-work at the SENAI-DF, students have the opportunity to do internships at Alcatel under the supervision of Alcatel experts.

On the other hand, a program of qualification on telecommunication network maintenance was established with CEFET/CE (the Federal Center for the technological education) of Ceara, Brazil. This six-month program also combines theoretical training and a hands-on internship. Twenty-five students took part in this program during 2004.

In order to better prepare students for their entrance to the job market, Alcatel University defines, in collaboration with the two institutions, a curriculum based on the needs and requirements of the current job market.

SPACEFORSCIENCE IN SOUTHERN EUROPE

Satellite links are being used to facilitate scientific cooperation in South Eastern Europe thanks to the SpaceForScience project, sponsored by the European Space Agency and managed by the MediaSpace consortium, of which Alcatel Space is a member. The goal of this project is to ensure that members of the scientific community from all over Europe — even those in remotely located institutes — can connect, meet, work, teach and learn. The project particularly targets new European countries and enables them to enter into cooperative research, education and technology transfer networks.

Today, a representative group of users, selected with the help of UNESCO, are participating in a pilot to use and evaluate that the system meets their particular needs for collaborating on life sciences, nanotechnologies, ICT and earth science (earthquake hazard mitigation). Once the pilot is up and running, the project will be rolled out in 2005.

DIGITAL BRIDGE INITIATIVE

AS PART OF ITS DIGITAL BRIDGE INITIATIVE, ALCATEL CONTINUED TO DEVELOP PILOT PROJECTS IN UNDERSERVED RURAL AREAS AND APPLICATIONS WITH A HIGH LOCAL ADDED-VALUE.

After an initial successful partnership geared to helping farmers and fishermen in Senegal, Alcatel has committed to another partnership with the Manobi company, this time in South Africa. A pilot project will be set up in Makuleke, an underserved agricultural area in the Limpopo region in the northeast of the country. Farmers in this region will have real-time access, via a mobile phone, to produce prices in the main wholesale markets of Johannesburg and Pretoria, located hundreds of kilometres away. This project is carried out in cooperation with the South African mobile phone operator, Vodacom, which has improved the mobile coverage in the pilot zone. Alcatel has provided the equipment needed for the Manobi service platform, as well as mobile telephones for the farmers involved in the project. The commercial launch of this service is scheduled for mid-2005, after the pilot phase is completed.

Fostering local entrepreneurs

Given the large scope of its technology portfolio, Alcatel is in a strong position to foster the type of local applications that will be important for all telecom operators.

To help support the local development of unique applications that will at the same time help building entrepreneurs, Alcatel has established Partnership Spaces to bring ideas and technology together.

In Egypt, Alcatel launched its Partnership Space within its new local headquarters in Cairo's Smart Village. Alcatel encourages local companies to come into the labs, complete with live networks, and create multimedia service projects that are adapted to the needs of the local telecom customers. Alcatel certifies the companies after they develop software applications, and then Alcatel will work with them to help create offerings that local operators, enterprises and local administrations can implement. The partnering company will remain the owner of its ideas and the resulting products or services.

In Tunisia, six students from local engineering schools delivered thesis projects that utilized the Alcatel Partership Space network platforms. They developed innovative services for GSM mobile networks. The Partnership Space opened in late 2003, and the real SMS based applications and services developed within its framework indicate how companies in this area and schools can partner for the future development of telecom services.

Environment

A DAY TO DAY CHALLENGE

▶ **2004 Highlights**

- Further 20% reduction of product power consumption, in keeping with the company's commitment (see flap).

- Definition of Alcatel's internal standards and procedures necessary for managing end-of-life equipment collection and treatment, in accordance with the European WEEE* directive on electronics waste management.

- Establishment of product migration plans towards compliance with the European RoHS** directive on hazardous substances.

- Contribution to research efforts on health effects of electromagnetic fields, coordinated by the World Health Organization.

▶ **2005 Key milestones**

→ Implement an **end-of-life collection and treatment system for electronic equipment.**

→ Implement **product development solutions in compliance with the RoHS directive.**

→ Have all company products covered with **ecodeclarations.**

→ Continue **the annual 20% product power consumption reduction program** until end of 2005.

→ Continue the **ISO 14001 certification process** for Alcatel sites.

* WEEE: Waste Electrical and Electronic Equipment.
** RoHS: Restriction of the use of certain Hazardous Substances.

ETHICSTECHNOLOGIESTOPROMOTEDEVELOPMENTRESEARCH&INNOVATIO
RESEARCH&INNOVATIONENVIRONMENETHICSCITIZENSHIPTECHNOLOG
ETHICSTECHNOLOGIESTOPROMOTEDEVELOPMENTRESEARCH&INNOVATIO

ENVIRONMENT

A long-term vision…

Alcatel has made a long-term commitment to market increasingly environmentally friendly products and services. To this end, the company integrates environmental aspects as from the design process.

This approach is based on three principles:

- taking into account the products' complete life cycle,
- conducting a multi-criteria evaluation of environmental factors,
- making a continued effort to reduce environmental impact.

With this perspective in mind, over the past several years Alcatel has acquired the methodologies necessary for putting these principles into practice.

DISTRIBUTION OF ENERGY CONSUMPTION
DURING PRODUCT LIFE CYCLE

9% Production

1% Transportation

90% Usage

…suited for economic and regulatory realities.

In 2004, Alcatel's long-term vision helped meet short-term regulatory deadlines and focused on three priorities:

- making the necessary preparations for the implementation in August 2005 of the European Waste Electrical and Electronic Equipment (WEEE) directive;
- taking into account the RoHS directive limiting the use of certain hazardous substances, starting in July 2006;
- reducing product power consumption.

Furthermore, Alcatel has continued working towards its goal of providing 95% of its new products with an ecodeclaration by the end of 2005.
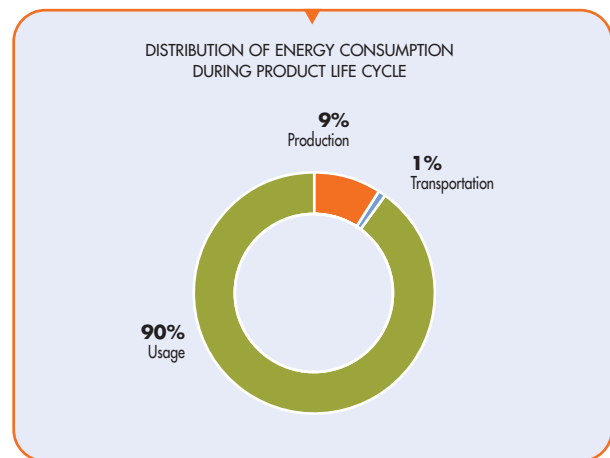
Environmentally-conscious equipment design focused on greater power efficiency

Based on the EIME* methodology, an assessment of the environmental impacts of the company's products, over their entire life cycle, showed that the power consumption mainly occurs during product use. Depending on the product type and its lifespan, product use can cause more than 80% of the various environmental effects. Reducing product energy consumption is therefore clearly a major objective of Alcatel's environmental policy.

At the same time, product power consumption should not be considered by itself as an indicator of performance. In order to satisfy its clients' needs, Alcatel has been increasing and diversifying its product features, which can result, despite significant efforts to improve energy efficiency, in an increase of "gross" power consumption. The measure of energy efficiency used should therefore account for both product features and power consumption. In 2004, Alcatel began the process of defining its products' energy efficiency indicators, which consider these two aspects, in order to take into account the product capacity evolution.

* The EIME methodology was presented in previous reports.
It is used to evaluate the environmental impacts of products.

The example on the right shows that the transmission capacity of a base station for mobile radio equipment could be increased by a factor of 2.5 in 2 years, while consumption per bit rate and per covered geographical area is reduced by approximately 40%.

In 2004, the company's new product power consumption was lower by 22%, on average, than in 2003, and by 36% with respect to 2002 (in keeping with the annual 20% reduction goal, or a 36% drop over two years).

NEW PRODUCT POWER
CONSUMPTION REDUCTION
(Base 100 in 2002)

Achievement   Target
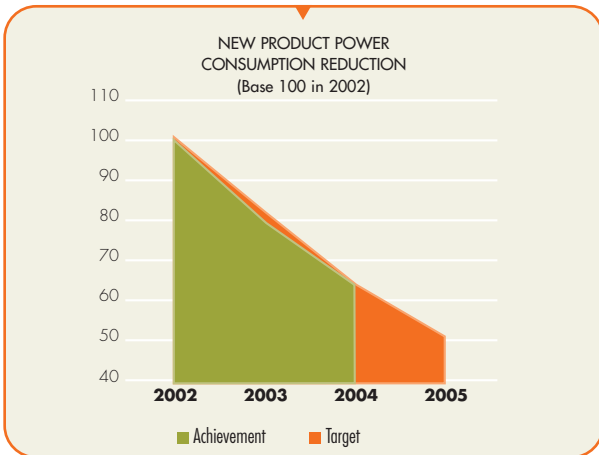
Ecodeclaration: the product's environmental Identity Card

In 2004, Alcatel continued implementing its ecodeclaration program, with the goal of covering all marketed products with ecodeclarations. The internal standard was updated to take into account the new version of the ECMA TR70 reference document (ed.3 – June 2004), and to complete the information pertaining to end-of-life equipment. When applicable, information on the presence of components requiring special treatment, as required by the WEEE directive, is now included in the ecodeclarations.

In 2004, 91% of new products were covered by an ecodeclaration.

PERCENTAGE OF NEW PRODUCTS
WITH AN ECODECLARATION

Target
Achievement
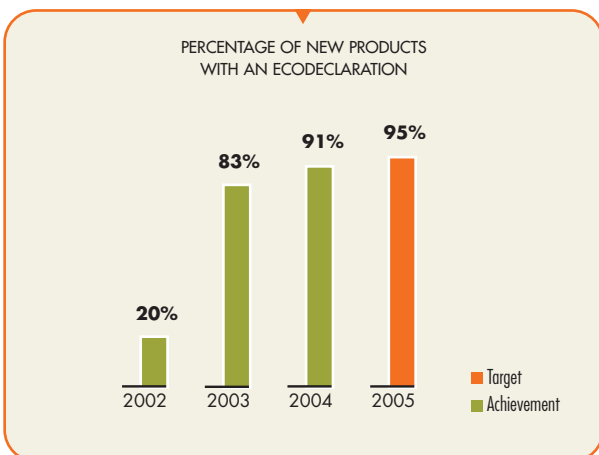
The radio micro base stations

In order to meet market demand for ever more flexible and compact solutions for mobile phone network infrastructures, Alcatel has been offering the A9110 micro base station for several years. This solution enables network operators to optimize the radio coverage of their networks without installing a new standard base station needing more space and energy.

Alcatel introduced a new generation of these micro base stations, which features the same power consumption level with increased flexibility and higher transmission performances. Mobile phone operators can therefore replace traditional base stations, and simultaneously reduce overall power consumption for their networks.

IMPROVEMENT OF POWER CONSUMPTION EFFICIENCY
FOR A MICRO BASE STATION
(Base 100 in 2002)

Transmission performance   Energy consumption
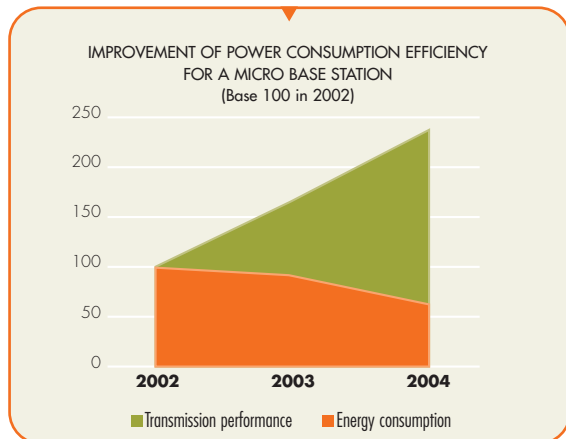
▲ *Ecodeclaration*
of the A9110 micro base station

STRIVING FOR EFFICIENT RESPONSIBILITY MANAGEMENT OF ELECTRICAL AND ELECTRONIC END-OF-LIFE EQUIPMENT.
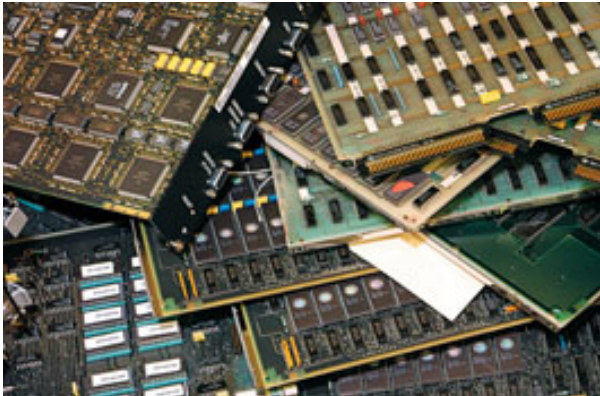
Considering the large number of company stakeholders involved in the implementation of the **directive on Waste Electrical and Electronic Equipment** (2002/96/CE), Alcatel has set up a dedicated project team to coordinate their efforts.

The project team's goal is to define the tools and procedures necessary for correct management of end-of-life equipment for which Alcatel will be responsible. In particular, the team should enable the company to satisfy the directive's requirements in terms of both operational responsibility, starting August 2005, and reporting to national authorities, starting in 2006.

The project team is assisted by the various Alcatel departments affected by the implementation of the WEEE directive:

→ the legal department studies national laws that align with European directives in order to assess subsequent measures to be taken;

→ the accounting and financial departments calculate the financial impact of these national laws;

→ the directive is taken into account in the product design and documentation preparation processes;

→ the purchasing departments define take-back conditions, by "end-of-life operators", of the equipment purchased by the company, either for its own use, or to be integrated as a subassembly of equipment sold;

→ the purchasing departments also develop the necessary contracts to guarantee the service quality and efficiency of "end-of-life operators";

→ sales forces are trained to inform the customers of end-of-life equipment take-back conditions, specific to each installation context;

→ Alcatel's legal entities are provided with the necessary facilities to collect and report the data to national authorities related to equipment collected from customers and from Alcatel's own sites.
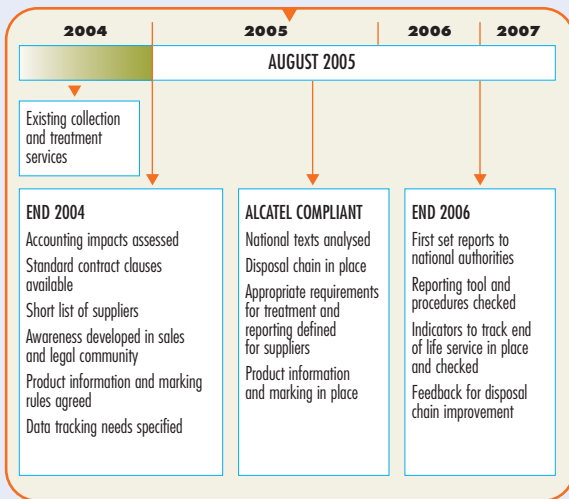
Alcatel has concurrently started a dialog with "end-of-life operators", in order to better understand this product lifecycle phase, and to improve the corresponding environmental and economic models accordingly.

◄ *This diagram shows the project progress with respect to the key steps described in the directive.*

2004	2005	2006	2007
	AUGUST 2005		

Existing collection and treatment services

END 2004
National collection assessed
Standard contract clauses available
Short list of suppliers
Awareness developed in sales and legal community
Product information and marking rules agreed
Data tracking needs specified

ALCATEL COMPLIANT
National texts analysed
Disposal chain in place
Appropriate requirements for treatment and reporting defined for suppliers
Product information and marking in place

END 2006
First set reports to national authorities
Reporting tool and procedures checked
Indicators to track end of life service in place and checked
Feedback for disposal chain improvement

Alcatel continues to participate in the ongoing study and research process, in conjunction with other industry sector leaders participating in the ELectricity ENvironment association (ELEN). This effort is focused on defining common databases and repositories to harmonize and facilitate information exchanges and product traceability for players involved in the end-of-life equipment chain, as well as between these players and public authorities.

▶ MIGRATION TOWARDS **RoHS*** COMPLIANT PRODUCTS WITH PRESERVED RELIABILITY AND PERFORMANCE.

The EU directive 2002/95/CE will restrict the use of some substances, in particular lead, in electronic products as of **July 2006.** The restriction on lead is of a great importance for Alcatel, as lead substitutes must not raise long term reliability issues for the equipment. This specific requirement has been acknowledged by the legislator which has exempted solders used in telecom infrastructure equipment from this ban.

In 2004, Alcatel began addressing the issue of substituting all concerned substances with the goal of offering compliant products by July 2006. The exemption on lead solders will be used as long as the long term reliability of our equipment is fully guaranteed with alternative solutions.

▲ *Product example fully manufactured with lead-free processes and components.*

A dedicated project team was set up and relies on multidisciplinary working groups to ensure coordination and efficiency of actions. The project goals are:

→ **with respect to substances other than lead,** to ensure full substitution by July 2006, without degrading technical performances of our products,

→ with respect to **the use of the exemption on lead solders, to ensure the availability of lead free components** compatible with tin-lead processes,

→ **with respect to the migration to lead-free processes:**

- to qualify lead free substitutes to tin-lead soldering,
- to produce reliable lead free assemblies in the long term,
- to resolve problems related to new soldering process (lead free solder substitutes like the commonly selected tin-copper-silver alloys have higher melting temperature which leads to higher stress on materials),

- to provide relevant information for the design or redesign of products,
- to take into account ramping-up of new compliant products and components/ramping-down of existing non-compliant components and products simultaneously,
- and more generally to evaluate the technical and economic impact of compliance on all processes, used during product design and manufacturing.

All actions are carried out in close cooperation with suppliers and subcontractors to establish compatible migration roadmaps.

Internal component database management has been modified to integrate the collected new characteristics (compatibility with the compliance requirements, with new assembly processes, etc.). This work encompasses a list of tens of thousands of components used by the company.

> Alcatel will be able to put on the market, in due time, by July 2006, products that combine reliability, high performance and respect for the new directive.

As a worldwide company, Alcatel is also participating in several international associations to ensure consistency of pending environmental regulations in China and other countries, with the EU directive.

> By the end of 2004, this project was considered to be on time with respect to working plans and roadmaps.

* RoHS: Restriction of the use of certain Hazardous Substances.

An environmental management of sites taking into account the evolution of Alcatel's activities

By selling off its battery and optic fiber manufacturing plants in 2004, Alcatel confirmed its evolution – refocusing on solutions and services, involving less environmental impact.

- As early as 1992, Alcatel was already committed to environment-friendliness, with a plan to reduce natural resource consumption, waste production, and discharge into water and air at its sites.

- In 2004, the company continued its efforts to optimize energy consumption at its main sites. This program has produced significant results in Vélizy (France), where 25 buildings were regrouped into 5 better-suited facilities, allowing a 40% reduction in power consumption.

- Furthermore, Alcatel has been involved in the reclamation of brownfields following factory shutdown, allowing in many cases urban land to be reclaimed for tertiary activity, as in Romainville (FR), or housing in Gisors (FR) on former battery manufacturing sites.

Thanks to ISO14001 certifications planned for 2005 and 2006 in France, most of Alcatel facilities will be certified by the end of 2006.

▲ In Vélizy (France), installations in new buildings enable a 40% energy saving.

> " *Alcatel is committed to:*
> *(…) participate in efforts to improve environmental protection and understanding of environmental problems. Set stringent guidelines, using government requirements as a basis. Continuously improve these guidelines in light of technological advances and new environmental data.* "

Extract from the Environmental Charter

▲ *Measurement of electromagnetic fields on site.*

Health and electromagnetic environment

In 2004, Alcatel continued to support the international research effort and to develop a set of standards for the evaluation of mobile and wireless equipment conformity. The company is strictly committed to respecting the standards when designing its products.

The electromagnetic environment research program initiated by the European Commission in 1999, with the support of the Mobile Manufacturers Forum (MMF) of which Alcatel is a member, is coming to its end in 2005. National and international health agencies will now have a complete set of studies for their evaluations. The MMF has made extensive information available to the general public (www.mmfai.org).

At the same time, the MMF has launched a new program for dosimetry research. This program should improve the efficiency of equipment compliance measurements. In addition, it will complement knowledge on the evaluation of physical parameters used to characterize the interaction between RF electromagnetic fields and the human body.

On an international scale, the MMF and mobile phone operators have participated in two information sessions organized by the European Commission. These sessions inform member state representatives on "health and mobile phone" (state of the art, regulations in force, implementation of consultation and information structures). In France, Alcatel has given its support to a project to create a "Health and Radio frequency" Foundation, whose objective, among others, would be to develop information programs for both professionals and the general public, regarding the effects of human exposure to electromagnetic fields.

Corporate citizenship actions

A STRATEGY BASED ON PROXIMITY AND CONTINUITY

Thanks to local initiatives, Alcatel actively participates in projects to promote culture, education and training, health and human services. These choices correspond to areas where Alcatel's business expertise can offer true added-value while giving priority to long-term projects.

REZA, PHOTOGRAPHER AND FOUNDER OF AÏNA, WITH ROSHANAK BAHRAMLOU, DURING THE INAUGURATION OF "AFGHAN INTIMACY".

▶ AFGHANISTAN

Alcatel partnered with the Aïna NGO in its project of training Afghan women in journalism. Aïna's goal is to offer women the needed state-of-the-art tools for obtaining quick and secure access to information.

The partnership covered in particular the production of a documentary film, which allowed a team of Afghan women to use the skills they learned in the Aïna training. "Afghan Voices", shows the evolution of the country since the end of the war and the role telecommunications played in this development.

The partnership also included a photo exhibit entitled "Afghan Intimacy", wich was organized at the end of 2004 in Alcatel's Paris headquarters' Atrium. The work of Afghan photographer and painter, Roshanak Bahramlou, depicted Afghan women at the end of the dark years.

A special sustainable development management tool

Since 2002, Alcatel has been working with the "Ethos Social Responsibility Indicator Evaluation". The Ethos Institute of Companies and Social Responsibility was created to help executives understand and implement socially responsible management. It is responsible for the promotion of the UN Global Compact in Brazil and has approximately 800 member companies. In 2004, a Sustainable Development committee was created in order to better respond to the Ethos requirements.

BRAZIL

Education: a key to success

Alcatel supports educational projects geared to young people in search of their first job. The company partnered with CAAP'I (The Ipiranga Professional Development Center) in 1995, a school specialized in training programs for young adults. Numerous partnerships have been developed with other educational institutions and universities.

Alcatel is also a sponsor of CDI (Comitê para Democratização da Informática), a school for telecommunications and high-tech training, that works toward reducing the digital divide in São Paulo's suburbs. Alcatel donated computers and enabled broadband access to the CDI.

The company also participated in athletic events organized by the "Gol de Letra" Foundation which promotes education and cultural activities for poor children. The admission fees for the sporting events are used to finance the Foundation's projects.

Supporting the local community through volunteer work

Alcatel employees created a volunteer group they call "Vontade" (Goodwill). Alcatel supports the group by publicizing Vontade's activities and initiatives.

Regular donation campaigns are organized where employees can give blood, winter clothes, and food, under the auspices of the governmental social program "Fome Zero" for fighting hunger. As part of the United Nations "Millennium Project", Alcatel in Brazil paid for children's eye examinations.

▶ INDIA

In order to facilitate social integration through culture and art, **Alcatel was the main sponsor of "Beyond Limits",** a 2004 art exhibition organized by the Delhi-based NGO, "Family of Disabled". Indian actress, Nandita Das, inaugurated the exhibition which featured the paintings of 24 disabled artists. This exhibition was an opportunity for these artists to gain recognition, sell their work and go "beyond their limits".

▶ ITALY

Alcatel is participating in the re-opening celebrations of Milan's "Alla Scala" theater from November 2004 until June 2005. The restoration of the theatre lasted three years. New technologies were the keynote of the re-opening ceremonies. Many exhibitions and conferences were organized on this occasion. An Alcatel broadband solution was used to broadcast the opening night's performance on giant screens throughout Milan, giving the public access to the classical music concert.

▶ ECUADOR

Thanks to its Employee Solidarity Fund, **Alcatel sponsors a nursery school in Catzuqui de Velasco,** about 30 minutes from Quito where some 3,000 families live in extreme poverty. Alcatel has donated audiovisual equipment, books, educational games, desks, mattresses and other classroom supplies.

▶ SPAIN

In 1977 Alcatel helped create the ADFYPSE, an association for mentally or physically disabled children and adults. Since that date, two major projects have been accomplished:

- creation of a center for disabled adults providing training facilities and residence halls,
- opening of a health center for elderly handicapped people with residence halls, a day-clinic, and a physical therapy center.

Alcatel also helps ADFYPSE to publish a magazine, organize cultural, sporting events and information campaigns for families. The company has donated computer equipment, sponsored a vacation program that enables 125 students to go to the beach for two weeks in the summer, and subsidizes the tuition for the children of Alcatel employees who attend the center.

In 2004, Alcatel sponsored and staffed a booth at a Social Action information fair in Valencia to inform the public about the ADFYSE. Corporate citizenship was one of the key topics at the fair.

Alcatel in Madrid has donated the bibliographic sources of its libraries to the Telecommunications Engineering Technical College (ETSIT) of the Polytechnic University of Madrid. As a whole, Alcatel donated 8,000 volumes including books and specialized magazine collections published between 1934 and today, offering an important outlook of publications in the telecommunications field. According to José Manuel Perez, headmaster of the ETSIT, "Alcatel's bibliographic collection covers almost 70 years of telecommunications research and development history. This vast chronology makes this collection specially valuable, considering that some volumes are now impossible to find anywhere else".

To mark the 4th Centenary of the first *Don Quixote* edition, a drawing contest was organized among the children of Alcatel employees in Iberia and Latin America on the subject "How do you see Don Quixote ?". The 18 best drawings were selected to illustrate the 2005 calendar.

Each month, in addition to the corresponding drawing, the calendar draws attention to a project related to culture and citizenship supported by Alcatel.

▶ UNITED STATES OF AMERICA

For the third consecutive year, Alcatel sponsored the *Susan G. Komen Race for the Cure*. Alcatel hosted the race, helping to raise money for breast cancer awareness, education, and treatment. On June 5, 2004 approximately 10,000 runners and walkers flooded the streets surrounding **Alcatel's US headquarters in Plano, Texas,** collecting more than $300,000 for the Komen Foundation.

▶ GERMANY

In its Stuttgart offices, Alcatel hosted an exhibition of paintings by artist Margaret Kübler, a graduate of the Stuttgart Art Academy and professor at a local university.

Alcatel SEL has been organizing exhibitions since 1990 to help artists gain exposure and sell their paintings. Thanks to the local fine arts academy, there is abundant talent in Stuttgart and Alcatel has organized 45 exhibitions over the years, mostly with local artists.

▶ CHINA

In China, **Alcatel Shanghai Bell continues to subsidize the children's education at the** *Ninglang Hope School.* When this school opened in 2003, Alcatel employees committed to helping develop education in the remote region of Ninglang, some 2,000 kilometers from Shanghai. New developments in 2004 included:

- Installation of a multimedia classroom thanks to a 10,000 euro Alcatel donation,
- Donation of thousands of books, book bags, and computers,
- A one-month training course for the school's 51 teachers,
- Academic scholarships for 102 students.

▶ FRANCE

As one of its activities in the health field, **Alcatel continued to sponsor** *Le Rire Médecin,* an association of actors/clowns that believes laughter is good medicine. This association brings together professional actors who have been specially trained to work in hospital pediatric wards. Each of their performances is carefully rehearsed in cooperation with the hospital's medical teams. Their shows include magic tricks, jokes and songs. These performances help not only the children, but also their families and hospital staff, to relax for a little while. The clowns also help make illness and the hospital environment seem less intimidating.

▼ "Télécoms Sans Frontières"

A humanitarian organization specializing in emergency telecommunications

During the holiday season Alcatel donated 10 euro cents for each greeting card it purchased to *Télécoms Sans Frontières*, a humanitarian organization specializing in emergency telecommunications. Thanks to a permanent monitoring center, *Télécoms Sans Frontières* can intervene anywhere in the world as soon as a catastrophe or conflict is announced. Within minutes its teams are able to install an operational telecommunications center at the site of the catastrophe that enables rescue teams to communicate efficiently and creates a link between the victims and their loved ones.

Télécoms Sans Frontières provided assistance in Sri Lanka in December 2004 when part of that country was devastated by a tsunami.

REFERENCES AND INDICATORS

For the last three years, Alcatel has communicated social and environmental indicators. In 2004, the company set up a new reporting tool in order to reinforce its efficiency in collecting and processing its sustainable development indicators. The publication this year of a "Global Reporting Initiative" reference table, shows that the company intends to take into account international reporting standards.

ETHICSTECHNOLOGIESTOPROMOTEDEV
RESEARCH&INNOVATIONENVIRONMEN
ETHICSTECHNOLOGIESTOPROMOTEDEV

2004 SUSTAINABLE DEVELOPMENT INDICATORS

SOCIAL INDICATORS	2001	2002	2003	**2004**	2004 Perimeter
RESEARCH AND DEVELOPMENT					
R&D Budget/Sales	11.3%	13.5%	12.7%	**13%**	100%
HEADCOUNT					
Total Alcatel headcount as of 31/12	99,314	75,940	60,486	**55,718**	100%
Total non-Alcatel workforce	4,316	3,701	2,215	**2,102**	100%
Number of recruits	13,379	2,645	2,240	**3,634**	100%
Headcount increase due to acquisitions and insourcing	1,068	5,686	1,692	**2,083**	100%
Headcount reduction due to outsourcing or transfers	-3,072	-10,473	-6,959	**-3,841**	100%
Headcount reduction due to redundancies	-11,319	-15,028	-8,806	**-2,325**	100%
Headcount reduction due to natural departures (retirements, end of temporary work contracts, resignation, deaths)	-11,998	-5,813	-3,443	**-3,004**	100%
DIVERSITY					
Percentage of women/headcount	26% [1]	26% [1]	23.3%	**23.6%**	100%
Asia-Pacific			23.6%	**27.8%**	100%
Europe, South America, Middle-East, Africa and India			22.7%	**22.3%**	100%
North America			25.8%	**25.2%**	100%
Percentage of women amongst High Potentials	16.2%	16.7%	18.7%	**18.9%**	100%
Number of disabled employees	387 [1]	405 [1]	301 [1]	**615**	83% [5]
TRAINING					
Training budget (as a percentage of payroll)	2.1% [2]	1.6% [2]	1.5% [3]	**1.6%**	80%
Total hours of training per employee	27 [2]	19 [2]	18 [3]	**21**	80%
Percentage of training time via e-learning technologies	6% [2]	14% [2]	11% [3]	**13.0%**	80%
MOBILITY					
Number of expatriates worldwide	2,107	1,942	1,718	**2,113**	100%
Expatriates by host region					
Europe	798	602	531	**748**	
North America	330	171	109	**122**	
South America	173	124	98	**92**	
Middle-East, Africa and India	315	426	524	**767**	
Asia-Pacific	491	619	456	**384**	
HEALTH AND SAFETY					
Number of days of absence due to work related accidents per employee		0.18 [4]	0.15 [4]	**0.11**	89% [6]
Rate of frequency (number of accidents per year per 1 million hours worked)				**3.98**	89% [6]
PERFORMANCE MANAGEMENT					
Percentage of managers and professionals who had an annual performance review				**81%**	55% [7]

(1) Perimeter: France
(2) Perimeter: 60%
(3) Perimeter: 65%

(4) Perimeter: 76% (main units excluding China)
(5) Perimeter: all main units excluding Canada (due to local privacy law)

(6) Perimeter: all main units
(7) Perimeter: units in the scope of the 2004 performance management survey (global pilot program and local systems)

Social indicators: definition and methodology

The perimeter of 2004 social reporting, specified for each indicator, is measured in terms of percentage of Alcatel employees covered by the indicator.

Alcatel figures are consolidated at a corporate level either through the global financial information system (headcount, including gender), through the corporate HR information systems, or through the sustainable development reporting tool (see description page 51). The person responsible for reporting in each HR domain works with a specialized network of correspondents worldwide.

The indicator "number of days of absence due to work related accidents per employee" does not take into account the days of absence related to work accidents which occurred in previous years.

Evolution 2004/2003

The perimeter of the following indicators has been extended: health and safety, training and disabled employees.
New indicators have been added: accident frequency rate, performance management.

ENVIRONMENTAL INDICATORS	Units	2002 [3]	2003	2004	2004 Perimeter
PURCHASED ENERGY AND CO_2 EMISSION					
Purchased electricity	GWh	1,118	747	**740**	100%
Purchased electricity per employee	MWh	18.1	12.3	**13.3**	100%
Purchased fossil energy	GWh	577	310	**251**	100%
Purchased fossil energy per employee	MWh	9.4	5.1	**4.5**	100%
Total purchased energy	GWh	1,695	1,057	**990**	100%
Total purchased energy per employee	MWh	27.5	17.5	**17.8**	100%
Indirect emissions of CO_2, linked to purchased electricity	tCO_2 [1]	329,710	264,000	**236,397**	100%
Indirect emissions of CO_2 per employee	tCO_2 [1]	5.3	4.4	**4.2**	100%
Direct emissions of CO_2, linked to purchase fosil energy	tCO_2 [1]	123,617	83,000	**56,149**	100%
Direct emissions of CO_2 per employee	tCO_2 [1]	2	1.4	**1**	100%
Total emissions of CO_2	tCO_2 [1]	453,327	347,000	**292,546**	100%
Total emissions of CO_2 per employee	tCO_2 [1]	7.3	5.8	**5.2**	100%
WATER AND WASTES					
Purchased water	m^3	3,644,000	2,356,000	**2,320,382**	100%
Purchased water per employee	m^3	59.1	39	**42**	100%
Production of hazardous waste	t	7,264	3,090	**2,313**	100%
Production of hazardous waste per employee	kg	118	51	**42**	100%
Percentage of hazardous waste recycled [2]	%	51	86	**64**	100%
Production of non-hazardous waste	t	35,894	24,620	**24,289**	100%
Production of non-hazardous waste per employee	kg	582	407	**436**	100%
Percentage of non-hazardous waste recycled [2]	%	53	65	**67**	100%
OTHER EMISSIONS					
Solvents	No significant quantities, indicator not relevant and not consolidated				100%
Halogenated hydrocarbon	No significant quantities, indicator not relevant and not consolidated				100%
Discharge into water (heavy metals)	No significant quantities, indicator not relevant and not consolidated				100%
MISCELLANEOUS					
Production sites, ISO 14001 certified	%	70	50	**65**	100%
New products covered by ecodeclarations	%	20 [4]	83	**91**	100%
Purchasing volume covered by ecodeclarations	%	30 [5]	65 [5]	**85**	100%

(1) tCO_2: CO_2 equivalent tons
(2) recycled: not released and not burned without energy recovery

(3) Perimeter : Europe and USA
(4) Perimeter : 100 %
(5) Perimeter : Europe

Environmental indicators: definition and methodology

The 2004 environmental reporting perimeter includes all locations worldwide, owned or leased, housing Alcatel employees. Figures are consolidated at a corporate level, from data reported by 49 locations, each one housing more than 300 employees, representing together 79% of Alcatel employees. Conservative extrapolation hypotheses are used, based on ratios per employee (instead of a ratio based on Total Insured Value in 2003), to cover 100% of Alcatel. Figures are cross checked with historical data existing since 1992. Reported energy purchase does not include hot and chilled water, thus corresponding emissions are not included in reported indirect CO_2 emissions.

Reported waste quantity does not include WEEE (Waste Electrical & Electronic Equipment), which could represent in 2004 a significant part of total waste production of the company. WEEE will be covered by specific indicators in 2005.

Evolution 2004/2003

The decrease in absolute figures reflects both the decrease in Alcatel's scope of activities and significant energy consumption reduction efforts at several key sites, resulting in lower CO_2 indirect emissions.

The normalized indicators, measured per employee, for electricity, raw water and non hazardous waste, show a slight increase due to conservative extrapolation hypotheses and headcount decrease for the same activity load in 2004 compared to 2003.

GRI REFERENCE TABLE

The goal of the Global Reporting Initiative (GRI) is to formalize international standards for economic, environmental and social reporting. These standards are voluntary adopted by companies. Started in 1997, GRI became independent in 2002. It is an official collaboration center for the United National Environment Program (UNEP) and works in cooperation with the Global Compact. This year, Alcatel decided to draw a parallel between the information published in its Sustainable Development report and the indicators defined by GRI.

ECONOMIC PERFORMANCE

GRI Indicators	Report page
DIRECT ECONOMIC IMPACTS	
Customers	
EC1	Inside covers
EC2	Inside covers
INDIRECT ECONOMIC IMPACTS	
EC13	7, 32 to 35

ENVIRONMENTAL PERFORMANCE

GRI Indicators	Report page
Energy	
EN3	49
EN4	49
EN17	37, 38
EN18	37, 38
EN19	37, 38
Water	
EN5	49
Biodiversity	
EN26	41
Emissions, effluents and waste	
EN8	49
EN9	49
EN10	49
EN11	49
EN12	49
EN31	49
Suppliers	
EN33	21
Products and services	
EN14	36 to 41
EN15	39

This reference table is based on the general indicators defined by the GRI and does not take into account the specific indicators listed in the "GRI Telecommunications Sector Supplement". Indeed, as mentioned in this Telecoms supplement, they apply primarily to telecommunications operators and are not as relevant for equipment manufacturers.

SOCIAL PERFORMANCE

GRI Indicators	Report page
LABOUR PRACTICES AND DECENT WORK	
Employment	
LA 1	Inside covers
LA 2	48
Labour/management relations	
LA 4	26, 30
LA 13	30
Health and safety	
LA 6	30
LA 7	48
LA 14	16,17
Training and education	
LA 9	48
LA 16	26 to 29
LA 17	28, 29
Diversity and opportunity	
LA 10	31
LA 11	31, 48
HUMAN RIGHTS	
Strategy and management	
HR1	12, 16, 17
HR2	21
HR3	21
HR8	16, 17, 30
Non-discrimination	
HR4	12, 16, 17, 31
Freedom of association and collective bargaining	
HR5	12, 16, 17
Child labour	
HR6	12, 16, 17
Forced and compulsory labour	
HR7	12, 16, 17
Disciplinary practices	
HR9	13
HR10	12, 13, 16, 17
SOCIETY	
Bribery and corruption	
SO2	12, 13, 16, 17
Political contributions	
SO3	12, 13, 16, 17
Competition and pricing	
SO7	12
PRODUCT RESPONSIBILITY	
Customer health and safety	
PR1	41
Products and services	
PR2	38
PR8	19

A DEDICATED REPORTING TOOL

In 2004, Alcatel set up a new reporting tool specifically designed for collecting and interpreting sustainable development indicators. This tool uses the same consolidation structure than the one used for the annual report but deals with the company's socio-economic and environmental data.

The use of this new tool allows:

1. the reinforcement and efficiency of data collection and processing, and

2. the formalization of intermediate controls.

Approximately 80 users around the world, Human Resources or site managers, enter data into the tool thanks to a user-friendly Internet interface.

Three key functions are included:

- the collection of data with consistency and variation tests,
- validation,
- consolidation and data reporting.

This tool also helps to keep track of the reporting process and to check on the progress of data-entry in real time so that alerts and reminder messages can be sent to contributors if necessary.

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. Working on an existing copper telephone line, ADSL's transmission speed is up to 150 times faster than today's analog modems.

CORPORATE GOVERNANCE

Corporate Governance is the balance of power between the management, the auditors, and the external stakeholders of a company. The concept of corporate governance was created at the end of the 1980s by the World Bank and adopted by the International Monetary Fund and the United Nations Development Agency.

DIGITAL BRIDGE INITIATIVE

In 2001, Alcatel and a variety of partners (international organizations, operators, local authorities...) launched the Digital Bridge initiative. The goal is to propose solutions that are adapted to local needs, and that combine technology, services and financing.

ECMA (EUROPEAN COMPUTER MANUFACTURERS ASSOCIATION)

An international association dedicated to information and communication systems standardization.

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.

GLOBAL COMPACT

www.unglobalcompact.org

Kofi Annan, Secretary General of the United Nations, launched the Global Compact at the 2000 World Economic Forum in Davos (Switzerland). The Global Compact challenges companies to be more socially responsible. Members include corporations and professional organizations.

GPRS (GENERAL PACKET RADIO SERVICE)

A packet-based mobile telephony norm that promises data rates up to 114 kbit/s and continuous connection to the Internet for mobile phone and computer users. GPRS is based on GSM and will complement existing services such as circuit-switched cellular phone connections and the Short Message Service (SMS).

GSM (GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS)

GSM is the world's most widely used digital mobile telephony system. It supports circuit mode mobile communication services such as SMS.

ICT (INFORMATION AND COMMUNICATION TECHNOLOGIES)

A general term that designates the converging Information (computer equipment, data networks, Internet) and Communication (wire-line and wireless telephony networks) Technologies and the services and applications they offer to their end-users.

ISO 14001

The ISO 14001 standard is an international standard which identifies those elements of an Environmental Management System necessary for an organization to effectively manage its impact on the environment. Compliance with this standard can be certified by an accredited third party, on a voluntary basis.

NRE LAW

This French law for "Nouvelles Régulations Economiques" (New Economic Regulations) was voted on May 15, 2001. This legislation regulates finance, competition and companies. Article 116 of the law makes it mandatory for French companies, that are quoted on the stock exchange, to provide information on an annual basis (either in the annual report or by a special sustainable development report) on the environmental and social impact of their products and activities.

PARTNERSHIP SPACE

Alcatel has created several "Partnership Spaces" in developing countries to allow Alcatel to work with local companies to help them accomplish multimedia service projects adapted to the needs of local users. The goal is to support the creation and distribution of a maximum number of value-added services derived from telecommunication infrastructures. This initiative will also contribute to the economic and social development of the countries where the centers are located by developing local skills and creating new jobs in the telecommunications sector.

VDSL (VERY HIGH SPEED DIGITAL SUBSCRIBER LINE)

VDSL transmits data in the 13 Mbit/s - 55 Mbit/s range over short distances, usually between 300 - 1500 meters, of twisted pair copper wire.

WI-FI (WIRELESS FIDELITY)

Wireless Local Area Network (WLAN) technology, can also be used to provide remote Wide Area Network (WAN) connectivity at "hot spot" locations such as airports, hotels and shops.

INDEPENDENT VERIFICATION STATEMENT

INDEPENDENT VERIFICATION STATEMENT ON SOCIAL AND ENVIRONMENTAL REPORTING PROCEDURES

At the request of Alcatel, we have reviewed the reporting procedures related to social and environmental information published in the 2004 sustainable development report, as well as qualitative assertions concerning:

- Organization and composition of the steering committee and of the Sustainable Development Correspondents network (p. 15),
- The carrying out of internal social and environmental audits aimed at verifying the implementation by the sites of the principles laid down by the company (p. 14),
- The drawing up of the Sustainable Development Purchasing Charter and the launch of an evaluation of suppliers' practices in this domain, in 2004 (p. 21).

These reporting procedures and the social and environmental information presented in this report are the responsibility of Alcatel. Our responsibility is to report on our findings, based on the work carried out, and to formulate recommendations to the departments concerned.

Nature and scope of our work

We have completed the following agreed-upon procedures:

- We reviewed the reporting procedures and conducted interviews, at corporate level, with the Human Resources Programs Director and the Environmental Director for sites,
- We conducted interviews with the Human Resources and Environment Correspondents from Alcatel Bell, in Antwerp (Belgium), Alcatel CIT, in Velizy (France) and Alcatel SEL, in Stuttgart (Germany), in order to assess the application of the procedures and the utilization of the new computer-based reporting tool. These entities represent 26% of the company's total staff,
- We carried out random tests on data reported by these sites,
- We verified supporting evidence with the Sustainable Development Director (reports of meetings, internal audit reports, questionnaires for supplier surveys), in order to validate the reality of the qualitative assertions mentioned above.

The procedures we performed are less detailed than an audit carried out for the purpose of providing a high or moderate level of assurance with respect to the data; however, they have enabled us to report the following findings.

Findings

As regards the social and environmental procedures, we have found that:

- A computer-based tool for reporting social and environmental data has been implemented in significant number of entities of the company,
- Use of this tool by the sites has allowed for improved reliability of the reporting process and the formalization of the steps required for data validation.

We would also like to draw your attention to the comments concerning reporting methods, which are presented in pages 48 and 49 of the report.

As regards the qualitative information we have reviewed, our findings are consistent with the affirmations expressed in the paragraphs concerned.

Neuilly-sur-Seine, March 11, 2005

Eric Duvaud
Ernst & Young and Associates
Environment and Sustainable Development
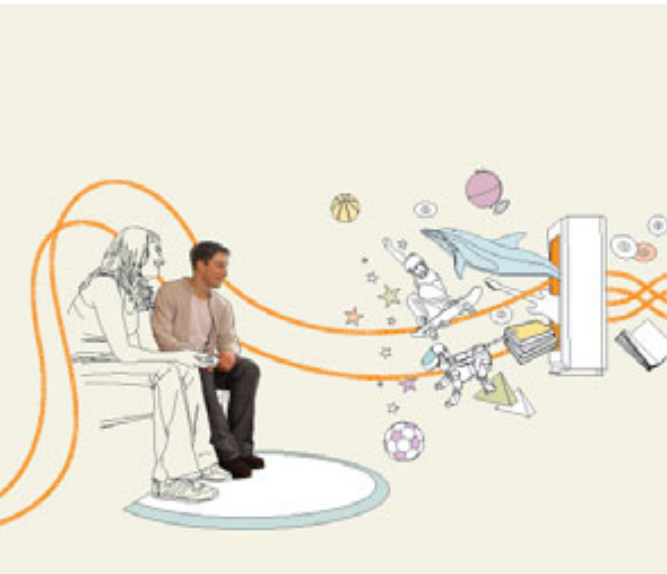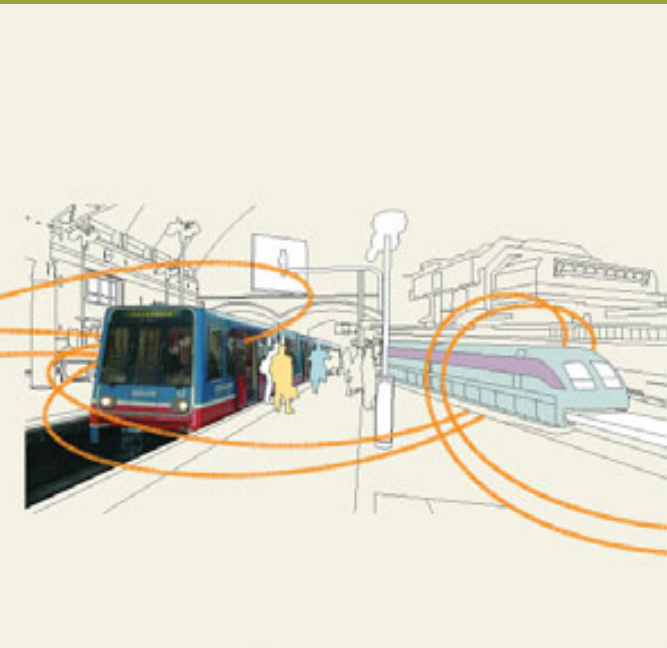
FIXED COMMUNICATIONS

▶ **ACTIVITIES**

- Design, supply, and install access and long-haul fixed communications infrastructures (telephony, data transfer, video distribution) for telecommunications operators
- Supply multimedia focused applications software
- Integrate complex solutions, including fixed/mobile network convergence
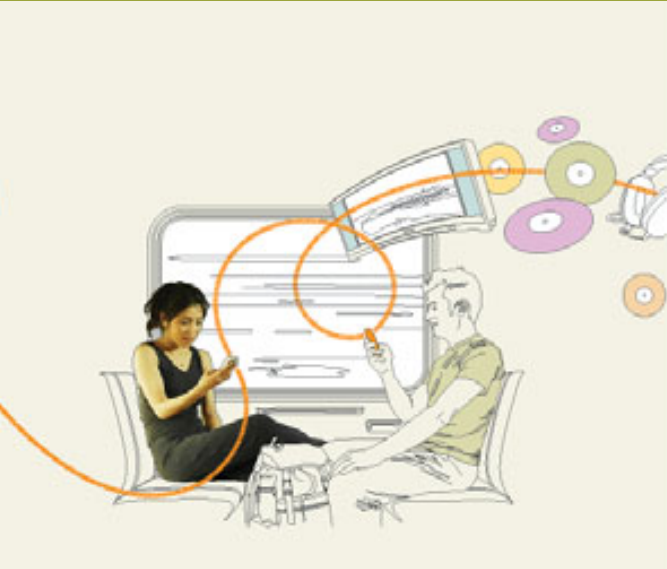
MOBILE COMMUNICATIONS

▶ **ACTIVITIES**

- Design, supply, and installation of mobile communications infrastructures (telephony, data transfer, video distribution) for telecommunications operators
- Supply multimedia focused applications software
- Integrate complex solutions, including fixed/mobile network convergence

PRIVATE COMMUNICATIONS

▶ **ACTIVITIES**

- Design, supply, and installation of fixed and mobile communications infrastructures (telephony, data transfer) for enterprises and public institutions
- Design and supply of satellite-based solutions (telephony, data transfer, television programming distribution) for enterprises and satellite operators
- Design, supply, and installation of signaling and communication networks for operators of urban and rail transportation systems
- Telecommunication solutions integration
- Outsourcing for telecommunications networks

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RESEARCH&INNOVATIONENVIRONMENTETHICSCITIZENSHIPTECHNOLOGIE
ETHICSTECHNOLOGIESTOPROMOTEDEVELOPMENTRESEARCH&INNOVATION

€ 5.1 billion in sales in 2004

SOLUTIONS

- Wireline telephone networks
- Broadband access networks over copper (DSL) and Optical fiber (FTTH)
- Optical transmission networks (terrestrial and submarine)
- IP and ATM data networks
- Multimedia services (Video on Demand, interactive television)

KEY FIGURES

- No. 1 worldwide for ADSL, 19.6 million lines shipped in 2004 [1]
- No. 1 worldwide for optical networks with 16% market share [2]
- No. 2 worldwide for ATM data networks with 24% market share [3]
- Over 360 million circuit-switched lines installed [4]

(1) (3) Source Dell'Oro, (2) Source RHK, (4) Source Alcatel

€ 3.3 billion in sales in 2004

SOLUTIONS

- Wireless telephone networks (GSM/GPRS, EDGE and 3G/UMTS/, and CDMA)
- Radio transmission networks
- Multimedia user services (messaging, video, content)
- Applications for mobile operators: value-based billing, user positioning system
- Wireless solutions (WiFi, WiMAX)

KEY FIGURES

- Over 300 clients in more than 130 countries
- 14% share for GSM infrastructure [5]
- No. 2 worldwide with 17% market share for wireless transmission networks [6]

(5) (6) Source Alcatel

€ 3.9 billion in sales in 2004

SOLUTIONS

- Voice over IP (VoIP) and voice-data convergence solutions for enterprises
- Multimedia call centers
- Satellite-based systems for telecoms, navigation, meteorology, Earth observation, and science
- Integrated signaling, communication, and management solutions for railway networks
- Network operation, maintenance, and management for operators and enterprises
- Sector-specific applications (banking, distribution, energy, administration, etc.)

KEY FIGURES

- No. 1 in Europe for enterprise IP communications systems with 23% market share [7]
- No. 1 worldwide in multimedia contact centers (Genesys) [8]
- No. 1 in Europe in telecommunications satellites [9]
- A major player in railway management (ETCS, European Train Control System) [10]

(7) Source Gartner, (8) (9) (10) Source Alcatel

SUSTAINABLE DEVELOPMENT OBJECTIVES

SOCIAL OBJECTIVES

→ Put in place systematic annual performance reviews for all Alcatel managers and professionals in 2005.

→ Maximize the use of online training (e-learning) to cover 25% of all training in 2005.

→ Reinforce international mobility and cultural diversity within management teams.

ENVIRONMENTAL OBJECTIVES

→ Continue until end of 2005, the three-year project to reduce the energy consumption of Alcatel products by 20% on average per year.

→ Provide ecodeclarations with all Alcatel products in 2005.

→ Be in a position to provide for the collection and recycling of used electric and electronic equipment in Europe by August 2005.

ECONOMIC OBJECTIVES

→ Growth of sales in 2005 (compared to 2004).

→ Double-digit growth of earnings per share pre-goodwill in 2005 (compared to 2004).

Most of the men and women shown in the photos of this report are Alcatel employees.
We sincerely thank them for their kind contribution to this document.

...OLOGIES TO PROMOTE DEVELOPMENT CITIZENSHIP ETHICS ENVIRONMENT ETHICS CITIZE...

CORPORATE COMMUNICATIONS

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