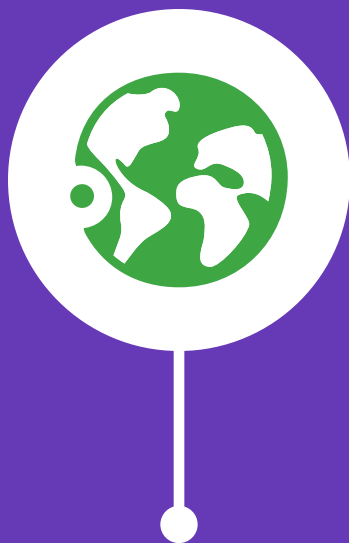


# 2012

## SUSTAINABILITY REPORT A BUSINESS IMPERATIVE



ENVIRONMENT



PEOPLE



INCLUSION



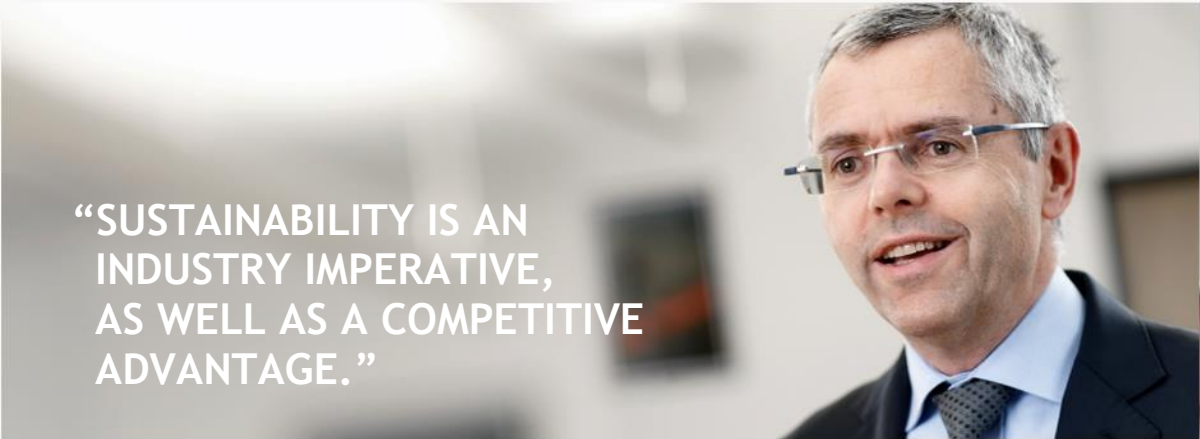
# 2012

SUSTAINABILITY REPORT  
A BUSINESS IMPERATIVE

## CEO MESSAGE

---





“SUSTAINABILITY IS AN  
INDUSTRY IMPERATIVE,  
AS WELL AS A COMPETITIVE  
ADVANTAGE.”

## CEO MESSAGE

It's with great pleasure as the new CEO of Alcatel-Lucent since April 1<sup>st</sup> 2013, that I am introducing this report on our progress in Sustainability.

We live in a connected world where citizen inclusion in the digital economy and society has never been more important or more possible. Smart devices are exploding on networks, everybody wants to be connected 24/7, and mobile communications are as dynamic in Tanzania as they are in China and in the United States.

In this world, Alcatel-Lucent wants to bring ideas, innovation, disruption. Alcatel-Lucent's Bell Labs is at the center of this revolution. The company's technology provides a best-in-class bridge to stronger citizen access to societies and economies in an ever more sustainable manner. Together with our customers, we are co-creating innovations that are fundamentally contributing to improve our way of communicating and interacting. And most important, we have done this by leveraging our global talent base and partnering with universities, prestigious R&D labs and other companies.

Our communications products and solutions provide that leading innovation integrating eco-sustainability through reduced power consumption, more energy efficient networks and efficient low carbon operations, as well as digital inclusion enabling greater coverage and accessibility to consumers. Eco-sustainability and digital inclusion are an industry and a business imperative, as well as a competitive advantage.

I would like to recognize all the teams and individuals throughout Alcatel-Lucent who helped make Sustainability a key part of the company's business activities over 2012. It is proof of the incredible talent, strength and innovation in this company.

In these key times of focus and choices, Sustainability remains for our company a leading indicator in our strategic orientations.

I am committed to maintaining the best-in-class momentum and continuing to make Sustainability an element of customer satisfaction, innovation, a core pillar of our way of efficient operations and a fundamental part of our values and transparency. [Read more](#)

**Michel Combes**  
CEO of Alcatel-Lucent

# 2012

## SUSTAINABILITY REPORT A BUSINESS IMPERATIVE

### **SUSTAINABILITY MANAGEMENT**

---

SUSTAINABILITY IS AN IMPERATIVE:  
IT IS OUR WAY OF DOING BUSINESS.

The world is evolving at a rapid pace. Because corporations have an important role to play in that changing global reality, Alcatel-Lucent considers sustainability a business imperative.



# TABLE OF CONTENTS

<b>1</b>	<b>OUR APPROACH TO SUSTAINABILITY.....</b>	<b>5</b>
1.1	The Alcatel-Lucent sustainability vision.....	5
1.2	Priorities and values .....	5
1.3	Acting on our priorities, living our values.....	6
1.4	Materiality assessment .....	8
1.5	Environment, health and safety management .....	9
1.6	Approach to marketing and communications.....	13
<b>2</b>	<b>MANAGING OUR SUSTAINABILITY .....</b>	<b>15</b>
2.1	Alcatel-Lucent Sustainability Council .....	15
2.2	Sustainability team.....	15
2.3	Sustainability network.....	16
<b>3</b>	<b>2012 HALL OF FAME.....</b>	<b>17</b>
3.1	Receiving worldwide recognition .....	17
3.2	Environment, health and safety .....	19
3.3	Good in green: Rankings and recognitions .....	20
3.4	Diverse and talented: The people of Alcatel-Lucent.....	22
3.5	Recognition around the world: regional and local sustainability .....	24
<b>4</b>	<b>OUR ENGAGEMENT WITH STAKEHOLDERS .....</b>	<b>26</b>
4.1	Dialogue and action .....	26
4.2	Customer relationships .....	30
4.3	United Nations Global Compact.....	34
4.4	World Economic Forum.....	36
4.5	Global eSustainability Initiative .....	38
4.6	Public affairs .....	40
4.7	Responsibility to shareholders .....	43



## 1 OUR APPROACH TO SUSTAINABILITY

### 1.1 The Alcatel-Lucent sustainability vision

---

Our vision is to make communications more sustainable, more affordable and more accessible as we pursue our overall business vision: *realizing the potential of a connected world*.

For Alcatel-Lucent, this means using innovation to embed the concepts of eco-sustainability and digital inclusion in our technology and throughout our business – to increase communications technology capacity, reach and affordability for our customers.

It means leveraging the talent, creativity and passion of our employees, and our Bell Labs innovations. And it also means reaching out to our key stakeholders – customers, investors, public authorities and civil society – to ensure we continuously innovate our sustainability performance by co-creating new solutions and best-in-class approaches.



**“We will continue to make sustainability a key differentiator – devoted to customer satisfaction, innovation in the communications industry, proactive stakeholder dialogue and, ultimately, employee talent and pride.”**

CHRISTINE DIAMENTE  
HEAD OF SUSTAINABILITY, CORPORATE MESSAGING AND BRAND,  
ALCATEL-LUCENT

### 1.2 Priorities and values

---

In 2012, we focused on executing around our three core sustainability priorities: extreme green innovation, our people and digital inclusion. We put our sustainability values at the core of our day-to-day business by implementing an absolute zero tolerance policy on compliance violations for employees, collaborating only with partners who support our values across the supply chain and actively engaging as citizens in the communities where we do business around the globe.

### 1.2.1 Our priorities



#### ENVIRONMENT

Lead in eco-sustainable innovation to provide energy efficient, environmentally sustainable networks and innovative solutions that meet growing bandwidth demands. Working in collaboration with the GreenTouch™ Consortium initiated by Bell Labs, we seek to make communications networks 1,000 times more energy efficient than they were in 2010.



#### OUR PEOPLE

Create a diverse and highly skilled global workforce able to meet customer demands for reliable, quality service. To this end, Alcatel-Lucent University provided 1.2 million hours of training to our employees in 2012. Our award-winning internal social networking platform, Engage, allows employees throughout the company to continuously share, collaborate and exchange best practices, leveraging each other's expertise and talents.



#### DIGITAL INCLUSION

Realize the potential of a connected world and digital inclusion by developing and deploying affordable communication solutions for citizens, and by expanding their social and economic opportunities. We will address digital inclusion through our innovative products and solutions, including our High Leverage Network™ platform, enabling global connectivity. This will change the way billions of people live and work, improving quality of life around the globe and connecting the world's talent to new opportunities.

### 1.2.2 Our values

A core element of sustainability is putting our values at the heart of our day-to-day business:

1. We take a zero tolerance stance on compliance violations and reinforce full integrity in every business action from every employee, treating each other with respect and empathy.
2. We collaborate and do business only with partners, suppliers, contractors and subcontractors who share and support our values. We commit to regularly and thoroughly assessing their performance and partnering to ensure improvement.
3. We commit to engaging with pride and passion as citizens of the communities where we do business around the globe.

### 1.3 Acting on our priorities, living our values



#### 2012 ACHIEVEMENTS

Our sustainability performance was recognized by many key stakeholders in 2012:

- Named Technology Supersector Leader on the Dow Jones Sustainability Index (DJSI)
- Named one of the top 25 performers in the United Nations Global Compact (UNGC) Caring for Climate initiative
- Met UNGC Advanced Level criteria
- Assigned A+ Transparency Level by the Global Reporting Initiative (GRI)



As a company, we have said that Corporate Responsibility and Sustainability is a business imperative. Today, we have proved that it is an integral part of our strategy and our activities going forward.

As a global team, this past year saw us demonstrate ambition, innovation and achievement in relation to our three core sustainability priorities and values – all within a very challenging business environment.

For example, in just four years we increased the energy efficiency of our entire access portfolio by more than 25%, a significant milestone but one we will continue to work on. We demonstrated our commitment to sustainable innovation through the 2012 launch of our groundbreaking 7950 XRS Router which provides more capacity, more network versatility and more accessibility while dramatically cutting energy costs for our customers. Alcatel-Lucent's researchers are also developing energy monitoring features across our access product portfolio to enable service providers to evaluate energy consumption at the network management level and ultimately green their networks. At the same time, continuing to dramatically reduce our own carbon footprint, generating important cost savings for our company. Finally, we have made tangible inroads through our leadership in the GreenTouch Consortium as it works to make telecommunications networks 1,000 times more energy efficient. These are only a few examples and do not include the numerous other achievements across the Company's activities that are referenced in this report. In essence, we have set the bar high, achieved our targets, and will continue to maintain this momentum across the business for our customers.

[Examples of the past year's achievements can be found in our 2012 Dashboard.](#)

In 2012, our sustainability performance was recognized by key global stakeholders. We were ranked Technology Supersector Leader on the DJSI. This is the second year in a row that Alcatel-Lucent leads the DJSI Communications Technology Sector. In particular, Alcatel-Lucent was recognized for its innovations in eco-sustainable communication technologies amid growing environmental challenges and resource constraints. We also achieved the Advanced Level of the UNGC, highlighting the transparency in our activities at the very highest levels.

We are carrying the momentum of last year's achievements forward into 2013, making sustainability our way of business. We are publishing 22 ongoing targets in line with the DJSI, UNGC Advanced Level and GRI A+ Level requirements. We have also published our sustainability indicators and performance as a dedicated part of our annual financial reporting in line with the French Grenelle II legal requirements and as proof of our integrated business approach.

[For more information about our sustainability social indicators](#)

[For more information about our sustainability environmental indicators](#)

[For more information about our compliance to sustainability frameworks](#)

[For more information about our stakeholder engagement, contact us by e-mail](#)

## 1.4 Materiality assessment

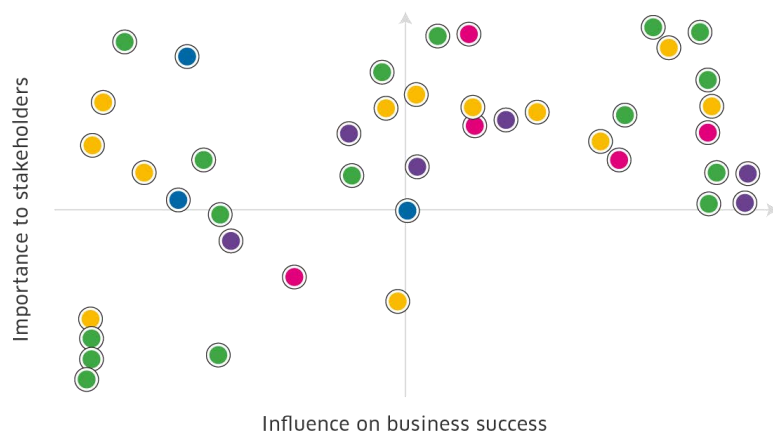


### HIGHLIGHT

### Recap of the 2011 Materiality Assessment

Our first-ever materiality assessment involved the internal analysis of 42 sustainability issues relevant to our industry, spanning areas such as customer expectations, risk management, the environment (operational and product-related), employees, ethics and governance, products, services, customers, supply chain, community and philanthropy. Each issue was considered by more than 50 Alcatel-Lucent executives and sustainability experts involved in key company functions such as finance, R&D, operations, legal, HR, compliance, sales, marketing, procurement, communication, public affairs and philanthropy. Our top customers also participated in the assessment.

Material topics, 42 topics identified



- Product innovation and environment
- Ethics & compliance
- Our people
- Digital inclusion
- Supply chain

CR REPORTING CATEGORIES	SUPPORT INNOVATION & DIFFERENTIATION	SUPPORT EXECUTION & EXCELLENCE
Product innovation & environment	Measure, support, increase energy efficiency products	Product safety to customers & communities
	Product stewardship: minimize environmental impact through lifecycle	Managing customer satisfaction
		Management of electromagnetic environment
	Co-development, R&D partnerships (universities/customers)	Our carbon footprint
Ethics & compliance business conduct	Protection of intellectual property	Anti-corruption & code of conduct
Our people	Talent development	Employee safety & well-being
	Diversity	Employee engagement
Digital inclusion	Affordable and sustainable access for digital inclusion	Social, economical & environmental impact of local operations
Supply chain	Supplier CR practices	Product traceability

To identify opportunities for progress and to improve its sustainability approach, Alcatel-Lucent carefully monitors and evaluates sustainability issues and trends. In 2012, we continued to establish action plans and performance evaluations based on the results of the company's first formal materiality assessment, which was completed in late 2011.

Through one-on-one interviews conducted with key management team members over the course of a four-month period in mid-2012, we fully reviewed the materiality assessment results, identifying specific actions related to our most material areas and embedding them into our business. We held additional meetings with customers to discuss our sustainability strategy and how that strategy translates into business performance. And we continued to have important dialogue with key external stakeholders and NGOs on our most material topics, continuously assessing our performance on issues of key materiality to our business.

In addition to those areas determined to be of greatest materiality, we continued to manage and monitor the full range of issues and expectations facing our company and industry, and worked to improve our performance and management systems over time according to the demands of our business and needs of our customers.

## 1.5 Environment, health and safety management

### 1.5.1 Our EHS Management System

Ensuring that we conduct our operations in a safe and environmentally responsible manner is essential to our commitment to sustainability. Our Environment, Health and Safety (EHS) policy provides a framework for improving EHS performances while the Environment, Health and Safety Management System (EHSMS) facilitates the use of a common management model.

[Read more](#)

The EHSMS is designed to identify risks, maintain compliance and promote EHS excellence. It provides an efficient and effective way to manage EHS issues associated with products, services and activities while cost-effectively pursuing continuous improvement in EHS performance. Our EHSMS continues to meet the needs of customers who increasingly insist on third-party certified EHS systems. Decisions regarding third-party certification are made at the local level based on risk, the nature of hazards, customer requirements and competitive advantage. We continue to drive this operations.

Employees are kept up to date on EHS news and issues via the company's collaborative social media platform (Engage), an internal EHSMS website and weekly summary emails.



#### 2012 ACHIEVEMENTS

In 2012, our system expanded as Alcatel-Lucent Shanghai Bell Managed Services obtained certification in Occupational Health and Safety Management Systems (OHSAS) 18001:2007.

In 2012, Alcatel-Lucent University delivered globally more than 12,000 training hours on EHS issues. Note: these training hours do not take into account other EHS awareness channels such as workplace 'ergonomic guidelines', EHS topics covered in mandatory Code of Conduct training, or other communication vehicles as mentioned above.

### 1.5.2 Centralizing environmental information

In 2011, we implemented a new EHS reporting tool for collecting, reporting and analyzing sustainability metrics and information. The use of this tool improves data reliability for the annual sustainability reporting. Since January 2012, contributors at Alcatel-Lucent facilities have used the tool to increase the frequency of data input for energy usage, water usage, direct greenhouse gas emissions and waste generation to align with their receiving invoices (i.e., monthly).



- 100% of facilities within our real estate portfolio were accounted for within the tool.
- Of our 654 worldwide sites, 225 were assigned responsibility for managing complete data input within the tool, while the remainder utilized operational usage rate estimation algorithms.

### 1.5.3 OHSAS 18001

The company's health and safety management systems expanded in 2012 as Alcatel-Lucent Shanghai Bell Managed Services obtained certification in Occupational Health and Safety Management Systems (OHSAS 18001:2007).



#### HIGHLIGHT

### Addressing the EHS impact of our products

We assess the environmental, health and safety impacts of 100% of our products for all stages of their product lifecycles.

For example, during the design phase, we work with suppliers to avoid the use of hazardous materials. We ensure that all materials are prepared for transportation according to nationally or internationally accepted regulations. Our technical documentation provides specific guidance for the safe use of the product, and mandatory training or instruction for Alcatel-Lucent Services personnel covers a range of topics to ensure a safe workplace.

All Alcatel-Lucent products that emit radio frequency (RF) energy must comply with country-specific regulations on human exposure to RF emissions during manufacturing and product-use phases. Compliance is determined by either analytical assessment or measurement of radiated RF energy.

Our company requirement dictates that all electronic waste is shipped to processing facilities that have passed our EHS Liability Assessment. These processing facilities are subject to periodic onsite audits and must pass a rigorous due diligence review before inclusion into the Alcatel-Lucent approved list.

### 1.5.4 EHS Compliance Audit Program

This program determines if the EHS programs at our facilities are properly implemented and effective, and assures management that the organization is operating in a manner consistent with EHS policy. Facilities are evaluated against a number of criteria including Alcatel-Lucent standards, international norms, and country-specific federal and local regulations. Each facility's EHS program is also measured against the established key performance indicator (KPI) metric of on-time completion of items identified during the audits.

In 2012, service delivery/installation operations were audited in the United States, Germany and Brazil as was a manufacturing facility in São Paulo, Brazil. All sites reviewed completed 100% of their action items on time.

[Read more](#)

In 2012, Alcatel-Lucent did not identify any instance in which the company did not comply with environmental laws or regulations regarding the provision and use of its products and services. As such, no fines (significant or otherwise) were levied against the company for violations of environmental laws or regulations.

### 1.5.5 Customer-based EHS activities

We, as well as our customers, suppliers and subcontracted suppliers, operate in an industry where inherent safety risks are associated with the installation and operation of telecommunications networks. As such, it is critical that we all work together to ensure the safety of all involved in completing the projects. There must be zero tolerance for non-compliance with safety rules by all those working on the projects. EHS excellence is seen as a fundamental requirement and a vision shared by all who partner with us.

Sharing best practices, conducting incident root-cause investigations and communicating lessons learned are examples of how we work together to ensure proper management of health and safety.

Our EHS activities in 2012 included:

- **Holding a virtual seminar with Alcatel-Lucent EHS professionals and senior EHS leaders from our top European customers.** Arranged by Robert Nolan, Global EHS Office Director for Alcatel-Lucent EMEA, this seminar centered on key health and safety performance indicators and reinforced our commitment to ensuring everyone involved in our projects goes home safely at the end of the working day. All attendees were encouraged to participate in an open Q&A session at the end of each presentation. Involving our customers in this type of format allows Alcatel-Lucent EHS professionals to tap into the wider experience and abilities of knowledgeable EHS resources, and to validate alignment with common norms. As a result, the members of our internal EHS community are now able to offer health and safety leadership to our downstream suppliers and contractors.
- **Hosting the U.S. Environmental Health & Safety Communications Panel (EHSCP) Conference in September.** The EHSCP is a consortium of communications EHS professionals dedicated to promoting employee safety and health as well as environmental responsibility throughout the communications industry. It strives to provide constructive input on the development and implementation of EHS standards and guidelines that affect the varied businesses within the communications industry. EHSCP member companies include Alcatel-Lucent, AT&T, CenturyLink, Ericsson, Cincinnati Bell, Crown Castle, Sprint Nextel, T-Mobile, Verizon and Windstream Communications. Bryan K. Stolte, Global EHS Office Director for Alcatel-Lucent USA, was the keynote speaker. His address, 'A Look Inside Alcatel-Lucent: Transforming Communications for a Sustainable Planet', presented our commitment to eco-sustainability and the impact the ICT industry can have on green technologies now and in the future.
- **Presenting at the Hong Kong Electric seminar on contractor EHS behavior in November.** At this event, an overview of the company's EHS and sustainability activities was delivered by Carlin Chan, Customer Delivery Leader for Alcatel-Lucent in Hong Kong. Senior officials from the Hong Kong Labor Department and the Hong Kong Occupational Safety & Health Agency, as well as safety professionals within Hong Kong Electric, attended the seminar.
- **Launching an initiative to improve our EHS audit scores from Brazilian customer Oi (formerly Brasil Telecom).** With a minimum score of 80% required to be retained by Oi, Alcatel-Lucent Safety Technician Jose Cassio Fonseca and 11 others supporting the Operation & Maintenance contract for Oi worked diligently to improve the company's rating. The current EHS assessments are now above 90% – and in many cases our 'state-level' operations have received a score of 100%.

### 1.5.6 Environmental risks

#### RISKS RELATED TO CLIMATE CHANGE

Any company with global operations faces the potential of extreme weather-related risks resulting from climate change. These risks could affect our value chain by causing material disruptions to our businesses. Fortunately, the diversity of our physical locations and our active business continuity planning give us the flexibility to respond to these risks while creating resilience within our processes.

Our customers are also exposed to weather-related risk: many types of telecommunications equipment (such as base stations, IP switches and optical communications equipment) are installed in locations where extreme weather events take place. In response, many of our products are designed to be operated outdoors and to withstand extreme conditions. Additionally, we develop and customize product specifications to meet the individual needs of our customers, giving consideration to their local climates.

We have established procedures for our installation and engineering workforces to ensure their safety as they perform their duties in the field, and factor conditions encountered due to climate change. These procedures are reviewed periodically and adjusted as needed.

For our supply chain, Alcatel-Lucent's Risk Management function surveys environmental risks and addresses them with physical prevention/protection measures where possible. These risks are also financially mitigated in part by insurance vehicles, when such vehicles are economically accessible and market capacity is available. At this juncture, Risk Management has not identified any additional impact on exposure to storms and floods resulting specifically from climate change.

#### CONTINGENCY PLANNING AND ADAPTATION TO ENVIRONMENTAL RISKS

In 2012, 80 real estate business continuity plans (BCPs) were in place to address environmental and other risks in terms of the potential loss of critical functions. The BCPs target locations with more than 500 employees (or with more than 200 employees in areas with elevated risks, such as proneness to earthquakes or political volatility). BCPs cover all critical real estate functions identified for a given location, allowing us to respond to diverse threats and systems that become material. Some plans – such as centrally managed plans within the corporate crisis management process and local emergency response plans – respond to particular hazards such as earthquakes and pandemics.

[For more information](#)

#### PROVISIONS AND GUARANTEES FOR ENVIRONMENTAL RISKS

It is our policy to comply with environmental requirements and to provide safe, environmentally sound workplaces that will not adversely affect the health or environment of communities in which we operate. Although we believe we are in material compliance with all environmental and health and safety laws and regulations, and that we have obtained all material environmental permits required for our operations and all material environmental authorizations required for our products, we may have to incur expenditures significantly in excess of our expectations to cover environmental liabilities, maintain compliance with current or future environmental and health and safety laws and regulations, or undertake any necessary remediation.

The future impact of environmental matters, including potential liabilities, changes in carbon and environmental reporting requirements and the pricing of carbon emissions, is often difficult to estimate. We have modeled the potential pricing of carbon on our financial statements. Although it is not possible at this stage to predict the outcome of remedial and investigatory activities with any degree of certainty, we believe the ultimate financial impact of these activities – net of applicable reserves – will not have a material adverse effect on our consolidated financial position or our income (loss) from operating activities.



As of December 31, 2012, our remaining outstanding balance related to our main provisions for environmental risks was €61.9 million.

## 1.6 Approach to marketing and communications

---

Alcatel-Lucent has put in place a number of measures to ensure its marketing communications and advertising activities remain truthful, legally compliant, and socially and environmentally responsible. Our marketing communications are regulated by national and international laws, and are subject to voluntary codes and standards applied across the organization – including our own Code of Conduct. Alcatel-Lucent reviews these regulations, standards and codes on at least an annual basis.

[For more information](#)

### 1.6.1 Communications integrity

The Company's corporate style guides forbid exaggeration, implicit guarantees and financial promises in all marketing communications and advertising. Bell Labs, the CTO and Marketing teams conduct detailed research and analysis to substantiate the facts provided in our marketing content.

Our style guides (the *Alcatel-Lucent Corporate Style Guide* and the *Marketing Communications Web Writing Style Guide*) also forbid disparaging mentions of competitors, and emphasize the importance of gender- and culturally neutral language – all part of the Company's commitment to encouraging the highest levels of employee development and conduct. Other activities include participation in the Corporate Leadership Council (a global organization that advises on management best practices), mandatory anti-corruption training and local programs for socio-economic development.

Our style guides describe and mandate the proper use of intellectual property, proprietary and non-proprietary information, trade secrets and trademarks. Advisors from the Company's Law and Compliance organizations are available to answer any employee questions about potential legal issues in our marketing activities.

Customer satisfaction and brand awareness surveys are conducted regularly to ensure marketing strategies and campaigns align with customer expectations and market perceptions. We also ensure marketing campaigns conform to local regulations and customs. Furthermore, guidelines and feedback from the DJSI are incorporated into our marketing programs to ensure continuous improvement based on independent best practice.

[For more information](#)

### 1.6.2 Responsible openness

Social media and digital marketing are increasingly important ways of keeping people informed of our business activities and results. They also help us stay attuned to the needs of our various constituencies. As part of our communications strategy, we seek to foster more dialogue with internal and external stakeholders through social media channels and improve the visibility of our company activities. We do this by taking advantage of the full range of social media – from employee tweets to YouTube videos to blog posts from our leaders, experts and Bell Labs researchers. Employee participation in social media is encouraged both internally and externally, with corporate guidelines provided for responsible employee involvement as well as best-practices documents, training and awareness sessions. Exposure to diverse opinions is cultivated at all times.

### 1.6.3 Environmental efforts related to communications

We continue to dramatically reduce our use of physical media, now sharing the vast majority of our marketing collateral, user guides, magazines and newsletters in electronic format only. Hard-copy user guides have been completely eliminated for our 2011 and 2012 Enterprise phone products. And for the sixth consecutive year, this sustainability report is available solely online. (In 2011, our Annual Report was produced solely online for the first time as well.) In 2012, our *Enriching Communications* and *TechZine* e-zines played important roles in our online customer engagement strategy.

To cut back on travel-related GHG emissions, we continue to communicate the value of our video and teleconferencing capabilities to all employees for team sessions, meetings and sales conferences.

[For more information](#)



#### HIGHLIGHT

#### Gathering virtually

Our 2012 EMEA sales conference was entirely virtual, with 1,560 employees logging into the site created for the session – amounting to almost 50,000 page views, 3,000 video views and 7,000 file downloads. We also launched our flagship Alcatel-Lucent 7950 Extensible Routing System at the Technology Symposium – an Alcatel-Lucent event held in California – where we reached out online to analysts, press and media.

In keeping with our commitment to online marketing communications, we address questions or concerns regarding our products through contacts provided on the company website and in product support and documentation.

[Read more](#)

### 1.6.4 Data protection, privacy and retention

Because we comply with the EU Privacy Directives – currently the most stringent in the world – our marketing communications activities meet all existing data privacy and data protection laws. The EU Privacy Directives are fully reflected in our Global Privacy & Data Protection Policy and its nine principles, and in our Global Privacy and Data Protection Web Site Policy Statement.

Our approach to marketing communications ensures that all collateral – white papers, brochures, data sheets and web pages – conforms to our Information and Record Management's Retention Schedule, which governs the secure storage and quick retrieval of relevant documents for legal, regulatory or operational reasons.

### 1.6.5 Channel and partner marketing communications

Our commitment to integrity in communications also extends to our channels and partners. Channels and partners must comply with the Alcatel-Lucent Statement of Business Principles.



## 2 MANAGING OUR SUSTAINABILITY

Three main bodies are responsible for managing sustainability at Alcatel-Lucent: the Sustainability Council, the Sustainability Team and the Sustainability Network.

### 2.1 Alcatel-Lucent Sustainability Council

The Sustainability Council is the highest-level sustainability governance body within Alcatel-Lucent. Chaired by the CEO and the head of Sustainability, its members in 2012 included executives from the Management Committee as well as two external advisors. The Council meets quarterly to set priorities, track progress on commitments and review sustainability strategy issues. It also provides perspective on potential risks and opportunities, and makes recommendations to the Management Committee and Board of Directors on emerging and critical sustainability issues for the Company at large where appropriate.



#### HIGHLIGHT

#### Alcatel-Lucent Sustainability Council

Council membership includes:

- Chief Executive Officer
- Head of Sustainability
- Executive Vice President of Human Resources & Transformation
- President of Bell Labs & Chief Strategy Officer
- President of EMEA & Chief Marketing and Communications Officer
- Executive Vice President of Public Affairs
- President of Operations
- Vice President of Communications
- Chief Compliance Officer
- Head of Corporate Finance & Investment Office
- Chair of the Alcatel-Lucent Foundation

Two external advisors:

- Eric Olson\*
- Claude Fussler

\* As of early 2013, Eric Olson is the sole advisor to the Council.

### 2.2 Sustainability team

Alcatel-Lucent's Sustainability Team sets the agenda for the entire company. This team defines and drives the implementation of our sustainability strategy and initiatives worldwide, consolidating all the social, economic and environmental indicators used to monitor progress.

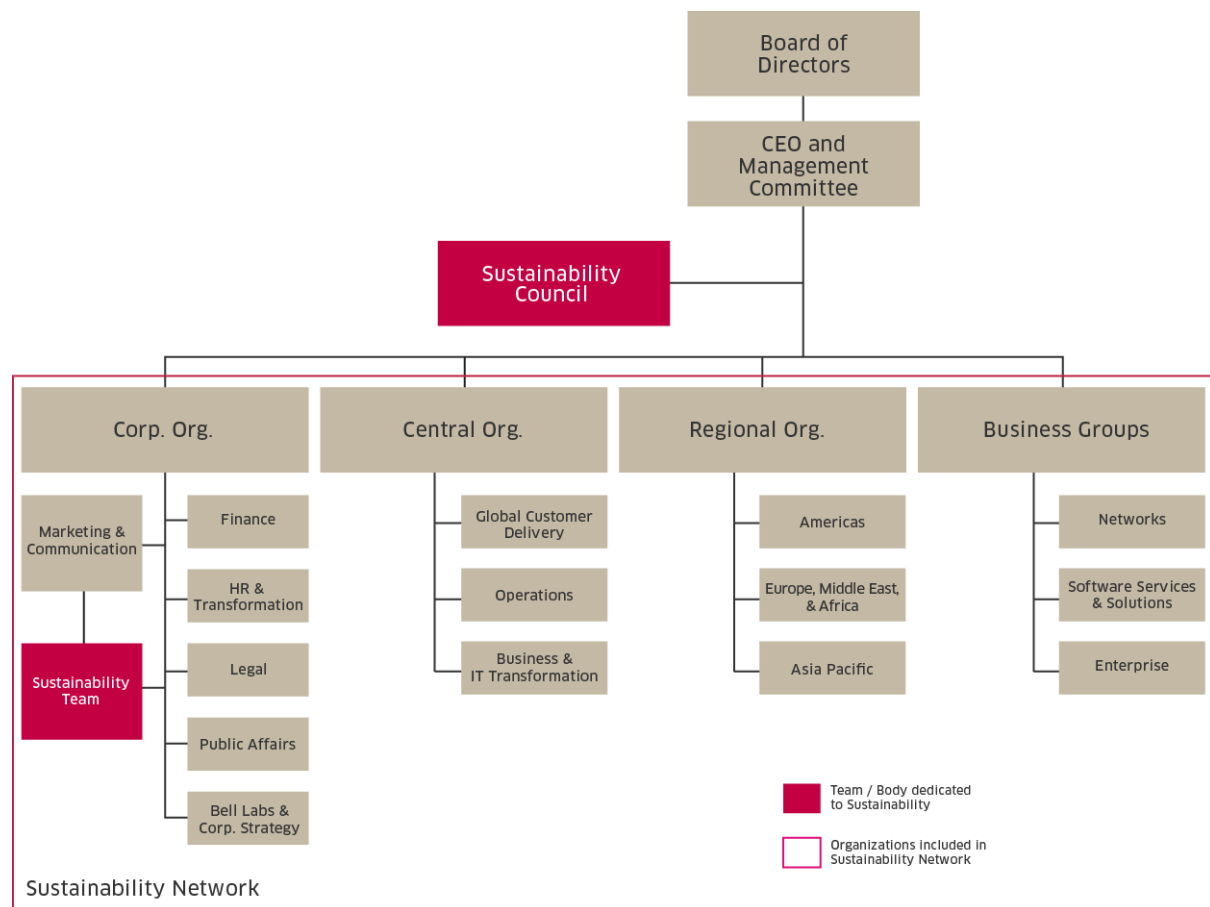
## 2.3 Sustainability network

This network handles sustainability operations throughout the company. Members come from the various business groups, Bell Labs and departments such as Human Resources, the Office of Business Conduct, Governance, Purchasing, Risk & Crisis Management, Environment, Health & Safety, Operational Eco-efficiency & Sustainability, CTO Green Strategy and Eco-environmental Engineering.

Sustainability Network members are responsible for:

- Helping define, manage and implement action plans in their respective domains of expertise
- Ensuring messages and actions align with the company's overall business strategy, current global challenges and customer business imperatives
- Serving as ambassadors of Alcatel-Lucent's Sustainability strategy internally and externally

### Sustainability within Alcatel-Lucent as per 2012 organization



## 3 2012 HALL OF FAME

Alcatel-Lucent received numerous awards and distinctions in 2012 relating to its performance in sustainability and innovation. Many individual employees were also singled out for their contributions, reflecting the high level of talent throughout the company. We have shared a selection of some of the most outstanding awards.

### 3.1 Receiving worldwide recognition

#### 3.1.1 Becoming a Supersector Leader in the Dow Jones Sustainability Index (DJSI)

In 2012, Alcatel-Lucent was named Technology Supersector Leader in the DJSI, receiving a score of 87/100 from the DJSI's rating agency, RobecoSAM (formerly SAM, Sustainable Asset Management).

The Technology Supersector includes all assessed companies in the following sectors: communications technology, semiconductors, software, computer hardware and electronic office equipment, and computer services and Internet. This follows our being named Communications Technology Sector Leader in 2011 with a score of 86/100.

The DJSI evaluates sustainability performance in three areas – economic, social and environmental – providing asset managers with objective benchmarks to assess companies and manage their sustainability portfolios.

In addition to financial performance, inclusion in the index points to the strides Alcatel-Lucent has made in environmental performance, corporate governance, risk assessment, responsible supply chain activities, community support and human resource management.



DJSI GLOBAL SCORE: 87/100

92/100 – ECONOMIC

92/100 – ENVIRONMENT

77/100 – SOCIAL

[Read more](#)

[Read the SAM  
Supersector  
Leader report](#)

### 3.1.2 Making the RobecoSAM 2013 Sustainability Yearbook

Alcatel-Lucent was also selected for inclusion in RobecoSAM's 2013 Sustainability Yearbook, a listing of the top-scoring 15% of the world's largest 2,000 companies across 58 different sectors.

In the 2013 edition, Alcatel-Lucent received two top distinctions: Gold Class and Sector Leader. Only 67 companies were named to the 2013 Gold Class – putting Alcatel-Lucent among the top 2.5% of all companies assessed.

These distinctions recognize the consistent progress Alcatel-Lucent has made to implement a thorough and robust sustainability approach aligned with its business priorities.



[Read more](#)

[Read the RobecoSAM Sustainability Yearbook](#)



“We are excited about the publication of the 10th-year anniversary edition of the Sustainability Yearbook. The analysis focuses on industry-specific factors that we believe are important to long-term value creation and is based on up to 120 financially material economic, environmental, social and governance criteria. I would like to congratulate Alcatel-Lucent as well as the other sustainability leaders.”

EDOARDO GAI, HEAD OF SUSTAINABILITY SERVICES, ROBECOSAM

### 3.1.3 One of the world's 100 most sustainable companies

When Corporate Knights revealed its 2013 Global 100 list of the world's most sustainable companies at the World Economic Forum in Davos, Switzerland, Alcatel-Lucent was ranked 28th overall – and second among the seven technology, hardware and equipment companies named to the list.

The Global 100 consists of the world's top-performing companies according to a range of sector-specific metrics including sustainability disclosure practices; safety performance; leadership diversity; and water, waste, energy and carbon productivity. Corporate Knights uses these rankings to explore sustainable investment strategies with investors.

[Read more](#)

### 3.1.4 Receiving top marks from Vigeo

Vigeo assesses companies according to their practices and performance on a range of environmental, social and governance issues – for example, human resources development, respect for human rights in the workplace, environmental protection, business ethics, transparency and corporate governance, and economic and social development in the areas in which they operate.

In November 2012, Alcatel-Lucent was recognized among the top performers in three Vigeo indexes:

- Ranked 35 in the Vigeo World 120
- Ranked 32 in the Vigeo Europe 120
- Ranked 8 in the Vigeo France 20



[Read more](#)

## 3.2 Environment, health and safety

Alcatel-Lucent earned a variety of certifications and awards in China last year for its health and safety-related performance. Alcatel-Lucent Shanghai Bell successfully completed the second surveillance audit for OHSAS 18001 and the recertification of the ISO 14001 Environmental Management System (EMS) process, again passed the annual clean production assessment of the Shanghai Municipal Clean Production Office, and was honored with a third consecutive Trusted Green Enterprise for Environmental Protection award.

Customer Hong Kong Electric continued its EHS partnership with Alcatel-Lucent by recognizing our long-term commitment to EHS by presenting Margaret Lee, Alcatel-Lucent Managing Director for China, with the Good Environment, Health and Safety Performance Award in May 2012. The award acknowledges the efforts of employees and contractors based on EHS meeting attendance rate, safety performance and HEC safety audits.



The inauguration ceremony of the 2012 Environmental, Health & Safety Behavior Enhancement at Work Campaign.

Alcatel-Lucent Qingdao successfully passed the third-party onsite management system certification audit of China Work Safety Standard for Enterprise (WSSE). The facility received an impressive score of 96.9 from WSSE.

For its performance in occupational health and safety management from the years 2010 and 2011, Alcatel-Lucent Colombia received the Silver - Class of Risk III distinction from ARL Bolívar at an award ceremony held on May 31, 2012 in Bogota, Colombia. Delivered annually since 2001, this award recognizes the commitment companies make to provide a better quality of life for workers, promote health, and prevent accidents and occupational diseases.



Luz Miryam Soriano of Alcatel-Lucent and Liliana Camejo, General Manager of ARL Bolívar

"This achievement, recognized publicly by the workers compensation company, fills us with pride and stimulates our commitment to maintain a safety culture as basic principle of the operation. Employees are our most important assets – and we must work hard to continue reducing injuries in the workplace."

LUZ MIRYAM SORIANO, EHS PROFESSIONAL, ALCATEL-LUCENT COLOMBIA

### 3.3 Good in green: Rankings and recognitions

---

#### 3.3.1 Our global standing

Alcatel-Lucent's green performance was assessed and acknowledged by a number of authoritative bodies in 2012, including the Environmental Investment Organisation (EIO), Greenpeace and the Massachusetts Institute of Technology (MIT). Specifically:

- The EIO ranked Alcatel-Lucent fourth worldwide and first in the technology sector on its ET Global 800 listing. This ranking is based on the company's comprehensiveness, transparency and verification of emissions both in its annual sustainability report and through the Carbon Disclosure Project.



[Read more](#)

- Following the second invitation in 2012 to participate in Greenpeace's CoolIT Leaderboard, we contributed examples of our green products and services, shared our efforts to reduce our emissions and impact, and helped position ICT's potential to reduce greenhouse gas (GHG) emissions. Alcatel-Lucent was ranked among the top ten performers.

[Read more](#)

- Alcatel-Lucent's groundbreaking lightRadio™ wireless networking technology earned the company a spot on the 2012 TR50, a list of the world's most innovative technology companies published by MIT's Technology Review magazine. In particular, this ranking recognizes lightRadio's ability to reduce the energy consumption of mobile networks by up to 50% over current radio access network equipment. Since its launch, lightRadio has received more than 20 awards. Those given in 2012 include:

#### NOVEMBER 2012

Telecoms LTE North America Awards - Best RAN Product

#### OCTOBER 2012

Telecoms World Award Middle East - Best Network Infrastructure Vendor

Broadband InfoVision Awards - Best Broadband Access in Wireless

#### JUNE 2012

Global Telecoms Innovation Awards - Heterogeneous Network Innovation GTB Award (with Telefónica)

Small Cell Forum - First Live, Small Cell LTE HetNet on a Commercial Network

#### MAY 2012

CTIA Emerging Technology Awards - Best Wireless Infrastructure Innovation

LTE World Summit/Telecom.com Award

#### MARCH 2012

GSMA Global Mobile Award - Best Infrastructure Technology Award



#### HIGHLIGHT



Alcatel-Lucent lightRadio wins the GSMA Best Infrastructure Technology Award at Mobile World Congress 2012.



### 3.3.2 Green awards in 2012

A number of key industry partners recognized Alcatel-Lucent last year for its commitment to eco-sustainability.

#### ALCATEL-LUCENT AND THE UNIVERSITY OF MELBOURNE

Alcatel-Lucent and the University of Melbourne were honored with two awards:

- Business/Higher Education Round Table (B-HERT) Award for Outstanding Achievement in Collaboration in R&D
- Communications Alliance ACOMM Environmental Responsibility Award

Both awards recognize the unique and productive research partnership between Alcatel-Lucent and the University of Melbourne underway at the Centre for Energy Efficient Telecommunications (CEET), which aims to tackle the major challenges around Internet energy efficiency.

[Read more](#)

#### ANTWERP ENVIRONMENTAL CHARTER AWARD

For the second year in a row, Alcatel-Lucent received the Antwerp Environmental Charter Award in recognition of our efforts to develop a specific action plan to make our day-to-day operations more sustainable.

#### FUTURE INTERNET AWARD

The European Commission's Directorate General for Communications Networks, Content and Technology (DG Connect) honored the EARTH consortium – of which Alcatel-Lucent is a member – with the 2012 Future Internet Award for optimizing the energy use of 4G/LTE base stations, which account for the largest share of energy consumption in mobile networks.

[Read more](#)

### 3.3.3 Promoting green IT with the United Nations Global Compact Network

We were identified as one of the top 25 performers in the UN Global Compact's *Caring for Climate Progress Report 2012* for achieving among the greatest percentage of absolute emissions reductions during the 2009 to 2010 reporting period. We also signed a joint commitment to environmental transparency and disclosure with other members of the Caring for Climate initiative during the Rio+20 Corporate Sustainability Forum in June 2012.

## 3.4 Diverse and talented: The people of Alcatel-Lucent

---

### 3.4.1 Standing with the LGBT community

For the fourth year in a row, Alcatel-Lucent was named to the Human Rights Campaign Foundation's Corporate Equality Index, which rates businesses on their treatment of lesbian, gay, bisexual and transgender (LGBT) employees, consumers and investors. Alcatel-Lucent was one of 252 businesses to achieve a perfect score for its commitment to protect individuals from employment discrimination based on sexual orientation and gender identity/expression. In France, Alcatel-Lucent and eight other large companies and organizations signed an LGBT charter on January 7, 2013, with the presence of two French ministers.

[Read more](#)

### 3.4.2 A top destination for minorities

Alcatel-Lucent was ranked among Minority Engineer's 2013 Top 50 Employers – the first time the company has been named to this list. Each year, the readers of Minority Engineer magazine are asked to select the employers for which they would most like to work or believe would provide a positive work environment for minorities.



### 3.4.3 Recognition of our employees

In addition to the company as a whole being celebrated for sustainability achievements last year, several individuals within Alcatel-Lucent were also singled out for their accomplishments.

- 
- Gerhard Kramer and Carl Nuzman of Bell Labs received the Edison Patent Award at the end of 2012 for their recent patent in VDSL2 vectoring.

[Read more](#)

- 
- Gabrielle Gauthey, Alcatel-Lucent Vice President of Public Affairs, was named a Prominent Personality of the Digital World at Digital ACSEL 2012 in Paris. ACSEL (the French Association of the Digital Economy) honors people and initiatives that demonstrate the wealth, variety and dynamism of the digital economy, and that place digital technology at the heart of the economy and society.



Gabrielle Gauthey at Digital ACSEL, pictured with (left) Stephane Elkon (GITEP) and Marc Charrière (Public Affairs for Alcatel-Lucent France).

- 
- Allison Cerra, Vice President of Marketing, Communications & Public Affairs (Americas), was named to the Dallas Business Journal 40 Under 40 list for 2012 — a selection of people under the age of 40 who have achieved exceptional results in their careers while making the Dallas community a better place to live and do business. It was the second time Cerra received such recognition in the past year: she was also named to the Global Telecom Business 40 Under 40 list.



- 
- Joining Cerra on the Global Telecom Business 40 Under 40 list was Christel Heydemann, Alcatel-Lucent Vice President of Human Resources and Transformation. In 2012, Heydemann was also appointed to the World Economic Forum (WEF) Young Global Leaders, a community of more than 700 young professionals dedicated to improving the state of the world.



[Read more](#)

[Read Christel's blog](#)

- 
- Hala Gohar, Customer Marketing Director (Middle East, Turkey and Africa), was named one of top 30 female executives in the Middle East and Africa region by CommsMEA, a monthly magazine published in the United Arab Emirates.

[Read more](#)



## 3.5 Recognition around the world: regional and local sustainability

---

### 3.5.1 North America

Alcatel-Lucent received several awards in recognition of its excellence in supplier diversity in 2012, including being listed for the fifth year in a row as one of America's Top Corporations for Women's Business Enterprises by the Women's Business Enterprise National Council.

[For more information](#)

### 3.5.2 Asia

Alcatel-Lucent won Telecom Asia's 2012 Broadband Innovation of the Year Award for its VDSL2 vectoring technology, an innovation that cost-effectively extends affordable, mass-market broadband – helping connect people to the digital economy and making services such as banking, healthcare and mobile learning more easily accessible.

### 3.5.3 China

For the second consecutive year, Alcatel-Lucent placed in the top 10 of *Southern Weekly's* World 500 Companies China Contribution Ranking, a list that reflects the economic responsibility, environmental protection, employee health and safety, philanthropy and stakeholder communications of companies operating in China. In 2012, Alcatel-Lucent ranked third overall – and was the only telecom company to place in the top 10.

[Read more](#)

Alcatel-Lucent Shanghai Bell (our flagship company in China) received several other awards for sustainability in 2012, including:

- Best Volunteer Participant by Junior Achievement (JA) China for the number of volunteers and volunteering hours devoted to JA activities, and the depth and breadth of volunteer activities promoted within the company
- Outstanding Contribution Award at the Shanghai Science and Technology Innovation Conference for contributing R&D and industrialization to enhance 3G mobile communications technology in China

In addition, Alcatel-Lucent Shanghai Bell received the Poverty Alleviation Award from the China Foundation for Poverty Alleviation for supporting a project to finance 150 high school students from less-developed areas of western Sichuan province – giving them the chance to compete with urban peers for the opportunity to study in colleges or universities.

Alcatel-Lucent Shanghai Bell employees will also volunteer for activities such as one-on-one coaching and summer camps to help the selected students. This project officially kicked off at Wenchuan High School in December 2012, with 10 Alcatel-Lucent Shanghai Bell volunteers attending the launch ceremony.

Other awards won in China include:

- Shanghai Municipal Government - Five Star Eco-Sustainable Enterprise Award
- China Charity Festival Organization - China Charity Award
- China Electronics Industrial Association - First Prize in QC Activity of China ITC
- China Information Port Forum - Gold Prize in Innovation in Telecom Technology

### 3.5.4 France

In January 2011, Alcatel-Lucent established a three-year budget to promote gender equality and adjust the salary gap between women and men, implemented a training program to fight gender stereotypes, and proposed a new skills-based professional development model. For these initiatives, we received the Association Française de Normalisation (AFNOR) Label for Professional Equality from Roselyne Bachelot-Narquin, French Minister of Solidarity and Social Cohesion, in February 2012.

Professional equality at Alcatel-Lucent was also recognized by APEC, an organization focused on employee and executive deployment. In 2012, Alcatel-Lucent Orvault earned the APEC Gold Trophy for Gender Equality thanks to its College@work initiative. Launched as a pilot in 2010 – and since deployed across all Alcatel-Lucent sites in France – College@work aims to encourage disadvantaged youth (in particular, women) to consider careers in engineering.

### 3.5.5 Egypt

Alcatel-Lucent Egypt conducts two blood donation campaigns each year. Its contributions were recognized by the World Health Organization (WHO) during an event celebrating World Blood Donor Day on June 11, 2012 at the WHO regional office in Cairo.



Alcatel-Lucent was recognized by the WHO during a World Blood Donor Day event in Cairo, Egypt.

### 3.5.6 Mexico

For the third year in a row, Alcatel-Lucent Mexico was named a Socially Responsible Company (ESR) by the Mexican Center for Philanthropy (CEMEFI). The rigorous evaluation process for ESR certification considers companies' community connections, business ethics, quality of life, and care and preservation of the environment.



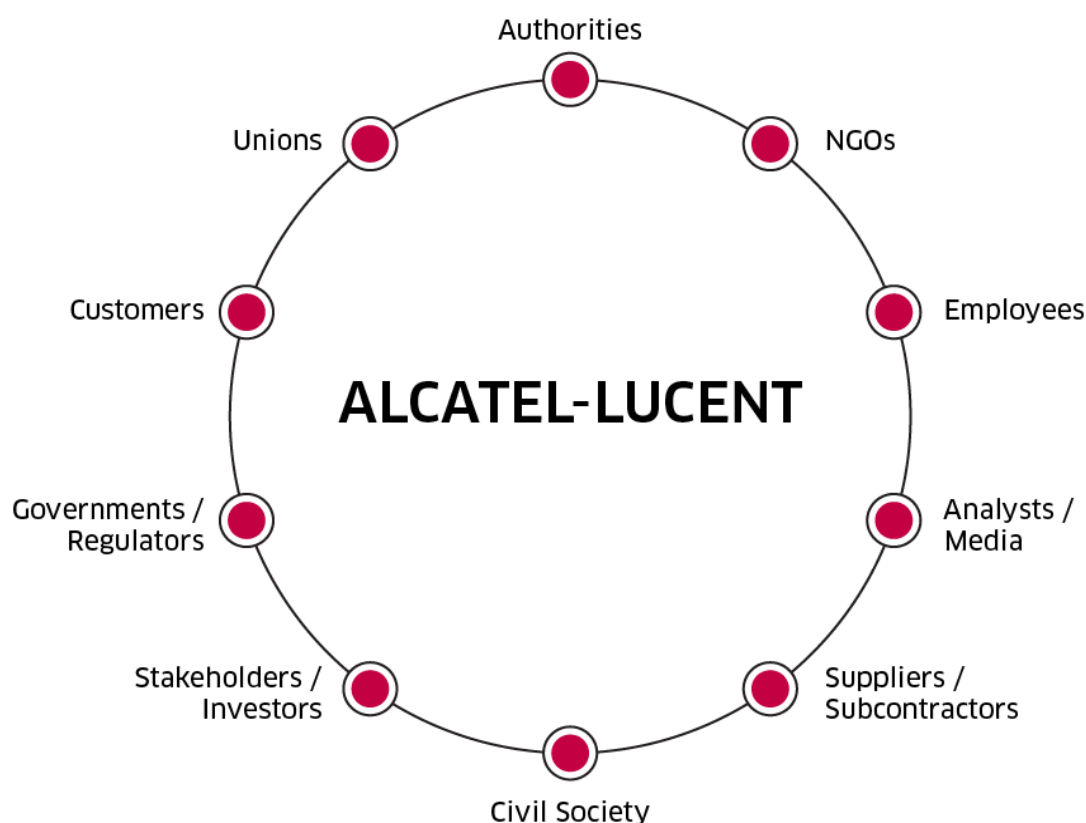
[Read more](#)

## 4 OUR ENGAGEMENT WITH STAKEHOLDERS

### 4.1 Dialogue and action

---

Stakeholder dialogue is key to our sustainability approach and is fully in line with our business strategy and vision of *realizing the potential of a connected world*. We engage in proactive dialogue through various means and tools and with a broad range of stakeholders including employees, customers, partners, investors, public authorities as well as our unions and civil society. For each group, a clear objective has been set in line with our business strategy, with clear outcomes and transparent processes.



In every interaction with stakeholders – public sector, private sector, academic and civil – we examine the costs, opportunities and risks involved, and have developed a common understanding of the issues relevant to the underlying problems as well as mutual agreements on the types of engagement best suited to our priorities. The outcomes of these engagements are completely transparent, premised on open dialogue and meaningful action. We always apply relevant stakeholder governance structures and ethics and compliance policies.

## 2012 ENGAGEMENT HIGHLIGHTS

### HIGHLIGHTS AND KEY ENGAGEMENT IN 2012

#### JANUARY 2012

The former CEO Ben Verwaayen, Executive Vice President Stephen Carter<sup>1</sup>, President of Bell Labs and Corporate Strategy Jeong Kim<sup>2</sup> and Executive Vice President Rajeev Singh-Molares<sup>3</sup> participated in the World Economic Forum's (WEF) Annual Meeting at Davos, Switzerland. Mr. Verwaayen participated in a debate organized by TIME magazine with unions, business leaders and academia; Mr. Carter met with Young Global Leaders; Mr. Kim met with Technology Pioneers; and Mr. Singh-Molares met with WEF Global Agenda Council ICT experts to discuss a global action plan on mobile learning.



[Watch the video](#)

[Read more](#)

i

#### FEBRUARY 2012

Executives took part in Mobile World Congress to meet key customers, investors, media, analysts and public stakeholders. Senior Vice President of Public Affairs Gabrielle Gauthey organized a high-level summit with information, telecoms and technology ministers from Latin America, Africa, Asia and the Middle East to draw a roadmap for mobile broadband.

[Read more](#)

Alcatel-Lucent hosted a World Bank seminar on the topic of investment in Africa with a focus on ICT.

[Read more](#)

#### MARCH 2012

Alcatel-Lucent participated in the South-by-Southwest (SXSW) conference in Austin, Texas, speaking on a panel entitled, 'New Media and CSR: Communicating Corporate Good'. At this panel, Head of Sustainability Christine Diamante spoke virtually with NGOs and sustainability professionals about employee and external stakeholder transparency.

[Read more](#)

The Alcatel-Lucent Foundation Board held its annual meeting in Murray Hill, New Jersey, visiting and volunteering time with grassroots programs such as Oiada and Junior Achievers.

#### APRIL 2012

Executive Vice President Christel Heydemann took part in the WEF Young Global Leaders event during the WEF Regional Latin American Summit. She discussed 'the new era of talentism' with a group of 280 young leaders from 59 countries.

[Read more](#)

Employees shared tips on reducing the company's energy consumption and increasing its cost savings as part of an eco-friendly campaign for Earth Week.

---

<sup>1</sup> Position as of December 31st 2012

<sup>2</sup> Position as of December 31st 2012

<sup>3</sup> Position as of December 31st 2012

## MAY 2012

At our annual Technology Symposium in Silicon Valley – attended by key customers, media representatives and analysts – we unveiled our strategy roadmap and groundbreaking innovations such as our power-saving 7950 XRS core router.

[Read more](#)

Executive Vice President Rajeev Singh-Molares moderated a panel on infrastructure investment at the WEF East Asia Summit in Thailand and participated in a private leaders meeting with Nobel Peace Prize winner Myanmar Aung San Suu Kyi to discuss education.

[Read the WEF session summary](#)



[Watch the video - May 30, 2012](#)



[Watch the video - June 1, 2012](#)

[Read more](#)

## JUNE 2012

Engage was used to present Alcatel-Lucent's sustainability priorities company-wide, supported externally by company blog posts, tweets, a news release and face-to-face dialogue.

Wim Sweldens, President of Alcatel-Lucent Wireless<sup>4</sup>, traveled to Istanbul for the WEF Summit on Europe, Middle East, North Africa and Central, where he spoke with leaders about the GreenTouch Consortium and sustainable innovations such as lightRadio.

[Read more](#)

Alcatel-Lucent signed the WEF Friends of Rio+20 initiative to promote multi-stakeholder action on sustainable development.

[Read more](#)

## JULY 2012

We presented our 2011 Corporate Responsibility Report and priorities to French labor unions.

We hosted a global supply chain forum in Murray Hill, New Jersey with customers and key supply chain partners to share best practices and training on responsible business.

[Read more](#)

We celebrated Global Days of Caring, with employees around the world volunteering their time to help digital literacy programs in underserved communities.

[Read more](#)

---

<sup>4</sup> Position as of December 31st 2012



## AUGUST 2012

We held a series of one-on-one calls with investors and analysts regarding our sustainability performance and issues related to supply chain, human rights and eco-sustainability.

## SEPTEMBER 2012

The former CEO Ben Verwaayen participated in a discussion on the ‘seven-billion challenge’ at the WEF Summer Davos in Tianjin, China; Executive Vice President Rajeev Singh-Molares moderated a private session on mobile learning (mLearning).

[Read more](#)

[Read session  
mLearning summary](#)

The Alcatel-Lucent Shanghai Bell Operations team made donations to two Shanghai area migrant schools to support digital literacy among children from underserved communities.

[Read more](#)

Alcatel-Lucent team members spoke at and participated in both the WWF 6th Green Forum and the ITU Green Standards Week in Paris.

[Read more](#)

[Read more](#)

## OCTOBER 2012

We hosted a local UN Global Compact meeting in Antwerp to present our supply chain activities and partnerships.

Alcatel-Lucent representatives were among key speakers on the importance of infrastructure investment and public-private partnerships at ITU-T Telecom World in Dubai and at the Global Green Growth Forum.

[Read more](#)

[Read more](#)

## NOVEMBER 2012

We hosted a local UN Global Compact meeting at our Paris headquarters to present our activities and partnerships related to eco-sustainability and green innovation.

Thierry Van Landegem, Vice President of Global Operations, participated at the WEF Global Agenda Summit in Dubai as a newly nominated member of the WEF Global Agenda Council on Sustainability Governance.

[Read more](#)

## DECEMBER 2012

We participated in the development and launch of the GeSI SMARTer 2020 report, *The Role of ICT in Driving a Sustainable Future*.

[Read more](#)

In every interaction with stakeholders – public sector, private sector, academic and civil – we examine the costs, opportunities and risks involved, and have developed a common understanding of the issues relevant to the underlying problems as well as mutual agreements on the types of engagement best suited to our priorities. The outcomes of these engagements are completely transparent, premised on open dialogue and meaningful action. We always apply relevant stakeholder governance structures and ethics and compliance policies.

## 4.2 Customer relationships

Our corporate Quality organization is headed by the Alcatel-Lucent Executive Vice President, Global Customer Delivery, who reports directly to the CEO and the Chief Quality Officer. The Quality Council, led by the Chief Quality Officer, combines central, product, customer delivery, operations, IT and regional Quality teams into a single entity to implement a common strategy across the company. It does so while optimizing processes, methodologies and skill sets globally and assessing all regions and products for systemic areas needing improvement.

Where necessary, cross-organizational quality improvement programs are established using the DMAIC (define, measure, analyze, improve, control) Six Sigma methodology as well as Lean Six Sigma, Theory of Constraints and Statistical Process Control.

To continue improving our customer experience and satisfaction levels, in Q4 2012 we introduced (and implemented successfully on January 1, 2013) the following changes to our Quality organization:

- Creating a Global Quality Council (GQC) that includes Quality leaders from each operating unit as well as the leader for Corporate Quality and Customer Satisfaction. Chaired by the Alcatel-Lucent Chief Quality Officer, the Council's mission is to ensure that Alcatel-Lucent provides an unmatched customer experience while driving profitable business outcomes. It does this by regularly reviewing, assessing and driving improvement in Alcatel-Lucent's Quality results, actions and activities.
- Appointing a Customer Quality Manager (CQM) to serve as the 'voice of the customer' and Quality representatives for key customers in a given geographic region. The CQM conducts customer satisfaction surveys, acts as an advocate for the customer and proactively manages customer quality perceptions by handling complaints, issues and alerts. The CQM triggers and ensures quality improvement plans, provides feedback to customers on progress and validates the effectiveness of improvement plans with customers.

Our 2012 Customer Satisfaction Program provides quicker feedback and improvement plans to our customers. Our questionnaires are asking more open-ended questions, allowing customers to tell us in their own words what is important to them. To ensure proper analysis of customer verbatim, automatic text analysis tools were implemented last year.

Also in 2012, we defined customer satisfaction objectives for approximately 250 customers worldwide, representing about 80% of our global sales. Every region, product division and service area now has specific objectives for customer satisfaction. To ensure consistency, objectives are defined at the account level and aligned with annual results and available benchmark data within the appropriate market segment. Objectives are aggregated and assigned to our internal organizations – leading market activities, customer accounts, central functions, services and products.



### HIGHLIGHT

#### Tracking customer satisfaction with dedicated indicators

Our customer satisfaction measurements include:

- Customer loyalty index performance versus defined targets per region, country or account
- Net promoter score per account
- Percentage of analyses completed by region, product division and key account (e.g., customers with 20 or more respondents)
- Closed-loop feedback (e.g., number of accounts with confirmed follow-up communications)



#### 4.2.1 Customer Satisfaction Survey Program

The Alcatel-Lucent Customer Satisfaction Survey Program (a series of five surveys executed on an annual basis) lets us know how well we are meeting customer expectations and helps strengthen our customer relationships.

Covering the entire customer lifecycle, the surveys evaluate customers' satisfaction in terms of their relationship with Alcatel-Lucent, the products we provide and the performance of our technical support, repair and project management services. A relationship survey issued once a year targets top managers, key decision makers and influencers, and covers a broader spectrum of the customer experience.

These surveys and evaluations create opportunities for account teams to engage in follow-up discussions with customers, enriching relationships, uncovering new revenue opportunities and identifying areas of importance to our customers. Customers receive follow-ups after the surveys are complete. These are handled by our account teams and can take the form of meeting notes, emails, presentations or similar items. Face-to-face customer meetings are the preferred method of follow-up and are highly encouraged.

Corrective actions and results are systematically tracked and stored electronically, and are reviewed by the Management Committee and the CEO as part of monthly business reviews.

In 2012, we improved our performance on customer satisfaction surveys in the Americas and Asia-Pacific and maintained our 2011 performance in Europe, the Middle East and Africa.



#### 2012 ACHIEVEMENTS

In 2012 we increased customer satisfaction by 1.34% versus 2011.

##### Customer relationship surveys

- 54.4% response rate (56% is considered best in class)
- Our NPS\* score improved year over year, achieving 13% in 2012 versus 5% in 2011 – the first time Alcatel-Lucent has rated better than all five of its main competitors
- Ranked second overall in NPS and fourth in overall satisfaction out of 15 competitors
- Customer Loyalty Index (CLI) score slightly increased in 2012 to 7.58 (out of a possible 10 points) versus 7.48 in 2011

##### Product surveys

- 51.4% response rate for product surveys
- Product NPS moved from 3% in 2011 to 15% in 2012 – the first time the NPS for our product surveys has been positive
- Product survey CLI score reached 7.83 in 2012 versus 7.43 in 2011, showing improvement for a majority of our product lines

\* Net Promoter Score (NPS) measures the percentage of customers that are highly likely to recommend Alcatel-Lucent minus the percentage that are less likely to recommend Alcatel-Lucent.

According to Medallia, the external supplier we use to launch the surveys, our response rate is approximately 25% higher than average for business-to-business (B2B) relationship surveys, with a very low bounce rate (0.01%). More than 1,300 people responded to our business partner survey, which was distributed for the first time in 2011.

Survey data are assessed by members of the Company's Account, Project Management, Service Assurance and Product Group teams, with coordination by the Quality Council.

Many of the insights gained are acted on by the regional product or services organizations closest to the customer, product or service involved. Our Corporate Quality & Customer Satisfaction (Q & CSAT) survey leads the company's overall Q & CSAT strategy, planning and assessment to ensure we keep our promises while delivering a 'right-first-time' customer experience.

#### 4.2.2 Customer service quality

‘Service quality’ is defined as the customer’s perception of a delivered service. ‘Service quality management’ is the monitoring and maintenance of end-to-end services for specific customers.

Quality and the right-the-first-time concept are based on tools and techniques such as Lean Six Sigma, Six Sigma and the Theory of Constraints, which provide scientific ways of analyzing and improving operations, predicting outcomes, avoiding errors and delivering faster, higher-value and better-quality solutions and services.

Through our Services Delivery Survey Strategy, we solicit, collect and measure input on customer perceptions of quality as they relate to the delivery of contracted services. These include but are not limited to managed services, remote technical support, onsite support, and repair and exchange services.

Our Service Assurance organization manages our welcome centers, technical support, repair and return processes, escalation processes and other related functions on a worldwide basis. It measures the responsiveness of these services per customers’ service-level agreements.

Our goal is to build on our solid results (e.g., 96% of system outage restorations completed within SLA-requested times) and improve the performance of our processes to demonstrate our commitment to customers. Our Quality organization periodically reviews the nature of customer service support requests to determine if steps can be taken to eliminate recurring issues that cause customers to call for support.



#### HIGHLIGHT

##### Verification of online service data

Alcatel-Lucent is certified to TL 9000 standards. Verification of online customer service data is assessed as part of our internal audit as well as in the audit conducted annually by an external certification company. Dedicated improvement plans are put in place after these audits.

The TL 9000 quality-management system is the telecom industry’s unique extension to ISO 9001:2008 and includes supplemental requirements in many areas, including performance measurements based on reliability of product, software development and lifecycle management as well as communications between telecom network operators and suppliers. TL 9000-certified organizations are required to comply with:

- All requirement clauses of ISO 9001:2008,
- Telecom-specific requirements that apply to all product categories, hardware, software and/or service registrations,
- Telecom industry measurements that apply in certain product categories specific to hardware, software and/or services.

[Read more](#)

### 4.2.3 Customer advocacy at Alcatel-Lucent

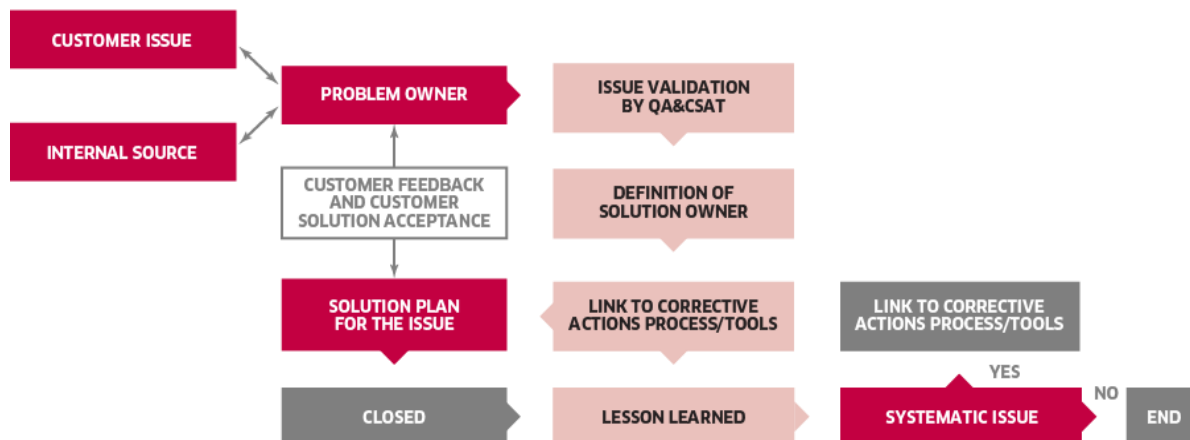
We maintain a process to ensure that all customer complaints (solicited or unsolicited) are managed and monitored through appropriate analysis and follow-up communications.

Under the leadership of our account teams, any customer complaint (referred to as a Customer Critical Issue) receives follow-up communication from a representative aligned directly with the area of concern. To ensure steps are taken to resolve issues, all complaints are recorded and tracked through Alcatel-Lucent's Customer Critical Issues process, which is controlled by the Customer Quality team. The process also allows for targets to be set and measured regarding the amount of time it takes to close a complaint.

Leveraging the information collected, corrective measures are developed and tracked to completion, and follow-up discussions with customers ensure all corrective measures have been addressed to the customer's satisfaction.

The Chief Quality Officer ensures that the Alcatel-Lucent Management Committee has visibility into customer issues, and Customer Critical Issues are reviewed by region and product unit presidents during their quarterly reviews.

## Customer critical issues process



### 4.3 United Nations Global Compact

Alcatel-Lucent is a longstanding signatory to the United Nations Global Compact (UNGC). A policy platform as well as a practical framework for companies committed to sustainability and responsible business practices, the UNGC is an international initiative that brings companies together with UN agencies, labor and community groups to support universal environmental, ethical and social principles. It is the world's largest corporate citizenship initiative, with more than 6,000 companies as members.



[Read more](#)

We are committed to integrating the 10 principles of the UNGC into everything we do. To strengthen our reporting and demonstrate our sustainability-related governance and management processes, this report includes information relevant to each of the 10 principles.

[Read more](#)

In 2012, we incorporated information on our sustainability activities in accordance with the UNGC Advanced Level criteria, particularly in the following areas:

- Strategy, governance and engagement
- UN goals and issues
- Implementation of UNGC principles
- Value chain implementation
- Verification and transparency

[Read more](#)



In 2012, Alcatel-Lucent raised the bar on reporting and transparency and obtained UN Global Compact Advanced Level differentiation.

[Read more](#)

We value the opportunity to promote the UNGC and its principles both globally and locally, with regional partnership networks allowing us to better understand the needs of our stakeholders and the environments in which we operate. Exchanging best practices at the local level further supports the UNGC's mission for companies to implement its principles into their strategy and day-to-day operations.

The UNGC's local networks thrive by showcasing examples, learning from each other and sharing insights at the annual UNGC meeting. They also form a unique community that supports the broader UN Millennium Development Goals.

PRINCIPLES	NUMBER	DESCRIPTION	READ MORE (SEE SUSTAINABILITY REPORT)
Human Rights	1	To support and respect the protection of internationally proclaimed human rights.	p5-6, p19-20, p23, p29, p38, p72, p80, p89-91, p169-170, p177, p180, p209-211, p213, p232
	2	To make sure that we are not complicit in human rights abuses.	p5-6, p38, p72, p89-91, p169-170, p180, p209-211, p213, p232
Labor	3	To uphold the freedom of association and the effective recognition of the right to collective bargaining.	p5-6, p26, p28, p145-147, p169-170, p207, p209-210, p230, p232
	4	To support the elimination of all forms of forced and compulsory labor.	p5-6, p26, p28, p145-147, p169-170, p207, p209-210, p230, p232
	5	To support the effective abolition of child labor.	p5-6, p169-170, p197, p205, p207, p209-210, p225, p233
	6	To support the elimination of discrimination in respect to employment and occupation.	p5-6, p22, p84-85, p89, p148-155, p169-170, p225, p232
Environment	7	To support a precautionary approach to environmental challenges.	p5-7, p48-57, p72, p94, p205-207
	8	To undertake initiatives to promote greater environmental responsibility.	p5-6, p19-23, p26-29, p38-42, p48-57, p94-97, p121-135, p205-207, p215-216, p224, p227-229
	9	To encourage the development and diffusion of environmentally friendly technologies.	p5-6, p13-14, p19-23, p26-29, p38-42, p94-97, p99-135, p173-184, p205-207, p215-216, p224, p227-229
Anti-corruption	10	To work against corruption in all its forms, including extortion and bribery.	p5-6, p15, p37, p71, p74, p77-79, p82-85, p88-90, p91, p212-213, p225, p233



**Konrad Eckenschwiller**  
(United Nations Global Compact France).



**United Nations Global Compact Local Network**  
event at Alcatel-Lucent Paris headquarters,  
November 2012.

Since 2011, Alcatel-Lucent has served on the United Nations Global Compact Network steering committee to provide strategic input and lead international partnerships, including those with other local UNGC networks. These local networks are important to our engagement with local communities and to bringing the UNGC principles to life.

In November 2012, Alcatel-Lucent invited more than 50 stakeholders from the UNGC Network as well as investors, media and NGOs to its Paris headquarters for a conference titled “Green Innovation & ICT: Why We Need to Act Now”. At this event, we presented our:

- Strategic approach to sustainability as a business imperative
- Green innovation across our products and solutions
- Approach to carbon emissions
- Participation in the GreenTouch Consortium
- Public policy recommendations to government stakeholders on how to stimulate green growth and the low-carbon economy at national levels

The proceedings of the conference were shared across the UN Global Compact Network.

A similar event focusing on supply chain practices was held in Antwerp in October 2012. Luc Defieuw, CEO of Alcatel-Lucent Bell in Belgium, welcomed the participants, who included representatives from various industries, academia and NGOs. Our team then took the occasion to describe how our supply chain is a very important part of our sustainability activities, contributing to our reporting-related success (e.g., being named DJSI Technology Supersector Leader).



Iris Maria Alexis Van der Veken,  
Chair of the United Nations  
Global Compact Network Belgium,  
and Katrina Destrée Cochran,  
Director of Sustainability and Stakeholder  
Engagement at Alcatel-Lucent,  
at the UNGC Network event in Antwerp,  
October 2012.

#### 4.4 World Economic Forum

Our strategic partnership with the WEF is an aspect of our corporate stakeholder engagement. Our goal at the WEF has been to have our most senior executives and experts – in collaboration with customers, partners and major stakeholders – play a leading role in improving the state of the world.

Throughout 2012, we focused our WEF participation and resources on the priorities of eco-sustainability and digital inclusion. Our executives participated in various work groups, communities, global agenda councils and WEF regional summits held throughout Europe, Latin America, Africa, Asia and the Middle East.



#### 2012 ACHIEVEMENTS

##### mLearning

Executive Vice President Rajeev Singh-Molares chaired the WEF Global Agenda Council on ICT and issued a call to action with a report, video and podcast themed, 'Accelerating the Adoption of mLearning: A Call for Collective and Collaborative Action'. The WEF held stakeholder meetings in Barcelona, Bangkok and Tianjin to increase awareness of mLearning.

[Read more](#)



[Watch the video](#)





## HIGHLIGHT

### Climate change and GreenTouch™

In June 2012, Alcatel-Lucent was among the founders and signatories of the WEF Friends of Rio+20 Initiative, which presented a message to the participants of the Rio+20 UN Conference on Sustainability Development about the importance of multi-stakeholder action. The GreenTouch Consortium, which was founded by Bell Labs, was included in the associated Annex of Global Best Practices.

[Read more](#)

In November, Thierry Van Landegem, Vice President of Bell Labs Global Operations, was nominated to the WEF's Global Agenda Council on Governance for Sustainability, where he worked with key global experts on effective stakeholder models of sustainability governance at the Global Summit Council in Dubai.

[Read more](#)

Other Alcatel-Lucent contributions to WEF entities and initiatives in 2012 included:

- Collaborating (through the former CEO Ben Verwaayen, a member of the WEF Foundation Board and the Executive Committee of the International Business Council)
- Continuing as signatory to the Partnering Against Corruption Initiative (PACI), represented by Chief Compliance Officer David Campos
- Serving on the WEF Green Growth Board (through Gee Rittenhouse, GreenTouch Chair and Chief Operating Officer of Alcatel-Lucent's S3G Business Group<sup>5</sup>)
- Serving on the Global Agenda Council for the International Legal System (through Steve<sup>6</sup> Reynolds, General Counsel)
- Signing the Partnering for Cyber Resilience Initiative
- Chairing the ICT Global Agenda Council and launching a dedicated mLearning initiative (through Rajeev Singh-Molares, Executive Vice-President)
- Judging WEF Tech Pioneers as a member of the Selection Committee, represented by President Bell Labs Jeong Kim

Related events from 2012 include:

- Participation of Christel Heydemann, Executive Vice President of Human Resources and Transformation, in the WEF Young Global Leaders event during the WEF Regional Latin American Summit as a new member of the 2012 WEF Young Global Leader class
- Participation of Daniel Jaeger, Vice-President Alcatel-Lucent Africa, and Eric Lacombe, Vice President Alcatel-Lucent West & Central Africa, in the WEF Africa Summit in Ethiopia
- Participation of Rajeev Singh-Molares as moderator and chair of a session at WEF East Asia Summit in Bangkok on Infrastructure Investment; he also participated in a private leaders meeting with Myanmar Aung San Suu Kyi to discuss education during her historical first participation in an external conference since her house arrest

[Read the session summary](#)

<sup>5</sup> Position as of December 31st 2012

<sup>6</sup> Position as of December 31st 2012



- Participation of Wim Sweldens, President Wireless, in a panel session on cutting-edge technology and as an invited expert speaker in private session on new models of sustainability for Rio+20

[Read the session summary](#)

- Participation of the former CEO Ben Verwaayen at the WEF Summer Davos in Tianjin, China, where he spoke about the ‘seven-billion challenge’ and participated in meetings of the Foundation Board and International Business Committee

[Read more](#)

- Participation of Rajeev Singh-Molares as chair of a special session on mLearning with business, public sector and education leaders at Tianjin, China

[Read more](#)

## 4.5 Global eSustainability Initiative

Alcatel-Lucent is a founding member of the Global eSustainability Initiative (GeSI), a strategic partnership of ICT companies, associations and international organizations committed to creating and promoting technologies and practices that foster economic, environmental and social sustainability. Formed in 2001, GeSI’s vision is a sustainable world through responsible, ICT-enabled transformation.



[Read more](#)



### HIGHLIGHT

Alcatel-Lucent provides leadership as a member of the GeSI Board and in several key areas, including climate change, energy efficiency, human rights and communications.

### 4.5.1 GeSI Climate Change Project Portfolio

GeSI received global recognition for its landmark 2008 report, *SMART 2020: Enabling a Low-carbon Economy*, which dealt with the potential of the ICT sector to enable other sectors to reduce their carbon emissions. In 2012, GeSI members commissioned a refresh of the report to reflect changes in technology and an even wider application of ICT across more sectors. At the end of 2012, during the United Nations Framework Convention on Climate Change (UNFCCC) COP-18 climate change negotiations, the *SMARTer 2020: The Role of ICT in Driving a Sustainable Future* report was released.

Alcatel-Lucent invested resources into both GeSI reports. In 2012, we served on the SMARTer 2020 steering committee, contributing critical traffic data and analysis as well as playing a lead role in the further dissemination of the report. We shared the report with thought leaders in several industry sectors, including select policy makers, academics, NGOs and research institutions. We will continue to share the key findings of the report through focused events with local audiences.



According to *SMARTer 2020*, the ICT sector's direct carbon footprint is now estimated at 1.9% of greenhouse gas (GHG) emissions – lower than previously estimated – while its potential to reduce emissions by 98.1% is even greater than previously estimated. The revised estimates reflect innovation in the ICT sector since 2008, especially energy efficiency improvements as well as more accurate assessments of the sector's impact on GHG emissions.

By applying ICT solutions to other sectors such as power, transportation and logistics, buildings, agriculture, land use, motor systems, services and consumer goods, global GHG emissions could be reduced by 16.5% by 2020 –an abatement potential of 9.1 GtCO<sub>2</sub>e, or seven times the ICT sector's own emissions.

*SMARTer 2020* also includes country 'deep dives' into Brazil, Canada, China, Germany, India, the UK and the U.S. to reflect local context and priority end-use sectors as well as regional policies.

[Read more](#)

Working in collaboration with other GeSI members, Alcatel-Lucent also provided expertise to inform the March 2012 ICT sector supplement to the GHG Protocol Product Accounting and Reporting Standard – the most widely used global accounting and reporting standard for corporate GHG emissions. Alcatel-Lucent continues to play a leading role in the technical working group responsible for developing the standard and at the steering committee level. Our work focuses on methodologies, processes and metrics used to quantify the enabling effect of ICT.

[Read more](#)

Alcatel-Lucent's expertise on this topic comes from Bell Labs, namely its product environmental engineering and network transformation area. For example, our experts are helping to model the amount of energy and associated carbon emissions it takes to communicate information across a network.

#### 4.5.2 GeSI Energy Efficiency Project Portfolio

Alcatel-Lucent co-leads the GeSI Energy Efficiency Project Portfolio, which aims to improve and facilitate cooperation and coordination among standards-developing organizations to promote and accelerate the market availability of energy-efficient ICT products, architectures and practices. This is achieved, for example, by addressing information gaps and eliminating duplication of efforts or diverging standards.

In 2012, the GreenTouch Consortium and GeSI collaborated on a full-day event during EU Sustainable Energy Week in Brussels. Alcatel-Lucent moderated the GeSI event, 'ICT for One-Planet Living', and led the GreenTouch event, 'ICT Sustainable Networks for Sustainable Lifestyles'. EU Sustainable Energy Week events drew more than 4,000 participants focused on energy efficiency projects in Europe.

The Alcatel-Lucent-led partnership between GreenTouch and GeSI was announced in 2011 with the goal of coordinating research and policy developments to disseminate energy-efficiency tools that can significantly mitigate climate change. Both organizations are committed to leveraging the strengths and expertise of their respective members to drive research and investment into energy-efficient technologies and solutions.

[Read more](#)

“It is critical that the world captures every last bit of energy efficiency if we are to reduce greenhouse gas emissions enough to keep below dangerous rises in temperature. I am pleased that the [SMARTer 2020] study shows how information and communication technology can play an essential role in saving energy. Now we need more and effective government policies that reward such action and penalize delayed responses.”

CHRISTIANA FIGUERES

EXECUTIVE SECRETARY, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

#### 4.5.3 GeSI Communications Project Portfolio

Alcatel-Lucent leads GeSI's Communications Project Portfolio, which disseminates key ICT sustainability messages about supply chain, energy efficiency, public policy, e-waste and climate change issues. Since 2008, at the negotiations under the UNFCCC, GeSI members have steadily and successfully raised awareness of ICT's potential to mitigate the consequences of climate change. The release of *SMARTer 2020* took place during the UNFCCC COP18 meeting in Doha, Qatar.

## 4.6 Public affairs

---



“Alcatel-Lucent’s public affairs initiatives focus on innovations that support sustainable economic growth, competitiveness and social welfare.”

GABRIELLE GAUTHEY

EXECUTIVE VICE PRESIDENT

GLOBAL GOVERNMENT & PUBLIC AFFAIRS

ALCATEL-LUCENT

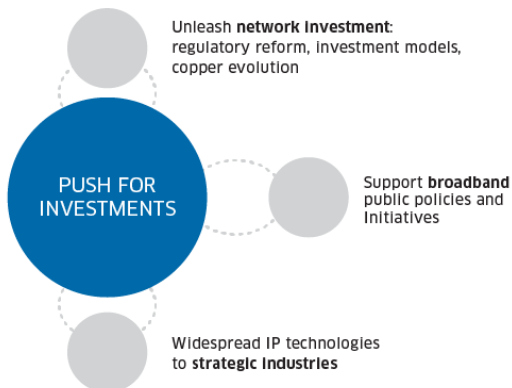
Alcatel-Lucent Global Government & Public Affairs works with policy makers, regulatory authorities and other institutions to help create a favorable political, financial, legal and regulatory environment that fosters public and private investment in the digital and broadband industries.

We focus our contribution where it matters most to our industry. Our activities help shape and socialize efficient spectrum allocation methodologies for mobile broadband in a range of Internet and online areas such as net neutrality, digital inclusion, corporate governance, and broadband connectivity for social and economic development. They also contribute overall to our sustainability performance in the areas of green innovation and digital inclusion.

## Policy & regulation topics for the industry

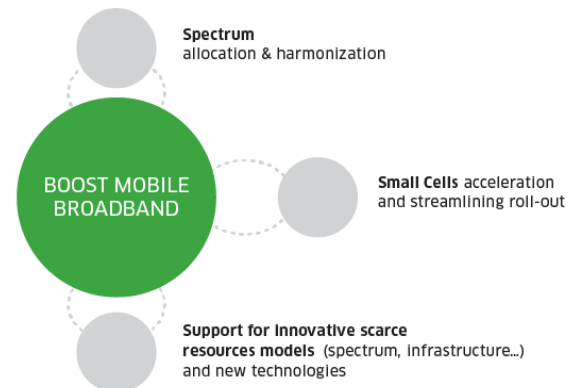
### Data explosion

Need for infrastructure upgrade



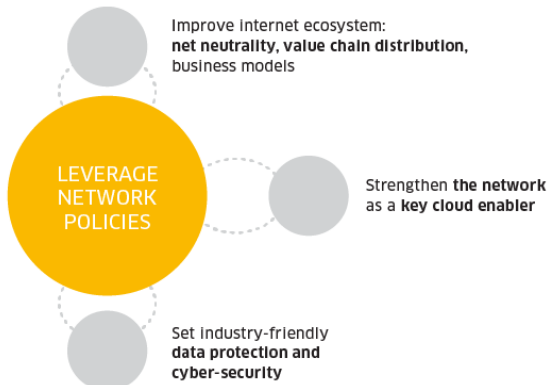
### Mobile usage revolution

Solving the capacity crunch



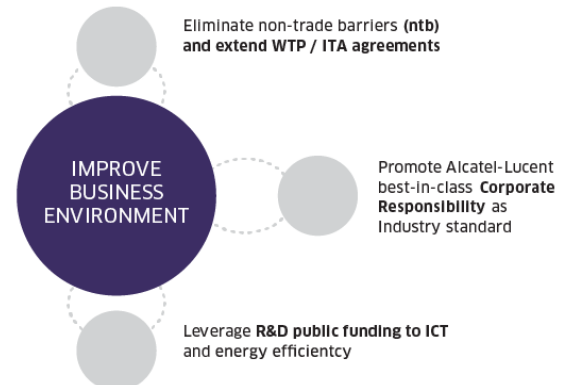
### Internet sustainability

Setting the right industry policies



### Competitive distortion

Achieving a level playing field



#### 4.6.1 Contributing to a sustainable Internet

Internet sustainability encompasses the economic, technical and societal issues related to net neutrality. In this arena, Public Affairs is active in shaping and sharing best practices related to issues such as online trust, data privacy, content protection and cyber security.



#### 2012 ACHIEVEMENTS

#### Promoting digital plans to support ICT for all

We shared best practices related to digital plans, broadband strategies and spectrum allocation with multilateral organizations (such as the ITU, Broadband Commission, World Bank, Inter-American Development Bank and African Development Bank) as well as public authorities from Brazil, Ecuador, Venezuela, Mexico, Colombia, South Africa, Morocco, Nigeria, Sri Lanka, Indonesia, India and Malaysia.

#### 4.6.2 Furthering digital inclusion

To contribute to economic development, public welfare and digital inclusion, Alcatel-Lucent Public Affairs works with governments and regulators globally to develop digital networks capable of delivering e-health, e-learning and e-government services at the lowest possible cost. In particular, we promote public policies (including efficient spectrum policy) that support extending wireline and wireless connectivity to underserved and rural populations in both developing and developed countries.

[For more information](#)

#### UNDERSTANDING THE IMPACT OF BROADBAND CONNECTIVITY

Alcatel-Lucent continues to raise awareness of the enabling effects of broadband connectivity and digital inclusion among stakeholders such as the UN, ITU, UNESCO, the World Bank and other regional development banks as well as the GSMA and various NGOs and foundations. Recognizing the need for greater cross-sectoral work – and for tying infrastructure deployments to applications, solutions and services that cater to health, education and other key sectors – we are also engaging with governments to foster cross-ministry bridges.

2012 activities included:

##### FEBRUARY

Hosting governments from emerging digital economies at Mobile World Congress for a high-level ministerial summit on the roadmap for mobile broadband. During this event, participants shared their perspectives on the evolution of the digital economy in key countries including Kenya, Nigeria, Lebanon, Mexico, Colombia and Brazil.

##### APRIL

Meeting with governments and regulators from Venezuela and Ecuador to exchange views on spectrum allocation and improvement of connectivity in rural areas.

##### SEPTEMBER

Organizing a roundtable during the ITU's annual event, looking at the need to invest in terrestrial backbones in Africa. Panelists including representatives of the African Development Bank, network operators and potential investors.

##### OCTOBER

Participating in the ITU Global Symposium for Regulators in Colombo (Sri Lanka), meeting with governments and regulators from Indonesia and Malaysia to share best practices on broadband strategies and digital inclusion.

[Read more](#)

#### TAKING AN ACTIVE ROLE IN THE BROADBAND COMMISSION

Alcatel-Lucent is a committed participant in the Broadband Commission for Digital Development, a joint initiative of the ITU and UNESCO established in response to UN Secretary-General Ban Ki-moon's call for greater effort to meet the Millennium Development Goals. Launched in May 2010, the Commission includes government leaders from around the world as well as the highest-level representatives from industry, academia and international organizations concerned with development. The former CEO Ben Verwaayen is among the initiative's select group of commissioners.

In 2012, we continued to actively participate in Broadband Commission general meetings, working groups and reports, including *The State of Broadband 2012: Achieving Digital Inclusion for All*, which was launched officially at the September 2012 meeting during the UN General Assembly. This high-profile report evaluates the rollout of broadband around the world and tracks progress towards achieving the four advocacy targets set by the Commission in 2011 for boosting broadband affordability and uptake. It provides 177 country rankings on economic impact, penetration, national broadband policy, and connecting people and dwellings. It also outlines ways in which broadband is improving the lives of people around the world: for example, through the use of mHealth, mPayment and mLearning services, and by promoting innovation and fostering the acquisition of new skills. The report also reinforces a clear need for policy leadership to facilitate the deployment of broadband around the world.

[Read more](#)

Alcatel-Lucent is also participating in a newly launched working group on gender and technology, with a specific focus on how to better engage and empower girls. The group is headed by Helen Clark, Administrator of the United Nations Development Programme.

As well, we were a major contributor to the broadband and education report released in February 2013, and participated actively in the One Million Community Health Workers by 2015 campaign launched by Professor Jeffrey Sachs, sharing its work on using mobile learning solutions to train health workers in the developing world.

#### 4.6.3 Corporate governance

Alcatel-Lucent works with professional associations and international forums to promote best-in-class sustainability policies — in particular, those related to corporate governance issues such as transparency, management structure, whistleblowing and compliance procedures, shareholder structure, balance sheet financing and financial results reporting.



#### 2012 ACHIEVEMENTS

Last year we successfully promoted:

- Best-in-class sustainability policies (in particular, corporate governance) to enhance legislation and voluntary initiatives, working with public authorities
- Best-in-class sustainability practices to create a fair and level playing field among telecom equipment vendors, working with U.S., EU and French authorities
- A voluntary charter to be signed by stakeholders, working with professional associations

## 4.7 Responsibility to shareholders

Alcatel-Lucent regularly updates shareholders and prospective investors on the company's business strategy, activities and financial performance. As governance is a key item on the agendas of investor meetings, we communicated with shareholders ahead of our Annual General Meeting to discuss and explain the resolutions submitted to vote. We also provided stakeholders with information about our Dow Jones Sustainability Index ranking and our role in the ICT sector. In 2013, our Investor Relations team will focus on strengthening our relationships with the financial community. [Read more](#)



#### HIGHLIGHT

Main shareholders as of December 31, 2012:

- 3.6% CDC
- 2.3% Fidelity Management & Research
- 2.1% Norges Bank Investment Management

# 2012

## SUSTAINABILITY REPORT

### A BUSINESS IMPERATIVE

## 2012 REPORTING

---

### OUR SUSTAINABILITY PERFORMANCE AT GLANCE

Through our robust approach to sustainability reporting, we prove that it is an integral part of our strategy and our activities. This past year saw us demonstrate ambition, innovation and achievement, all within a very challenging business environment.



# TABLE OF CONTENTS

<b>1</b>	<b>HOW WE REPORT ON SUSTAINABILITY.....</b>	<b>46</b>
1.1	How to navigate the report.....	46
1.2	Stay up to date with us and share your feedback .....	47
<b>2</b>	<b>2012 ALCATEL-LUCENT DASHBOARD: ACHIEVEMENTS, PROGRESS AND COMMITMENTS....</b>	<b>48</b>
<b>3</b>	<b>ENVIRONMENTAL INDICATORS .....</b>	<b>52</b>
3.1	Definitions and methodology .....	52
3.2	Evolution in 2012 .....	53
3.3	Environmental and energy consumption indicators .....	53
3.4	Energy consumption indicators .....	56
<b>4</b>	<b>SOCIAL INDICATORS.....</b>	<b>57</b>
<b>5</b>	<b>REPORTING FRAMEWORK.....</b>	<b>58</b>
5.1	Article 225 of France's Grenelle II law (July 10, 2010) .....	58
5.2	United Nations Global Compact (UNGC).....	61

# 1 HOW WE REPORT ON SUSTAINABILITY

**For Alcatel-Lucent, sustainability is part of our business.**

Through innovation in networking and communications technology, products and services, Alcatel-Lucent is making communications more sustainable, affordable and accessible. It's all part of our corporate vision: *realizing the potential of a connected world*.

Every year, Alcatel-Lucent shares its commitments, achievements and perspectives on sustainability through the publication of a comprehensive report.

Our 2012 sustainability report consolidates all Alcatel-Lucent sustainability activities worldwide for the year, focusing on key achievements and future objectives, and including facts and examples from local initiatives as well as early data from 2013. Unless otherwise stated, all performance data concern the company's global operations.

This year's edition goes a step beyond 2011's interactive PDF format to present the report in web form, enhancing its accessibility, searchability and navigability. In addition to the key metrics above, a summary of each area of sustainability activity is accessible via its own web page, supplemented by a downloadable file of the full set of reporting information under the following headings:

- [Sustainability management](#)
- [Environment](#)
- [Our people](#)
- [Society](#)
- [Ethics and compliance](#)
- [Supply chain](#)
- [Governance](#)

The report is intended for all Alcatel-Lucent stakeholders: customers, investors, employees, analysts, media, suppliers, governmental and non-governmental organizations, and other members of the communities in which we are active.

Alcatel-Lucent published its first Sustainability Report in 2002. Our previous Sustainability Report was published in June 2012.

[See our reports archives](#)

Since 2007, for environmental and accessibility reasons, our reports and all regularly updated sustainability information have been distributed exclusively online.

This section provides quick access to the complete set of sustainability metrics we tracked in 2012.

## 1.1 How to navigate the report

---



### VIDEO

Indicates a video or a podcast is available.



### CHECKMARK

Shows an indicator or qualitative assertion has been reviewed by Ernst & Young as part of the independent assurance process for 2012.

[Read more](#)

Links you to more detailed information.



## 1.2 Stay up to date with us and share your feedback

---

We hope this online report provides useful information about the sustainability challenges facing businesses and societies today. We will continue to engage in constructive discussions on these topics as we continue to work toward solutions for a thriving, sustainable world. Throughout the year, you can find dynamic, regularly updated content on:

- [Our website](#)
- [Company blogs](#)
- [Social media channels](#)
- [Alcatel-Lucent YouTube channel](#)

Your comments, suggestions and questions are important to us. Please direct any thoughts or inquiries to [sustainability@alcatel-lucent.com](mailto:sustainability@alcatel-lucent.com).

## 2 2012 ALCATEL-LUCENT DASHBOARD: ACHIEVEMENTS, PROGRESS AND COMMITMENTS

### 2.1 Challenge: Reduce the Impact of Our Products on the Environment

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Improve the functional energy efficiency of key products* by at least 25% by end of 2012 compared to 2010.  * New or recently developed products on an upward lifecycle curve.	BY 2012	● <b>ACHIEVED:</b> The 25% goal was significantly exceeded for many products across the portfolio. Achieved for all key products of Business Divisions in Networks and Platforms group.
Improve the functional energy efficiency of our radio access technology, which is now part of the lightRadio™ portfolio, by at least 75% by 2015 compared to 2008.	BY 2015	● <b>ON TRACK:</b> On track to meet the goal.
Leverage our innovation to establish a common methodology for measuring the carbon footprint of network telecommunications products over their lifecycles.	BY 2012	● <b>ACHIEVED:</b> Developed and introduced LCA estimator methodology to ICT industry (via iNEMI industry consortium project) with very positive support and adoption. Led and introduced common methodology within ITU L1410 (published February 2012) and WRI GHG Protocol ICT Guidance document (publication anticipated mid-2013).
Eliminate PVC from all products.*  * Subject to the availability of technically, environmentally and economically sound alternatives.	BY 2015	● <b>ON TRACK:</b> Continued partnerships with suppliers on the identification and introduction of viable alternatives to PVC in cables. Also continued our collaborative R&D on the development and eco-assessment of PVC alternative materials.

### 2.2 Challenge: Reduce Our Eco-Footprint

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Reduce our absolute carbon footprint (CO2 equivalent) from our operations by 50% by 2020 (from 2008 baseline).	BY 2020	● <b>ON TRACK:</b> On track to meet the goal. Since 2008, we reduced our carbon footprint by more than 29%.
Reduce water consumption by 20% from 2010 baseline.	BY 2013	● <b>ONGOING:</b> We continue to measure water consumption and have managed to reduce water use by 26% since 2007. In 2012, water usage decreased 7% year over year.  The initial water goal was based on calculations that did not account for different uses of water within the facility. However initial water goal was based on calculations that did not account for different uses of water within the facility. A new goal will be established after a better understanding of water usage is obtained by utilizing enhanced metering at selected sites.

### 2.3 Challenge: Our People

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Launch a three-year workforce plan with development plans and human capital performance metrics. Bank on 2011 achievements to drive mid- and long-term resource planning capabilities.	BY 2012	● <b>ACHIEVED:</b> We successfully launched a three-year workforce plan with development plans and human capital performance metrics, and built on 2011 achievements to drive mid- and long-term resource-planning capabilities.
Achieve SA 8000 certification in Brazil and Mexico by year-end 2012; extend to other countries that are already compliant with the requirements.	BY 2012-2014	● <b>ONGOING:</b> An SA 8000 assessment was conducted in Brazil and Mexico during 2012. Further rollout to other countries planned to be completed in 2014 will be done according to the Performance Program execution.
Increase representation of women in upper management positions by 20%.	BY 2014	● <b>ON TRACK:</b> Over the course of 2012, the overall proportion of women in upper management positions rose to 16%.

Extend existing equal-pay agreements. By end of 2012, have a plan in place to address gender pay gaps.	BY 2014	● <b>ACHIEVED:</b> Plan is in place to address gender pay gaps.
Further extend the number of countries with teleworking policies by deploying agreements in China and India.	BY 2012	● <b>ACHIEVED:</b> All countries where Alcatel-Lucent has a substantial employee presence now have teleworking policies in place.
Build a company-wide learning architecture that combines existing enterprise support for formal training with the new interactive employee-centric knowledge and learning platforms.	BY 2013	● <b>ON TRACK:</b> Alcatel-Lucent University is implementing a personal and social-networking learning model called My Personal Learning Environment (My PLE). It is both an environment and platform that allows students to better drive and manage their own learning programs.
Leadership Pipeline: Continuation of 2011 efforts with deployment of high-potential identification process, usage of succession pools and pilot of new Leadership Development Offer.	BY 2012	● <b>ACHIEVED:</b> In 2012, we deployed a renewed Leadership Pipeline process accompanied by a new Leadership Development Offer more tailored to individuals and in line with organizational development and business requirements.
Employee engagement: Engagement survey to be launched to drive clear understanding of our human capital actions for improvement.	BY 2013	● <b>ON TRACK:</b> In 2012, our employee engagement survey was administered to 30,000 people (approximately 40% of our total employee population).
Technical Ladder: Deployment of career development path for technical professionals as complementary focus on best-in-class versus Leadership Pipeline.	BY 2013	● <b>ON TRACK:</b> Launched in 2011, the Technical Ladder pilot program was extended to the engineering and research communities in 2012, allowing for further testing and enhancement of the concept and process.
Professional accreditation: Double the number of newly accredited employees to 1,000 by year-end 2012.	BY 2012	● <b>ACHIEVED:</b> We doubled the number of newly accredited employees, with more than 1,000 employees in the accreditation training and application process.
Community learning: Launch community learning for seven most critical functions ('hot profiles') as parallel 'fast track' for learning from best in-class employees.	BY 2012	● <b>ACHIEVED:</b> Exceeding our objectives for 2012, we now have community learning sites for eight critical job functions and programs to foster learning from best-in-class employees.
Gender diversity: Deploy gender diversity awareness training to all people managers.	BY 2012	● <b>ACHIEVED:</b> Gender dynamics workshops were launched to more than 300 people managers in 2012.

## 2.4 Challenge: Stakeholders Customer Relationship

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
By 2012, enhance our Customer Satisfaction Program by providing quicker feedback and improvement plans to our customers. We will be asking more open-ended questions, allowing the customer to tell us in their own words what is important to them. Goal: 45-56% response rate (where 56% is considered best in class) for the customer relationship and product surveys.	BY 2012	<p>● <b>ACHIEVED:</b> In 2012 we increased customer satisfaction by 1.3% versus 2011.</p> <p><b>CUSTOMER RELATIONSHIP SURVEYS</b></p> <ul style="list-style-type: none"> <li>• 54.4% response rate for customer relationship surveys.</li> <li>• Our NPS* score improved year over year, achieving 13% in 2012 versus 5% in 2011.</li> <li>• Ranked as the 2<sup>nd</sup> supplier in NPS and 4<sup>th</sup> in overall satisfaction out of 15 competitors.</li> <li>• Customer Loyalty Index (CLI) scores slightly increased in 2012 to 7.58 (out of a possible 10 points) vs. 7.51 in 2011.</li> </ul> <p><b>PRODUCT SURVEYS</b></p> <ul style="list-style-type: none"> <li>• 51.4% response rate for product surveys.</li> <li>• Product NPS moved from 3% in 2011 to 15% in 2012.</li> <li>• Product Survey CLI score reached 7.83 in 2012 versus 7.43 in 2011, showing improvement for a majority of our product lines.</li> </ul> <p>* The Net Promoter Score (NPS) measures the percentage of customers that are highly likely to recommend Alcatel-Lucent minus the percentage that are less likely to recommend Alcatel-Lucent.</p>

## 2.5 Challenge: Stakeholders Public Affairs

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Via the Public Affairs team, continue to promote digital plans in countries around the world to support ICT for all.	BY 2012	● <b>ACHIEVED:</b> Best practices around digital plans, broadband strategies and spectrum allocation were shared in 2012 with multilateral organizations (ITU, Broadband Commission, World Bank, Inter-American Development Bank, African Development Bank) and public authorities from Brazil, Ecuador, Venezuela, Mexico, Colombia, South Africa, Morocco, Nigeria, Sri Lanka, Indonesia, India and Malaysia.
Via the Public Affairs team, continue to promote with public authorities best-in-class sustainability policies (in particular, corporate governance) to enhance legislation and voluntary initiatives.	BY 2012	● <b>ACHIEVED:</b> Promoted best-in-class sustainability practices with U.S., EU and French authorities to create a fair, level playing field among telecom equipment vendors, either directly or through professional associations. Through professional associations, discussed, decided on and created a voluntary charter to be signed by stakeholders.

## 2.6 Challenge: Philanthropy - Alcatel-Lucent Foundation

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Via our Alcatel-Lucent Foundation, provide digital training to 13,500 children in the 2010-2014 timeframe.	BY 2014	● <b>ON TRACK:</b> Via Foundation Global Signature Program ConnectEd. By September 30, 2012, it had provided digital training to 12,513 youth, 60% of them girls.
Via the Alcatel-Lucent Foundation, create a group-wide strategy to guide corporate philanthropic activities and include priorities aligned with business drivers, description of system to measure results/impacts.	BY 2013	● <b>ACHIEVED:</b> A group-wide strategy was created and aligned with business drivers. A system to measure results/impacts was created using the foundation guidelines and the London Benchmarking Group (LBG) tool and standards to provide quantitative and qualitative assessments of the economic, societal, environmental and social impact of philanthropic investments.
Introduce executive program for employee volunteering, including skills enhancement and training for community investment.	BY 2013	● <b>ACHIEVED:</b> Via Foundation company Signature Program, 'Campus in the Cloud', which is linked directly to our business objectives and approach to community investment — sharing skills and expertise already available within the Company.

## 2.7 Challenge: Ethics and Compliance

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
People manager training: Target 100% participation in ethical leadership.	BY 2012	● <b>ACHIEVED:</b> 97% completion for this training requirement across the target audience.
Business integrity training: Target 100% participation by employees globally in deployed ethics and compliance training.	BY 2012	● <b>ACHIEVED:</b> 99% participation in the Code of Conduct review and acknowledgment process.
Conflict of interest: Increase transparency around disclosure of potential conflicts of interest.	BY 2012	● <b>ON TRACK:</b> Per our commitment we developed and raised awareness of new conflict of interest disclosure training and a related web-based disclosure process scheduled for deployment in 2013.

## 2.8 Challenge: Governance

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Ensure the improvement of gender diversity in our Board of Directors.	BY 2012	<p>● <b>ACHIEVED:</b> The Board of Directors has continued to bring the Company into compliance with the provisions of the law of January 27, 2011, concerning the balanced representation of men and women at boards of directors, namely by submitting to the Shareholders' meeting first the cooptation, then the ratification of appointment by cooptation of Ms. Kim Crawford Goodman as a director.</p> <p>The Board of Directors will hence count three women, representing 27% of the directors.</p>

## 2.9 Challenge: Supply Chain

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Establish a systematic improvement program with suppliers assessed as being below satisfactory, ensuring 80% of active suppliers assessed are satisfactory or above — and that action plans are in place for the remaining 20%.	BY 2014	<p>● <b>ON TRACK:</b> 2012 objective (70% of active suppliers rated satisfactory or above) has been achieved. A considerable achievement given that we performed 110 new assessments or reassessments.</p>
Include specific sustainability requirements in 70% of procurement sectors for the purchase of own-use services/products.	BY 2012	<p>● <b>ACHIEVED:</b> In the first half of 2012, we completed our objective to have sustainability requirements identified for 70% of our own-use procurement sectors. This enabled us to deepen the knowledge and interest of commodity managers purchasing own-use products and services for sustainability.</p>

## 2.10 Challenge: Risk & Crisis Management

COMMITMENTS FOR THE COMING YEARS	TIME FRAME	STATUS 2013
Update each regional Enterprise Risk Management (ERM) deliverables (risk maps) every 2 years.	BY 2012 (APAC) BY 2013 (EMEA, Americas)	<p>● <b>ON TRACK:</b> APAC risk map updated in 2012. Due to the new operating model put in place on January 1, 2013, the ERM 2013 updates for EMEA and Americas will be replaced by an enhanced corporate-wide ERM deliverable that will include regions.</p>
Have an updated corporate-level ERM deliverable.	BY 2012	<p>● <b>ACHIEVED:</b> Updated corporate risk map presented on March 13 &amp; 14, 2012 to the Audit &amp; Finance Committee and Board of Directors.</p>
Cover more than 80% of key risks with a follow-up of mitigating actions.	BY 2012	<p>● <b>ACHIEVED:</b> 100% of key risks covered by mitigating actions.</p>
Organize an annual Audit & Finance Committee ERM review.	BY 2012	<p>● <b>ACHIEVED:</b> Review by the Audit &amp; Finance Committee conducted on March 13, 2012; review by the Board of Directors conducted on March 14, 2012.</p>
Have more than 90% of all identified critical functions covered by our consolidated, enterprise-wide Business Continuity Management Program.	BY 2012	<p>● <b>ACHIEVED:</b> The percentage of all identified critical functions covered through the BCM program is at 90.1% as of December 31, 2012.</p>
Run at least 1 crisis trial.	BY 2012	<p>● <b>ACHIEVED:</b> Test of EMEA crisis plan conducted in June 2012.</p>

## 3 ENVIRONMENTAL INDICATORS




### 3.1 Definitions and methodology

---

Our 2012 energy and water consumption, carbon footprint assessment and waste-generation reporting perimeter includes all sites owned or leased by Alcatel-Lucent as of December 2012.

In setting organizational boundaries and for corporate reporting of consolidated greenhouse gas emissions, we employ the “operational control” approach when establishing organizational boundaries. Within this approach, we account for 100% of GHG emissions from operations over which we have operational control. We continue to attempt to obtain utility information from landlords in leased situations where the utility usage can be allocated accurately to our leased space – for example, via a separate electric meter. If such information cannot be obtained, electricity and/or natural gas usage is estimated utilizing “energy intensity” factors as stipulated within our EHS Program Reporting Plan.

For the 2012 assessment, 225 facilities were directly responsible for managing energy and water consumption, carbon footprint assessment and waste generation reporting at their particular site. Sites with direct facility data input responsibility accounted for 81% of the total real estate building area and 74% of the total Alcatel-Lucent headcount. From this scope, the number of facilities that reported effectively resulted in the following corresponding percentage of total Alcatel-Lucent employees:

- **Energy consumption and CO<sub>2</sub>e emissions:** 225 sites (accounting for 74% of our employees) provided actual facility specific energy consumption and CO<sub>2</sub>e emissions information. This included inputting utility billings, fuel purchases and emitted GHG chemical emission data directly entered into a web-based tool by facility personnel. To account for 100% of our employees, facility energy consumption usage and CO<sub>2</sub>e emissions estimation algorithms were employed for sites that could not obtain such information. In addition, fuel usage data for marine vessels, along with fuel and mileage data for leased automobiles were obtained to account for 100% of world- wide Alcatel-Lucent mobile source operations. 
- **Water consumption:** 119 sites (accounting for 66% of our employees) provided water usage information. To account for 100% of our employees, extrapolation procedures were applied based on calculated ratios per employee.
- **Hazardous waste production:** 51 sites (accounting for 43% of our employees) provided information on hazardous waste production. To account for 100% of our employees, extrapolation procedures were applied based on calculated ratios per employee. 
- **Non-hazardous waste production:** 118 sites (accounting for 53% of our employees) provided information on non- hazardous waste production. To account for 100% of our employees, extrapolation procedures were applied based on calculated ratios per employee. 
- **Waste electrical and electronic equipment production:** 142 sites (accounting for 62% of our employees) provided information on waste electrical and electronic equipment. To account for 100% of our employees, extrapolation procedures were applied based on calculated ratios per employee.

The EHS Reporting Protocol is available upon request at: [sustainability@alcatel-lucent.com](mailto:sustainability@alcatel-lucent.com)

## 3.2 Evolution in 2012

The scope of our 2012 sustainability campaign grew from 2011: all facilities that were able to obtain energy usage information, regardless of building area or employee headcount, were required to participate using a web-based tool. As a result, more actual facility operational data was obtained, requiring less estimation to obtain 100% company- wide assessment.

In part due to the consolidation of facilities to more efficiently utilize resources, as well as our efforts to implement energy efficiency projects and conduct energy efficiency awareness programs for employees, we have achieved a reduction of total CO<sub>2</sub>e emissions from our facilities of 11% from 2011 levels.

In 2011, we clarified the wording of our commitment to “reduce our absolute carbon footprint (CO<sub>2</sub> equivalent) by 50% of 2008 baseline by 2020” by adding the term “from our operations”, meaning Scopes 1 and 2 only. The reason for this is that as we continue to add new Scope 3 indicators, we need to keep a stable baseline from which to track our progress on reducing our carbon footprint. Additionally, we constantly work with our key suppliers to reduce our Scope 3 emissions even though they are not part of our 50% reduction goal.

## 3.3 Environmental and energy consumption indicators

ENVIRONMENTAL INDICATORS	UNITS	2010	2011	2012	2012 PERIMETER
<b>Carbon Footprint Assessment-Worldwide Operations<sup>(1)</sup></b>					
<b>Scope 1</b>					
Stationary source fuel combustion	tCO <sub>2</sub> e <sup>(4)</sup>	63,403	54,541	56,540	100%
Mobile source fuel combustion	tCO <sub>2</sub> e <sup>(4)</sup>	82,419	81,153	66,292	100%
Facility and mobile source refrigerant losses	tCO <sub>2</sub> e <sup>(4)</sup>	5,333	4,381	4,070	100%
Direct emission of GHG from manufacturing/R&D/product development	tCO <sub>2</sub> e <sup>(4)</sup>	142	248	237	100%
Fire suppression system losses	tCO <sub>2</sub> e <sup>(4)</sup>	72	12	1	100%
<b>Scope 2</b>					
Electricity usage	tCO <sub>2</sub> e <sup>(4)</sup>	570,039	505,862	448,788	100%
Purchase of hot water/steam	tCO <sub>2</sub> e <sup>(4)</sup>	9,377	5,761	8,356	100%
Purchase of chilled water	tCO <sub>2</sub> e <sup>(4)</sup>	448	221	50	100%
<b>Scope 3<sup>(2)</sup></b>					
Purchased goods and services:					
• Contracted manufacturing services	tCO <sub>2</sub> e <sup>(4)</sup>	99,632	94,083	218,328	100%
• Contracted marine services	tCO <sub>2</sub> e <sup>(4)</sup>	58,019	58,768	71,668	100%
• Purchased paper <sup>(7)</sup>	tCO <sub>2</sub> e <sup>(4)</sup>	1,257	1,229	1,371	100%
Fuel- and energy-related activities not included in Scope 1 and 2	tCO <sub>2</sub> e <sup>(4)</sup>	45,273	39,188	58,208	100%
Upstream transportation and distribution <sup>(8)</sup>	tCO <sub>2</sub> e <sup>(4)</sup>	208,578	198,782	171,474	100%
Waste generated in operations <sup>(9)</sup>	tCO <sub>2</sub> e <sup>(4)</sup>	2,418	5,602	935	100%
Business travel	tCO <sub>2</sub> e <sup>(4)</sup>	114,494	107,184	76,790	100%
Employee commuting	tCO <sub>2</sub> e <sup>(4)</sup>	109,555	104,237	190,141	100%
Downstream transportation and distribution <sup>(8)</sup>	tCO <sub>2</sub> e <sup>(4)</sup>	6,447	5,861	5,303	100%
End-of-Life treatment of sold products <sup>(10)</sup>	tCO <sub>2</sub> e <sup>(4)</sup>	2,951	2,951	9	100%
<b>Grand Total (Scope 1 + 2 + 3)</b>	<b>tCO<sub>2</sub>e<sup>(4)</sup></b>	<b>1,379,857</b>	<b>1,270,064</b>	<b>1,378,561</b>	<b>100%</b>



ENVIRONMENTAL INDICATORS	UNITS	2010	2011	2012	2012 PERIMETER
Carbon Footprint Assessment-Facility Operations Only <sup>(1,5)</sup>					
Indirect emissions of CO <sub>2</sub> e, linked to consumed electricity	kt CO <sub>2</sub> e <sup>(3)</sup>	559	512	449	100%
Indirect emissions of CO <sub>2</sub> e per employee	t CO <sub>2</sub> e <sup>(4)</sup>	7	7	6	100%
Direct emissions of CO <sub>2</sub> e, linked to consumed fossil energy	kt CO <sub>2</sub> e <sup>(3)</sup>	73	63	62	100%
Direct emissions of CO <sub>2</sub> e per employee	t CO <sub>2</sub> e <sup>(4)</sup>	1	1	1	100%
Total emissions of CO <sub>2</sub> e	kt CO <sub>2</sub> e <sup>(3)</sup>	647	581	519	100%
Total emissions of CO <sub>2</sub> e per employee	t CO <sub>2</sub> e <sup>(4)</sup>	8	8	7	100%
Consumed Energy-Facility Operations Only <sup>(1,5)</sup>					
Consumed electricity	GWh	1,125	1,014	958 <span style="color: red;">Q</span>	100%
Consumed electricity by employee	MWh	15	13	13	100%
Consumed fossil energy	GWh	308	317	328 <span style="color: red;">Q</span>	100%
Consumed fossil energy by employee	MWh	4	4	5	100%
Total consumed energy	GWh	1,491	1,357	1,323 <span style="color: red;">Q</span>	100%
Total consumed energy by employee	MWh	19	18	18	100%
Carbon Footprint Assessment - Worldwide Scope 1 and Scope 2 <sup>(1,6)</sup>					
Indirect emissions of CO <sub>2</sub> e, Worldwide Scope 2 operations	kt CO <sub>2</sub> e <sup>(3)</sup>	n/a	n/a	457	100%
Indirect emissions of CO <sub>2</sub> e per employee	tCO <sub>2</sub> e <sup>(4)</sup>	n/a	n/a	6	100%
Direct emissions of CO <sub>2</sub> e, Worldwide Scope 1 operations	kt CO <sub>2</sub> e <sup>(3)</sup>	n/a	n/a	127	100%
Direct emissions of CO <sub>2</sub> e per employee	tCO <sub>2</sub> e <sup>(4)</sup>	n/a	n/a	2	100%
Total emissions of CO <sub>2</sub> e	kt CO <sub>2</sub> e <sup>(3)</sup>	n/a	n/a	584	100%
Total emissions of CO <sub>2</sub> e per employee	t CO <sub>2</sub> e <sup>(4)</sup>	n/a	n/a	8	100%
Consumed Energy - Worldwide Scope 1 and Scope 2 <sup>(1,6)</sup>					
Purchased electricity, Worldwide Scope 2 operations	GWh	n/a	n/a	958	100%
Purchased electricity by employee	MWh	n/a	n/a	13	100%
Total purchased Worldwide Scope 2 operations	GWh	n/a	n/a	955	100%
Total consumed Scope 2 energy by employee	MWh	n/a	n/a	14	100%
Consumed fossil energy, Worldwide Scope 1 operations	GWh	n/a	n/a	581	100%
Total consumed Scope 1 energy by employee	MWh	n/a	n/a	8	100%
Total consumed energy, Worldwide Scope 1 and 2 operations	GWh	n/a	n/a	1,576	100%
Total consumed energy by employee	MWh	n/a	n/a	22	100%

ENVIRONMENTAL INDICATORS	UNITS	2010	2011	2012	2012 PERIMETER
<b>Water and Wastes</b>					
Consumed water	m <sup>3</sup>	2,744,454	2,765,474	2,565,582	100%
Consumed water per employee	m <sup>3</sup>	36	38	37	100%
Production of hazardous waste	t	2,230	1,116	1,061 <span style="color: red;">Q</span>	100%
Production of hazardous waste per employee	kg	28	15	15	100%
Percentage of hazardous waste recycled <sup>(11)</sup>	%	80	50	68	100%
Production of non-hazardous waste	t	19,767	20,934	16,453 <span style="color: red;">Q</span>	100%
Production of non-hazardous waste per employee	kg	248	275	227	100%
Percentage of non-hazardous waste recycled <sup>(11)</sup>	%	68	71	71	100%
Production of Waste Electrical & Electronic Equipment (WEEE) <sup>(12)</sup>	t	4,464	6,314	7,481	100%
Percentage of WEEE recycled/reused	%	98	96	97	100%
<b>Other Emissions</b>					
Solvents	No significant quantities, indicator not relevant and not consolidated				
Halogenated hydrocarbon	No significant quantities, indicator not relevant and not consolidated				
Discharge into water (heavy metals)	No significant quantities, indicator not relevant and not consolidated				
Ozone-depleting substances	No significant quantities, indicator not relevant and not consolidated				
NOx, SOx and other criteria air contaminants <sup>(13)</sup>	t	576	103	116	100%
<b>Miscellaneous</b>					
Alcatel-Lucent headcount, ISO 14001 certified	%	29	39	43	100%
New products covered by ecodeclarations <sup>(14)</sup>	%	100	100	100	100%
Functional energy efficiency improvement of key products	%	20	n/a	25 <span style="color: red;">Q</span>	100%
Domestic product freight by truck	%	n/a	98	99	100%
International product freight by ocean vessel	%	n/a	40	51	100%

- (1) Emission factors based on initial values issued by IPCC and kept constant for data consistency.
- (2) The presentation of our Scope 3 indicators follows the categories and guidance provided by the GHG Protocol Corporate Value Chain (Scope 3) Accounting & Reporting Standard, published in November, 2011.
- (3) kt CO<sub>2</sub>e: Kilo metric tons of CO<sub>2</sub> equivalency (includes the following GHGs: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFCs and PFCs).
- (4) t CO<sub>2</sub>e: Metric tons of CO<sub>2</sub> equivalency (includes the following GHGs: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, HFCs and PFCs).
- (5) CO<sub>2</sub>e values include Scope 1 and Scope 2 emissions for facility operations only (includes facility mobile combustion)
- (6) Complete Scope 1 and 2 activities – worldwide.
- (7) Purchased paper includes 100% of paper used in operations and purchased under corporate contract; does not include externally printed marketing collateral.
- (8) Product transport includes 100% of emissions from air and marine transport worldwide, and truck transport from Europe.
- (9) Energy usage at environmental remediation sites.
- (10) Recycled electronic equipment.
- (11) Recycled: not released in a landfill or not burned without energy recovery.
- (12) WEEE data includes electronic waste generated by Alcatel-Lucent operations and WEEE take-back. Not reported as production per employee since production includes take-back.
- (13) Products of combustion from facility stationary operations.
- (14) Associated with new products released during the cited year.

### 3.4 Energy consumption indicators

#### Total energy consumption in joules or multiples

	AMOUNT	UNITS	TCO <sub>2</sub> E	MWH	GJ
Facility Operations_Coal Gas	967	megawatt hours	155	967	3,480
Facility Operations_Distillate Fuel Oil (#1, 2, 4 and diesel)	891,162	liters	2,402	9,497	34,124
Facility Operations_Natural Gas	292,058	megawatt hours	53,012	292,058	1,051,410
Facility Operations_Propane	20,592	liters	32	146	525
Facility Operations_Residual Fuel Oil (#5, 6)	299,973	liters	940	3,484	12,542
Facility Mobile Sources_CNG	689	kilograms	0	10	36
Facility Mobile Sources_Diesel	1,292,714	liters	3,498	13,750	49,500
Facility Mobile Sources_Ethanol	186	liters	0	1	4
Facility Mobile Sources_Gasoline	748,604	liters	1,758	7,207	25,944
Facility Mobile Sources_LNG	1,340	liters	2	9	31
Facility Mobile Sources_Propane	99,092	liters	154	701	2,525
			61,952	327,830	1,180,121

#### Total direct energy consumption in joules or multiples by renewable primary source

	AMOUNT	UNITS	CO <sub>2</sub> E	MWH	GJ
Facility Mobile Sources Ethanol	186	liters	0	1	4

#### Total direct energy consumption in joules or multiples by non-renewable primary source



	AMOUNT	UNITS	CO <sub>2</sub> E	MWH	GJ
Facility Operations_Coal Gas	967	megawatt hours	155	967	3,480
Facility Operations_Distillate Fuel Oil (#1, 2, 4 and diesel)	891,162	liters	2,402	9,479	34,124
Facility Operations_Natural Gas	292,058	megawatt hours	53,012	292,058	1,051,410
Facility Operations_Propane	20,592	liters	32	146	525
Facility Operations_Residual Fuel Oil (#5, 6)	299,973	liters	940	3,484	12,542
Facility Mobile Sources_CNG	689	kilograms	0	10	36
Facility Mobile Sources_Diesel	1,292,714	liters	3,498	13,750	49,500
Facility Mobile Sources_Gasoline	748,604	liters	1,758	7,207	25,944
Facility Mobile Sources_LNG	1,340	liters	2	9	31
Facility Mobile Sources_Propane	99,092	liters	154	701	2,525
			61,952	327,810	1,180,117


## Total amount of indirect energy in joules or multiples

	TOTAL MWH	TOTAL GJ	RENEWABLE MWH	RENEWABLE GJ	NON- RENEWABLE MWH	NON- RENEWABLE GJ
Purchased Hot Water/Steam	36,831	132,591	8,729	31,424	28,102	101,167
Purchased Chilled Water	52	187	8	29	44	157
Purchased Electricity	958,187	3,449,473	184,915	665,694	821,461	2,783,779
TOTAL	995,070	3,582,251	193,652	697,147	849,607	2,885,103

## 4 SOCIAL INDICATORS

With the convergence of our HR information systems, data on all social indicators are collected and consolidated at the corporate level. The only exception is health and safety data, which are issued from our sustainability reporting tool. The health and safety survey covered 69 countries.


SOCIAL INDICATORS	2010	2011	2012	2012 PERIMETER
<b>1. Headcount</b>				
Total headcount as of December 31	78,139	74,366	72,344 	100%
Number of recruits	8,661	4,331	4,776	100%
Headcount increase due to the full consolidation of previously non-fully consolidated companies	53	51	62	100%
Headcount increase due to acquisitions and insourcing	3,687	442	47	100%
Headcount reductions	(10,978)	(8,618)	(8,543)	
Headcount reduction due to businesses transferred or sold	(1,153)	(14)	(1,961)	100%
Headcount reduction due to outsourcing and transfers	(666)	(857)	(73)	100%
Headcount reduction due to redundancies	(2,660)	(1,542)	(1,700)	100%
Headcount reduction due to normal departures (retirements, end of temporary work contracts, resignations, deaths)	(6,499)	(6,205)	(4,809)	100%
<b>2. Diversity</b>				
Percentage of women/headcount	22%	21%	21% 	100%
Percentage of men/headcount	78%	79%	79%	100%
Percentage of women (Leadership Pipeline)	19%	19%	23%	100%
Number of disabled employees	148	157	168	France <sup>(1)</sup>
<b>3. Training</b>				
Training budget (as a percentage of payroll)	1.00%	1.00%	1.00%	100%
Total hours of training per employee	17.8	16	15	100%
Percentage of training time via e-learning technologies	38%	40%	51%	100%
<b>4. Mobility</b>				
Number of expatriates worldwide	498	391	358	100%
Expatriates by host region (Europe)	151	100	97	100%
Expatriates by host region (North America)	31	24	25	100%
Expatriates by host region (South America)	12	8	7	100%
Expatriates by host region (Middle East, Africa and India)	147	131	129	100%
Expatriates by host region (Asia-Pacific)	157	128	100	100%

SOCIAL INDICATORS	2010	2011	2012	2012 PERIMETER
<b>5. Health and Safety</b>				
Number of days of absence due to work-related accidents including occupational diseases per employee	0.07	0.08	0.07 	98% <sup>(2)</sup>
Frequency rate for work-related accidents including occupational diseases (number of accidents per year, per 1 million hours worked)	1.48	1.42	1.21	98%

(1) For Alcatel-Lucent France legal entity.

(2) Based on country legislations.

#### Additional notes

- In 2012, number of days of absence due to work-related accidents including occupational diseases per employee by region is 0.18 in APAC, 1.31 in EMEA and 1.92 in Americas.
- In 2012, distribution of frequency rate for work-related accidents including occupational diseases for total employee headcount by region was 0.01 in APAC, 0.08 in EMEA and 0.11 in Americas.
- Regarding the number of absence days due to work-related accidents including occupational diseases per employee: this value is the best possible estimate based on available data and given the challenges which may occur to a global company of our size, when trying to apply a common definition in all the countries where we are present. Each country has its own practices and/or regulations. Since some countries report calendar days instead of working days, the published indicator is overvalued. 

## 5 REPORTING FRAMEWORK

Our sustainability strategy and reporting framework conform to the following key regulatory requirements and international sustainability frameworks:

### 5.1 Article 225 of France's Grenelle II law (July 10, 2010)

Grenelle II requires companies to include information in their annual report on the environmental, social and societal impacts of their business activities and on their commitments to sustainable development – and to have an independent third-party verification of the published information.

See the correspondence Grenelle II table

SUBJECT	TOPIC	REQUIRED INFORMATION	REFERENCES
Environment	Overall environmental policy	Company organization to take into account environmental issues (including policy, assessment approach or certification)	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.1 OVERALL ENVIRONMENTAL POLICY</a>
Environment	Overall environmental policy	Employee awareness training and communication activities on environmental protection	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.1 OVERALL ENVIRONMENTAL POLICY</a>
Environment	Overall environmental policy	Allocation of resources to prevent environmental risks and pollution	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.1 OVERALL ENVIRONMENTAL POLICY</a>
Environment	Overall environmental policy	Amount of provisions and guarantees to address environmental risks, provided such information is not likely to cause serious harm to society in an ongoing dispute	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.1 OVERALL ENVIRONMENTAL POLICY</a>
Environment	Pollution and waste management	Prevention, reduction or compensation measures for air emissions or water and soil discharges that seriously affect the environment	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.2 POLLUTION AND WASTE MANAGEMENT</a>
Environment	Pollution and waste management	Actions taken to support prevention, recycling and waste disposal	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.2 POLLUTION AND WASTE MANAGEMENT ; 4.2.6 ENVIRONMENT INDICATORS</a>
Environment	Pollution and waste management	Inclusion of noise pollution and any other form of pollution specific to the activity in question	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.2 POLLUTION AND WASTE MANAGEMENT</a>

SUBJECT	TOPIC	REQUIRED INFORMATION	REFERENCES
Environment	Sustainable use of resources	Water consumption and water supply based on local conditions	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.3 SUSTAINABLE USE OF RESOURCES ; 4.2.6 ENVIRONMENT INDICATORS</a>
Environment	Sustainable use of resources	Consumption of raw materials and measures taken to improve the efficiency of their use	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.3 SUSTAINABLE USE OF RESOURCES</a>
Environment	Sustainable use of resources	Energy consumption, measures taken to improve energy efficiency and renewable energy use	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.3 SUSTAINABLE USE OF RESOURCES ; 4.2.6 ENVIRONMENT INDICATORS</a>
Environment	Sustainable use of resources	Soil use	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.5 BIODIVERSITY PROTECTION</a>
Environment	Climate Change	Greenhouse gas emissions	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.4 CLIMATE CHAGE ; 4.2.6 ENVIRONMENT INDICATORS</a>
Environment	Climate Change	Adaptation to the impact of climate change	<a href="#">4.2.1 OVERALL ENVIRONMENTAL POLICY</a>
Environment	Biodiversity protection	Measures taken to protect or develop biodiversity	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.2.5 BIODIVERSITY PROTECTION</a>
Social	Employment	Total number and breakdown of employees by gender, age and geography	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.1 EMPLOYMENT ; 4.3.8 SOCIAL INDICATORS</a>
Social	Employment	Hirings and dismissals	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.1 EMPLOYMENT ; 4.3.8 SOCIAL INDICATORS</a>
Social	Employment	Compensation and evolution	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.1 EMPLOYMENT</a>
Social	Work organization	Work time organization	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.2 WORK ORGANIZATION AND MANAGEMENT</a>
Social	Work organization	Absenteeism	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.2 WORK ORGANIZATION AND MANAGEMENT</a>
Social	Social relationships	Organization of social dialogue, including procedures for consultation and negotiation with staff	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.3 SOCIAL RELATIONSHIPS</a>
Social	Social relationships	Review of collective agreements	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.3 SOCIAL RELATIONSHIPS</a>
Social	Health and Safety	Health and safety work conditions	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.4 HEALTH AND SAFETY</a>
Social	Health and Safety	Review of agreements signed with trade unions or staff representatives on workplace health and safety	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.4 HEALTH AND SAFETY</a>
Social	Health and Safety	Occupational accidents (including frequency and severity rates) and occupational diseases	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.4 HEALTH AND SAFETY ; 4.3.8 SOCIAL INDICATORS</a>
Social	Training	Training policies	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.5 TRAINING</a>
Social	Training	Total number of hours trained	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.5 TRAINING</a>
Social	Equal opportunity	Measures in favor of equality between women and men	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.6 DIVERSITY AND EQUAL OPPORTUNITY</a>

SUBJECT	TOPIC	REQUIRED INFORMATION	REFERENCES
Social	Equal opportunity	Measures for employment and integration of disabled people	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.6 DIVERSITY AND EQUAL OPPORTUNITY</a>
Social	Equal opportunity	Policies against discrimination	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.6 DIVERSITY AND EQUAL OPPORTUNITY</a>
Social	Promotion and enforcement of ILO core conventions	Freedom of association and collective bargaining rights	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.7 PROMOTION AND ENFORCEMENT OF ILO CORE CONVENTIONS</a>
Social	Promotion and enforcement of ILO core conventions	Measures toward the elimination of discriminatory treatment in employment and occupation	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.7 PROMOTION AND ENFORCEMENT OF ILO CORE CONVENTIONS</a>
Social	Promotion and enforcement of ILO core conventions	Measures toward the elimination of forced or compulsory work	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.7 PROMOTION AND ENFORCEMENT OF ILO CORE CONVENTIONS</a>
Social	Promotion and enforcement of ILO core conventions	Measures toward the effective abolition of child labor	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.3.7 PROMOTION AND ENFORCEMENT OF ILO CORE CONVENTIONS</a>
Societal	Territorial, economic and social impact of the company	in terms of employment and regional development	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.1 TERRITORIAL, ECONOMIC AND SOCIAL IMPACT</a>
Societal	Territorial, economic and social impact of the company	on local population	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.1 TERRITORIAL, ECONOMIC AND SOCIAL IMPACT</a>
Societal	Relationships with persons or organizations interested in the company's business, including:	Dialogue conditions with those persons or organizations	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.2 ENGAGEMENT WITH STAKEHOLDERS</a>
Societal	Relationships with persons or organizations interested in the company's business, including:	Actions of partnership or philanthropy	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.2 ENGAGEMENT WITH STAKEHOLDERS</a>
Societal	Subcontractors and suppliers	Consideration of social and environmental issues in the company's procurement policy	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.3 RESPONSIBLE PURCHASING</a>
Societal	Subcontractors and suppliers	Importance of subcontracting and the social and environmental responsibility of suppliers and subcontractors	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.3 RESPONSIBLE PURCHASING</a>
Societal	Fair practices	Actions taken to prevent corruption	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.4 FAIR PRACTICES</a>
Societal	Fair practices	Measures taken for consumer health and safety	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.4 FAIR PRACTICES</a>
Societal	Human rights: Actions taken to support human rights	Human rights: Actions taken to support human rights	<a href="#">SEE 20-F ADDITIONAL INFORMATION DOCUMENT 4.4.5 INDUSTRY DIALOGUE ON HUMAN RIGHTS</a>



## 5.2 United Nations Global Compact (UNGC)

---

Our sustainability report and company strategy conform to the United Nations Global Compact by:

- Incorporating information on our sustainability activities according to the 24 UN Global Compact Advanced Level assessment criteria
- Incorporating the principles of the UN's "Caring for Climate" eco-sustainability initiative in all our activities

[Read more about Alcatel-Lucent and UNGC Advanced Level criteria](#)

[Read more about Alcatel-Lucent and UNGC](#)

In 2012, we ranked among the top 25 UNGC "Caring for Climate" performers for our commitments to setting goals, disclosing carbon emissions, and developing and expanding strategies and practices. We were also among the top quadrant of companies reporting according to the UNGC Advanced Level criteria.



# 2012

## SUSTAINABILITY REPORT

### A BUSINESS IMPERATIVE

## GOVERNANCE

---

Alcatel-Lucent is compliant with the AFEP-MEDEF Code of Corporate Governance for listed corporations. The principles of the code govern, among other things, the operating rules of our Board of Directors and its committees. The code is based on specific principles that also largely underpin our corporate governance policy as those principles are in line with the organization, the status and the means of the company, unless otherwise mentioned.



# TABLE OF CONTENTS

<b>1</b>	<b>BOARD OF DIRECTORS GOVERNANCE SYSTEM.....</b>	<b>64</b>
1.1	Separation of functions.....	64
1.2	Staggered Board: Membership and diversity.....	65
1.3	Selection criteria and independence of the Directors .....	66
1.4	Ethics and absence of conflicts of interest .....	66
1.5	Board duties .....	67
<b>2</b>	<b>BOARD EFFECTIVENESS AND TRANSPARENCY .....</b>	<b>67</b>
2.1	Dialogue with Directors .....	67
2.2	Board's information and works .....	67
2.3	Assessment of the Board's own work .....	68
2.4	Communication with the Shareholders .....	68
<b>3</b>	<b>SENIOR MANAGEMENT REMUNERATION.....</b>	<b>68</b>
3.1	Principles .....	68
3.2	Executive Directors .....	69
3.3	Executive Committee.....	70
3.4	Members of the Board of Directors.....	70
<b>4</b>	<b>SUSTAINABILITY .....</b>	<b>70</b>
<b>5</b>	<b>INDEPENDENCE OF STATUTORY AUDITORS AND INTERNAL AUDIT.....</b>	<b>71</b>
<b>6</b>	<b>E-NOTICE OF MEETING AND E-VOTE FOR THE 2013 SHAREHOLDER'S MEETING .....</b>	<b>71</b>
<b>7</b>	<b>OUR APPROACH TO RISK AND CRISIS MANAGEMENT .....</b>	<b>72</b>
7.1	Enterprise Risk Management .....	72
7.2	ERM governance and compliance .....	72
7.3	Business continuity and crisis management .....	73
7.4	Contingency plans for environmental and sustainability-related risks.....	74



## 1 BOARD OF DIRECTORS GOVERNANCE SYSTEM

### 1.1 Separation of functions

Alcatel-Lucent operates according to the ‘monist’ system, meaning that it is managed by a Board of Directors. The duties of the Chairman of the Board and those of the CEO have been separated since 2006. Philippe Camus has been Chairman since October 1, 2008, and Ben Verwaayen has been CEO since September 15, 2008.

Following the renewal of their terms of office at the Annual Shareholders’ Meeting in 2010, our Board of Directors confirmed the principle of separation of Chairman and CEO functions and reappointed Philippe Camus as Chairman of the Board of Directors.

On February 6, 2013, the Board of Directors acknowledged Ben Verwaayen’s decision not to request the renewal of his terms of office as Director and CEO.



#### HIGHLIGHT

Alcatel-Lucent’s Board of Directors appointed Michel Combes as the Company’s new Chief Executive Officer, effective April 1, 2013, for a term of office also expiring at the end of the Shareholders’ Meeting deliberating on the financial statements for fiscal year 2015.

In addition, Michel Combes was appointed director by the Shareholders’ Meeting held on May 7, 2013 for a three-year term of office, i.e., until the shareholders’ meeting which will be held to approve the financial statements for fiscal year 2015.

For more information, please see Form 20-F, Section 7.1.1 “Principles of Organization of Our Company’s Management”.

## 1.2 Staggered Board: Membership and diversity

As of March 7, 2013, our Board consists of 11 Directors, three of whom are women, representing six different nationalities, and the average member age is 62. The term of office is three years and, in compliance with the AFEP-MEDEF Code, the renewal of the Directors' terms of office is staggered in order to avoid replacing the entire Board of Directors. One third of the Board of Directors members will be renewed each year starting in 2013.

DIRECTORS	OFFICE	AGE	INDEPENDENCE	NATIONALITY	DURATION OF THE TERM OF OFFICE					
					2010	2011	2012	2013	2014	2015
Mr. Camus	Chairman	64	No	French						
Mr. Verwaayen	CEO	61	No	Dutch						
Ms. Cico	Director	52	Yes	Italian						
Mr. Monty	Director	65	Yes	Canadian						
Mr. Bernard	Director	67	Yes	French						
Ms. Goodman*	Director	47	Yes	American						
Lady Jay	Director	66	Yes	British						
Mr. Spinetta	Director	69	Yes	French						
Mr. Eizenstat	Director	70	Yes	American						
Mr. Hughes	Director	64	Yes	American						
Mr. Piou	Director	54	Yes	French						

\* Kim Goodman was co-opted at the Board meeting held on December 5, 2012, in replacement of W. Frank Blount for the remainder of his term of office.

The Board of Directors includes two Board observers (*"censeurs"*). The two Board observers are both Alcatel-Lucent employees, or from an affiliate, and members of an Alcatel-Lucent mutual fund (in French, *"fonds commun de placement"*).

The Board observers participate at the Board meetings on a consultative basis. They have access to the same information as that submitted to the Board of Directors. Their term of office is three years with staggered renewal.



### 2012 ACHIEVEMENTS

The Board of Directors continued to ensure company compliance with the provisions of the January 27, 2011 law concerning the balanced representation of men and women at boards of directors, namely by submitting to the Shareholders' Meeting first the cooptation, then the ratification of appointment by cooptation of Ms. Kim Crawford Goodman as a director.

The Board of Directors will hence include three women, representing 27% of the directors.

For more information, please see Form 20-F, Section 7.1.2 "Management Bodies of the Company".

### 1.3 Selection criteria and independence of the Directors

---

The appointment of new Directors must comply with the selection rules applied by our Corporate Governance and Nominating Committee. In broad terms, the Board of Directors aims to combine a range of diverse skills and expertise capable of supporting the company's high-technology businesses, and sufficient financial expertise to enable the Board of Directors to make informed and independent decisions about financial statements and compliance with accounting standards. Special attention is also paid to the quality and the complementary nature of the careers of the Directors, in terms of location, duties performed and their business sector.

The independence criteria chosen by the Board of Directors are based on the AFEP-MEDEF Code: "A director is independent when he or she has no relationship of any kind whatsoever with the corporation, its group or the management of either that is such as to color his or her judgment."

At the February 6, 2013 meeting, our Board of Directors re-examined the situation of each Director with respect to the independence criteria of the AFEP-MEDEF Code and the NYSE rules. It determined that nine of the 11 Directors are independent, i.e., all the Directors except the Chairman of the Board and the CEO. Indeed, according to the AFEP-MEDEF Code they could not be considered to be independent since one of the independence criteria stipulated by the AFEP-MEDEF Code is that a Director "must not be [...] an executive director" (*"dirigeant mandataire social"* in French).

For more information, please see Form 20-F, Section 7.1.2 "Management Bodies of the Company".

### 1.4 Ethics and absence of conflicts of interest

---

Each Director (and Board observer) undertakes to comply with the rules of conduct set out in the Directors' Charter, in particular concerning the compliance with any applicable securities laws, as well as with the rules of our Alcatel-Lucent Insider Trading Policy, designed to prevent insider trading. This policy sets limited periods outside of which transactions involving our company's shares are not authorized, the minimum number of shares that each director must hold, and an obligation to notify the *Autorité des Marchés Financiers* (the French securities regulator) of any personal transactions involving Alcatel-Lucent shares.

In accordance with the Directors' Charter, a Director must notify the Board of any actual or potential conflict of interest. To the knowledge of our Board of Directors, none of our Directors are in such a situation. Lady Sylvia Jay abstained from voting on a Board decision concerning the appointment as financial advisor of a company that is a member of a group of which Lady Sylvia Jay is also Director. There are also no family relationships between members of the Board of Directors and senior management and no arrangement or agreement with a shareholder, client, supplier or any third-party pursuant to which a member of our Board of Directors or of our Management Committee was appointed in such capacity or as CEO of the Company.

For more information, please see Form 20-F, Section 7.1.2 "Management Bodies of the Company".

## 1.5 Board duties

---

In addition to matters related to its legal or regulatory function, the Board of Directors regularly decides upon the company's strategic orientations and the main decisions affecting its activities. It also analyzes the outlook resulting from the research and development activities of the Group and gives input on the main technology options chosen. Furthermore, the Board monitors the company's economic and financial management, and authorizes financial transactions that have a significant impact on its accounts.

The Operating Rules of the Board of Directors specify the conditions according to which the Directors exercise their functions and, in particular, the thresholds above which the decisions of the CEO are subject to the prior approval of the Board of Directors.

For more information, please see Form 20-F, Section 7.1.3 "Powers and Activity of the Board of Directors".

## 2 BOARD EFFECTIVENESS AND TRANSPARENCY

### 2.1 Dialogue with Directors

---

Pursuant to the Operating Rules that govern its operation, our Board of Directors meets at least once every quarter. However, in practice, the Board of Directors meets more frequently, illustrating the commitment of its Chairman and the Directors vis-à-vis our Company.

Board meetings are usually held at the Alcatel-Lucent head office in Paris, or in the United States at Murray Hill (New Jersey), the head office of Alcatel-Lucent USA Inc. However, meetings can also be held regularly at other company sites with a view to facilitating dialogue between executives, employees and Directors, and enabling our Directors to better understand both the company's wide range of business activities, as well as the specific challenges in its main markets.

The Directors may also seek the opinion of company senior management on any subject they deem appropriate, meet with them in an informal way at the meetings held before the Board of Directors meetings. The Directors also regularly meet with the company's employees, in particular with those with strong career potential.

For more information, please see Form 20-F, Section 7.1.3.2 "Organization of Board Meetings".

### 2.2 Board's information and works

---

To assist them in the performance of their duties, the members of the Board receive all relevant information regarding Alcatel-Lucent, in particular, the financial analysis reports. This information is available to the Directors via a secure Intranet site dedicated to the Board members.

The Board of Directors has four specialized committees that report to it concerning the subjects presented to them: Audit & Finance; Corporate Governance & Nominating; Compensation; and Technology. The attendance rate to the Board and its Committees for fiscal year 2012 is globally satisfying:

BOARD AND COMMITTEE MEETINGS IN 2012	BOARD OF DIRECTORS	AUDIT AND FINANCE COMMITTEE	CORPORATE GOVERNANCE AND NOMINATING COMMITTEE	COMPENSATION COMMITTEE	TECHNOLOGY COMMITTEE
Overall attendance rate	94%	92%	100%	100%	100%

For more information, please see Form 20-F, Section 7.1.3.2 "Organization of Board Meetings".



## 2.3 Assessment of the Board's own work

---

The Board carries out an annual assessment of its own work in accordance with the AFEP-MEDEF Code, as well as of the performance of the Executive Directors, and at least once every two years, its performance is assessed by an independent consultant in compliance with our Operating Rules.

In compliance with the AFEP-MEDEF Code and with our Operating Rules, the Board performed an annual assessment of its own work at the beginning of 2012, with the assistance of an external consultant. The results of this assessment were reviewed by the Board in March 2012. They confirmed that the Board and its Committees function in a satisfactory manner, that there is complementarity and cohesion between the Directors, and that the dialogue between the Directors and the management is dense and of quality. It further highlighted improvements that could be made, in particular regarding the distribution of tasks between the Board and the Committees, and the implementation of sessions dedicated to certain strategic questions.

The Board performed an annual assessment of its own work at the beginning of 2013. The results of this assessment were reviewed by the Board on March 7, 2013. They confirmed the conclusions of the in-depth evaluation conducted last year, as well as the complementary skills of the Board members, and highlighted the strong dedication of the Directors in the main steps of the company's transformation.

For more information, please see Form 20-F, Section 7.1.3.3 "Activity of the Board of Directors in 2012 and 2013".

## 2.4 Communication with the Shareholders

---

The Board of Directors also ensured that the shareholders were kept properly informed. This included a detailed presentation of Alcatel-Lucent's situation and its governance by the Chairman and the CEO at the Shareholders' Meeting on June 8, 2012. The Board of Directors also ensured that investors and the public were properly informed, as required under French and U.S. stock exchange regulations.

For more information, please see Form 20-F, Section 7.1.3.3 "Activity of the Board of Directors in 2012 and 2013".

# 3 SENIOR MANAGEMENT REMUNERATION

## 3.1 Principles

---

Compensation for the Executive Directors is established in accordance with the recommendations of the AFEP-MEDEF Code. Based on the recommendation of the Compensation Committee, the Board of Directors determines all compensation and long-term benefits awarded to the Chairman of the Board and the Chief Executive Officer.

Regarding 2013, without putting into question the fundamental principles framing these mechanisms, which are explained in the following sections, the Board of Directors decided not to put in place at this point a performance share or a stock option annual plan for the employees, Executive Directors, and company senior management, in particular in view of market conditions.

Proposals for the compensation of the Chairman and of the Chief Executive Officer, as well as of the Directors and key executives, are established under the responsibility of the Compensation Committee. It evaluates all compensation paid or attributed to them, including compensation relating to retirement, and other benefits of any nature. It also reviews the policies relating to the grant of stock options and performance shares to the Group's Executive Officers, and in particular to members of the Management Committee.

However, the Executive Directors advised the Board of Directors of their decision to relinquish any performance share or stock option grants in 2013 for fiscal year 2012, in order to show their personal commitment in favor of Alcatel-Lucent's recovery and to take into account the 2012 fiscal year results.

## 3.2 Executive Directors

The Board of Directors ensures a balance between the various components of the Executive Directors' compensation (fixed and variable compensation, stock options and performance share awards, and additional pension benefits, if any). It also ensures that these components comply with the principles of comprehensiveness and clarity, balance and reasonableness, benchmarking and consistency set forth in the AFEP-MEDEF Code.

The total annual compensation of the Chairman of the Board consists of a fixed annual compensation paid in cash and share-based compensation, in line with the practices of companies in Alcatel-Lucent's main reference markets.

In application of the AFEP-MEDEF Code, the evaluation of the performance of the Chairman of the Board must not only be based on quantitative criteria, but must also consider the work performed and results obtained, as well as the specific responsibility assumed by the Chairman within the company. The acquisition of performance shares for fiscal year 2011 by the Chairman of the Board were subject to the satisfaction of one quantitative criterion equal to 30% of the performance evaluation, and of qualitative criteria equal to 70% of the performance evaluation.

The total annual compensation of the Chief Executive Officer, like that of all Alcatel-Lucent managers and executives, consists of a fixed portion and a variable portion, plus a long-term benefit. The variable compensation is determined each year by the Board of Directors according to pre-defined performance criteria.

The Chief Executive Officer received, in 2011, 2010 and 2009, long-term compensation consisting entirely of stock options and 100% subject to the performance conditions described below, as recommended by the AFEP-MEDEF Code.

The Chief Executive Officer is not entitled to any severance payment, even upon forced termination resulting from a change in control or strategy.

The compensation policy for our Executive Directors was determined by the Board of Directors, taking into account the difficult situation – both in terms of markets and technologies – that Alcatel-Lucent experienced in mid-2008, at the time of their appointment, and the challenges they agreed to meet at that time. The table below reflects the main criteria adopted:

	FIXED COMPENSATION	VARIABLE COMPENSATION	PERFORMANCE SHARES	STOCK OPTIONS
Chairman <sup>1</sup>	Individual skills		Individual performance: 70% of the grant; Performance of Alcatel-Lucent's shares: 30% of the grant	
CEO <sup>2</sup>	Individual skills	Financial criterion		Performance of Alcatel-Lucent's shares: 50% of the grant; Financial criterion: 50% of the grant
	SHORT TERM PERFORMANCE		LONG TERM PERFORMANCE	

<sup>1</sup> No performance share grant for fiscal year 2012.

<sup>2</sup> No stock option grant for fiscal years 2011 and 2012.

### 3.3 Executive Committee

---

The remuneration of the members of the Executive Committee consists of a fixed portion and a variable portion based on the company's performance criteria reviewed by the Compensation Committee, identical to those applicable to all executives and a large number of Company managers, and on their individual performance.

### 3.4 Members of the Board of Directors

---

The only compensation paid to the Directors by Alcatel-Lucent is directors' fees. The directors' fees, in application of the Board of Directors' Operating Rules, consist of (i) a fixed portion for performing their duties on the Board of Directors and, where relevant, on one of the Boards' Committees, and (ii) a variable portion for their attendance at the various meetings, in compliance with the AFEF-MEDEF Code. Additional directors' fees are equally allocated among the Directors, subject to the investment in Alcatel-Lucent shares of the amount granted as additional fees after taxes and to the holding of the acquired shares during the duration of the term of office as director. The Chairman of the Board of Directors and the CEO do not receive any directors' fees.

[For more information, please see Form 20-F, 7.1.2 "Management Bodies of the Company", Sections 7.2.2.2 "Chairman of the Board of Directors", 7.2.2.5 "Chief Executive Officer" and 7.2.2.8 "Management Committee".](#)

## 4 SUSTAINABILITY

The principles of sustainability are an essential part of our corporate governance. The Board of Directors supports the company's initiatives that cover a scope beyond the limited part of what is meant by 'sustainability'.

The Board of Directors is kept regularly informed of sustainability proceedings that are reported by the different organizations within Alcatel-Lucent to the Board's Committees: the Technology Committee is concerned by the areas of the environment; the Audit & Finance Committee by the conformity and risks management areas; and the Board by the strategy and human resources fields.

The Sustainability Council meets four times a year to review the company's sustainability strategy and performance, providing oversight to the Board of Directors via the aforementioned Board Committees.

[For more information about our sustainability approach](#)

## 5 INDEPENDENCE OF STATUTORY AUDITORS AND INTERNAL AUDIT

External auditor fees are closely monitored and controlled. Their budget is approved by the Audit and Finance Committee, and a process has been established in order to approve additional audit services fees (audit-related or not audit-related). It has to be noted that services (not audit-related) rendered by the two statutory auditors in 2011 represent less than 5% of the total amount paid to our two external audit firms.

The Corporate Audit function is in charge of all internal audit engagements as well as the Sarbanes-Oxley Project Management Office. In accordance with the Audit Charter, CAS has full access to all areas of the organization to accomplish its mission. With a team of approximately 45 people, the Chief Audit Executive reports to the Audit & Finance Committee and CFO on the status of the audit plan and specifically on the effectiveness of the internal controls of reviewed domains (including notably Sarbanes-Oxley compliance, and results of anti-corruption reviews). The audit results and the follow up of the audit recommendations made by the audit team are regularly shared with the Audit & Finance Committee.

In 2012, the internal audit department was certified by the IFACI (French branch of the Institute of Internal Auditors - IIA), recognizing the team's professionalism. This certification, granted by external experts, confirms that the internal audit function is independent and objective; is competent and rigorous; focuses on areas of major importance for the organization; constantly strives to optimize the quality of services rendered; and plays an active role in the company's governance practices.

For more information, please see Form 20-F, Section 3.1 "Global System of Internal Control and Risk Management".

## 6 E-NOTICE OF MEETING AND E-VOTE FOR THE 2013 SHAREHOLDER'S MEETING

Alcatel-Lucent proposes to send notices of shareholder meetings by email and enable votes via Internet as a sign of commitment to eco-sustainability.

Shareholders who have agreed to this will receive the notice of meeting by email with a link to a dedicated and secure website where they can access and download the Board's report on resolutions and the Shareholders' Meeting notice, and can cast their vote.

A similar system also exists for the holders of American Depositary shares (ADS)\* with access to the voting materials via a dedicated website. The company has produced a lightweight notice of meeting in compliance with the applicable law that authorizes the sending of a two-page important notice with access to a dedicated website for the Shareholders' Meeting and to receive, if requested, a paper copy of the documents regarding this meeting.

\* An ADS represents one underlying ordinary share, and allows U.S. investors to have easier access to non-U.S. corporate issuers.

## 7 OUR APPROACH TO RISK AND CRISIS MANAGEMENT

### 7.1 Enterprise Risk Management

---

Enterprise Risk Management (ERM) at Alcatel-Lucent is built on a comprehensive framework covering 80 risks in the areas of operations, finance, strategy, human resources, security, and legal and compliance. Topics related to sustainability – for example, respect for human rights, anti-corruption, raw material prices and environmental regulations – are either addressed directly or nested within the risk catalogue.

[For more information](#)



#### 2012 ACHIEVEMENTS

In 2012 we focused on the ongoing maintenance of our comprehensive ERM process, which encompasses risk identification, prioritization and mitigation. This prepared the ground for ERM adaptations and enhancements under our new operating model. Our achievements in 2012 included:

1. APAC risk map updated in 2012. Due to the new operating model put in place on January 1, 2013, the ERM 2013 updates for EMEA and Americas will be replaced by an enhanced corporate-wide ERM deliverable that will include regions.
2. Updating of our corporate-level ERM risk map.
3. Definition and quarterly monitoring of mitigating actions. In 2012, 82 mitigating actions covering 100% of our key risks were defined, implemented and monitored.
4. Completion of a global ERM review by the Audit & Finance Committee on March 13, 2012, supported by quarterly reporting on the status of ERM action plans. A review by the Board of Directors was conducted on March 14, 2012.

Our ERM approach gives enterprise-wide visibility to the impact of all types of risks on processes, activities, stakeholders, products and services. It allows us to define effective and sustainable risk responses through:

- Risk identification and evaluation
- Setup and capture of mitigating actions for key risks

We prioritize the most significant risks according to:

- Severity of impact
- Likelihood of occurrence
- Control effectiveness

Prioritized risks identified as warranting particular attention (based on consolidated ERM results and input from select corporate stakeholders) are communicated to and reviewed annually by the Board of Directors and its Audit & Finance Committee. ERM disclosure is reconciled with 20-F risk factor disclosure.

### 7.2 ERM governance and compliance

---

The Head of Group Treasury, who reports directly to the Chief Financial Officer, a member of the Management Committee, reviews our ERM program for the Board of Directors and its Audit & Finance Committee. Within Group Treasury, the Head of Risk & Insurance owns the ERM process.

In place for more than a decade, our ERM program complies with the integrated COSO II framework (which allows companies to structure all kinds of risks and organize appropriate mitigating actions) and aligns with the recommendations of the Autorité des Marchés Financiers and the *Sarbanes-Oxley Act*.

Corporate risk owners and associated mitigating actions are identified for each key risk. Actions can be either recurrent (control activities) or corrective (ad hoc). Action plans are monitored on a quarterly basis via specific indicators. The risk owner works with the corresponding Management Committee member or his/her direct reports.

Risks and the status of mitigating actions are submitted quarterly to Group Treasury and Corporate Audit Services. Reporting on key risks and mitigating actions is complemented, where relevant, by the presentation of hot risk topics that ensures our perspective on risks remains current.

In 2012, our risk mitigation programs placed particular focus on contingencies and financial risks associated with our suppliers, and liquidity risks linked to the Eurozone crisis.



#### HIGHLIGHT

### Minimizing supply chain contingencies

The natural catastrophes of 2011 – including the earthquake and tsunami in Japan and flooding in Thailand – highlighted the ways modern supply chains are vulnerable to natural hazards. To improve the resiliency of our supply chain, we updated and expanded our portfolio analysis of windstorm, earthquake and flood exposures in 2012 to include third-party locations and revenue streams. This was complemented by an evaluation of recovery times for the hardware supply chain for our most profitable products.

[For more information on our supply chain](#)

Alcatel-Lucent enforces a policy to minimize industrial risks in order to avoid high-frequency occurrences and control the impact of potentially serious losses. More than 65% of our total insured values are classified as ‘highly protected risks’ (HPRs).<sup>1</sup> Contingencies and interdependencies linked to internal and external manufacturing and logistics nodes are continuously analyzed, and corrective risk engineering is conducted throughout our supply chain organization for the benefit of customers, employees, suppliers and stakeholders.

## 7.3 Business continuity and crisis management



#### 2012 ACHIEVEMENTS

1. Achieved business continuity plan coverage of more than 90% (up from 69% in 2011) of all identified critical functions with our consolidated, enterprise-wide BCM program by end of year (i.e., developed a mature BCM program).
2. Conducted a crisis management exercise for the Europe, Middle East and Africa region in June 2012.

Integrated into ERM, our enterprise-wide Business Continuity Management (BCM) program is designed to enable the continuation of business-critical functions such as product delivery, installation and technical support – and our ability to meet customer expectations – during significant business disruptions. BCM is closely linked to and supports our corporate crisis-management process.

In 2012, Alcatel-Lucent completed a four-year initiative to establish a standard format and centralized repository for its business continuity plans. These plans are integrated for coverage throughout the company, and are activated if and when needed. Currently, plans cover more than 90% of all identified critical functions – achieving our objective for developing a mature BCM program. The focus for 2013 will be to maintain plan coverage to sustain BCM program maturity.

<sup>1</sup> An HPR is a facility at which exposure to loss due to natural hazards (e.g., earthquakes, floods, windstorms) and industrial risks (e.g., fire) has been reduced to an acceptable level through all reasonable human elements (to avoid high-frequency risks) and physical protection measures (to reduce high-impact risks).

Our BCM program is complemented by a robust corporate crisis-management process approved by the CEO. This process establishes an integrated approach to incident management in crisis situations and provides the framework for efficient interaction between local, national, regional, corporate and external stakeholders.

The Corporate Crisis Management team is activated during a major event that threatens people security, company image, customer satisfaction or business continuity. It provides guidance for events such as country evacuation, serious injury or fatality, data breach, natural disaster, pandemic or geopolitical crisis.



## HIGHLIGHTS

### Ensuring business continuity

On August 7, 2012, Alcatel-Lucent employees at the Ottawa, Canada campus were greeted by a fleet of fire trucks in the parking lot as they arrived for work. A melted electrical transformer core generated smoke and interrupted power, closing the campus to employees. Both the Global Welcome Center and the HR Service Center activated their business continuity plans and were able to operate offsite with no interruption to business. The Facilities team worked tirelessly to manage the situation and secure a backup generator so the campus could reopen the following day.

### Maintaining continuity during natural catastrophes

Various business continuity plans were successfully activated for Hurricane Sandy, which caused facility closures and power outages throughout the northeastern United States in late October and early November 2012. As part of our commitment to continuous improvement, 'Lessons Learned' sessions were held after each incident to help improve risk response.

## 7.4 Contingency plans for environmental and sustainability-related risks

Real estate business continuity plans (BCPs) address environmental risks not as specific threats but rather as risk responses to the loss of critical functions. A total of 80 real estate facilities plans are currently in place. These plans target locations with more than 500 employees (or more than 200 employees in areas with elevated risks, such as locales prone to earthquakes or political volatility) and cover all critical real estate functions identified for a given location.

With some exceptions, BCPs are not developed per threat but instead per critical function. Therefore, BCPs respond to any threat to any system that becomes material, including environmental risks. Some plans – both centrally managed plans within the corporate crisis management process and local emergency response plans – respond to particular hazards such as earthquakes and pandemics.

Regarding compliance, ethics and human resources management, key risks are identified in the ERM, requiring dedicated mitigating actions to ensure continuity and avoid contagion or rapid deterioration. Dedicated procedures, business continuity and crisis-management plans are put in place to manage the appropriate response to identified key risks.

# 2012

## SUSTAINABILITY REPORT A BUSINESS IMPERATIVE

### ETHICS

---

BE THE COMPANY YOU WANT TO DO BUSINESS WITH

Alcatel-Lucent is dedicated to upholding the highest standards of ethical conduct - ensuring that customers are proud to do business with us, partners are proud to work with us, and our communities are proud we are making a difference.





# TABLE OF CONTENTS

<b>1</b>	<b>OUR COMMITMENT TO ETHICS AND COMPLIANCE .....</b>	<b>77</b>
1.1	Zero tolerance policy .....	78
1.2	Communicating ethics and compliance.....	78
1.3	Competition .....	78
<b>2</b>	<b>OUR COMPLIANCE GOVERNANCE STRUCTURE.....</b>	<b>80</b>
2.1	A global compliance governance organization .....	80
2.2	The role of the Board of Directors .....	81
<b>3</b>	<b>OUR ANTI-CORRUPTION COMPLIANCE PROGRAM.....</b>	<b>82</b>
3.1	Anti-corruption approach .....	82
3.2	Corporate Investigation Services .....	83
3.3	Law Division .....	83
3.4	Anti-corruption Compliance Monitor .....	83
<b>4</b>	<b>ALCATEL-LUCENT CODE OF CONDUCT.....</b>	<b>84</b>
<b>5</b>	<b>COMPLIANCE HOTLINE .....</b>	<b>84</b>
5.1	Compliance Hotline principles .....	84
5.2	Management of incidents declared through the Compliance Hotline .....	85
<b>6</b>	<b>PRIVACY PROTECTION AND INFORMATION SECURITY .....</b>	<b>86</b>
6.1	Commitment to privacy principles .....	86
6.2	Governance of privacy-related activities .....	86
<b>7</b>	<b>INFORMATION SECURITY.....</b>	<b>87</b>
7.1	Governance of information security-related activities .....	87
7.2	Ensuring the security of information systems and databases.....	87
7.3	Preventing hacker attacks .....	88
<b>8</b>	<b>COMPLIANCE RISK ASSESSMENT, ENHANCEMENT AND MITIGATION.....</b>	<b>88</b>
<b>9</b>	<b>ETHICS AND COMPLIANCE TRAINING .....</b>	<b>89</b>
9.1	Anti-corruption training .....	89
9.2	Internal communications in 2012 .....	90
<b>10</b>	<b>HUMAN RIGHTS .....</b>	<b>90</b>
<b>11</b>	<b>INTERNATIONAL INITIATIVES.....</b>	<b>91</b>
11.1	World Economic Forum.....	91
11.2	Industry/trade associations.....	91

**97%**

OF PEOPLE  
MANAGERS  
COMPLETED  
ETHICAL  
LEADERSHIP  
TRAINING

**ZERO**

ANTI-COMPETITION/  
ANTI-TRUST LAW  
VIOLATIONS

**99%**

OF EMPLOYEES  
PARTICIPATED IN  
CODE OF CONDUCT  
REVIEW AND  
ACKNOWLEDGMENT  
PROCESS

## 1 OUR COMMITMENT TO ETHICS AND COMPLIANCE

Our commitment to ethics and compliance is communicated widely and regularly – and is an essential aspect and core value of how we conduct business.



### OUR COMMITMENT

Alcatel-Lucent has a zero tolerance policy for compliance violations and reinforces full integrity in every business action from every employee.



### HIGHLIGHT

Alcatel-Lucent was selected as the Dow Jones Sustainability Index (DJSI) Industry Supersector Leader in the Technology Sector, achieving a score of 99/100 in the Codes of Conduct, Compliance, Corruption and Bribery category.

Since 2007, we have implemented a comprehensive Ethics & Compliance Management System designed to promote compliance and ethical behavior consistent with the highest standards of our customers, shareholders and employees. Specifically, this system aims to prevent and detect violations of law, regulation and company policy, and to cultivate an ethical business culture throughout the company.

Key elements of the Ethics & Compliance Management System include:

- A comprehensive compliance governance structure
- The Alcatel-Lucent Code of Conduct
- Policies, procedures and controls
- Monitoring and auditing practices
- Annual compliance risk assessment (with related mitigation plans and processes for continuous improvement)
- Education and training
- Ethics and compliance communications focusing on maintaining a ‘speak-up’ culture
- Consolidated Compliance Hotline and other reporting venues
- Global compliance resolution process



## 2012 ACHIEVEMENTS

- 99% participation by employees globally in the annual Code of Conduct review and acknowledgment process
- 97% participation in ethical leadership training for people managers

In 2012, we focused on:

- Embedding a culture of integrity by reinforcing a strong tone at the top of the company (supported by the CEO) and enhancing the role of people managers
- Reinforcing ownership of business integrity by senior leaders, as well as overall business accountability for program implementation and results
- Increasing regional leadership and oversight of ethics and compliance across the business

### 1.1 Zero tolerance policy

We continued to implement our zero tolerance policy last year, requiring 100% integrity in all business practices. Management expects all employees to comply with applicable legal and company requirements. Any identified violations are addressed swiftly, consistently and fairly. We also furthered our phase-out of sales agents and consultants – a mandated process initiated in 2008.

The status of the zero tolerance policy is reviewed regularly at the highest levels of the company, including review by the Ethics & Compliance Council and the Board of Directors.



## HIGHLIGHT

In 2012, Alcatel-Lucent paid no fines (significant or otherwise) for non-compliance with laws and regulations concerning the provisions and use of its products and services.

### 1.2 Communicating ethics and compliance

In 2012, we continued to enhance our comprehensive communications campaign promoting exemplary business ethics. Led by the Office of Business Integrity & Compliance, we used town hall meetings, videos, blogs, employee stories and management messages to underscore the importance of establishing and maintaining a corporate culture of integrity. Particular attention was paid to communicating with people managers, who have a significant impact on the behavior of employees in dealing with customers, vendors, government authorities and others.

### 1.3 Competition

Alcatel-Lucent has a clear policy to obtain business solely on the merits of its products, services and people. Compliance with laws that promote and protect competition in the marketplace ('competition laws' or, in the U.S., 'anti-trust laws') is carefully spelled out in our Code of Conduct and in our competition/anti-trust law policy and guidelines.



## HIGHLIGHT

In 2012, there were no findings of competition/anti-trust law violations by the company or an employee, and no allegations had been reported.

We engage in only lawful means of obtaining information about our competitors. We comply with all international trade laws, including applicable export, import and sanction laws and regulations in the countries where we conduct business.

Our competition/anti-trust law policy and guidelines for employees are readily available through the company intranet. Employees whose jobs are affected by this policy participate in relevant live and online training programs.

Alcatel-Lucent employees are instructed to avoid contact with competitors except for participation in certain types of activities reviewed in advance by the Alcatel-Lucent Law Division (e.g., industry forums, standards-setting organizations, research and development projects). Employees are not permitted to participate in any agreements or exchanges of information with competitors that could avoid or reduce competition. When in doubt, they are urged to consult the Law Division to ensure their activities comply with competition/anti-trust laws. Employee competition/anti-trust law violations can be reported via the Alcatel-Lucent Compliance Hotline and are subject to the company's internal general compliance enforcement procedures.

Suppliers and contractors from whom we purchase goods and services are also required to comply with our competition/anti-trust law policy. To enforce this obligation, we have the right to conduct an audit confirming compliance. Any knowledge or reasonable suspicion that an anti-trust violation has occurred must be reported by the contractor or supplier to the Alcatel-Lucent Compliance Hotline. In case of a violation of such laws, Alcatel-Lucent may terminate a contractor or supplier, and may require the contractor or supplier to fully indemnify Alcatel-Lucent for any monetary losses caused by the violation.

## 2 OUR COMPLIANCE GOVERNANCE STRUCTURE

### 2.1 A global compliance governance organization

Our global compliance governance structure defines responsibilities for designing the company's ethics and compliance management system, implementing program elements, and ensuring overall accountability for results. It incorporates guidance from global standards and elements consistent with evolving best practices, as well as defined accountabilities to ensure alignment with business requirements.



#### HIGHLIGHT

#### Alcatel-lucent ethics and compliance council

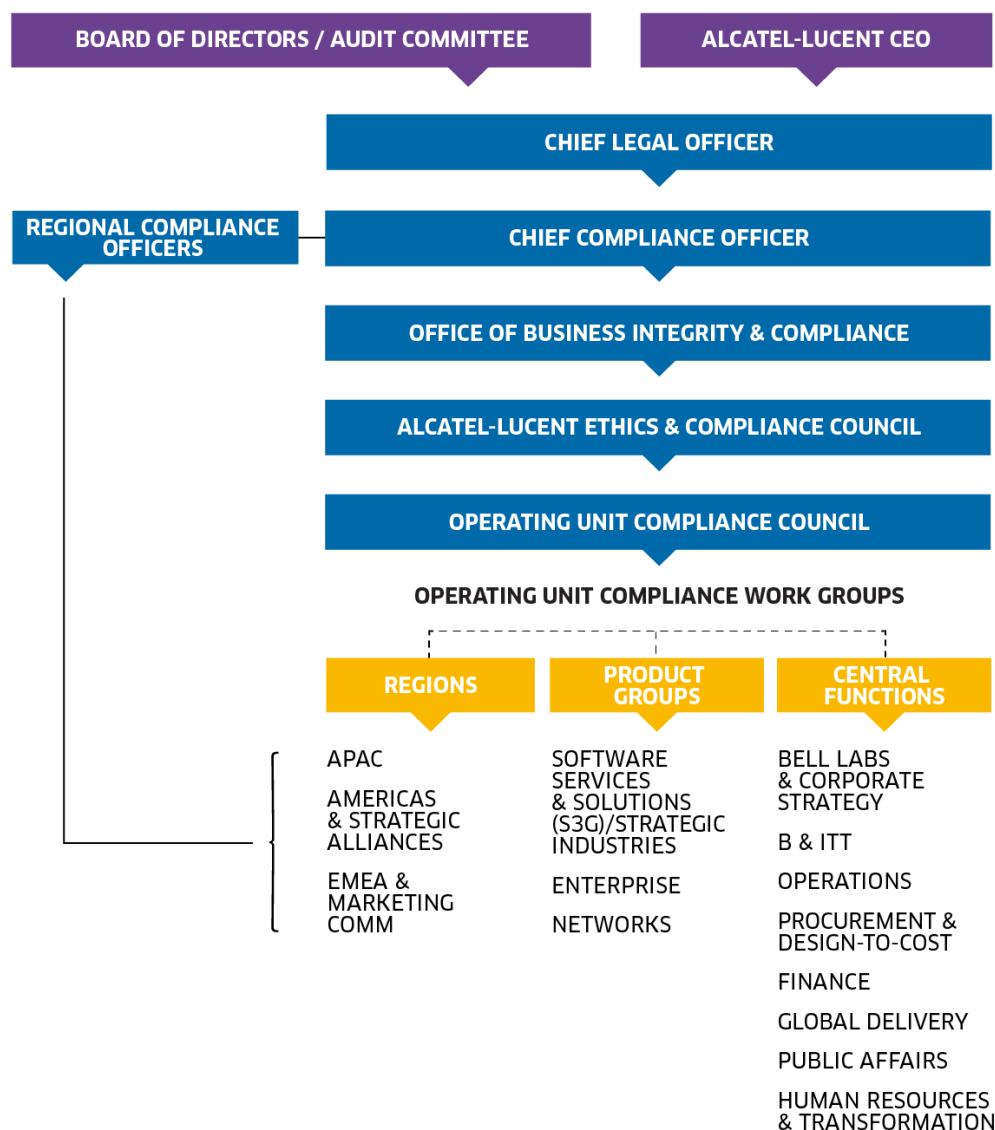
The Alcatel-Lucent Ethics and Compliance Council was established in February 2007 and is composed of the Chief Compliance Officer and representatives from Law, Audit and Finance, Human Resources & Transformation, Communications, Business & Information Technology Transformation, Procurement & Design-to-Cost, Corporate Security, Global Delivery and the Office of Business Integrity & Compliance. This Council meets bi-monthly and is responsible for overseeing the company-level design and implementation of an integrated ethics and compliance system.

In 2012, we formed a new, centrally managed Compliance organization to enhance existing compliance resources and consolidate key compliance functions under the Chief Compliance Officer (including the regional compliance leaders, the Anti-Corruption Compliance Program, the Privacy and Data Protection Program, and the Corporate Investigation Services organization).

Key elements of our compliance governance structure include:

- **Chief Compliance Officer (CCO):** Established as a full-time position in 2012 reporting directly to the Chief Legal Officer, with direct access to the CEO, the Board of Directors and, in particular, the Audit & Finance Committee. The CCO is a member of the Sustainability Council and is responsible for overseeing the ethics and compliance management system (including Human Rights, Freedom of Expression, Privacy and Anti-Corruption), setting strategic direction and ensuring Alcatel-Lucent operations are consistent with a culture of integrity.
- **CEO:** Sets tone and demonstrates the importance of business integrity consistent with our zero tolerance policy.
- **Office of Business Integrity & Compliance:** Executes the strategic direction of the company's compliance management system by developing and supporting implementation of key compliance initiatives, while providing ethics and compliance leadership and expertise across the business.
- **Regional compliance leaders:** Provide regional oversight and support to the business in operationalizing ethics and compliance initiatives regionally.
- **Ethics & Compliance Council:** Chaired by the CCO, consists of senior management responsible for overseeing program status across the business, including review and approval of key compliance policies.
- **Operating Unit Compliance Council (and Work Groups):** With representation from each business unit, accountable for implementing initiatives and ensuring measurable results.
- **Compliance Program Owners:** Subject-matter experts for our key compliance program areas who are responsible for ensuring that programs are fully integrated into business operations, effectively managed and consistent in quality across the organization.
- **Law Division:** Supports the enforcement of company policies by the Ethics & Compliance Council, the CCO and the regional compliance officers.
- **Compliance Issues Reporting Methods Initiative:** Provides options for employees to report suspected violations of law or company policy without fear of retaliation.

## Alcatel-Lucent Compliance Governance Structure



Supported by Law Division and the functional owners of key compliance program areas.

## 2.2 The role of the Board of Directors

Separate from but aligned with the governance mechanisms established through the Ethics and Compliance Management System, the Board of Directors – with support from the Audit & Finance Committee – plays an important role in overseeing our compliance performance. The Chief Compliance Officer and Chief Legal Officer provide periodic updates to the Audit & Finance Committee and to the entire Board on the status of ethics and compliance activities at Alcatel-Lucent. These status reports occur quarterly, and more often as required. The Chief Audit Executive also regularly updates the Audit & Finance Committee on significant compliance-related audits and investigations.

[Read more about our board of directors governance system](#)

## 3 OUR ANTI-CORRUPTION COMPLIANCE PROGRAM

### 3.1 Anti-corruption approach

Anti-corruption is our top compliance priority. Our policy is to conduct business only on the merits of our products, services and people. We never pay, offer or promise to provide anything of value to obtain or retain business or to secure any improper advantage, and we never allow a representative or business partner to make illegal payments or promises on our behalf. Our Anti-Corruption Compliance Program focuses on ensuring employee awareness of and compliance with company policies and applicable laws such as the United States *Foreign Corrupt Practices Act* and the United Kingdom *Bribery Act*.

Three main anti-corruption policies are at the core of the program:

1. Policy on Travel, Lodging, Meals, Entertainment Gifts and Sponsorships, and the accompanying online hospitality pre-approval process
2. Policy on Facilitation Payments
3. Policy on Third-party Risk Management, Screening and Selection and the accompanying approval process

These anti-corruption policies are subject to an annual review and revision process to capture any changes in regulatory requirements and lessons learned during the past year.

In line with Alcatel-Lucent's 2008 decision to phase out the use of commercial agents and consultants and to prohibit the engagement of former agents and consultants in any capacity, the Global Process for Selection and Management of Agents and Consultants is now a managed process for the use of agents and consultants only in those few countries where legally required. The Anti-Corruption Program also supports other departments in implementing additional anti-corruption policies including the Policy on Charitable Contributions; the Global Procurement and Sourcing Policy Directive on Subcontracting; and the Policy Directive on Mitigating Supplier Risk.

#### 2012 anti-corruption achievements

- Ongoing monitoring of legislative and regulatory activities
- Annual program self-assessment and development of related enhancement plans
- Annual compliance risk assessment with related mitigation plans
- Regular status reporting to senior management
- Continued implementation of EZVisit, a tool to ensure gifts, travel and hospitality events are granted in accordance with anti-corruption policies
- Continued risk management of sales third parties by applying our third-party screening and selection process
- Developing our first all-employee online anti-corruption training course to supplement existing targeting training, scheduled for deployment in Q2 2013

In 2012, every part of our business (including regions, business groups and central functions) was analyzed for risks related to corruption. To ensure full alignment, each operating unit's compliance risk assessment report was reviewed, approved and documented by the Management Committee member responsible for that organization. Consolidated risk assessment results are shared regularly with all interested stakeholders, including senior management. In addition, unit compliance leaders provide quarterly status reports to the Office of Business Integrity & Compliance on how their units are implementing their action plans.

We also invested significant time and resources in assessing and improving our third-party risk management last year. The Anti-Corruption Compliance Program provided focused support to business groups most heavily engaged with third-party resellers and suppliers, helping them assess compliance with existing policies and identify areas for improvement. The focus on third-party risk management will continue in 2013 with the revision of third-party risk management policies and processes and the deployment of improved compliance tools for managing third-party engagements.

## 3.2 Corporate Investigation Services

Complementing the Anti-Corruption Compliance Program, the Corporate Investigation Services (CIS) organization includes an Anti-Corruption Competency Center to facilitate a global anti-corruption risk assessment. This assessment identifies high-risk Alcatel-Lucent legal entities based on a set of predetermined anti-corruption risk attributes. The results of the risk assessment are key in identifying the Alcatel-Lucent entities where proactive anti-corruption compliance reviews will be performed by Corporate Audit Services.

CIS maintains the approach and methodology used by Corporate Audit Services to test the effectiveness of controls in place to ensure compliance with internal anti-corruption policies and procedures. It administers the corporate Compliance Hotline and investigates allegations related to:

- Accounting, internal control and auditing issues
- Overall compliance and Code of Conduct incidents, including anti-corruption

Legal guidance is sought in all investigations to ensure compliance with local laws and regulations.

## 3.3 Law Division

The Alcatel-Lucent Law Division plays a critical role in supporting our Anti-Corruption Compliance Program. In 2012, it drove the development and implementation of anti-corruption policies and administered and implemented the gifts, travel and hospitality approval process and the third-party screening and approval process.

The Law Division handled any disputes that arose with terminated sales agents and consultants, and actively monitored sales practices to ensure company policy was not circumvented through the inappropriate use of consultants disguised, for example, as resellers.



### HIGHLIGHT

#### Political contributions

Alcatel-Lucent does not directly spend corporate funds on political activities. Our employees in Alcatel-Lucent USA have formed a voluntary political action committee (PAC) through which political contributions were made to candidates for federal office in 2012. The Alcatel-Lucent USA employee PAC operates in accordance with all U.S. laws and Federal Election Commission regulations.

In addition to legal proceedings incidental to the conduct of its business (including employment-related collective actions in France and the United States) that management believes are adequately reserved against in the financial statements or will not result in any significant costs to the company, legal proceedings involving Alcatel-Lucent are listed online.

#### [Listing of legal proceedings](#)

This content is based on Section 6.10 of our 2011 20-F report. This report is filed annually, but the Contingencies section is updated quarterly and any changes are reflected in the company's quarterly financials.

## 3.4 Anti-corruption Compliance Monitor

We continued to support the activities of the Anti-corruption Compliance Monitor who was appointed to a three-year term in 2011, pursuant to the provisions of final settlement agreements reached in 2010 with the U.S. Securities and Exchange Commission (SEC) and Department of Justice. Those agreements were related to violations of the anti-bribery, internal controls, and books and records provisions of the *Foreign Corrupt Practices Act*.



## 4 ALCATEL-LUCENT CODE OF CONDUCT



### 2012 ACHIEVEMENT

In 2012, all employees were required to review the Code and acknowledge their understanding of their obligation to abide by it. The company achieved 99% compliance globally for this review and acknowledgment process. Understanding of the Code is further reinforced through mandatory ethics and integrity training as well as specialized training in key compliance areas.

Alcatel-Lucent has implemented and is continuing to enhance a compliance and ethics program involving a set of methods, principles and controls to ensure, to the extent possible, that the current legislation and regulations, as well as the Group guidelines, principles and policies are respected.

Alcatel-Lucent's Chief Compliance Officer oversees the implementation and continuous enhancement of this program to reflect current and evolving legal requirements, international standards and the standards of behavior set forth in the Alcatel-Lucent Code of Conduct.

In 2009, the Group published a revised Alcatel-Lucent Code of Conduct with the requirement for all employees and members of the Group's Board of Directors to review the document and acknowledge their understanding of its provisions.

The revised Code of Conduct establishes, in a streamlined manner, the Group's standards for ethical business conduct and is binding on all employees globally in their daily activities, as well as in our relations with our competitors, suppliers, shareholders, partners and customers. The standards set forth in the Code of Conduct are not only based upon the laws and regulations in force, but on the notions of integrity, respect, equity, diversity and ethics.



### KEY FIGURES

The Code of Conduct is available on the Group Intranet website in twenty-two languages and can be viewed by third parties on the Alcatel-Lucent external website.

[Read more](#)

In February 2004, we adopted a Code of Ethics for Senior Financial Officers that applies to our Chief Executive Officer, Chief Financial Officer and Corporate Controller. This Code supplements the Code of Conduct mentioned above, which also applies to these senior financial officers. In these ways we comply with the rules of the New York Stock Exchange (NYSE) for U.S.-listed companies. (Although these rules are not mandatory for Alcatel-Lucent, our Code addresses all aspects of them with the exception of specifying a mechanism that allows the Chairman, CEO, executive officers or employees to obtain a waiver of the application of any aspect of the Code.)

## 5 COMPLIANCE HOTLINE

### 5.1 Compliance Hotline principles



### HIGHLIGHT

The Compliance Hotline has been formally deployed in 114 countries and is available 24 hours a day, seven days a week. Employees who want to enter a report can use a multilingual web interface available in 11 languages. The company has a non-retaliation policy that specifically prohibits adverse action against employees who report, in good faith, suspected violations of law or company policy.

The success of our Ethics and Compliance Management System depends on employees and third parties being confident to raise ethical questions and concerns without fear of retaliation. Under the Compliance Issues Reporting Methods Initiative, several options are available for reporting suspected violations of law or company policy. Employees are encouraged to initially raise issues with their direct line manager or to use the Compliance Hotline where permitted under local law.

Employees and contractors also have other options available to report suspected violations of company policy or the law, including contacting their human resources business partner or regional compliance leader.

Employees can report incidents online through our secure website at <http://www.alcatel-lucent.ethicspoint.com>.

Local laws may limit the types of matters for which the Hotline and website are used in certain countries. Regardless of location, persons wishing to report a suspected violation of law or policy may do so by sending an email to [compliancehotline@alcatel-lucent.com](mailto:compliancehotline@alcatel-lucent.com).

## 5.2 Management of incidents declared through the Compliance Hotline

All reports made to the Compliance Hotline are subject to due diligence to determine the organization best suited to respond. The majority of reports are investigated by a corporate investigation team with assistance from other corporate organizations, as appropriate (e.g., Law, Regional Compliance, Human Resources, Corporate Audit Services).

Our investigation protocol includes the following steps:

- Understanding the issue or allegation
- Consulting with the Alcatel-Lucent Law Division
- Gathering and reviewing evidence and documentation
- Interviewing key individuals
- Analyzing all evidential materials to conclude and determine if company policies or local laws have been violated.

If an investigation determines there has been a violation of company policy or law, a compliance resolution team is convened. This team follows a process established for resolving all compliance issues requiring corrective action (including disciplinary action, training and internal control improvements). Disciplinary action can include coaching, written warnings, suspension and termination. All reported incidents are documented in a secure, limited-access central database compliant with local laws.

The same process is followed if internal audits and/or compliance reviews identify violations of company policies. External reporting of such matters is considered only with the guidance and approval of the Alcatel-Lucent Law Division.



### HIGHLIGHT

#### Data and metrics on Code of Conduct violations

A total of 531 issues/allegations were reported to the Compliance Hotline in 2012. Of these:

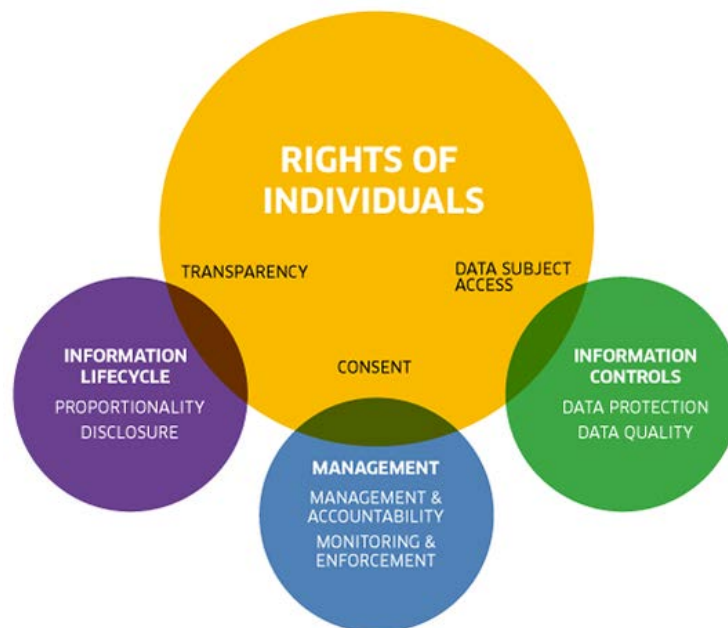
- 89 allegations were substantiated in 2012 with 'cause found' after investigation was completed. (33 of these 89 were opened prior to 2012.) 88 of the 89 resulted in disciplinary action up to and including termination.
- 55 cases involved allegations of potential harassment or discrimination (including those categorized as sexual harassment). Of these, 11 cases of harassment or discrimination resulted in a 'cause found' determination.

## 6 PRIVACY PROTECTION AND INFORMATION SECURITY

### 6.1 Commitment to privacy principles

Alcatel-Lucent is committed to respecting individual privacy rights and expectations, and to protecting personal data against unauthorized access, use, retention/storage or disclosure. In 2012, we completed the rollout of privacy training for Human Resources (HR), Information Technology (IT) and Procurement; developed a training module for Sales and Marketing; and continued to review all systems before they go live to ensure compliance with our global privacy policy and applicable laws.

Alcatel-Lucent approach to privacy protection



### 6.2 Governance of privacy-related activities

The Chief Privacy Officer is responsible for ensuring that Alcatel-Lucent has a consistent and effective privacy and data protection strategy in line with its overall business strategy and with applicable privacy and data protection laws. The Chief Privacy Officer is also responsible for defining, documenting, promoting and communicating the company's global privacy and data protection policies, which apply to all personal information processed by or for the Company.

[Read more](#)

The compliance program owner for the Privacy and Data Protection (P&DP) Compliance Program is responsible for leading the development and implementation of processes and procedures designed to ensure global compliance with defined strategies and policies. Other key stakeholders in this program include:

- **The P&DP Steering Committee**, which provides cross-functional leadership and direction to the P&DP program and is chaired by the functional owner of the P&DP program. It meets quarterly and also includes the Chief Privacy Officer, the Chief Privacy Counsel, and members of corporate support functions such as Human Resources and Information Technology Transformation.
- **The Chief Privacy Counsel**, who ensures the Chief Privacy Officer, the functional owner of the P&DP Compliance Program and all other personnel with responsibilities for privacy and data protection have the necessary legal advice and support.
- **The Data Privacy Network**, which consists of legal, human resources and other specialists representing countries in which Alcatel-Lucent operates.

In 2013, the Privacy & Data Protection Compliance Program will focus on designing a three-year plan for privacy compliance aligned with the company's new business model and strategy – combining the needs and expectations of our customers with the evolving regulatory landscape (in particular, the new EU regulations to come).

## 7 INFORMATION SECURITY

### 7.1 Governance of information security-related activities

---

Alcatel-Lucent has established an information security (IS) compliance function under the direction of the Director of Information Security Compliance, who is a member of the Global Information Security department led by the Chief Information Security Officer. This department is responsible for establishing the information security policies, strategies, architecture, compliance programs and transformation projects needed to protect our valuable information assets, which include data, information systems and IS/IT services.



#### HIGHLIGHT

In 2012, we conducted more than 360 project reviews and more than 250 third-party reviews. This accounts for 100% of suppliers for which a third-party connection is required, and represents a substantial increase over the number of reviews conducted in 2011. Compliance assessments were also conducted on more than 130 applications, 85 databases, four labs, 250 servers and 250 suppliers.

The Information Security Steering Committee ensures corporate-wide implementation of strategies focused on the following areas: security governance, service hardening, compliance management, threat and incident response, data protection, access and collaboration, security awareness and cultural transformation.

Risk mitigation plans are also developed at the operating-unit level, in alignment with the overall information security strategy. Compliance assessments are used as a core management practice to drive accountability and awareness of compliance and security risk management into all areas of the company. Executive-level information owners provide additional focus on protection measures for customer data, personal data, and technical information on our products and financial data. A strong investment and gating process ensures that new service and system designs comply with approved security architectures and include appropriate protection measures.

### 7.2 Ensuring the security of information systems and databases

---

Our comprehensive information security policies cover the full spectrum of security domains: physical security, applications and operations security, access control and identity management, security monitoring and incident response, information classification, business continuity and compliance management. These are accessible to all employees on internal web pages; communications related to specific information security topics are delivered on a regular basis.

The company regularly audits implementation of these policies, using both internal and external resources. Remediation plans for audit findings are developed and implemented by information and asset owners and IT support organizations in cooperation with company management and the applicable audit organization. Global audits of information security also guide our overall information security strategic plan.

## 7.3 Preventing hacker attacks

Like many other large enterprises, Alcatel-Lucent employs a defense-in-depth approach to fend off malicious attacks against its network. Controls such as firewalls, intrusion detection and prevention, anti-virus software, encryption, whitelisting and monitoring technologies are used in conjunction with strong passwords and other proven security practices to reduce the likelihood of a successful attack.

Targeted cyber attacks, known as advanced persistent threats, use a high degree of stealth over a prolonged period to avoid detection while compromising systems and obtaining sensitive information from them. Alcatel-Lucent has implemented a variety of measures to counter this type of threat and will continue to enhance its defenses in 2013.



### HIGHLIGHT

#### Ensuring compliance with our information security policy

Our information security policy defines the fundamental principles for the protection of information resources, establishes the controls needed to ensure compliance with internal policies and external regulations, and strives to uphold Alcatel-Lucent's reputation for safeguarding the information entrusted to us by our customers. Control standards provide requirements for specific, technology-independent areas of policy; baseline standards are maintained to provide detailed instructions for implementing security controls within a specific technology.

## 8 COMPLIANCE RISK ASSESSMENT, ENHANCEMENT AND MITIGATION

Alcatel-Lucent continued its efforts to ensure that key compliance program areas — anti-corruption, data privacy and protection, information security and others — were fully integrated into business operations, effectively managed and consistent in quality across the company.

In 2012, compliance experts supported by the Office of Business Integrity & Compliance worked closely with management to assess and enhance compliance programs, both on an ongoing basis and formally at least once per year. These reviews ensure internal controls embedded within each program area are comprehensive, robust and reflective of the evolving nature of the company's business and applicable regulatory requirements. Inputs into the continuous improvement process included experience from prior audit cycles, guidance from the compliance risk assessment process, changes in the regulatory environment and compliance issues encountered by the company.

To address identified gaps and associated risks, business leaders and their respective work groups were responsible for developing, implementing and monitoring remedial action and ongoing enhancement plans. To ensure full alignment throughout the company, every risk assessment was reviewed and approved by a member of the appropriate senior management team. In 2012, Alcatel-Lucent achieved 100% alignment across this review and validation process.

To ensure accountability for results, Operating Unit Compliance Leaders are required to periodically provide status updates on the implementation of their enhancement plans to the Office of Business Integrity and Compliance (OBIC). These reports are reviewed by the OBIC team and the appropriate subject-matter experts to ensure timely and effective implementation of identified risk mitigation and enhancement plans. All risk assessment information (including action plans and related resource material) is posted on a SharePoint website to promote the exchange of information and best practices among various operating units — ensuring stakeholder access to important information and ongoing connectivity between the business and compliance experts.

## 9 ETHICS AND COMPLIANCE TRAINING

Our Compliance and Business Integrity Training Program educates employees about their personal and professional responsibilities under the Alcatel-Lucent Code of Conduct, and fosters commitment to the highest levels of ethical business conduct. It provides employees with a general introduction to the company's major compliance areas as well as specialized training based on job function.

Courses are updated annually and as needed to reflect current business requirements and evolving regulations. All training is documented on our annual Compliance Training Roadmap and tracked to verify full participation through our Compliance Dashboard.



Per our commitment to increase transparency around disclosure of potential conflicts of interest, in 2012 we developed and raised awareness of new conflict of interest disclosure training and a related web-based disclosure process scheduled for deployment in 2013.

In 2012, we also continued to implement a comprehensive global ethics and compliance training program, deploying eight specialized compliance courses targeted to key stakeholders. Topics included:

- An overview of our information security policy, access control and new services related to the National Security Agreement (NSA)
- Intellectual property rights
- Ethics and integrity
- Preventing harassment and discrimination in the workplace

This training complemented the requirement for all employees to review and acknowledge the Alcatel-Lucent Code of Conduct.

[Read the Alcatel-Lucent Code of Conduct](#)

[Read the Alcatel-Lucent Global Human Rights Policy](#)

In recent years, we have focused on delivering targeted training to help people managers be effective compliance role models and ethical leaders. In 2012, we deployed a web-based ethical leadership training module for people managers, targeting more than 11,000 globally. This was supported by an extensive communications plan to inform people managers of their role in continuing to enhance a culture of business ethics and integrity.

### 9.1 Anti-corruption training

Formal anti-corruption training is delivered over the web and through in-person sessions. In 2012, we updated our existing anti-corruption training to reflect recently enacted regulatory requirements and resulting changes to corporate policy, procedures and internal controls. This training will be deployed globally to all employees in 2013. Our web-based ethics and integrity overview training, which is mandatory for all employees and contractors, also includes a section on anti-corruption.

## 9.2 Internal communications in 2012

---

Under the leadership of the Office of Business Integrity & Compliance, we deployed a broad range of communications through various media to help establish and maintain a corporate culture of integrity. Directed primarily at middle management, last year's communications initiatives informed employees about their responsibilities, emphasized the importance of integrity, and promoted a 'speak-up' culture.

Specific key messages included:

- The value of compliance and the consequences of lapses both to the business and to employees
- The imposition of consequences consistent with our zero tolerance policy
- Management's role in operating with integrity, holding employees personally accountable for wrongdoing, and actively monitoring to ensure compliance
- The importance of supporting the business in finding compliant solutions
- Where employees can find resources to support them in reporting potential violations without fear of retaliation

By consolidating essential compliance and business conduct resources in one central location, the website of the Office of Business Integrity & Compliance is an important component in our communication efforts. In 2012 there were 23,034 visits to this site.

## 10 HUMAN RIGHTS

We consider the United Nations (UN) Guiding Principles on Business and Human Rights — the so-called "Ruggie Principles" that led to the establishment of the UN Protect, Respect and Remedy Framework — to be a significant milestone. This framework, endorsed in June 2011, clarifies the responsibility of governments to protect human rights and the responsibility of the business community to respect human rights in their global operations and eco-system.

In 2012, Alcatel-Lucent updated its Human Rights policy in line with the UN Guiding Principles on Business and Human Rights and designed internal processes to ensure its implementation. We are now working with other stakeholders in the telecommunications industry (e.g., operators and vendors) to define how the Protect, Respect and Remedy Framework should be applied in our sector, especially as it relates to privacy and freedom of expression.

[Read more about our Global Human Rights approach](#)

[Read the Alcatel-Lucent Global Human Rights Policy](#)

Finally, as part of our commitment to human rights, we designated the Chief Compliance Officer as the company's representative on human rights in 2012 and agreed to design and implement the following initiatives in 2013:

- Human rights due diligence requirements for future material proposals
- Employee training program on human rights principles



# 11 INTERNATIONAL INITIATIVES

Alcatel-Lucent participates in numerous cooperative anti-corruption initiatives to contribute to an ethical business environment and keep abreast of evolving requirements and best practices.

## 11.1 World Economic Forum

---

Our former CEO Ben Verwaayen, was the first chief executive in the ICT sector to sign the World Economic Forum's Partnering Against Corruption Initiative (PACI) in 2009. PACI brings together companies across industries and regions to fight bribery and corruption. A multistakeholder initiative, PACI works with organizations such as the Basel Institute on Governance, the International Chamber of Commerce (ICC), the Organisation for Economic Co-operation and Development (OECD) and the United Nations Global Compact, as well as multilateral development banks and select international financial institutions.

Alcatel-Lucent is one of the financial sponsors of and contributors to the development of an online training module based on the WEF's RESIST anti-corruption tool that will be made available free of charge in both English and French on ICC France's portal in early 2013.

[Read more  
about the World  
Economic Forum](#)

[Read more  
about PACI](#)

## 11.2 Industry/trade associations

---

### 11.2.1 Human Rights & Industry Dialogue group

Freedom of expression and user privacy rights are increasingly important issues for companies in the ICT sector.

The Industry Dialogue on Human Rights was initiated during the summer of 2011 to explore the interactions and boundaries between the duty to protect and the responsibility to respect human rights.

In 2012, participating companies jointly developed broadly accepted principles to ensure respect for privacy and freedom of expression in their activities. As a founding member of Industry Dialogue, Alcatel-Lucent actively participated in defining the Telecommunications, Freedom of Expression and Privacy Principles in 2012.

The Industry Dialogue also opened discussions in late 2012 with the Global Network Initiative to serve as a future host for the initiative and principles in 2013. Alcatel-Lucent has also joined the GeSI Human Rights Working Group to ensure open discussion on best practices for human rights in the telecommunications sector. The company also participated in the European Commission's open consultation to establish sector guidance on freedom of expression and privacy.

### 11.2.2 Ethics & Compliance Officer Association

In 2011, Alcatel-Lucent continued its leadership in ethics and compliance through active representation on the Board of Directors of the Ethics & Compliance Officer Association (ECO) – the leading member-driven association of individuals responsible for their organizations' ethics, compliance and business conduct programs. We are also an active member of the ICC's international and French commissions on sustainability and anti-corruption, as well as of the ethics committee of the MEDEF (French trade association of large French companies).



# 2012

## SUSTAINABILITY REPORT

### A BUSINESS IMPERATIVE

## ENVIRONMENT

---

### DOING NOTHING IS NOT AN OPTION

Telecommunications technologies have the potential to make our world greener and more sustainable. Alcatel-Lucent is committed to leading the industry in developing and deploying globally recognized innovation in eco-sustainable communications technologies that enable our customers to compete and win amidst growing environmental challenges and resource constraints.



# TABLE OF CONTENTS

<b>1</b>	<b>OUR ENVIRONMENTAL SUSTAINABILITY STRATEGY .....</b>	<b>94</b>
1.1	Our approach to environmental sustainability .....	94
1.2	Our principal global commitments .....	95
1.3	Governance and sustainability .....	96
1.4	Adopting carbon footprint assessment standards for ICT products.....	97
<b>2</b>	<b>DEVELOPING ECO-SUSTAINABLE NETWORKS .....</b>	<b>99</b>
2.1	Measuring impact from end to end.....	99
2.2	Thinking ahead.....	102
2.3	Reducing the impact of our products and solutions.....	108
<b>3</b>	<b>ENABLING A LOW-CARBON ECONOMY .....</b>	<b>116</b>
3.1	The carbon-reducing capacity of ICT .....	116
3.2	Bringing new capabilities to smart grids .....	116
3.3	Propelling smart transportation .....	118
3.4	Building smart cities .....	119
<b>4</b>	<b>REDUCING OUR CARBON FOOTPRINT .....</b>	<b>121</b>
4.1	Tracking and reporting on carbon emissions .....	121
4.2	Living our best practices .....	128
4.3	Encouraging eco-awareness among our people .....	133



## 1 OUR ENVIRONMENTAL SUSTAINABILITY STRATEGY



**OUR  
COMMITMENT**

Lead in eco-sustainable innovation to provide energy-efficient, environmentally sustainable networks and innovative solutions that meet growing bandwidth demands. Seek, with the GreenTouch™ Consortium initiated by Bell Labs, to make communications networks 1,000 times more energy efficient than they were in 2010.



### 1.1 Our approach to environmental sustainability

The Information and Communications Technology (ICT) sector has been recognized as having the potential to play a critical role in addressing challenges related to climate change. At Alcatel-Lucent, we understand our long-term success depends on helping our customers respond to their environmental challenges — and on reducing our own direct environmental impact.

#### 1.1.1 Strategy

We have built environmental considerations into virtually every aspect of our business, following a three-part approach:

1. **Developing eco-sustainable networks:** Creating and bringing to market products, services and solutions that contribute to environmentally responsible end-to-end networks.
2. **Enabling a low-carbon economy:** Helping businesses and consumers reduce their respective environmental impacts with innovative applications and solutions.
3. **Reducing our carbon footprint:** Reducing our absolute carbon footprint from operations by 50% by 2020 compared to our 2008 baseline (at end of 2012, our footprint decreased by 29% compared to 2008).

This approach relies on our capacity for eco-innovation and our ability to play a leading role with key stakeholders. Our research arm, Bell Labs, actively participates in open, collaborative partnerships and forums focused on establishing broad sustainability strategies and initiatives.



[Find out from our customers why energy efficiency is one of the most critical issues facing service providers](#)

### 1.1.2 Engaging for success: stakeholder activities

Collaborating with stakeholders brings us closer to the communities we serve. We begin by identifying the connections between our business and our communities. Then we engage with local stakeholders to determine the best way to invest our resources to meet their long-term needs. At the end of every year, we evaluate our engagements to apply insights and lessons learned. This enhances our ability to develop responsible, effective strategies that address environmental issues at local as well as global levels.

The role of information and communications technology (ICT) in combating climate change, and its potential to address the UN's Millennium Development Goals, resonates strongly with our stakeholders. Our central role in the launch of GreenTouch, commitment to the Global e-Sustainability Initiative (GeSI), leadership in the World Economic Forum (WEF) and dedication to the United Nations Global Compact's (UNGC's) climate change efforts are all collaborative initiatives that allow us to apply our ICT expertise to eco-sustainability.

Following the second invitation in 2012 to participate in Greenpeace's CoolIT Leaderboard, we contributed examples of our green products and services, shared our efforts to reduce our emissions and impact, and helped position ICT's potential to reduce greenhouse gas (GHG) emissions. Alcatel-Lucent was ranked among the top ten performers. Following the CoolIT Leaderboard exercise, we began an open dialogue to better understand Greenpeace's work in this area as well as share more examples of our extensive research in green technologies. At the last two WEF Annual Forums at Davos, Alcatel-Lucent had opportunities to exchange views with Greenpeace; in 2013, Greenpeace expressed appreciation of Alcatel-Lucent's dedication towards green research.

[Read more](#)

## 1.2 Our principal global commitments

---

Alcatel-Lucent has made a number of public commitments to encourage the uptake of low-carbon ICT solutions locally, regionally, nationally and internationally – areas with the greatest possible opportunity to achieve meaningful impact. We actively support and participate in the following:

- GreenTouch Consortium – through Bell Labs, we play a leading role in seeking to improve the energy efficiency of ICT networks by a factor of 1,000 compared to 2010 levels
- Broadband Commission eHealth and Climate Change Task Forces – the Broadband Commission is a UN initiative created in 2010 to respond to the Millennium Development Goals
- Business for Environment Global Summit (B4E) Green Imperative Manifesto
- International Chamber of Commerce (ICC) Green Economy Task Force – a group partnered with United Nations Environment Programme (UNEP) to promote the green economy in connection with the Rio+20 international development conference
- United Nations Global Compact (UNGC) Caring for Climate Initiative – an organization encouraging participation at the global and Steering Committee level within a UNGC local network
- World Economic Forum 'Friends of Rio+20' – a WEF initiative involving the participants of the Rio+20 UN Conference on Sustainability Development, presenting a common call to action (a published Annex of Best Practices included GreenTouch)
- World Economic Forum Global Agenda Council on Governance for Sustainability – an expert global task force dedicated to effective stakeholder models of sustainability
- World Resources Institute (WRI) – an organization leading methodological development for the measurement and reporting of GHGs emitted by ICT hardware

Our industry-leading activities:

- We participate in the Environmental Policy Group of Digital Europe, chairing its Chemicals cluster and contributing to clusters on eco-design, resource efficiency, waste and substance-related restrictions. We also contribute to the statements issued by Digital Europe on the contribution of ICT to the digital economy, low-carbon economy and energy efficiency, and are contributing to the European Union's 2050 Roadmap.
- We co-chair working groups on energy efficiency and communications within the Global e-Sustainability Initiative (GeSI), and participate in its Transformative Step of the Day initiative, providing examples of best-practice solutions. We also support initiative-related communications efforts, and were a major contributor to the << [GeSI SMARTer2020: The Role of ICT in Driving a Sustainable Future](#) >> report.
- As part of the International Electronics Manufacturing Initiative (iNEMI), we serve as a board member and either chair or participate in environmentally focused work groups such as lead-free solder assembly, polyvinyl chloride (PVC) alternatives and lifecycle assessment estimation.
- We contributed to collaborative efforts on cellular industry commitments and policy recommendations through GSMA.

Our standards-development activities:

- We have contributed to standards development for ICT energy efficiency (STEP-TEE) through the Alliance for Telecommunications Industry Solutions (ATIS).
- We served as chair of the Technical Committee of the European Telecommunications Standards Institute (ETSI), actively contributing to energy-efficiency standards and leading liaisons between ETSI and other telecommunications standards development organizations such as IEC, CENELEC, ATIS and ITU-T.
- We have worked with the ITU-T Focus Group for ICT and Climate Change and ITU Study Group 5. We have also developed important recommendations for assessing the environmental impact of ICT goods, networks and services (L.1410), and developed organizational requirements for assessing energy consumption and GHG emissions (L.1420). Alcatel-Lucent was lead author of best practices on the sustainable design of products as part of ITU's Toolkit on Environmental Sustainability for the ICT sector.

### 1.3 Governance and sustainability

---

When it comes to sustainability, the two highest-level governing bodies within Alcatel-Lucent are the Sustainability Council and the Sustainability Network. As part of their broad mandate, the pair shares the tasks of monitoring performance and tracking progress on environmental issues across the company.

Three bodies are primarily responsible for environmental activities at Alcatel-Lucent:

- **The Green Operations Team:** The members of the Green Operations Team oversee operational sustainability issues linked to the environment and climate change. The Green Operations Team relies on a network of local leaders – referred to as Green Teams – to ensure carbon footprint information is reported reliably and on time, and that local action plans are implemented properly.
- **The Environment, Health & Safety (EHS) Office** develops policies and compliance assurance programs to meet legal, customer and company requirements. It also provides technical support to local EHS representatives for implementation of EHS programs, and uses the EHS Management Systems approach to ensure compliance, continual improvement and performance in line with industry best practices.
- **The Bell Labs Chief Technology Office (CTO)** addresses environmental initiatives and goals linked to products, services and solutions. In collaboration with product and research teams, the CTO looks for ways to minimize the environmental impact of our products throughout their lifecycle by developing and deploying eco-conscious design processes, practices and tools. Bell Labs' CTO also seeks to identify ways ICTs can be used to enable a low-carbon economy.



## HIGHLIGHT

Worldwide, more than 50 Bell Labs scientists, researchers and engineers are involved in research and collaborations focused on green networks and energy-efficient services for various sectors of the economy.

### 1.4 Adopting carbon footprint assessment standards for ICT products

Accurate measurement of GHG emissions — using externally verified, industry-standard methodologies and metrics — is essential to assess impacts and evaluate net savings. But today's measurement approaches are generally not entirely mature. Given the importance of GHG reduction, Alcatel-Lucent is taking a major role in advancing GHG emissions assessment and developing metrics and standards. Examples of this work are cited below.

#### WRI/WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (WBCSD) GREENHOUSE GAS PROTOCOL (GHGP)

We've taken a leadership role in developing ICT sector guidance for the GHGP Product Life Cycle Accounting and Reporting Standard. The guidance is meant to enable the measurement of ICT sector GHG emissions in a clear and credible way. Alcatel-Lucent has provided input at both the steering and technical committee levels, and co-authored chapters on ICT hardware and telecommunications network services, drawing on our expertise in carbon footprinting and network energy use modeling.

[Read more](#)

#### INTERNATIONAL TELECOMMUNICATIONS UNION (ITU)

##### Study Group 5

Alcatel-Lucent is co-author of both *L.1410 — Methodology for environmental impact assessment of ICT goods, networks and services* and *L.1420 — Methodology for energy consumption and greenhouse gas emissions impact assessment of ICT in organizations*. These standards can be used to assess energy and emissions generated from ICT goods, networks and services, and allow organizations to measure emissions from activities related to their operations.

[Read more](#)

#### TOOLKIT ON ENVIRONMENTAL SUSTAINABILITY

Alcatel-Lucent aided the ITU's development of a Toolkit on Environmental Sustainability for the ICT sector, serving as lead author of the chapter on Sustainable Products. Providing technical guidance on environmentally conscious design principles and best practices, the Toolkit helps companies provide products that are more 'environmentally conscious' throughout their full lifecycle.

[Read more](#)

### Pilot testing ICT carbon footprint measurement methods

In 2012, the European Commission (EC) sought volunteers to pilot test the compatibility and workability of different methods of energy and carbon footprinting for ICT products, services and organizations. The methods included ITU-T L.1410 and L.1420, ETSI TS 103 199 and the GHG Protocol Standard ICT Sector Guidance. In response, Alcatel-Lucent joined a consortium with BT and Cisco to test these methods for an Internet service offered by BT. The test found the various methods have a compatible basis, with the GHG Protocol more workable for the Internet service tested. The EC recommended continued collaboration with the ICT sector to sustain improvements to the methods.



## 2012 ACHIEVEMENT

Alcatel-Lucent achieved its goal of establishing a common methodology for measuring the carbon footprint of network telecommunications products over their lifecycle. Using a lifecycle carbon footprinting methodology developed at Bell Labs, Alcatel-Lucent led a group within the iNEMI industry consortium and developed a framework and tool for more efficiently estimating the carbon footprint of ICT equipment. We successfully promoted the methodology's adoption through global standards organizations such as the WRI Greenhouse Gas Protocol.

[Read more](#)

### GLOBAL E-SUSTAINABILITY INITIATIVE (GESI)

Alcatel-Lucent provided key contributions to GeSI's second major report on the ICT industry's critical role in combating climate change, *SMARTer2020: The Role of ICT in Driving a Sustainable Future*. The document examines how ICT-enabled solutions can reduce global GHG emissions by 9.1 GtCO<sub>2</sub>e (16.5% of total global GHG emissions) by 2020. Alcatel-Lucent was one of the most active contributors to the report, providing telecom traffic data, lifecycle GHG emissions data, methodology and communications expertise.



**GeSI**  
GLOBAL e-SUSTAINABILITY  
INITIATIVE

[Read more](#)



[Watch the GeSI 'SMARTer2020' video](#)

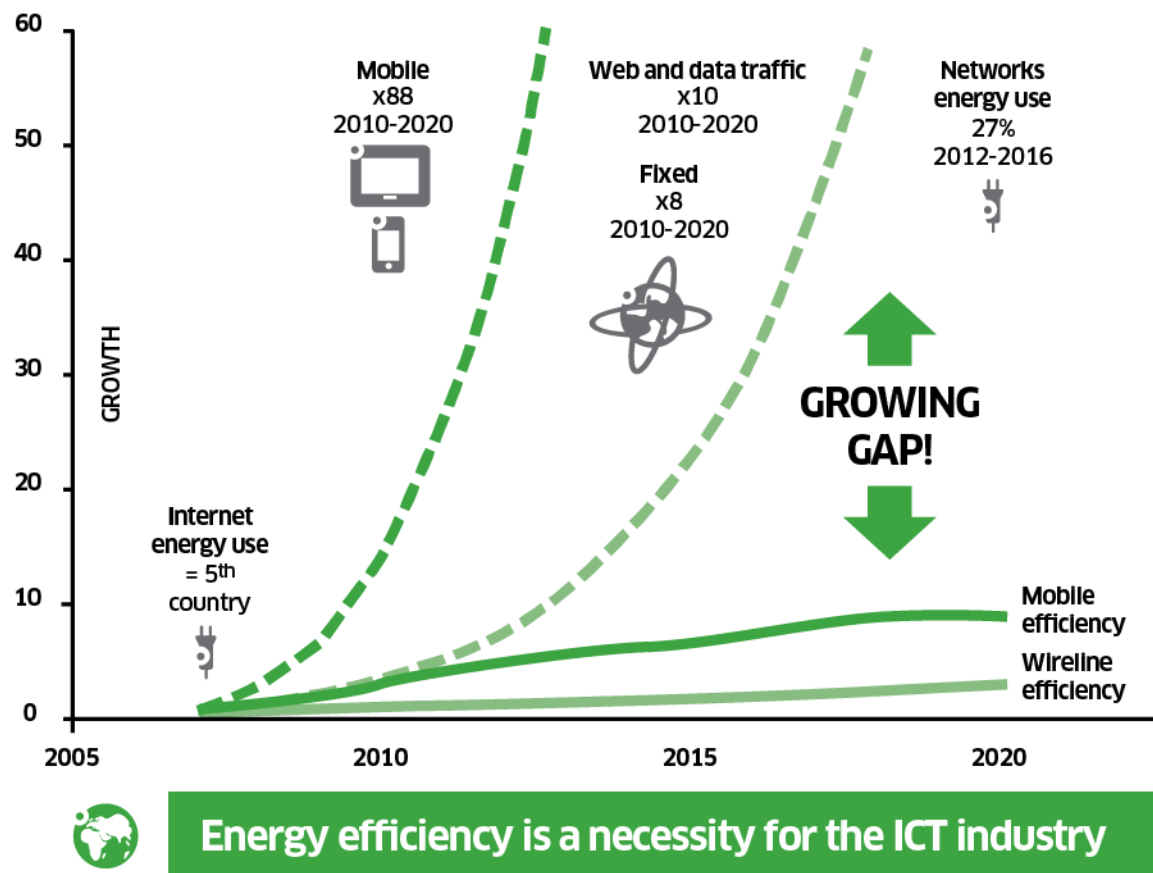
## 2 DEVELOPING ECO-SUSTAINABLE NETWORKS

### 2.1 Measuring impact from end to end

Evolving mobile devices, new applications and services, and relentless bandwidth growth are forcing service providers to deploy more capacity in their networks through technologies such as Long Term Evolution (LTE). This, however, is increasing operational costs, power demands and overall network complexity. Developing efficient, eco-sustainable options remains critical to ensuring the long-term affordability of telecommunications networks. To do so, wireline and wireless service providers will need to evolve their networks to a next-generation, all-IP multiservice infrastructure that is fully converged, optimized and scalable.

The chart below shows that doing nothing is not an option with respect to the increasing network energy efficiency gap. Global mobile broadband connections are expected to grow at a compound annual growth rate (CAGR) of 20% from 2012 to 2017, reaching 4.5 billion connections by 2017.<sup>1</sup> In 2011, the Internet used about 30 billion watts of electricity, roughly equivalent to the output of 30 nuclear power plants, with only six to 12% of electricity powering their servers used to perform computations.<sup>2</sup> This is a clear indication that energy efficiency is imperative for the ICT industry.

### The network energy gap



<sup>1</sup> Ovum, <http://ovum.com/research/mobile-broadband-connections-and-revenues-forecast-2012-17/>

<sup>2</sup> New York Times, <http://www.nytimes.com/2012/09/23/technology/data-centers-waste-vast-amounts-of-energy-belying-industry-image.html?pagewanted=all>



### 2.1.1 High Leverage Network™

End-to-end thinking is integral to our High Leverage Network™ (HLN). Introduced in 2009, HLN was designed to help service providers efficiently and cost-effectively scale network bandwidth and increase network capacity. HLN provides a platform to help service providers introduce new services quickly and efficiently. Using less energy and occupying less space than previous generations, our next-generation HLN products use innovative technologies that result in more sustainable and efficient energy use, decreased cooling requirements and smaller physical footprints. For example, our new IP and optical chips scale bandwidth by a factor of four while using half the power of the previous generation.

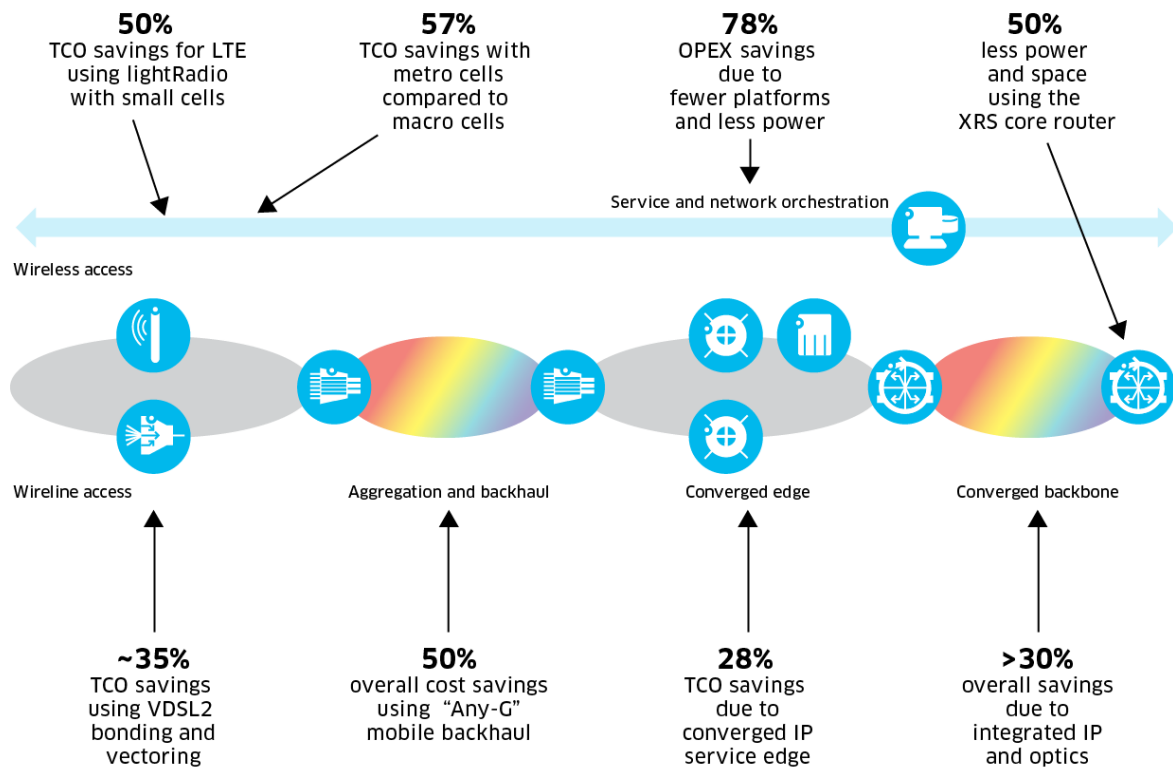


**KEY  
FIGURE**

Sales of our next-generation HLN products accounted for 53% of Network sales in 2012, up from 48% in 2011, with more than 500 new or extension HLN contracts for the full year 2012.

[Read more](#)

With a scalable, intelligent, efficient all-IP infrastructure, service providers can achieve the following cost savings:



Source: Bell Labs Business Modeling, 2011



## HIGHLIGHTS

### Saving space and power

Our lightRadio™ small cells have been designed to blend in with the environment — meaning they face significantly fewer zoning barriers than traditional cell sites. We have paid special attention to industrial design and power consumption, resulting in nearly invisible elements that consume less power than alternate options. For example, lightRadio elements use about 35% less power than a comparable remote radio head-based installation. Over five years, the CO<sub>2</sub> emissions saved by deploying lightRadio in a major city such as New York would be equal to removing roughly 14,000 cars from the road.

[Read the white paper](#)

Our 7950 Extensible Routing System (XRS) Core Router addresses the increasing costs of growing core networks due to the exponential growth of network traffic. Instead of requiring additional platforms that escalate power usage and space requirements, the Alcatel-Lucent 7950 XRS Core Router elegantly scales within a single system. Network operators can save more than 50% in power and space costs over a five-year horizon of network growth.

[Read the research report](#)

#### 2.1.2 Looking at the whole lifecycle

Our lifecycle approach addresses environmental impacts from the concept stage forward. Through it, we constantly seek improvements in design, material selection and operating characteristics such as energy efficiency. We also examine non-product specific aspects of the lifecycle, such as:

- Developing logistics tools that quickly compare various routes for components and finished goods shipments and provide solutions for environmentally and cost-efficient routes
- Reducing the end-of-life environmental impact by providing product developers with design guidance and best practices for disassembly, reuse and recycling

Environmental impacts are further minimized by:

- Extending product lifetime and value
- Occupying less space and generating less heat
- Providing more functionality per kilowatt used
- Operating on alternate energy when/where applicable
- Assuring electromagnetic environment safety
- Reducing acoustic noise
- Using materials with low environmental impact
- Managing end-of-life disassembly and treatment
- Providing eco-efficient product packaging and transport

#### 2.1.3 The Alcatel-Lucent Lifecycle Assessment (LCA) estimator



## 2012 ACHIEVEMENT

Alcatel-Lucent has developed and introduced LCA estimator methodology to the ICT industry (via an iNEMI industry consortium project) with very positive support and adoption. We have also led and introduced a common methodology within ITU L.1410 (published February 2012) and the WRI GHG Protocol ICT Guidance document (publication anticipated mid-2013).

Alcatel-Lucent has pioneered a simple, accurate LCA estimator to generate product carbon footprint (PCF) information on all our new product families, with the results contributing to each product's eco-declaration.

Our eco-declarations conform to:

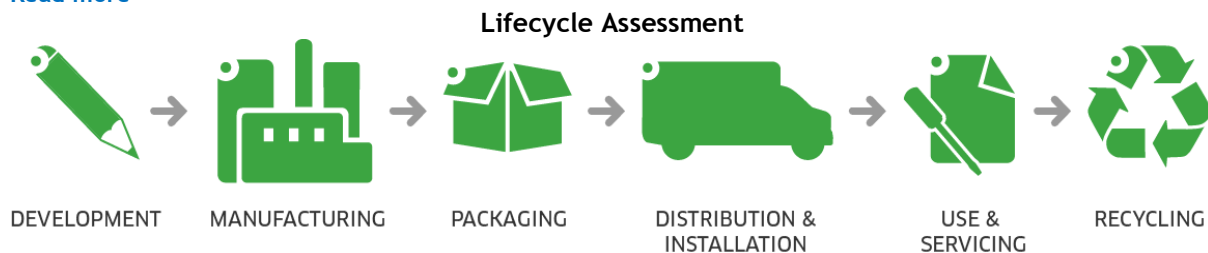
- ECMA-370 standard, issued by the European Association for Standardization Information and Communication Systems
- International Electrotechnical Commission (IEC) 62430 standard for Environmentally Conscious Design for Electrical and Electronic Products

The LCA Estimator is also used to test ‘what if’ scenarios to evaluate material alternatives, transportation routing, and power profile options.

We’re also championing the adoption and development of the LCA estimator framework for broader industry-wide use and alignment through:

- International Electronics Manufacturing Initiative (iNEMI) – an ICT industry consortium
- WRI Greenhouse Gas Protocol (GHGP) – where Alcatel-Lucent integrated its LCA estimation methodology into the newly published ICT Sector Guidance for product lifecycle accounting and reporting

[Read more](#)



## 2.2 Thinking ahead

### 2.2.1 Green innovation



#### HIGHLIGHTS

- In 2012, Alcatel-Lucent was included in the MIT Technology Report’s TR50 annual list of the world’s most innovative technology companies for its lightRadio innovation.
- More than 50 Bell Labs scientists, researchers and engineers around the world are now working on research for green, energy efficient and sustainable communications, networking and computing, and collaborating with more than 60 other companies, research institutes and universities.
- In 2012, Bell Labs actively supported and funded 10 university green research collaborations. Despite challenging times, we maintain a strong commitment to university collaborations. Bell Labs coordinated the EC funded FP7 “Energy Aware Radio and Network Technologies (EARTH)” project, which successfully accomplished all of its objectives showing that operators could save up to 70% of the energy in realistic 4G wireless network scenarios. EARTH was awarded the Future Internet Award (FIA) in May 2012.  
[Read our Blog](#)
- Alcatel-Lucent and the Centre for Energy Efficient Telecommunications (CEET) at the University of Melbourne won the Australian B-HERT 2012 award for Outstanding Achievement in Collaboration in R&D.
- Approximately 10% of our company’s patents are dedicated to green innovations. In 2012, Alcatel-Lucent was named one of the Thomson Reuters Top 100 Global Innovators, recognition for the company’s continued addition to its world-class patent portfolio, one of the largest in the telecom industry.

Bell Labs is spearheading Alcatel-Lucent's 'extreme green' approach to innovation — maintaining a dedicated green research program and appointing a Head of Green Research who reports directly to the Head of Bell Labs Research.

The green research program aims to:

1. Dramatically improve end-to-end network energy efficiency
2. Provide technologies, solutions and services for sustainable communications and networked computing based on out-of-the-box thinking, 'clean slate' architectures and open innovation

Taking a holistic, end-to-end perspective, Bell Labs' research spans all network domains: wireless and mobile, wireline and fixed access, packet data and optical transmission. The organization investigates:

- Efficient cooling and thermal management solutions
- Integrated alternative energy technologies
- Efficient hardware components, devices and network elements, including base stations and routers
- Optimized network architectures
- Intelligent management and control algorithms that ensure power consumption is proportional to traffic loads, preventing waste in the network
- The fundamental limits of communications and energy efficiency, specifically in optical and quantum communications and wireless transmission systems

This research involves more than 50 scientists around the world, collaborating either directly or through jointly funded projects and industry consortia with other companies, research institutes and universities.

These include:

- GreenTouch Consortium
- Center for Integrated Access Networks (CIAN)
- Cooling Technologies Research Center (CTRC) in the U.S.
- Intelligent Energy Aware Networks (INTERNET) consortium in the UK

Bell Labs serves on the industrial advisory boards of both CIAN and INTERNET.



In 2012, Bell Labs actively supported and funded 10 university green research collaborations.

With Bell Labs research highlighting longer-term barriers to sustainable network growth, energy considerations have become important to a large number of new Bell Labs projects. It is anticipated that 15% of all patents filed each year by Bell Labs Research will be related to energy efficient and sustainable communications, networking and computing technologies.

Through its green research, Bell Labs has positioned itself as an industry thought leader — clearly demonstrated by the number of presentations and keynotes Bell Labs researchers have been invited to give, and in the number of tier-one conferences and journals to which they have been asked to contribute.

Going forward, Bell Labs aims to:

- Organize, promote and participate in events, workshops and conferences dedicated to green ICT
- Foster collaborations in the industry
- Build the green innovation ecosystem

All of these will involve increased collaboration with other stakeholders and policy organizations such as the GeSI, the WEF and Digital Europe.

### 2.2.2 Supporting university collaborations

Despite current budget pressure, Alcatel-Lucent and Bell Labs are committed to maintaining a strong university collaboration program focused on high-quality, high-impact research activities.

In 2012, Bell Labs actively supported and funded 10 university green research collaborations. It will continue to support such collaboration projects at a comparable level in 2013 – and will also launch a dedicated green research summer student program in the U.S. with five slots available. Through an international PhD student program, Bell Labs will support the participation of two students from top-tier universities in U.S.-based green research projects for six to nine months, further strengthening the company's collaborative relationships with universities.



#### HIGHLIGHT

### New Jersey companies join to make ICT greener

In January 2013, representatives from companies and universities across New Jersey gathered at Bell Labs headquarters for the first New Jersey Green ICT Summit. Organized in collaboration with Verizon and the New Jersey Economic Development Authority, this event gave participants the opportunity to network and share the ways they are helping “green” the information and communications technology sector.

[Read more](#)

### 2.2.3 Open innovation

Because the eco-sustainability challenge is too vast for any one organization to solve alone, Alcatel-Lucent has made open innovation a strategic priority – assuming active or leading roles in numerous collaborative initiatives. Open innovation allows us to move toward a global, end-to-end network approach that will fully address all facets of the eco-sustainability challenge.

[Read the SmartPlanet interview with Bell Labs' Thierry Klein](#)



[Watch our video on the role of ICT in fostering green growth](#)

### 2.2.4 GreenTouch™ Consortium

Bell Labs is a founder and remains the most active member of the GreenTouch Consortium – a global, pre-competitive research initiative with the mission to improve network energy efficiency by a factor of 1,000 compared to 2010 levels. Its deliverables by 2015 include the architectures, solutions and roadmap needed to realize this objective, and the demonstration of key technologies.

Members of Bell Labs hold leadership positions in GreenTouch, including:

- Chair of the Executive Board
- Chair of the Technical Committee
- Chair of the Mobile Communications Working Group
- Chair of the Marketing and Communications subcommittee
- Chair of the Funded Projects subcommittee
- Co-chair of the Operations Committee
- Co-chair of the Services, Policies and Standards Working Group

In 2012 (its second year of operation), the GreenTouch Consortium achieved the following:

## DEMONSTRATED A NEW TRANSMISSION PROTOCOL FOR WIRELINE AND FIBER-TO-THE-HOME NETWORKS CALLED BIT INTERLEAVED PASSIVE OPTICAL NETWORKS (BI-PON).

Bi-PON is expected to power next-generation networks with 10 to 30 times greater energy efficiency than current architectures – while improving performance and reducing cost. An advanced demonstration integrated with a virtual home gateway was conducted at the GreenTouch booth at the Telecommunications Industry Association (TIA) conference in June 2012. The consortium's previous demonstration of a Large Scale Antenna System was also profiled. Demonstrations like these contribute to the consortium's technology roadmap development.



[Watch the video](#)

## PUBLICALLY RELEASED THE FIRST VERSION OF STRATEGIC RESEARCH AREAS AND INITIAL RESEARCH PORTFOLIO.

Issued in September 2012, this document includes the main strategic research directions identified as necessary to accomplishing the GreenTouch mission and highlights major research activities currently being conducted by members. It also brings attention to promising – and critical – research areas that require further in-depth investigation.

[Learn more about the Strategic Research roadmap](#)

## ESTABLISHED A NEW SERVICES, POLICIES AND STANDARDS WORKING GROUP.

Created in April 2012, this group liaises between GreenTouch technical working groups and policy and standards organizations. By focusing on pre-standardization activities related to deploying novel technologies in the commercial market, it is helping the GreenTouch community present efficiency-improving technologies to standards bodies in an effective and coherent way. This group also enhances the relevance and value of GreenTouch for members by allowing them to realize commercial and knowledge gains from GreenTouch research activities.

## EXPANDED ITS MEMBERSHIP TO MORE THAN 60 ORGANIZATIONS.

By the end of 2012, GreenTouch's members represented some 350 scientists, engineers and researchers from 23 countries. The consortium also increased its collaborations and partnerships with other organizations, and struck formal agreements with the GeSI and WEF. GreenTouch contributed background information, traffic volumes and growth projections to the GeSI SMARTer2020 report, and is featured in the report as a leading industry initiative. As well, in recognition of the consortium being a best-practice example of a collaborative, cross-stakeholder industry initiative, the Chair of GreenTouch was invited to become an official member of the WEF Global Agenda Council (GAC) on Governance for Sustainability.

## ORGANIZED SEVERAL INDUSTRY EVENTS DEDICATED TO GREEN ICT AND SUSTAINABILITY.

These included:

- A June 2012 workshop on sustainable lifestyles during the EU Sustainable Energy Week 2012
- A June 2012 green educational track during the TIA 2012 Inside the Network conference

GreenTouch members are also regularly invited for keynote presentations, talks and panel discussions at leading industry and academic conferences.



## HIGHLIGHTS

### Who is part of GreenTouch?

Hailing from Asia, Australia, Europe and North America — across all sectors and stakeholders — the members of GreenTouch include:

- Service providers such as China Mobile, France Telecom-Orange, Korea Telecom, Swisscom, NTT, Chunghwa Telecom, Portugal Telecom and Vodafone
- Academic institutions such as the University of Melbourne, Cambridge University, Politecnico di Milano, University of Leeds, California Institute of Technology, University of Maryland and Politecnico di Torino
- Telecom solution and equipment providers such as Huawei, Samsung, Fujitsu and ZTE Corporation
- Industrial labs such as CEA-Leti, IMEC and INRIA

Since its inception, GreenTouch has initiated 12 research programs (with more than 25 individual projects and research activities) in all areas of the network, including wireless and mobile communication, wireline and fixed access, switching and routing, core networks, optical transmissions and content distribution. It has also established and defined a network reference architecture as a baseline model for comparison of future energy efficient technologies. Bell Labs currently leads six GreenTouch research projects and is a key contributor to an additional eight.

GreenTouch goals for 2013 and beyond:

- Build on the consortium's thought leadership by continuing with far-reaching research projects and innovative thinking on energy efficiency
- Demonstrate the results and milestones of current research activities and further illustrate key technologies, architectures and solutions through physical lab demonstrations, prototypes and publications
- Continue to engage with key industry stakeholders, relevant consortia, and research and policy organizations through increased presence at events, trade shows and technical conferences
- Expand the end-to-end network architecture perspective to present a comprehensive picture of future energy-efficient networks as well as the strengths of — and relationships between — different technologies and solutions being researched

The end-to-end architecture perspective is part of the GreenTouch technology roadmap, which will indicate the maturity of each technology and when those technologies might be expected in commercial networks.

In 2013, GreenTouch will announce its progress toward improving network energy efficiency by a factor of 1,000 — and this progress will be continuously monitored and updated as new research ideas come to fruition and new projects are launched.



[Watch the video](#)

[Read our blog](#)



### 2.2.5 Other green research partnerships

Alcatel-Lucent and Bell Labs participate in several other major collaborative efforts focused on green innovations, including the following:

#### CENTRE FOR ENERGY-EFFICIENT TELECOMMUNICATIONS (CEET)

CEET was launched in March 2011 by Alcatel-Lucent, the University of Melbourne, and the Victorian State Government as the world's first research center dedicated to energy-efficient telecommunications technologies. Its research efforts cover a broad range of telecommunications network infrastructures and how they can increase their energy efficiency.

To date, CEET has produced three patents: one focused on energy-efficient data-encoding for optical signals in fiber-to-the-premises (FTTP) access networks, and two on receiver techniques for detecting low-power signals. Its research findings are driving potential new products, setting industry standards in energy efficiency, and raising awareness of energy efficiency in telecommunications. In recognition of their work, Alcatel-Lucent and CEET received awards from the Business/Higher Education Round Table (B-HERT) and Australia's Communications Alliance in 2012.

[For more information](#)

[Read more about CEET](#)

#### CENTRE FOR TELECOMMUNICATIONS VALUE CHAIN RESEARCH (CTVR)

CTVR is a partnership between the Alcatel-Lucent Bell Labs Ireland & UK research cluster and the Irish Centre for Science, Engineering & Technology. Its goals include developing new energy-saving heat-dissipation techniques such as vapor chambers and energy harvesting. Supported by Science Foundation Ireland, CTVR is a collaborative research center involving seven Irish universities.

[Read more about CTVR](#)

#### EARTH (ENERGY AWARE RADIO AND NETWORK TECHNOLOGIES) PROJECT

Bell Labs played a leading role — including overall technical coordination — in EARTH, a European consortium of 15 leading telecommunications service providers, academic institutions, and component and infrastructure vendors. The now-finished project successfully accomplished all of its objectives, showing that, if the integrated solutions recommended by the consortium are deployed, operators could save up to 70% of the energy in realistic 4G wireless network scenarios. EARTH received broad attention and recognition and was honored with the Future Internet Award in May 2012. The main Bell Labs contributions to the project included: a methodology for evaluating energy efficiency in wireless networks; innovative designs and prototype implementations for energy efficient transceivers; fast time-scale radio resource and network management algorithms leveraging new hardware capabilities; and a network-level simulation tool for evaluating network-wide energy consumption for macro cellular and heterogeneous networks.

[Read more about EARTH](#)

#### GACHON ENERGY RESEARCH INSTITUTE (GERI) IN KOREA

Bell Labs continues to work with the Gachon Energy Research Institute (GERI) of Korea's Kyungwon University to develop innovative business models for the next-generation smart power grid. The intent of the joint research program, called Grid 2.0, is to fundamentally enhance the efficiency, reliability, security and intelligence of electric power grids by exploiting the convergence between electric power systems and information and communications technologies.



## 2.3 Reducing the impact of our products and solutions

---

We maintain high standards of product stewardship and consider the environmental impact of our products throughout their lifecycle, from design to end of life.

### 2.3.1 Improving the efficiency of raw materials use

Our Lifecycle Assessment (LCA) approach evaluates the consumption of raw materials throughout the lifecycles of our products. Data and results from LCA assessments inform continual improvements to achieve more efficient use of raw materials and energy at every stage of product life: raw material extraction, pre-processing, intermediate material and component manufacturing, final manufacturing and assembly, packaging, distribution and installation, use, and end-of-life reuse and recycling. These improvements are incorporated into our best practices for environmentally conscious product design, which include design guidelines and requirements such as:

- **Designing for standardization**, which reduces parts inventories by increasing the use of “golden” catalogs and reuse of “golden” parts. Golden catalogs and parts are to be considered first in any new design or redesign in order to increase the commonality of such parts across the company. This promotes resource conservation and design simplicity. In 2012, golden catalogs were extended to all relevant commodities for board designs and applied to field installation materials. For example, Alcatel-Lucent equipment racks are standardized to only six reference designs, resulting in a common look and feel while simplifying rack interchangeability and stocking, which saves on material and energy consumption due to reduced inventories and logistics.
- **Common designs and design reuse**, which increases parts interchangeability, provides common toolsets, and reduces component testing and qualification – ultimately lowering the quantities of parts and materials needed.
- **Accelerated innovation** to deliver technological and environmental innovations to market more quickly, making energy-efficient equipment that uses fewer materials and resources that are more readily available.
- **Eco-efficient product designs** that provide increased functionality (e.g., capacity, service, performance) per unit of electricity consumed while occupying less physical space, weighing less and using fewer types of materials. This has significantly reduced the amount of raw materials consumed in our products over their entire lifecycles.

For example, the new FP3 chip in our 7750 Service Router (SR) enables faster service delivery while consuming 50% less power than its predecessor. It also requires 30% less space, which means fewer components and raw materials go into its increased functionality.

- **Improved materials selection guidance**, supporting optimal materials selection during the design phase to deliver increased efficiency in material consumption while offsetting other material and energy flows and environmental impacts. For instance, selecting aluminum with a high metal recycled content over painted steel for product chassis/cabinets can significantly reduce raw materials extraction requirements and produces a lighter-weight product that will consume less energy during shipping, installation, and end-of-life product takeback and recycling. Aluminum also needs fewer materials for corrosion and finish protection.
- **Product packaging** that directly reduces the amount of raw materials needed for replacement parts. For example, we recommend the use of static intercept bags in place of traditional ESD plastic bags. The static intercept bags yield a 40-fold eco-improvement by extending product shelf life and reducing parts failures due to better electrostatic protection.
- **Product logistics** that minimize parts inventories and reduce environmental impact through a “regional campus” manufacturing model that sees products made closer to customers.



### 2.3.2 Managing materials

We place paramount importance on minimizing and managing the environmental impacts of materials used in our products and our supply chain. Our supplier requirements specify our expectations for the control and tracking of material content as well as prohibitions against materials that are banned, restricted or to be avoided in products or packaging provided to us.

Specifically, our suppliers must track material content information according to the IEC 62474: Material Declaration for Products of and for the Electrotechnical Industry. We maintain a robust material/substance content management process to aggressively limit the impact of hazardous materials and waste on human health and the environment. This process ensures that we:

1. Meet regulatory material restrictions in all markets we serve
2. Are proactive in going beyond legislative material restrictions where there is a sound scientific basis for doing so, which includes abiding by regional legislative requirements on a global level and respecting material restrictions
3. Invest in R&D both independently and through partnerships to minimize the eco-impact of materials
4. Advocate the use and adoption of lower eco-impact materials among our suppliers, customers and in the industry at large

### 2.3.3 Restricted substances

While compliance with materials-related legislation such as the EU RoHS Directive<sup>3</sup> and REACH<sup>4</sup> Regulation is primarily EU-focused, we have adopted these globally. Our products are fully RoHS compliant – and although network infrastructure equipment is currently exempt from the requirement to eliminate lead-based solders, we are taking steps to completely eliminate lead from our products. Our Enterprise products have been lead-free since 2006. All new network infrastructure equipment since 2010 is designed to be lead-free by default.

Our research program – conducted in collaboration with industry partners including iNEMI, the High Density Packaging User Group (HDPUG) and the Unovis AREA Consortium – has helped advance global knowledge of lead-free technology. Thanks to this research we have been able to advocate for industry acceptance of lead-free technology, increasing adoption of reliable lead-free products for service provider applications.

We have voluntarily reduced our use of polyvinyl chloride (PVC) over the last several years in recognition of its associated environmental and human health risks. We have a broad initiative focused on PVC elimination that includes internal R&D, and we are engaged in supplier and consortia partnerships to develop and assess the impact of alternative materials.



#### 2012 ACHIEVEMENT

Our target by the end of 2015 is to replace the use of PVC in our products with alternatives that are technically and economically viable. In 2012, we continued partnerships with suppliers on the identification and introduction of viable alternatives to PVC in cables. Also, we continued our collaborative R&D on the development and eco-assessment of PVC alternative materials.

<sup>3</sup> EU Directive 2002/95/EC and 2011/65/EU on Restriction of Certain Hazardous Substances (RoHS)

<sup>4</sup> EU Regulation 2009/1907/EC Restriction, Evaluation and Authorisation of Chemicals (REACH)

### 2.3.4 Product materials content

In 2012, Alcatel-Lucent delivered 210,931 metric tons of equipment to market. To ensure our products make the most efficient use of materials, we analyze them to better understand the composition of both their component materials and recycled content, identifying opportunities for improvement.

The following is an example of the kinds of materials that make up one of our finished products:

9234e BASE STATION d2u (WIRELESS PRODUCT)	
Total weight of finished product (typical configuration supplied to customer)	139.6 kg
Metals	aluminum: 55.8 kg; copper: 35.4 kg; stainless steel: 10.7 kg; steel: 0.8 kg; other metals: trace
Percentage of metals in finished product	73.6%
Plastics	epoxy resin: 32.1 kg; ABS / polycarbonate: 4.5 kg; other plastics: trace
Percentage of plastics in finished product	26.2%
Other (e.g., ceramics, glass, elastomers)	0.2%

We work closely with our components and materials suppliers to use a high percentage of recycled input materials in raw materials processing and manufacturing. The following shows the percentage of recycled materials typically contained within our feedstock materials:

PERCENTAGE OF RECYCLED MATERIALS TYPICALLY CONTAINED WITHIN FEEDSTOCK MATERIALS	
Aluminum	40% avg.; extruded forms — up to 85%; sheet products — up to 63%; electronic components — up to 5%
Zinc	coatings — up to 36%; die castings — 10%
Lead	battery plates — ~50%
Tin	solder — up to 5%
Steel	47% avg.; structural parts — ~80%; rolled sheet goods — up to 35%
Stainless steel	60% avg.
Copper	38% avg.; structural — up to 75%; electrical/electronic — up to 5%
Nickel	34% avg.
Packaging	~50% in cardboard packaging for shipped products

EXAMPLE FOR A SINGLE ALCATEL-LUCENT PRODUCT (9234e BASE STATION d2u)	
Total weight of materials in product	139.6 kg
Total weight of metals in product	102.7 kg
Total weight of recycled material in metals	42.2 kg
Percentage of recycled input material in product	30%

### 2.3.5 Ensuring product safety

Alcatel-Lucent is committed to meeting the needs of its clients and to ensuring the safety of its employees and the general public. We assess the health and safety impacts of all our products at all stages of their lifecycles. For example, during the design phase, we work with suppliers to avoid the use of hazardous materials. We ensure that all materials are prepared for transportation according to nationally or internationally accepted regulations. Our technical documentation provides specific guidance for the safe use of our products. And mandatory training for Alcatel-Lucent Services personnel covers a range of topics to ensure a safe workplace.

Additionally, all Alcatel-Lucent products that emit radio frequency (RF) energy must comply with country-specific regulations for human exposure to RF emissions in the manufacturing and product-use phases. Compliance is determined either by analytical assessment or measurement of propagated RF energy. Finally, our company requirement dictates that all electronic waste is shipped to processing facilities that have passed our EHS liability assessment. Unless otherwise specified, all electronic waste is processed to recover as much of its recyclable material as possible.

#### SAFETY WITHIN THE ELECTROMAGNETIC ENVIRONMENT

We closely follow health and regulatory issues related to wireless communications, including those associated with the electromagnetic environment. This effort has been recognized by third parties such as the Dow Jones Sustainability Index, which for the past five years has assigned Alcatel-Lucent the highest score achievable in the electromagnetic fields category. We actively contribute to the international standardization bodies that develop exposure assessment standards. We ensure our product portfolio – including macro cells, small cells and WiFi – complies with national and international standards and regulations on human exposure.

Our position regarding the electromagnetic environment is based on the opinion of more than 150 expert committees mandated by national and international authorities to assess the advancement of scientific knowledge. All have been consistent in concluding there is no established health effect from exposure to RF fields below the limits set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) or the Institute of Electrical and Electronics Engineers (IEEE) – the international commissions recognized by the World Health Organization (WHO).

As outlined in the WHO's Fact Sheet 304: "Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak radio frequency signals from base stations and wireless networks cause adverse health effects." This statement applies to all mobile and wireless network technologies implemented by Alcatel-Lucent, including CDMA, GSM, W-CDMA/UMTS, LTE and Wi-Fi.

#### HARMONIZING EXPOSURE LIMITS

We track the evolution of the scientific knowledge on which present exposure limits are based. Expert committees such as Europe's Scientific Committee on Emerging and Newly Identified Health Risks conclude there is no established health effect at exposure levels below the guidelines developed by ICNIRP.

#### CONTRIBUTING TO INTERNATIONAL STANDARDIZATION INITIATIVES

We support the development of human exposure assessment standards through international standardization bodies and industry associations. We also contribute to the global standardization framework of exposure assessment methods coordinated by the International Electrotechnical Commission (IEC). This framework aims to harmonize exposure assessment methods from regional and international standardization bodies such as the IEEE and the European Committee for Electrotechnical Standardization.

### 2.3.6 Packaging and distribution

#### LEAN PACKAGING

Packaging has a direct impact on the environment through the consumption of raw materials and waste generated from its manufacturing processes. It also indirectly affects transportation-related GHG emissions by influencing the amount of transport space required to deliver products. One way Alcatel-Lucent has committed to reducing the environmental impact of packaging is through the elimination of wood (plywood/solid wood) containers in primary (outer) packaging. Switching to cartons with high-recycled fiber content reduces demands on natural resources such as forests and lowers the weight of packaged products — thereby reducing GHG emissions from transport. To date, some 18% of all containers have been converted, resulting in an annual reduction of nearly 10,000 wooden containers. Going forward, we are working to increase this conversion rate of wood containers to high-recycled fiber content cartons.



Switching from wood containers to cartons with high recycled fiber content lessens demands on natural resources.

We also undertook truck-fill optimization projects for some of our major North American and European suppliers in 2012, continuing our efforts to adapt packaging to allow full double stacking and to enforce a higher rate of truck fill. As a result, truckloads were reduced by an estimated 770,000 driven-truck kilometers, the equivalent of eliminating more than 715 metric tons of GHGs. Similar efforts will continue for key suppliers in all regions.

#### EFFICIENT TRANSPORT


We continued to reduce the carbon footprint of our logistics by further shifting freight from air to surface transit, especially ocean shipping. In 2011, Alcatel-Lucent deployed a transportation upgrade process requiring products to be shipped by ocean vessel or truck unless a waiver authorizes an urgent material delivery. This allowed us to ship more than 99% domestically by truck and more than 51% internationally by ocean vessel — the latter up from 40% in 2011 and exceeding our 2012 goal of 50%. For 2013, our target is to further increase international shipments by ocean vessel to 65%.




#### HIGHLIGHTS

- We shipped more than 99% domestically by truck and more than 51% internationally by ocean vessel.
- We exceeded our goal for 2012 to increase international shipments by ocean vessel to 50%.

### 2.3.7 Increasing the energy efficiency of products in use

With broadband traffic growing dramatically, our customers have to strengthen their network's capacity, which increases operational costs and power needs. Lifecycle assessments (LCAs) show that the use of a typical network product accounts for 80-90% of its total environmental impact — the bulk of which is associated with energy consumption. Consequently, reducing energy consumption and developing energy efficient, eco-sustainable options has become critical to ensuring the long-term affordability of telecommunication networks. 

Given the increasing complexity of deployed technology mixes, architectures and operational conditions, it becomes crucial to operators to identify how and where energy is consumed in their networks, and to formulate an action plan to reduce their overall energy consumption. Alcatel-Lucent is addressing this issue by embedding energy monitoring in its telecom systems management tools. Energy monitoring allows network operators to achieve significant reductions in their operational expenses with a corresponding reduction in their associated GHGs.

Between 2010 and 2012 Alcatel-Lucent met the target of improving the functional energy efficiency of its key products<sup>5</sup> by at least 25%. This target has been significantly exceeded for many products in Optics, IP, Wireless, Wireline and Applications Divisions. 

Energy efficiency has been integrated as a standard feature in all our product and solution roadmaps. We will intensify the efforts to improve in this area since they represent a competitive differentiator and an element of customer satisfaction.



Alcatel-Lucent achieved its goal of increasing the energy efficiency of its key products by at least 25% between 2010 and 2012. Many products exceeded the 25% increase.

## ERNST & YOUNG STATEMENT

### Energy efficiency

Starting in 2008, Alcatel-Lucent set objectives for a selection of its products to reduce the environmental impact linked to the energy consumption during their network usage. At the division level, teams put in place measures to improve the energy efficiency of their products, beginning from the time of their design. The methodology for the measurement of energy performance is aligned with international standards and regulatory requirements. All of the targeted products have met the objective for a 25% reduction in energy consumption by 2010-2012.

## ENERGY EFFICIENCY FOR WIRELESS NETWORKS

We are leveraging innovative programs to holistically improve the energy efficiency of our radio access portfolio – from product design to site and system architectures. Areas of improvement include:

- Power amplifier design
- Linearization algorithms
- Integration of system-on-a-chip, radio-on-a-chip and digital-on-a-chip designs into product architectures

We are also addressing energy savings at site and system architecture levels, promoting the implementation of distributed site architectures based on remote radio head (RRH) and heterogeneous networks (HetNets) that drive deployments toward more efficient use of transmitted energy and bring power closer to areas where signal is needed. Between 2010 and 2012, the energy consumption of key products has dropped between 30% and 50% for macro base stations.

Energy efficiency is also at the heart of our small cell product designs, where we focus on identifying energy-efficient hardware architectures, selecting components with low power consumption and providing increased functionality for a given power-consumption level. For example, the energy efficiency of the Alcatel-Lucent 9361 Home Cell increased 100% between 2010 and 2012.

---

<sup>5</sup> New or recently developed products for Networks and Platforms on an upward lifecycle curve.

## ENERGY EFFICIENCY FOR VDSL2 NETWORKS

Since 2010, Alcatel-Lucent has increased the efficiency of its VDSL2 line cards by 46% through the integration of more energy efficient and in-house designed components. Improved thermal management schemes such as variable fan speed (which reduces fan speeds at nominal temperatures) have also contributed. As well, by removing noise among VDSL2 lines in a binder so that each can operate optimally and deliver 100 Mb/s at distances of up to 400 meters, our VDSL2 vectoring line cards consume less power per Mb/s than our previous generation VDSL2 line cards, amounting to a 45% energy efficiency increase.

## LEVERAGING PACKET OPTICAL TRANSPORT TECHNOLOGY

Packet optical transport infrastructures provide the high-speed connectivity required for content-rich multimedia applications such as mobile video and music on demand while optimizing network availability, reducing backhaul costs and increasing service reach.

They also deliver superior energy efficiency and help shrink a service provider's environmental impact by reducing the number of elements required in the network. In the case of the Alcatel-Lucent 1850 Transport Service Switch (TSS), energy efficiency gains of 176% have been realized – and up to 300% in our latest Optical Multi-Service Node (OMSN) product families.



### HIGHLIGHT

France Telecom-Orange and Alcatel-Lucent deployed the world's first live 400 Gb/s-per-wavelength optical link, offering four times more bandwidth than currently available by other technologies. This energy-saving innovation will help France Telecom-Orange meet its commitment to reduce its energy consumption while also optimizing operating and network maintenance costs.

[Read more](#)

## BRINGING EFFICIENCY TO IP ROUTING AND SWITCHING

The new release of our 7705 Service Aggregation Router (SAR) is 34% more energy efficient than its 2010 predecessor thanks to new component technologies that permit higher port density, greater integration and more throughput per watt. The 7705 SAR-8 is an edge services router suited to the aggregation and backhaul of 2G/3G/LTE mobile traffic, legacy-to-packet migration and strategic industries traffic. It enables cost-effective scaling and the transformation to IP/MPLS networking.

## RETHINKING THE IP CORE

Alcatel-Lucent introduced the world's most powerful Internet core router in 2012: the 7950 Extensible Routing System (XRS). The 7950 XRS family brings a huge boost in capacity, efficiency and flexibility to IP networks, providing five times the data throughput of existing alternatives while consuming only one-third the electricity and occupying significantly less space.



### HIGHLIGHT

Alcatel-Lucent is working with Belgium's leading service provider, Belgacom, to expand Belgacom's network infrastructure with the 7950 Extensible Routing System (XRS). Belgacom will have significantly more capacity to meet bandwidth demand being driven by video, cloud-based applications and immersive multimedia – across an array of devices. The 7950 XRS will bring significant operational cost savings by reducing requirements for physical footprint and power per bit. Over a five-year horizon of network growth, Belgacom can save more than 50% of their space and power costs using the 7950 XRS.

[Read more](#)



## MORE EFFICIENT DATA MANAGEMENT SOLUTIONS

The Alcatel-Lucent 8650 Subscriber Data Manager (SDM) supports the consolidation of database information across mobile and fixed networks to create an open knowledge center using a common platform. By leveraging the Alcatel-Lucent Advanced Telecommunications Computing Architecture (ATCA) platform, the energy efficiency of our SDM 8650 increased by 83% over the past two years.

## MORE EFFICIENT PAYMENT SOLUTIONS

Our 8620 SurePay® suite allows operators to simultaneously offer prepaid, postpaid and hybrid rating and charging for voice, data, video and content and commerce services. The transition of our 2010 solution to the next-generation Alcatel-Lucent ATCA platform boosted its energy efficiency by 38%.



Improve the functional energy efficiency of our radio access technology, which is now part of the lightRadio portfolio, by at least 75% between 2008 and 2015. We are on track to meet this goal.

## CAPTURING THE ENVIRONMENTAL ADVANTAGES OF THE CLOUD

Digital content stored by cloud hosting providers will more than triple in the next few years — from 2.7 zettabytes (ZB) in 2012 to 8 ZB by 2015. This represents an enormous amount of virtualized content. Bell Labs has found that moving to the cloud reduces both capital and operating expenses, which in turn provides environmental benefits through virtualization, energy savings and footprint. These benefits include 100% savings in energy and real estate expenses for network elements that are eliminated through hardware reduction. Our CloudBand™ solution portfolio allows service providers to secure the virtual assets of consumers and the mission-critical applications of enterprises, transforming business models and generating revenues through cloud services.

### 2.3.8 Takeback, remanufacturing and recycling

Alcatel-Lucent offers global product takeback, remanufacturing and recycling services for any type of telecom products regardless of vendor. Members of our global network of approved recycling vendors collect and recycle products that have reached their end of life. Customers are provided with an online request form to arrange equipment pick-up. Where possible, we participate in public recovery systems.

In 2012, the company managed 7,481 metric tons of electronic waste. Of this, 389 metric tons of equipment and components were remanufactured and/or resold (142,470 circuit packs and 957 configured pieces of equipment). In 2012, we also avoided producing over 12,100 metric tons of CO<sub>2</sub>e by remanufacturing new equipment and components (instead of manufacturing). Approved recycling partners recycled 6,780 metric tons. Almost 97% was recycled or resold, less than 2% was treated by incineration and less than 2% was disposed of via secure landfill. In 2012, 26 new product families were added to our remanufacturing and resale operations. The overall number of Alcatel-Lucent product families under current remanufacturing/resale process grew from 45 in 2008 to 88 in 2012.



In 2012, almost 97% of 7,481 metric tons of electronic waste was recycled or resold, less than 2% was treated by incineration and less than 2% was disposed of via secure landfill.



## 3 ENABLING A LOW-CARBON ECONOMY

### 3.1 The carbon-reducing capacity of ICT

---

Updating previous estimates of the ICT sector's impact on the environment, a recent GeSI report produced by the Boston Consulting Group (BCG) found that ICT-enabled solutions have the potential to reduce GHG emissions by 16.5%, create 29.5 million jobs and yield USD 1.9 trillion in savings. While ICT's own footprint is projected to rise to 1.27 GtCO<sub>2</sub>e by 2020, its abatement potential is seven times higher. Alcatel-Lucent was one of the most active contributors to the report, providing telecom traffic data, lifecycle GHG emissions data, methodology and communications expertise.

ICT applications and solutions where Alcatel-Lucent technology helps reduce the environmental impact of other sectors include:

- Smart grids deployed for power utilities
- Intelligent transport systems for transportation and logistics companies
- Energy and building managements for smart cities
- Smart city services such as remote patient care and monitoring, state and local government applications, public safety and cloud offerings (virtualization and dematerialization)

In addition, the ICT industry is developing methodologies and standards for evaluating the carbon-reducing potential of ICT solutions.

[Read more](#) | [Read more at the GeSI SMARTer2020 report web page](#)

### 3.2 Bringing new capabilities to smart grids

---

Ensuring the safe, reliable and secure delivery of high-quality power is a power utility's primary objective. Today, in response to aging power grids and mounting consumption, many utilities are using smart grid technologies to transform the way they do business.

The Alcatel-Lucent End-to-End Smart Grid solution allows utilities to improve power delivery, power quality and operational efficiency while incorporating green energy and establishing closer customer relationships. Its demand response, direct load control and energy resource distribution capabilities allow utilities to balance supply and demand and reduce peak loads. Real-time energy usage data from smart meters lets customers shift energy use from peak times to better balance their energy economy and home comfort priorities. In addition, net metering enables customers to sell energy from renewables such as photovoltaic cells back to the grid.

Currently, Alcatel-Lucent runs more than 80 mission-critical networks and smart grid transformation projects worldwide, including:

- Making Luxembourg power utility Creos' communications network smarter with Internet routing technology that lowers costs and enhances the reliability and efficiency of power transmission

[Read more](#)

- Enhancing the operational safety, efficiency and cost-effectiveness of desaNet Telekommunikation Sachsen Ost GmbH (a subsidiary of German energy provider ENSO Energie Sachsen Ost) through the deployment of an IP network supporting smart grid applications

[Read more](#) | [Read more](#)



## HIGHLIGHTS

### United States

Over the next 10 years, the 1 Gbps fiber-to-the-home (FTTH) network of the Electric Power Board (EPB) in Chattanooga, Tennessee is expected to generate USD 40 million in telecommunications revenue, USD 12 million in energy savings and USD 300 million in ancillary benefits, and to support 2,600 new jobs.

Alcatel-Lucent is supplying EPB with smart meters and a smart meter management system, and Bell Labs is working on a research project with EPB to design and develop analytical tools and techniques to mine smart meters and other data sources. This will inject further intelligence into the grid, turning raw data into information for control, operations and planning. Novel models are being developed to predict demand at different time horizons and aggregation levels, detect voltage anomalies, estimate transformer reliability and identify anomalies in home energy consumption. Detailed requirements for implementation of these models along with initial prototypes are also being developed; the project is currently in the final phase of the development of a smart grid data analytics system.

The fastest fiber-based smart grid in North America, EPB's network not only manages electrical use in real time but also offers the community additional advanced communications services such as virtual local area networks for businesses and schools, and 'triple play' services that include Internet, phone and television. EPB is working on customer interfaces – web and IPTV – and is preparing for a 5,000-home pilot where people will be able to see their usage, choose rates and learn to control their use of energy better.

### Indonesia

Alcatel-Lucent is providing global engineering contractor JGC Corporation and its subsidiary, PT JGC Indonesia, with advanced communications technology for a new liquefied natural gas plant in Indonesia. The fully integrated communications and security system ensures safe and efficient operations while a high-bandwidth communications network supports real-time delivery of essential system performance data, including management functionality and notifications of potential issues – giving the company everything it needs to remotely monitor and maintain the plant.

### Australia

Alcatel-Lucent and the Technip Samsung Consortium are set to provide an advanced communications system for Shell's new floating liquefied natural gas facility – the first of its kind in the world. In addition to providing entertainment and communications services to crew members in the facility, the system will also perform essential operational activities as well as ensure the safety of the workforce and the environment.

### 3.3 Propelling smart transportation

---

With transportation being the second highest source of global GHG emissions, ICT-driven transport solutions have the potential to save 1.9 GtCO<sub>2</sub>e (21% of total).<sup>6</sup> That's why Alcatel-Lucent works to develop and deploy greener, cleaner traffic management solutions for its customers.

#### 3.3.1 Smart rail

As governments place more focus on rail as an economical and sustainable form of transportation, information and communications technologies are playing an important role in modernizing the industry by boosting the safety and efficiency of operations and improving the overall passenger experience.

In Europe, rail legislation is opening new markets and improving both travel and trade links. For example, a June 2011 EU report recommended moving 50% of passenger and freight trips from road to rail and waterways, and called for a complete European high-speed rail network by 2050.

Railway operations are becoming increasingly automated and integrated. Advanced signaling, asset management and improved video security – combined with the real-time multimedia services demanded by customers – are putting tremendous pressure on existing networks. Alcatel-Lucent's Dynamic Communications solution, currently running in more than 80 mission-critical railway networks around the world, is addressing these complexities by boosting capacity, improving service quality and enhancing safety – all while reducing costs and carbon emissions.

By becoming the first telecommunications company to join UNIFE (Europe's rail industry association), Alcatel-Lucent highlighted the increasing importance of communications technology in improving the safety, efficiency and sustainability of rail transportation. UNIFE is a leading proponent of rail modernization, representing companies responsible for the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. Recognizing the importance of communications in meeting the challenges of the rail industry, UNIFE invited Alcatel-Lucent to lead its first telecommunication working groups, which looked at the evolving needs of rail operators, infrastructure managers, passengers and freight companies.

Alcatel-Lucent is also helping ensure safe and efficient travel on a new high-speed railway line connecting the busy Spanish cities of Albacete and Alicante, providing the communications infrastructure supporting a next-generation signaling system installed by Alstom. Enabling secure and reliable delivery of remote signaling and traffic control information, the service also provides video and data for surveillance, security and passenger information systems – enhancing the level of communications between trains, stations and control centers.

[Read more](#)

#### 3.3.2 Smart roads

To better deal with increasing traffic volume, highway operators around the world are constantly looking for ways to boost operational efficiency, improve traffic flow and provide real-time information to drivers. And with traffic congestion costing industrialized countries the equivalent of 2-3% of their gross domestic product (GDP) every year, smart transportation is seeking to reduce the time collectively spent in traffic.

By placing roadside Bluetooth® sensors at multiple points across a city, the Alcatel-Lucent Intelligent Travel Time System (ITTS) can effectively monitor and predict traffic congestion in real time. The system works by detecting Bluetooth® devices (such as cell phones) in vehicles as they drive past the sensors. Supported by a local network provider, the captured MAC addresses from these devices are time-stamped and sent to the central ITTS server. (Data encryption ensures there is no intrusion on commuters' privacy – and drivers incur no costs in transmitting positional information.) By analyzing this data in combination with data collected during past events such as sports games and extreme weather, travel time estimates between any two points in the city can

---

<sup>6</sup> GeSI SMARTer2020, December 2012

be calculated. Real-time reports on traffic congestion and density – along with information on alternate routes – are then displayed to authorities and/or commuters through an auto-refreshing web interface.

Alcatel-Lucent has demonstrated ITTS in several locations, including Vejle, Denmark; Newport, Wales; and Orlando, USA. In Orlando, Alcatel-Lucent Bell Labs also measured the system’s potential for GHG abatement. By looking at the system’s enabling effects (e.g., faster vehicle speed and less wait time, which reduces fuel consumption and emissions) as well as its rebound effects (e.g., increased fuel usage due to extraneous travel), it was estimated that an expanded ITTS system covering 49 route kilometers could reduce GHG emissions by as much as 752 metric tons over the course of a single year. That is equivalent to eliminating nearly 2.8 million kilometers of vehicle driving.

[Read more](#)

## 3.4 Building smart cities

### 3.4.1 Studying smart cities around the world

With global urban populations set to grow by an estimated 2.3 billion over the next 40 years, as much as 70% of the world’s population will live in cities by 2050. The smart city concept is a framework for modern urban development that recognizes the growing importance of ICTs in driving economic competitiveness, environmental sustainability and general livability. High-speed broadband, wireless and WiFi connectivity, the cloud and sensor networks are all important enablers of the smart city, supporting a range of intelligent services such as:

- Smart traffic management that help citizens avoid traffic congestion and improve emergency service response time
- End-to-end smart grids that coordinate electrical generation and consumption, reducing peak capacity requirements and delivering only as much energy as required
- Smart buildings that run heating, lighting or computing systems according to occupants’ needs
- Smart environment applications that measure carbon emissions and other environmental performance metrics

The challenge for governments, private industry, non-governmental organizations and other stakeholders, however, is to collectively determine how to realize the vision of the smart city. The Alcatel-Lucent Market & Consumer Insight team explored this question throughout 2012, conducting extensive research in Chattanooga, USA; Zurich, Switzerland; Wuxi, China; and King Abdullah Economic City, Saudi Arabia. The purpose of this study was to better understand the drivers behind smart city projects already underway – and to identify common, shareable best practices for implementation of future initiatives.

[Read more](#)

[Read more  
about smart city initiatives  
in Chattanooga](#)

[Read more  
about smart city  
initiatives in Zurich](#)

Watch the Living in a Smart City videos:



[Chattanooga,  
USA](#)



[Zurich,  
Switzerland](#)



[King Abdullah Economic  
City, Saudi Arabia](#)



[Wuxi, China](#)

Our research found that the desire to “go smart” is usually motivated by social, environmental or economic aspirations – often in combination. Chattanooga, for example, was primarily interested in revitalizing its economy, with social and environmental aims secondary. For Zurich, the environment was key, complemented by societal goals.

We also found that smart city initiatives typically involve some form of public-private partnership (PPP) comprised of a complex ecosystem of players, including non-governmental organizations, service providers, engineering procurement companies, city planners, real estate developers, transportation companies, and healthcare and education organizations. However, to properly identify opportunities, secure buy-in, effectively pilot solutions and ensure uptake, citizens must be given a central role in the PPP process. This effectively produces a new partnership model: the PPCP. In this context, service providers can help cities upgrade their aging infrastructures and use the technologies at their disposal to foster citizen engagement – enabling online dialogue and impromptu contribution on the development of tomorrow’s smart cities.

## Moving from smart to smarter

Citizens value collaboration, efficiency and speed



### 3.4.2 Enhancing public safety in energy and transportation

Alcatel-Lucent and Cassidian launched the Evercor® solution in 2012 to enhance the safety and operations of public safety, energy and transport companies. Based on 4G LTE technology, it enables the use of video, data and other media to improve the way security professionals serve and protect their communities. By delivering services such as enhanced location information and medical record transmission to smart emergency response vehicles, handheld tablet devices and control center systems, the solution equips teams with the vital information they need to rapidly respond to any incident.

### 3.4.3 Creating smarter buildings

California State University (CSU) selected Alcatel-Lucent to transform an information infrastructure used by almost 430,000 students and 44,000 faculty and staff over 23 campuses across the state. In addition to enhancing network security, availability and performance, the migration to an advanced, high-speed local area network will enable CSU to add cloud computing technology in the future – optimizing the way it stores, manages and delivers data. And by deploying Alcatel-Lucent’s energy-efficient OmniSwitch™ product line, CSU expects the transformation process to provide “green” savings of millions of dollars over the course of the eight-year agreement.

**Magasin du Nord**, a major Danish retailer, deployed a scalable Alcatel-Lucent enterprise solution (including IVR technology and unified data and voice communications) to improve its customer service, reinforce its brand reputation and lower costs. Benefits included the elimination of power and cooling issues and a 50% reduction in energy consumption.

**Sheraton Waikiki**, a hotel in Honolulu, Hawaii, chose Alcatel-Lucent solutions when modernizing its building management and energy control systems. Its upgraded wireless network incorporated existing copper wiring, stretching out the network lifecycle while supporting eco-sustainable results.

### 3.4.4 Alcatel-Lucent smart applications

**TeleConsult**, a healthcare application that leverages videoconferencing technology, Bluetooth® sensors, video content, and voice and text applications, enables people to remotely “visit” a healthcare professional. Information can be transferred securely to the person’s healthcare team electronically, reducing the need for physical medical files, images and reports.

**Next Gen TV** offers more connectivity options and richer interactive services, including video calling, e-health services, home power monitoring using RFID technology, and real-time interaction with TV programs (e.g., to learn where to buy a jacket being worn on a favorite television show).

**Safe at Home** uses next-generation, LTE-enabled routers and mobile devices to deliver value-added services such as security, environmental management, automation, telecare and video to people’s homes.

## 4 REDUCING OUR CARBON FOOTPRINT

### 4.1 Tracking and reporting on carbon emissions

#### 4.1.1 Commitments and achievements

Alcatel-Lucent has committed to reducing its carbon footprint from 2008 levels by 50% by 2020 (direct carbon emissions from our operations according to GHG Protocol Scope 1 and 2). Alcatel-Lucent also measures and reports on Scope 3 emissions. (The GHG Protocol is the most widely used international accounting tool for government and business leaders to understand, quantify and manage GHGs.)

While Scope 3 activities are not part of our 50% reduction target, we do have considerable influence over emissions from our supply chain. For example, annual emissions related to product logistics amount to more than 175,000 metric tons of CO<sub>2</sub>. By moving to a regionalized manufacturing model, using more short-distance surface transport and further shifting freight from air to surface transit, we are taking concrete steps to reduce our Scope 3 emissions. Similarly, investing in videoconferencing systems at key locations enables faster and better collaboration among employees without the need for carbon-intensive business travel.



#### HIGHLIGHTS

#### Greenhouse Gas Protocol

Alcatel-Lucent reports emissions from all sources, including facilities, fleet operations, mobile sources of combustion and all other Scope 1 and 2 sources that result directly from business operations. We also report Scope 3 emissions from outsourced activities such as leased vehicles and vessels, product logistics, company business travel, contract manufacturers, employee commuting, and purchased goods and services. We follow the Greenhouse Gas Protocol to determine which elements to measure and report on. At this point we are reporting on nine of the 15 (GGP) categories. Based on our current business activities, two of the categories are not applicable to Alcatel-Lucent and we continue to assess the remaining four categories for our ability to capture and publish meaningful data.

[Read more](#)



## 2012 ACHIEVEMENT

In 2012, we reduced our carbon footprint from our operations (Scopes 1 and 2) by 11%, while including a greater range of Scope 3 emissions than in past years when calculating our carbon footprint.

Since 2008, we have reduced our carbon footprint associated with facility operations by 29% (or more than 242,000 metric tons of CO<sub>2</sub> equivalents), which is slightly more than halfway to our ultimate goal of 50%.



## 2020 TARGET

Alcatel-Lucent has committed to reducing our absolute carbon footprint from our operations by 50% by 2020 (from 2008 levels).

### CARBON DISCLOSURE PROJECT

In 2012, Alcatel-Lucent participated in the CDP Supply Chain and Investors questionnaires scoring 77 points (Industry average was 48) for Disclosure and was assigned the B band (Industry average was D) for Performance.

We also invested in an enterprise carbon accounting tool late in 2011 that helped streamline and automate our greenhouse gas data-collection process, identify additional opportunities for reductions and reveal best practices for reducing the carbon footprint of our operations. All of this helped maintain our leadership position in carbon footprint measurement and reporting.



## TARGETS

Reduce carbon emissions directly related to our business operations through initiatives such as cutting electricity usage and investing in building infrastructure. We also influence our supply chain's energy consumption, and will continue to bring greater efficiency to our product transport and logistics activities while reducing business travel through the use of technology.

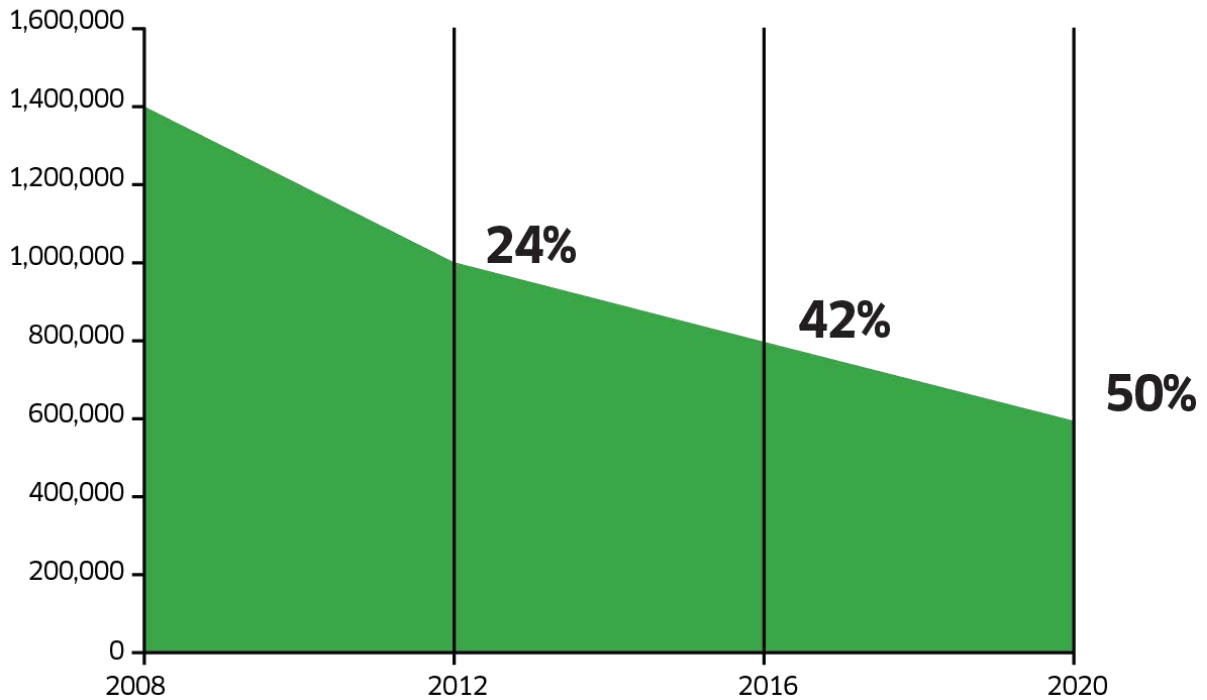
Engage and audit suppliers, ensuring they follow the EICC Supplier Code of Conduct and helping them reduce carbon emissions.

Increase our use of renewable energy sources, credits and, if necessary, offsets.



## ALCATEL-LUCENT THREE-PHASE PLAN TO REDUCE ITS CARBON FOOTPRINT BY 50% BY 2020

In tons of CO<sub>2</sub>



### 1. GET OUR HOUSE IN ORDER

- Improve onsite energy efficiency
- Reduce the use of air shipments
- Consolidate Facilities
- Consolidate IT servers
- Reduce business travel

### 2. ASK MORE FROM SUPPLIERS

- Improve onsite energy efficiency
- Reduce the use of air shipments
- Consolidate facilities
- Encourage partner involvement

### 3. USE RENEWABLES FOR THE REST

- Use renewable energy
- Use renewable energy credits



### HIGHLIGHT

Since 2008, Alcatel-Lucent has reduced its carbon footprint by more than 29%.



#### 4.1.2 Scope 1, 2 and 3 emissions

Through its global approach to sustainability, Alcatel-Lucent is targeting everything that contributes to reducing its carbon footprint, both directly and indirectly. We report emissions from sources including facilities, fleet operations, mobile sources of combustion and others resulting directly from our business operations. Alcatel-Lucent also reports Scope 3 emissions and strives to continuously improve emissions-reporting activities by working with suppliers and business partners.

The following worldwide Scope 1 activities are being assessed:

##### FACILITY OPERATIONS

###### Stationary source fuel combustion

- Distillate fuel oil (#1, #2, #4 and diesel)
- Residual fuel oil (#5 or #6)
- Natural gas
- Propane
- Coal gas

###### Mobile source fuel combustion

- Gasoline
- Diesel
- Ethanol
- Liquefied natural gas (LNG)
- Compressed natural gas (CNG)
- Liquefied petroleum gas (LPG-propane)
- Jet fuel

###### Direct emission of GHGs

- Refrigeration and air conditioning equipment
- Manufacturing, laboratory or product development operations
- Fire suppression equipment

##### CORPORATE FUNCTION

###### Mobile source fuel combustion

- Owned/leased aircraft
- Owned/leased vehicles
- Owned/leased marine vessels

The following worldwide Scope 2 activities are being assessed:

##### FACILITY OPERATIONS

- Electricity consumption
- Purchased hot water/vapor consumption
- Purchased chilled water consumption

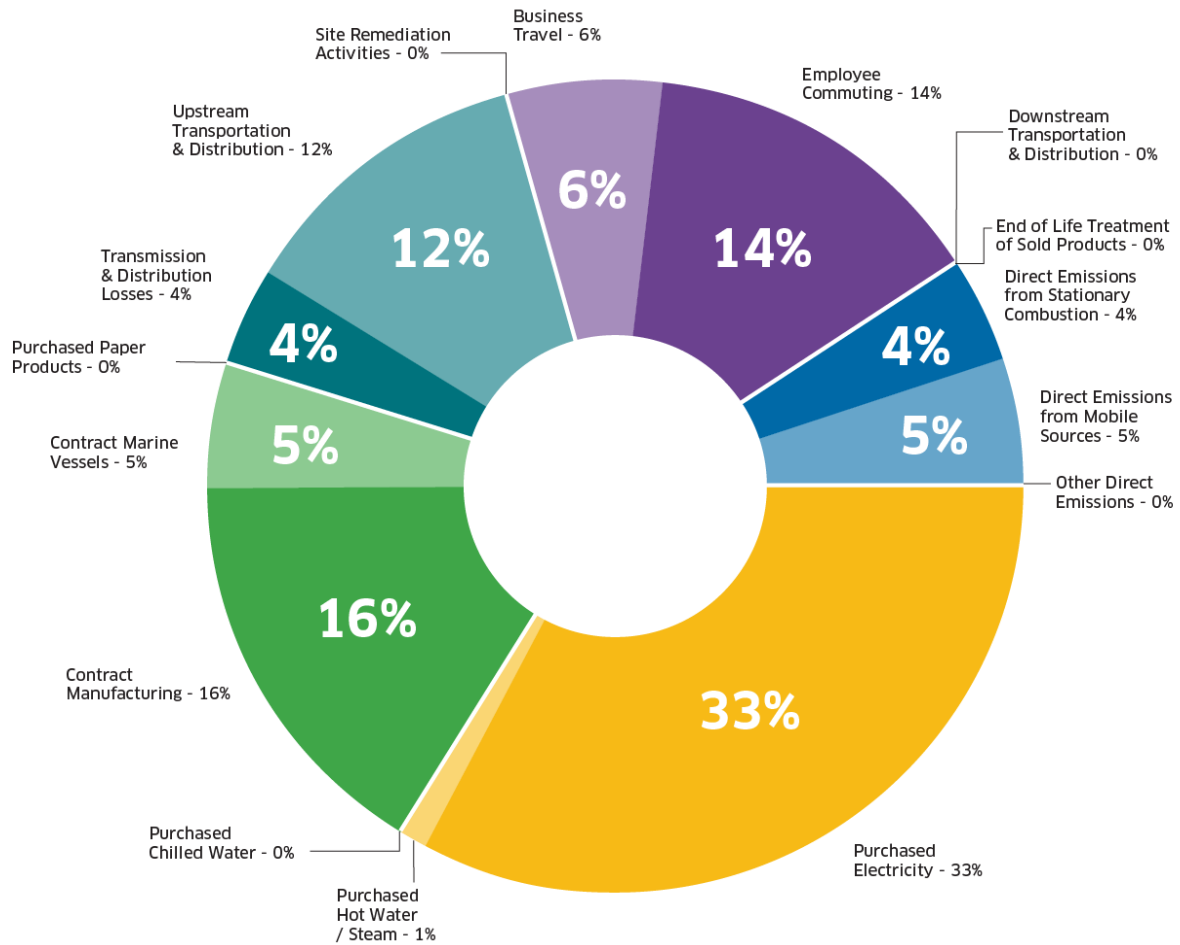
Scope 3 emissions are often the largest source of emissions for companies and therefore often represent the largest opportunity for GHG reductions. Scope 3 emissions include upstream activities such as the production of goods and services purchased by the company as well as downstream activities such as consumer use and disposal of products sold. A comprehensive approach to GHG emissions measurement, management and reporting – including Scope 1, Scope 2 and Scope 3 emissions – has enabled us to focus on the greatest opportunities to reduce emissions within our entire value chain.

Listed below are those Scope 3 categories that Alcatel-Lucent is assessing:

1. Purchased goods and services
  - Paper purchase
  - Contract manufacturing
  - Contract marine vessels
2. Fuel-and energy-related activities not included in Scopes 1 and 2
  - Electric transmission and distribution losses
3. Upstream transportation and distribution
  - Air transport
  - Waterborne craft transport
  - Truck transport
4. Waste generated in operations
  - Energy employed at environmental remediation sites (United States)
5. Business travel
  - Rental cars
  - Rail
  - Air
  - Employee personnel vehicle usage
6. Employee commuting
7. Upstream leased assets
  - Leased vehicles
8. Downstream transportation and distribution
  - Air transport
  - Waterborne craft transport
  - Truck transport
9. End-of-life treatment of sold products
  - Energy employed at electrical equipment recycling facilities

Each year, as the ability to collect and report on this data improves, we add additional indicators. In 2012, we added truck transport activities to the Scope 3 assessment program.

## 2012 CARBON FOOTPRINT (ALL SCOPES INCLUDED)



### SCOPE 1

- Direct Emissions from Stationary Combustion
- Direct Emissions from Mobile Sources
- Other Direct Emissions

### SCOPE 2

- Purchased Electricity
- Purchased Hot Water / Steam
- Purchased Chilled Water

### SCOPE 3

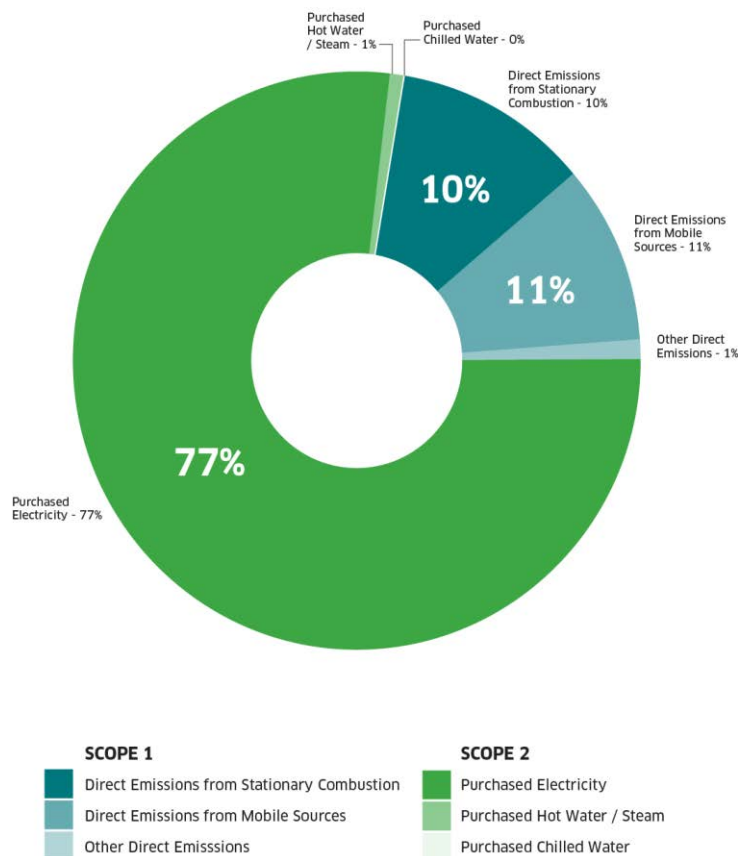
- Category 1 - Contract Manufacturing
- Category 1 - Contract Marine Vessels
- Category 1 - Purchased Paper Products
- Category 3 - Transmission & Distribution Losses
- Category 4 - Upstream Transportation & Distribution
- Category 5 - Site Remediation Activities
- Category 6 - Business Travel
- Category 7 - Employee Commuting
- Category 9 - Downstream Transportation & Distribution
- Category 12 - End of Life Treatment of Sold Products

### 4.1.3 Green teams

Green team leaders and building managers ensure carbon footprint data is provided on a regular and reliable basis for major Alcatel-Lucent facilities worldwide, and that local action plans are implemented to reduce environmental impact. Organized into three regions, our Green teams work with Office of Sustainability experts who share knowledge and provide structure, direction and access to best practices.

Along with reporting energy usage data, Green team members identify opportunities to reduce energy consumption and emissions, ranging from straightforward behavioral changes and short-term payback initiatives to longer-term measures.

#### 2012 CARBON FOOTPRINT (SCOPES 1 & 2)



**2012  
ACHIEVEMENT**

26 energy optimization projects in six of our largest facilities worldwide.



**HIGHLIGHT**

#### Reducing our emissions at sites around the world

Alcatel-Lucent has made it a top priority to reduce GHG emissions at its more than 600 sites worldwide, which account for more than two-thirds of the company's Scope 1 and 2 emissions. Since 2008, emissions at these sites have been reduced by more than 29%, thanks to the efforts of dedicated site leaders and regional Green teams.

## 4.2 Living our best practices

### 4.2.1 Electricity consumption

Electricity accounts for 77% of our Scope 1 and Scope 2 carbon footprint. In 2012, we lowered emissions from our electricity consumption by 12% from the previous year, and continued to implement projects and invest in facilities to achieve ongoing reductions.



#### HIGHLIGHTS

- **Energy optimization projects:** Since 2011, we have made several major capital investments to further reduce energy consumption and related emissions in our buildings. More than 115 energy optimization projects are underway in 27 of our largest facilities – for efficient illumination, occupancy sensors, time-of-day adjustments and alternative energy use.
- **Use of alternative energy:** As of today, we directly contract less than 5% of our power from renewable sources; however, we are expanding our use of this type of energy. In Belgium, Austria and Switzerland, 100% of the electricity we buy is from renewable sources. As availability and financial conditions warrant, we will expand our direct purchases of renewable energy.

### 4.2.2 Greening our network

The Business & Information Technology Transformation function within Alcatel-Lucent is actively supporting the company's commitment to carbon footprint reduction, progress against which is measured quarterly as a part of the Business & Information Technology Transformation operational scorecard. Programs currently underway cover four key areas: PCs, printers, data centers and videoconferencing solutions.

#### PC REFRESH

In 2012, more than 10,000 laptop computers were replaced with devices 85% more energy efficient as a part of a rolling program that will continue over the coming years (11,000 planned for 2013). The old devices were donated to charitable programs where possible.

#### PRINTER REFRESH

1,430 new, energy-efficient printers were installed – capable of duplex printing and using recycled paper stock, and with intelligent ink-level monitoring to minimize polluting waste. These new devices are networked, meaning fewer are required per location. Through the printer refresh program, the number of printers in the Company has been reduced by 1,812.

#### DATA CENTER REFRESH

We decommissioned 232 servers in 2012 and will continue to do so, migrating the remainder to next-generation HP data centers, centralizing our facilities. The HP data centers provide energy-saving solutions to reduce power consumption and cooling requirements, as well as new hardware and virtualization capabilities to reduce carbon footprint and contribute to our green IT targets.

#### VIDEOCONFERENCING

Our videoconferencing systems have been upgraded for better image quality, enhanced services and self-booking. This worldwide upgrade will improve our ways of working and minimize the need for travel within the company. Currently, we maintain more than 300 videoconferencing rooms around the world, covering most of the countries in which we operate, and the usage of videoconferencing continues to increase.

### 4.2.3 Travel, commuting and telecommuting

#### EMPLOYEES COMMUTING

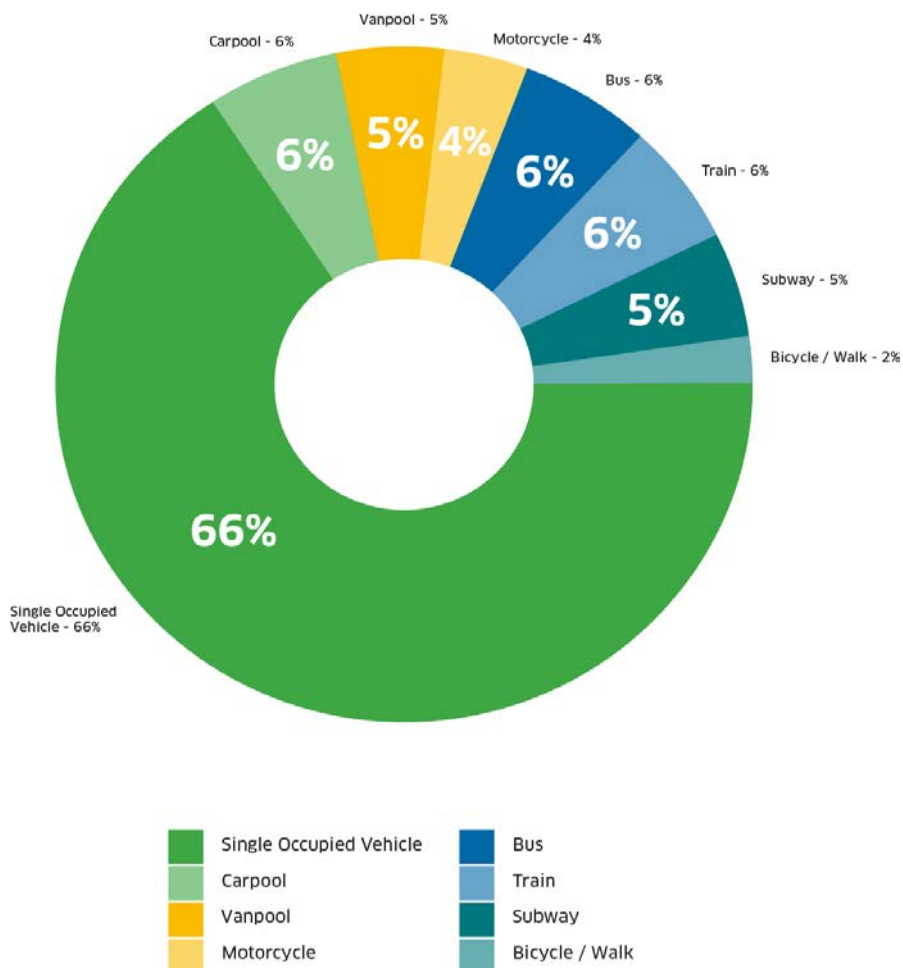


#### 2012 ACHIEVEMENT

In 2012, we conducted a global employee survey to gather accurate information about the commuting habits of our people. Sent to 10,000 employees, with a response rate of 27%, the survey enabled us to calculate carbon emissions associated with employee commuting. We also determined that Alcatel-Lucent's efforts related to environmental protection are rated good to excellent by 58% of its employees.

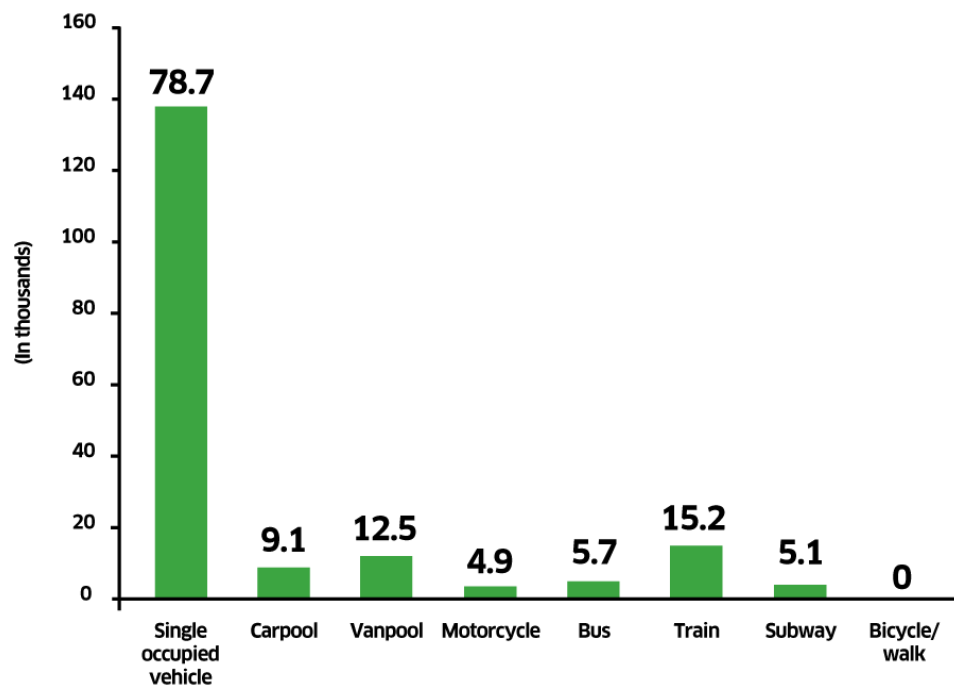
To gain a better understanding of the actual carbon footprint impact associated with our employees' commutes to work, we asked our people to document each mode of travel they use on a daily basis for a typical workweek. All days that employees teleworked were accounted for. Based on the provided information, we determined employee commuting resulted in the emission of 190,141 tons of CO<sub>2</sub>e. We also learned that the average distance between the home and the office is 21 kilometers for our people, with an average one-way commuting time of 41 minutes.

Employees used the following modes of transportation in 2012 (based on total commuting distance):

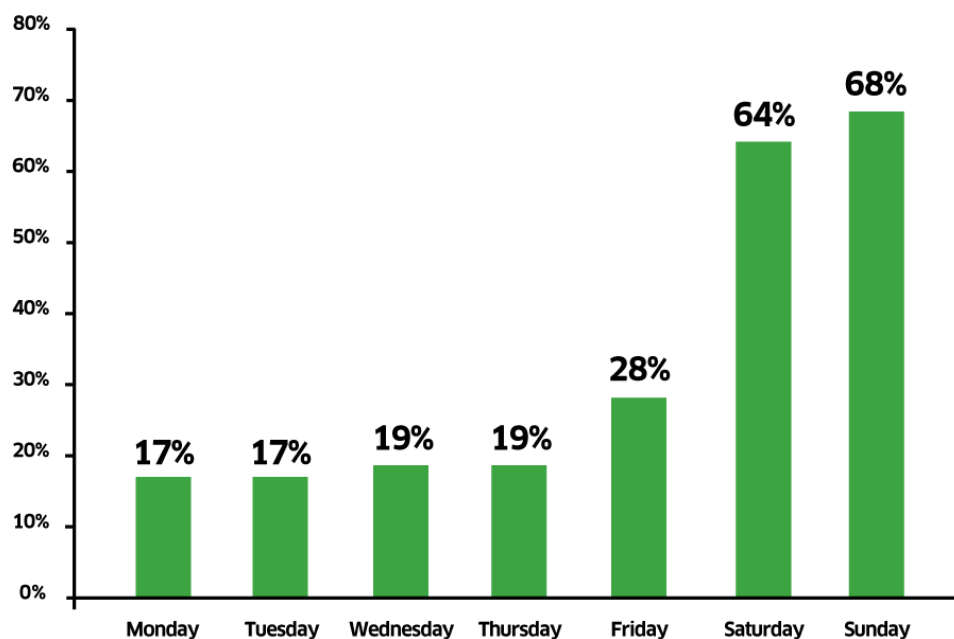


An assessment of the commuting behavior of our employees indicated that the use of single-occupied vehicles for 66% of the commuting distance resulted in 72% of the associated emission of GHG.

### CO<sub>2</sub>e Emissions per Commuting Mode (metric tons/year)



The survey data also documented that teleworking is widely employed at Alcatel-Lucent, with the following percentage of employees teleworking during a typical week, on a worldwide basis:



[For more information](#)

## DEMATERIALIZING BUSINESS TRAVEL

Responsible for 6% of Alcatel-Lucent's Scope 3 carbon footprint in 2012, business travel offers the Company an opportunity to both reduce emissions and demonstrate the advantages of our advanced multimedia communications solutions. Thanks to alternatives such as videoconferencing, Alcatel-Lucent has reduced emissions from business travel by 35% since 2008.

### 4.2.4 Protecting biodiversity

#### ON THE GROUND

Alcatel-Lucent continues to assess its real estate portfolio, creating natural habitat enhancements at company-owned locations by identifying for instance remediation/clean-up projects.

For example, our property in Naperville, Illinois covers 117 acres, including 28 acres of natural prairie and 69 acres of low-maintenance areas that only require grass cutting and mulching at two-week intervals. Prairie maintenance is performed every year on a three-year cycle, and minimally applied organic herbicides are used to spot-treat invasive plants on the property.

Native meadows continually pay dividends by supplying late season seed for birds and providing cover and protection for small wildlife species — all while requiring less labor, fuel and pesticides. At our Murray Hill, New Jersey campus, we are increasing the size of an existing 10-acre native grass and wildflower meadow by 10%. With a goal to make similar increases over the next three years, we continue to evaluate and replace high maintenance lawn areas with native warm-season grasses.

Forest management plans improve the quality, health and vigor of the forest stand while improving wildlife habitat and species diversity. Now in the fourth year of a forest management plan encompassing 57 wooded acres, our Murray Hill facility has seen forest improvement work on more than 20% of its designated forest stand improvement areas. Trees that are of poor quality or too closely spaced for maximum growth have been removed, along with non-native and invasive plants.



**Murray Hill  
meadow and  
forest area.**

Other locations of biodiversity interest include Plano, Texas, where we are collecting water from fire pump discharge testing and diverting it to irrigation; and Ottawa, Ontario, where we have converted a campus lawn to forest/shrubs. A number of our facilities have also been pesticide- and herbicide-free for 12 years.

#### UNDER THE SEA

We ensure that when we lay submarine cable on the ocean floor, we comply with specific environmental standards and obtain all necessary permits from authorities. The cables we lay are small — about 17 mm in diameter — and are designed to have no impact on the environment.



#### 4.2.5 Paper products



In 2012, we reduced carbon emissions from paper usage by 12% from 2008 levels — and we plan to continue that trend by further increasing our use of recycled paper.

##### GOING PAPERLESS

###### Only the phone in the box

Apart from essential safety instructions, every new office desk phone introduced to market in 2011 by Alcatel-Lucent Enterprise division had no paper documentation. Instead, all user guides were made available electronically. Packaging was also minimized, with smaller box sizes reducing paper use and enabling more efficient shipping, thereby reducing GHG emissions associated with transport. Starting in 2012, paper documentation will be removed from 8- and 9-series desk phones.

###### 'Fiscal paperless' with France Telecom-Orange

As part of our Principal Operating Model transformation program, we began moving toward completely paperless invoicing for France Telecom-Orange (FT-Orange) starting in July 2011 — making us the first telecom supplier in the FT-Orange group to do so. The move is a logical progression in the electronic data interchange process implemented in 2006 between Alcatel-Lucent France and FT-Orange, which simplifies and automates information exchanges between companies, streamlines costs, minimizes the need for manual adjustments and reduces the risk of errors.

#### 4.2.6 Conserving water



By 2013 we committed to reduce water consumption by 20% from 2010 baseline. We measure water consumption and have managed to reduce water use by 26% since 2007. However, the cited water goal was based on calculations that did not account for various uses of water within the facility. As such, that goal is to be replaced with a new objective that will be established after obtaining a better understanding of water usage by utilizing enhanced metering at selected sites.

Based on our determination that a more robust water-monitoring program is needed within our facilities, we are in the process of issuing revised internal guidelines that will establish specific timelines to:

- Install sub-meters within targeted facilities
- Track water consumption per usage category (domestic, irrigation, process) and facility type (office, laboratory, warehouse, manufacturing)
- Establish water-consumption reduction goals by the 2014-2015 time period

Within Alcatel-Lucent, water use is limited to cafeteria services, landscaping, toilets and facility cleaning and cooling. All our facilities and cleanups comply with local legal requirements for water discharges, and contaminants of concern (such as metals and volatile organic compounds) are removed prior to discharge.

Though the nature of our business means our water discharges are not significant, we have implemented or initiated projects to reduce their environmental impact. In our Murray Hill facility, we continue to implement a unique project using hydrogen peroxide. A temporary system was installed and other sites in our portfolio are currently investigating the feasibility of this approach.

#### 4.2.7 Handling spills

We maintain a process for monitoring air emissions, water and soil discharges that seriously harm the environment in the countries in which we operate. No air emissions, water and soil discharges above any legal reportable quantities took place in 2012.

#### 4.2.8 Waste

We have reduced the amount of waste<sup>1</sup> we generate by 34% (i.e., 8,859 metric tons) between 2008 and 2012.

In 2012, we established an objective to reduce the amount of landfilled waste<sup>1</sup> to 15% by 2015 (down from 36% in 2009).

AMOUNT OF LANDFILLED HAZARDOUS AND NON-HAZARDOUS WASTE	
2009	36%
2010	28%
2011	25%
2012	22%

We have also a requirement stating that all Alcatel-Lucent and joint venture facilities and operations that generate or manage waste and byproducts that include hazardous waste and electronic scrap shall evaluate the possibility to reuse Alcatel-Lucent branded equipment within Alcatel-Lucent for maintenance or resale and reduce waste and scrap generation by applying pollution prevention and waste minimization principles and mechanisms at both process and facility levels.

#### 4.2.9 Noise

We monitor our operations and activities with regard to occupational noise and community noise regulations. In 2012, no noise-related issues were reported or regulatory citations written regarding either community or occupational noise.

### 4.3 Encouraging eco-awareness among our people

While many environmental goals are achieved through the disciplined enactment of large-scale company policies, individuals everywhere can take powerful steps toward going green on their own. We seek to inspire our employees to be aware of environmental issues. Examples include:

- Embedding customer satisfaction and energy performance into the company's new profit-sharing arrangement with employees in France
- Promoting speaking opportunities at events such as the ICC Green Growth Forum (and these opportunities are often promoted through blog posts, audio podcasts and Twitter sessions)
- Holding an Earth Week internal awareness campaign and running a "save energy" intranet series
- Producing videos such as "Transforming Communications for a Sustainable Planet"
- Maintaining and promoting our WWF Green Forum partnership
- Distributing EHS employee news via: email, our internal Engage social media platform and our EHSMS intranet website
- Holding a "Safety Slogan of the Day" campaign and a "Green Tip of the Day" campaign

In 2012, Alcatel-Lucent University delivered globally more than 12,000 training hours on EHS issues. Note: these training hours do not take into account other EHS awareness channels such as workplace "ergonomic guidelines", EHS topics covered in mandatory Code of Conduct training, or other communication vehicles as mentioned above.

In 2012, we conducted a global employee survey to provide accurate information about the commuting habits of Alcatel-Lucent employees. Sent to 10,000 employees and with a response rate of 27%, by extrapolation, the survey enabled us to calculate the carbon emissions associated with employee commuting. We also determined that Alcatel-Lucent's efforts related to environmental protection are rated good to excellent by 58% of its employees.

---

<sup>1</sup> Hazardous and non-hazardous waste from our operations (excluding electronic waste)

### 4.3.1 Earth Week 2012

Alcatel-Lucent employees around the world took part in a number of events to celebrate Earth Week in April 2012. For example:

**India:** Volunteers took part in tree-planting drives in Bangalore, Chennai and the National Capital Region.

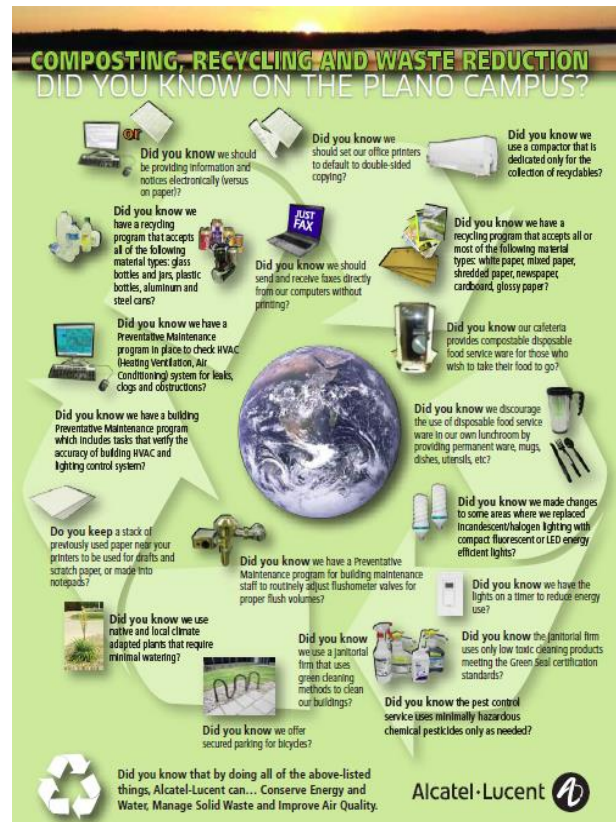
**Brazil:** Employees were invited to submit photos related to protecting the environment. The winning entries were displayed throughout the campus.

**Mexico:** Gardens were not watered during Earth Week to reduce water usage.

**Canada:** Non-essential interior and exterior lighting was turned off during the week, and interactive kiosks were set up to promote ongoing green initiatives and activities.

**United States:** Organic fruit was served in California and North Carolina, while a special vegetarian menu was offered in California and Naperville, Illinois. In Murray Hill, New Jersey, a special 'Green Zone' was set up to educate and update employees on the facility's efforts to reduce its carbon footprint through recycling, waste management, energy use reduction and alternative energy sources. Our campus in Plano, Texas offered employees time to participate in the community garden and gave away packets of flower seeds in the cafeteria. And finally, onsite electronics recycling was also made available at many of our U.S. locations, allowing employees to safely discard items such as phones, laptops, batteries and printer toner.

As part of Earth Week, Alcatel-Lucent declared April 19, 2012, to be No Print Day in North America, encouraging employees to think of the environmental impact of excess paper use. Employees were guided through steps to reduce their paper consumption and encouraged to provide suggestions on further action (for example, the use of electronic submission of expense reports).



### 4.3.2 Engaging employees

#### INTERNAL SOCIAL MEDIA

Engage, the company's social media and communications vehicle, currently hosts 200 different user groups and communities and is used by approximately 50,000 employees every week. It is used to update employees on various sustainability initiatives and allows all employees to blog or comment in real-time. Several Engage groups are dedicated to eco-sustainability and green business, with employees regularly sharing information and best practices, participating in online discussions and suggesting ideas to help the company take action to support our environmental objectives, grow our business and reduce our operating costs.

For Alcatel-Lucent, soliciting employee input on sustainability not only generates original ideas but also helps attract and retain top-notch talent. We have set ambitious goals to increase membership and participation in Engage for 2013, including:

- Increasing active members by 10% over the 2012 baseline
- Increasing contributors by 10% over the 2012 baseline

## GOING VIRAL TO PLEDGE SUPPORT

In the fall of 2012, Alcatel-Lucent launched its first viral campaign — titled ‘YES’ — in three countries. During the campaign, employees took pledges to help green the workforce and adopt digital inclusion. In keeping with the company’s desire to tap innovation from its workforce, employees were also invited to design their own pledges.

[Read more in the Society chapter of this report.](#)

Employees were also invited to take part in the Billion Acts of Green campaign, organized by the Earth Day Network. Alcatel-Lucent teams in China teamed up with the World Wildlife Fund (WWF) and launched an Earth Hour event on March 26 for the third consecutive year, switching off unnecessary lights and promising to donate 3,256 trees to offset carbon emissions by 814,000 kg.

### 4.3.3 Our people making a difference around the world

#### OUR COLLEAGUES IN ROMANIA LOOK TO TREES FOR OUR FUTURE

Alcatel-Lucent employees participated in the ‘Plant Good Things’ voluntary young person’s initiative. The initiative mobilized 2,500 volunteers who planted 46,200 trees last year. In November 2012, Alcatel-Lucent employees helped plant 5,000 saplings in the village of Livezile, in Romania’s Timis County. The benefits of this initiative include increased forestation in Romania and reduced landslides, desertification and flooding. The different tree varieties planted include oak, ash and maple.

In a separate but not unrelated initiative, Alcatel-Lucent Romania is participating in the Paper Tree project, through which recyclable paper is collected and donated — with the funds being used by an NGO to purchase and plant saplings.



# 2012

## SUSTAINABILITY REPORT

### A BUSINESS IMPERATIVE

## PEOPLE

---

### PERFORMANCE STARTS WITH PEOPLE

The diversity of our workforce, client base and the communities where we do business supports our development of innovative approaches to a wide range of business and technological challenges. We believe innovation, which depends on breaking down boundaries and making new connections, is strongly linked to diversity. Increasing gender, cultural and generational diversity improves the company's ability to perform.



# TABLE OF CONTENTS


<b>1</b>	<b>FOCUSED ON OUR PEOPLE .....</b>	<b>138</b>
<b>2</b>	<b>MANAGING REORGANIZATION AND RESTRUCTURING .....</b>	<b>139</b>
<b>3</b>	<b>OUR VALUES.....</b>	<b>140</b>
<b>4</b>	<b>OUR EMPLOYEES.....</b>	<b>140</b>
<b>5</b>	<b>FOSTERING INTERNAL DIALOGUE .....</b>	<b>142</b>
	5.1 Communication at Alcatel-Lucent.....	142
	5.2 Employee recognition.....	144
	5.3 Discussions with unions.....	145
<b>6</b>	<b>EMPLOYEE HEALTH AND SAFETY .....</b>	<b>146</b>
	6.1 Employee awareness of health and safety.....	146
	6.2 Electromagnetic environment at work .....	146
	6.3 Occupational accidents.....	147
	6.4 Review of agreements signed with trade unions.....	147
<b>7</b>	<b>DIVERSITY AND EQUAL OPPORTUNITY .....</b>	<b>148</b>
	7.1 Gender diversity .....	148
	7.2 Accessibility and integration .....	154
	7.3 Generation diversity .....	155
<b>8</b>	<b>DEVELOPING OUR WORKFORCE .....</b>	<b>157</b>
	8.1 Workforce planning .....	157
	8.2 Employee learning.....	157
<b>9</b>	<b>TALENT ATTRACTION AND RETENTION.....</b>	<b>160</b>
	9.1 Alcatel-lucent technical ladder.....	160
	9.2 Performance management.....	160
	9.3 Mobility.....	161
	9.4 Remuneration .....	161
<b>10</b>	<b>TALENT DEVELOPMENT .....</b>	<b>162</b>
	10.1 Leadership Pipeline identification and development .....	162
	10.2 Mentoring .....	166
<b>11</b>	<b>ENABLING FLEXIBLE WORK ARRANGEMENTS .....</b>	<b>168</b>
	11.1 Teleworking .....	168
	11.2 Services for employees.....	168
<b>12</b>	<b>GLOBAL HUMAN RIGHTS POLICY .....</b>	<b>169</b>





## 1 FOCUSED ON OUR PEOPLE


The diversity of our workforce, customers and communities where we work is one of our most valuable assets. Innovation depends on breaking down boundaries and making new connections: increasing gender, cultural and generational diversity improves our collective ability to perform.



**OUR COMMITMENT**

We are committed to creating a diverse and highly skilled global workforce that is able to meet our customers' demands for reliable, quality service. Therefore, we will ensure our employees work in a stimulating environment of continuous learning while fostering diversity and open dialogue via innovative tools to share knowledge and celebrate difference.

The Alcatel-Lucent University provided 1.2 million hours of training to employees in 2012. Our award-winning Engage internal social networking platform is enabling employees throughout the company to share, collaborate and exchange best practices on each other's expertise and talents.



Our human resources policies and practices continue to ensure that the ongoing transformation of Alcatel-Lucent aligns with changes affecting our customers, markets and the world at large. Because we serve global markets and customers who do business on a global scale, our approach to HR management and development is likewise global. At the same time, Alcatel-Lucent nurtures a vast web of partnerships and relationships at both the local level and around the world – not only with customers but also with suppliers, subcontractors, local communities and educational institutions.

Internally, we use social networking to encourage more open collaboration throughout the organization, and have created a global internal job market to expand the career possibilities open to all employees. Platforms such as Engage are helping nurture skills development throughout the company by identifying needs, highlighting talents and supporting community learning. They also support rich, ongoing dialogue between employees and management – critical to our business success. This helps everyone understand, embrace and contribute to the realization of the company's strategic goals.



## HIGHLIGHT

Alcatel-Lucent's global workforce consists of more than 72,000 employees representing more than 100 nationalities.



“For us as an innovation company, people are a vital resource. We need to ensure we have the right skills, experience and conditions to inspire next-generation innovation. At the same time, we must ensure our workforce is flexible, agile and adapted to the demands of the marketplace we operate in.”

CHRISTEL HEYDEMANN

EXECUTIVE VICE PRESIDENT, CORPORATE HUMAN RESOURCES AND TRANSFORMATION

With regard to our people, our goals for 2012 were to:

- Support the company's new operating model
- Execute on the Alcatel-Lucent Performance Program to enable a focus on core products, a strengthened sales organization and re-shaped corporate functions
- Continue to invest in talent and training (for example, by supporting people managers so they can be more effective in their roles)

## 2 MANAGING REORGANIZATION AND RESTRUCTURING

In July 2012, we launched the Performance Program to help us reach our objectives in the following areas by the end of 2013:

- **Costs:** An additional € 750 million in cost reductions, bringing total savings to € 1.25 billion
- **People:** Approximately 5,500 global headcount reductions across the Group
- **Contracts:** Exiting or restructuring unprofitable Managed Services contracts, along with associated headcount reductions
- **Geographies:** Exiting or restructuring unprofitable markets

In September 2012, we announced a new operating model focused on core products, a strengthened sales organization and re-shaped corporate functions to help us deliver the Performance Program and to enable us to:

- Focus on profitable markets and customers around the world
- Optimize tendering and sales in a single global sales organization
- Accelerate the pace of transformation
- Maintain a strong innovation engine with continued R&D investment
- Manage our patent portfolio as a dedicated profit center
- Concentrate on higher value-added contracts in Managed Services
- Simplify management layers across the company



[Read more](#)



## 3 OUR VALUES

**Customer first:** We exist to serve our customers. Our success will be determined by how well we perform for them.

**Innovation:** We are intuitive, curious, inventive, practical and bold, which allows us to create new ideas for our customers, our business and our employees. These ideas come from anywhere throughout our global operations.

**Teamwork:** Success requires teamwork. We are collaborative and respect the contributions of each person to the team's success.

**Respect:** We are a global company with many cultures. We respect and embrace people and perspectives from all over the world.

**Accountability:** We do what we say we will do. We own a collective responsibility toward customers, colleagues, communities and shareholders.

## 4 OUR EMPLOYEES

Our total employee headcount at the end of 2012 was 72,344. The first two tables below break this number down by business segment and the geographic areas in which our employees worked for the years 2010 through 2012. The two following tables specify the breakdown of employees by age and by gender for 2011 and 2012. The figures account for all employees who worked for fully consolidated companies as well as companies in which we own 50% or more of the equity.

Note: Numbers below were restated for the last three years due to the sale of our Genesys activities on February 1, 2012.

### Breakdown of employees by business segment

	NETWORKS	SOFTWARE, SERVICES AND SOLUTIONS	ENTERPRISE	OTHER	TOTAL GROUP
2010	34,753	38,236	3,964	1,186	78,139
2011	33,359	36,095	3,833	1,079	74,366
2012	32,159	35,269	3,855	1,061	72,344 <span style="color: red;">Q</span>

### Breakdown of employees by geographic area


	FRANCE	OTHER WESTERN EUROPE	REST OF EUROPE	ASIA PACIFIC	NORTH AMERICA	REST OF WORLD	TOTAL GROUP
2010	9,732	12,160	6,243	24,389	17,908	7,707	78,139
2011	9,541	11,697	5,757	22,697	16,914	7,760	74,366
2012	9,483	11,022	5,292	22,339	16,507	7,701	72,344

## Breakdown of employees by age

		BELOW 30	30-50	ABOVE 50
2010	Europe, Middle East and Africa	14%	67%	19%
	Americas	8%	63%	29%
	Asia-Pacific	33%	64%	3%
	Total Group	18%	65%	17%
2011	Europe, Middle East and Africa	12%	67%	21%
	Americas	7%	60%	33%
	Asia-Pacific	28%	69%	3%
	Total Group	15.5%	66%	18.5%
2012	Europe, Middle East and Africa	8%	69%	23%
	Americas	6%	58%	36%
	Asia-Pacific	23%	74%	3%
	Total Group	12%	67%	21%

Note: 2011 data have been restated due to a better accuracy in our reporting system.

## Breakdown of employees by gender

		FEMALE	MALE
2010	Europe, Middle East and Africa	21%	79%
	Americas	23%	77%
	Asia-Pacific	21%	79%
	Total Group	22%	78%
2011	Europe, Middle East and Africa	21%	79%
	Americas	22%	78%
	Asia-Pacific	21%	79%
	Total Group	21%	79%
2012	Europe, Middle East and Africa	19%	81%
	Americas	21%	79%
	Asia-Pacific	22%	78%
	Total Group	21% 	79%

## Attrition\* by Region & Gender

	2011		2012**	
Attrition by Region	Sum CI/EI/ other Attrition	Attrition Rate	Sum CI/EI/ other Attrition	Attrition Rate
AMERICAS	2,309	10.11%	1,416	6.75%
APAC	3,651	15.36%	2,504	11.07%
EMEA	2,021	6.66%	2,153	7.52%
Total Alcatel-Lucent	7,981	10.37%	6,073	8.41%
Attrition by Gender	Sum CI/EI/other Attrition	Attrition Rate	Sum CI/EI/other Attrition	Attrition Rate
AMERICAS	2,309	10.11%	1,416	6.75%
Female	596	11.49%	245	5.40%
Male	1,708	9.68%	1171	7.13%
Information Not Available	5	45.45%		0%
APAC	3,651	15.36%	2,504	11.07%
Female	583	11.69%	463	9.61%
Male	3,068	16.33%	0	0%
Information Not Available	0	0.00%	2,041	11.49%
EMEA	2,021	6.66%	2,153	7.52%
Female	363	6.16%	407	7.39%
Male	1,657	6.78%	1,746	7.55%
Information Not Available	1	76.47%	0	0%
Grand Total	7,981	10.37%	6,073	8.41%
Female	1,542	9.60%	1,115	7.50%
Male	6,433	10.57%	4,958	8.65%
Information Not Available	6	48.45%	0	0%

\* Attrition includes all termination activity including resignation, retirement, death, spinoff, outsourcing, layoffs, redundancy, violation of rules, and other miscellaneous payroll/company terminations.

## 5 FOSTERING INTERNAL DIALOGUE

### 5.1 Communication at Alcatel-Lucent

#### 5.1.1 Internal communication and dialogue

Our success depends on our ability to build the strongest possible commitment from our workforce. Doing so requires an ongoing exchange between employees and management to ensure broad dedication to our strategic goals and a shared understanding of how each employee can contribute to those objectives.

We have updated our approach to performance management to reinforce the role of people managers and to nurture the ongoing dialogue between managers and employees. This new approach will ensure that all managers have the skills and tools they need to drive a less formal (yet still structured) exchange with employees at all levels of the organization.

We have deployed the latest communications tools throughout the company to support ongoing dialogue, for example:

- The social media functions of our Web 2.0 service platform, accessible in all countries where we operate, is actively used by more than half of the company population.
- Launched in March 2010, the Engage social networking platform enables employees to collaborate in real time by sharing insights, links and documents.
- The OurTalent Dialogue tool enables dialogue between managers and employees to assess objectives and measure performance.
- The Manage+ newsletter published on a monthly basis provides the company's people managers with key virtual training updates as well as latest company news relevant to creating stronger teams.
- The Inside-Out video offers all employees and external stakeholders a snapshot of the company's latest innovation milestones available on Alcatel-Lucent's YouTube channel.

In addition to corporate-level initiatives, local HR and communications specialists are available to sponsor a range of activities or talk with employees.

#### FOSTERING A DIGITAL WORKPLACE

In 2012, we redesigned our intranet homepage to incorporate real-time news feeds, direct links to social media tools and other features to help employees stay informed. As the portal to our digital workplace, the intranet homepage was viewed 26 million times in 2012, and other pages across the entire intranet were viewed almost 50 million times in total. To date, nearly 5,000 videos have been uploaded to ALU TV, and more than 55,000 comments and ratings have been posted on news stories and messages.

Nearly 100% of Alcatel-Lucent employees are registered on Engage, and some 28,000 actively use this internal social networking platform at least once a month – with roughly 6,000 contributing actively. Overall, employee interaction via Engage increased by more than 25% in 2012. Teams and organizations use Engage to solicit input, share experience and knowledge and raise questions. Tools like Engage allow our global team to collaborate while contributing to a reduced carbon footprint through reduced travel.

#### FACE-TO-FACE VALUE

The most effective and personal communication channel remains face-to-face meetings. Whether through large-scale, all-hands meetings and road shows or more intimate 'Coffee and Connect' sessions, we encourage personal exchange. In 2012, the Strategy team engaged in a multi-country road show over the course of several months to explain the company's strategy – kicking off their communications at the Alcatel-Lucent Tech Symposium in May. The new strategy was also one of the key agenda topics during our Global Days of Learning.



#### HIGHLIGHTS

About 28,000 employees actively use the Engage social networking platform at least once a month, and nearly 6,000 employees are active contributors. Employee interaction on Engage increased by more than 25% in 2012.

### 5.1.2 Employee engagement



In 2012, our employee engagement survey was administered to 30,000 people (approximately 40% of the total employee population).




Employee engagement survey to be launched to drive clear understanding of our human capital actions for improvement.

During 2012, Alcatel-Lucent rolled out an Employee Engagement Improvement Process to more than 30,000 employees, principally within the Global Customer Delivery organization. This approach focused on three elements.

First, we built an active network of over 100 Employee Engagement Ambassadors, all of whom went through an intensive 12-week blended learning training program to fully equip them with the skills necessary to drive this process effectively within their locations.

Second, a detailed online survey was then deployed, which looked at many aspects of employee engagement, including an Employee Engagement Index (comprising six questions), an Employee Motivation Index (comprising four questions) and a Change Effectiveness Index (comprising five questions), as well as measuring perceptions of many well established ‘drivers’ of engagement (such as leadership effectiveness, communications effectiveness, immediate manager, etc.).

And, finally, a best-practice ‘Results2Action’ process was deployed across the business that rolled out a top-down and highly systematic approach, which was designed to focus the business acutely on the one or two most pressing issues to emerge from the diagnostic (which, in 2012, were change effectiveness and perceptions of career opportunities). The efforts of this Results2Action approach have since continued into 2013 and will run well into the year. 

This process will be repeated in June 2013 using the incumbent Employee Engagement Ambassador community to minimize the need for additional training. The results will be compared to those of 2012 to determine areas of improvement, inertia or regression. Based on the outcomes of this process, a new Results2Action plan will be rolled out in 2013 to deal with the most pressing issues identified.

### 5.2 Employee recognition



2012 saw 55 nominations for CEO Excellence Awards from around the globe. More than 6,000 employees took part in the online voting process and the winner was announced live during our Global Day of Learning.

The annual CEO Excellence Award is given to Alcatel-Lucent teams for projects that serve as models of superior execution in accordance company behaviors and values.

Winners choose a charitable organization to receive a donation on their behalf. All nominees’ submissions are published to spotlight the quality of work being done within the company. In 2012, the top five submissions (as determined by an internal review team) were voted on by all employees — producing a top three from which the CEO chose a winner. ASB Manufacturing Cycle Time Reduction project was honored to be selected by Alcatel-Lucent’s CEO as the winner among the top six nominees.



Alcatel-Lucent's top talent is regularly featured on the 'ALU Has Talent' intranet page that celebrates awards, successes and other forms of public recognition.

[Read more](#)

### 5.3 Discussions with unions

We strive to foster an open dialogue with employees on the decisions that directly affect them. Discussions with employee representatives concerning organizational changes and workforce reductions are managed on a regional and/or country basis. With the launch of the Alcatel-Lucent Performance Program in 2012, we regularly engaged with our social partners in full compliance with local rules and regulations.

- **Trade unions:** We inform or consult with union representatives before making any major change in the organization. Matters affecting individuals, particularly those involving relocation or the transfer of work to a new location, may require up to six months of discussions.
- **European Committee:** In force since June 1996, the European Committee for Information and Dialogue (ECID) is a dialogue body where senior management and European employee representatives can share their views. Composed of 30 members – including representatives from Belgium, France, Germany, Italy and Romania who composed the Coordinating Committee – the European Committee meets at least twice a year (April and October); in 2012, it met for a third time on December 6 specifically for the Alcatel-Lucent Performance Program.
- The December 6 plenary meeting focused on reporting and discussing the details of the Performance Program and the foreseen headcount reductions by country and by function, and explaining the associated rationale of the program for countries within the ECID's scope. In addition, in all our European countries, the official consultation process was launched in parallel. Further details are communicated at a country level following due process.
- **French Committee:** In France, a company-level committee representing unionized employees has been operating since February 1983. Composed of 30 trade union representatives, the French Committee (Comité de Groupe France) meets at least twice a year (usually in June and December). Like the European Committee, its membership is renewed every two years. During the final quarter of 2012, all Alcatel-Lucent companies and subsidiaries in France held elections to worker councils; in that respect the French Group Committee was renewed at this occasion based on these elections' results.

## COLLECTIVE AGREEMENTS

A selection of some of the major collective agreements signed in 2012 includes the following:

- **France:** New collective agreement for improved social dialogue (including a three-year mandate for union representatives); 2011 agreement continuation on equality at work and employment and skill management; negotiations launched about 'social dialog 2.0' regarding the use of social networks.
- **Italy:** Two agreements on social tools; one agreement on outsourcing (Genoa); one agreement on temporary work (Trieste); one agreement on Italy national plan (2012 and beyond).
- **Germany:** Two company-related collective bargaining agreements (on regulating working conditions and the amalgamation of 10 establishments into five) concluded in December 2011, came into effect on September 2012; one new agreement for Alcatel-Lucent Digitalfunk Betriebsgesellschaft on regulating working conditions; one new agreement for Alcatel-Lucent Deutschland AG on salary increases, increases of apprentices' remuneration, employers' obligations to offer an apprentice a temporary or permanent employment following the apprenticeship, and working conditions applying in case of employee leasing.
- **Norway:** One main collective (tariff) agreement between the employee organization (LO) and the employer organization (NHO).
- **Sweden:** One agreement covering employment conditions, negotiation process, salary setting process, salary increase lowest levels, competence development activities, working hours and work conditions.

## 6 EMPLOYEE HEALTH AND SAFETY

As stated in our Employee Health and Safety (EHS) Policy, we are committed to operating in a way that protects the environment as well as the health and safety of our employees, contractors, customers and communities in which we do business. Meeting this commitment is a primary management objective as well as the individual and collective responsibility of all employees.



### 2012 ACHIEVEMENTS

Per our 2012 commitment, an SA 8000 assessment was conducted in Brazil and Mexico during last year. Further rollout to other countries, planned for completion in 2014, will be done according to the Performance Program execution.

### 6.1 Employee awareness of health and safety

To increase the availability and speed of delivery of EHS training, a series of health and safety courses – starting with courses on slips, trips and falls – were offered through our online learning portal in 2012. To deliver these courses we use Skillport, an off-the-shelf product with many applicable EHS titles that is hosted in the Alcatel-Lucent Learning Management System. And to make health and safety information more readily available, our corporate EHS office created a common EHS SharePoint platform that allows local EHS coordinators to input, utilize and customize course content according to their specific needs. Additionally, our travel services website is used to keep employees informed of any risks associated with serious diseases.

### 6.2 Electromagnetic environment at work


To ensure a healthy and safe work environment for our employees, we place high priority on training and guidance. We provide dedicated customer services and training to support the safe deployment of wireless products in the field. We have also initiated an internal program in all EU countries to address the key principles of EU Directive 2004/40/EC on electromagnetic fields exposure at work. We have maintained this program even though the deadline for implementing the directive was postponed until 2013.



## 6.3 Occupational accidents

	FREQUENCY RATE FOR WORK-RELATED ACCIDENTS INCLUDING OCCUPATIONAL DISEASES	NUMBER OF DAYS OF ABSENCE DUE TO WORK-RELATED ACCIDENTS INCLUDING OCCUPATIONAL DISEASES PER EMPLOYEE
2010	1.21	0.07
2011	1.42	0.08
2012	1.48	0.07 

Note: The workforce considered for work-related accidents including occupational diseases are employees, students, trainees and apprentices. 

Regarding the number of absence days due to work-related accidents including occupational diseases per employee: this value is the best possible estimate based on available data and given the challenges which may occur to a global company of our size, when trying to apply a common definition in all the countries where we are present. Each country has its own practices and/or regulations. Since some countries report calendar days instead of working days, the published indicator is overvalued. 

Our reporting requirements for serious incidents and occupational accidents ensure all business groups provide the information to support effective trend analysis and root-cause identification – data that are used to continually improve our safety performance as we strive to reach our goal of zero lost workdays due to injury or illness. A preliminary trend analysis in 2011 pointed to slips, trips and falls; strain- and sprain-related injuries; and motor vehicle safety as areas needing more attention.

Consequently, we are revising our ergonomic guidelines to better suit today's work environment (e.g., the increasing use of laptop versus desktop computers) and evaluating driver safety courses in all regions to ensure local safety issues are addressed.

At Alcatel-Lucent, we do not calculate the severity rate as we do not have heavy industrial manufacturing processes that would require following an indicator on severity of occupational accidents. Global occupational accident trends focus on an employee's professional activity and the corresponding risks associated with it. Improvements are made at the program level based on trends identified, irrespective of the number of lost workdays. It has always been our approach to view the potential of the occurred accident and what we can learn to prevent its further occurrence.

## 6.4 Review of agreements signed with trade unions

Examples of collective agreements signed with trade unions staff representatives on workplace health and safety in 2012 include the following:

- **United States:** On December 28, 2012, we signed an agreement with the Communications Workers of America (CWA) to extend our existing U.S. collective bargaining agreements with them until May 24, 2014. Our collective bargaining agreements were due to expire in May of 2013. With this extension we will continue the health and safety agreements contained in our U.S. union contracts. Included are a joint manager and union EHS Advisory Committee for approximately 1,200 union technicians in the U.S.; and an agreement to pay \$100 per quarter to union employees who are trained, certified and participate on an Emergency Response Team at our major facilities.
- **Germany:** Collective bargaining agreements with trade unions contain general principals referring to the German laws regarding the workplace and the working environment. Based on the Works Constitution Act (sections 87 (7), 90, 91), the Works Council has co-determination rights regarding to all regulations referring to occupational safety and health protection. Major collective agreements signed in 2012 include in-house medical services and safety arrangements regarding the Occupational Safety Act - EHS regulations with participations rights; and a risk assessment with the participation of Works Councils according to the Act of Occupational Safety and Health of 1996 - pilot project 2012/2013.



## Local initiatives

Last year Alcatel-Lucent engaged in a number of local EHS initiatives, including:

### **Alcatel-Lucent Shanghai Bell: First time certification for OHSMS (OHSAS) 18001**

The company's health and safety management systems expanded in 2012 as Alcatel-Lucent Shanghai Bell Managed Services obtained certification in Occupational Health and Safety Management Systems (OHSAS) 18001:2007.

### **Alcatel-Lucent Shanghai Bell: Trusted Green Enterprise for Environmental Protection**

The company passed the annual clean production assessment of the Shanghai Municipal Clean Production Office and was honored with a third consecutive Trusted Green Enterprise for Environmental Protection award.

### **Alcatel-Lucent Hong Kong: Employee recognition**

Customer Hong Kong Electric continued its EHS partnership with Alcatel-Lucent, recognizing our long-term commitment to EHS by presenting Margaret Lee, Alcatel-Lucent Managing Director for China, with the Good Environment, Health and Safety Performance Award in May 2012. The award acknowledges the efforts of employees and contractors based on EHS meeting attendance rate, safety performance and HEC safety audits.

### **Alcatel-Lucent Colombia: Silver — Class of Risk III distinction**

Alcatel-Lucent Colombia received the Silver — Class of Risk III distinction from ARL Bolívar for its performance in occupational health and safety management in 2010 and 2011. Delivered annually since 2001, this award recognizes the commitments companies make to provide a better quality of life for workers, promote health and prevent accidents and occupational diseases.

## 7 DIVERSITY AND EQUAL OPPORTUNITY

As a global company, we actively seek to ensure our employee body reflects the diversity of our business environment. Our Statement of Business Principles and our human rights policies clearly confirm our responsibility to ensuring equal opportunities and to recognizing and respecting the diversity of people and ideas.

The richness of diversity among our employees is a great source of strength that allows everyone within the company to develop new ways of looking at issues and to contribute creative thinking. In today's global environment, we believe more than ever that it is crucial to understand the cultures, customs and needs of employees, customers and regional markets.


Our commitment to advancing equality and non-discrimination is reflected in specific initiatives against harassment and discrimination in several countries. Focusing on diversity means ensuring that the right choices are being made about our talent and that our workforce reflects the make-up of our business environments. Our corporate diversity strategy is to adhere to the principles of inclusivity worldwide, with an initial focus on gender diversity at the global level. Countries and regions are accountable for addressing diversity relevant to their local contexts.

### 7.1 Gender diversity

#### 7.1.1 Our gender diversity strategy

While women make up more than 50% of most talent pools and represent a large contingent of the Company's end users, they are not equally represented among our management; Alcatel-Lucent has made it a business imperative to correct this misalignment.

At the end of 2011, we implemented a global strategy and action plan that assigned accountabilities at the organizational, corporate and country levels, and identified actions in five focus areas: awareness building, the Alcatel-Lucent Leadership Pipeline, staffing/recruitment, work/life balance and equal pay for equal work.

**Awareness building:** We launched a series of interactive sessions on gender diversity to over 200 people managers and leaders in 2012. The aim of the workshops is to help people managers understand why diversity is a business imperative for Alcatel-Lucent, and to build managers' awareness of workplace gender dynamics — all to better tap our existing talent and improve organizational performance. 

Prior to these workshops, more than 300 employees in 16 different countries participated in 34 focus groups on gender diversity.

In addition, as part of the June 2012 Global Day of Learning, we unveiled a dedicated website on gender diversity complete with training material, videos and readings. Leaders recorded six videos on the topic of gender diversity within Alcatel-Lucent.

## ERNST & YOUNG STATEMENT

### Gender diversity

Alcatel-Lucent has reinforced its communications and outreach strategy related to the improvement of gender equality. Materials have been made available to Alcatel-Lucent teams regarding the importance of gender diversity to the company and support on achieving greater gender equality. This includes both a dedicated intranet portal and a global awareness raising campaign and workshops on overcoming gender related unconscious biases. Alcatel-Lucent's online Learning Management System inventories the dates, the number of participants, and the location of these awareness raising sessions. Employees also receive emails from leaders encouraging them to participate in and provide feedback on these events. Local teams regularly provide updates related to these gender equality efforts to headquarters.




### 2012 ACHIEVEMENT

Gender dynamics awareness workshops for people managers were launched in June 2012 with sessions in Paris, Shanghai and Naperville, Illinois. In Paris, the interactive sessions were attended by a number of members of our Management Committee as well as a selection of top people managers. The aim of the sessions is to help people managers understand why diversity is a business imperative for Alcatel-Lucent and to build their awareness of workplace gender dynamics. Further workshops were rolled out in 2012 to more than 200 people managers in Mexico, Brazil and the U.S. All people managers in the company will be expected to attend these sessions to better tap our existing talent and improve organizational performance.

**Staffing/recruitment:** 20% of external hires over the past year were women, up a few percentage points from the previous period.

**Leadership Pipeline:** More women than ever before are part of our Leadership Pipeline: 23% in 2012 compared to 19% in 2011.

**Work/life balance:** We now have teleworking policies in all key countries worldwide. Our internal networking and learning platforms are being used to educate employees on the benefits and best practices in the field, thus helping make flexible work practices more prevalent for both men and women employees.

**Equal pay for equal work:** We continue to closely monitor the pay differences between men and women. All geographies are not impacted equally but we have made progress thanks to targeted actions such as those implemented in France. 



## 2012 HIGHLIGHTS

### Gender diversity

Alcatel-Lucent has set a target to increase the number of women in upper management positions by 20%. Over the course of 2012, the overall proportion of women in upper management positions rose to 16%.

### Equal-pay agreements

By the end of 2012, a plan was put in place to address gender pay gaps.



## 2012-2014 TARGETS

In light of the steps that need to be taken to improve the gender balance at the executive level, Alcatel-Lucent shifted the 2012 target of a 20% increase in the percentage of women in executive positions to 2014 – a more realistic timeframe within which to enact specific action plans and propel measurable progress.

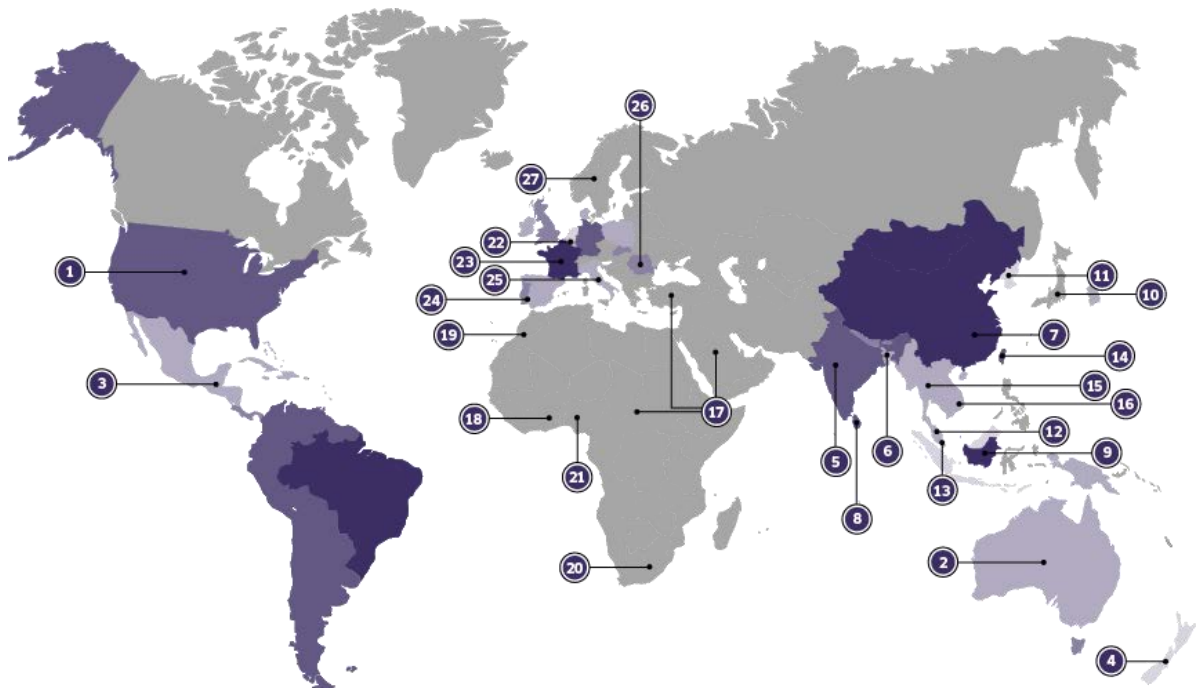
In 2012, we met our objective to launch gender diversity awareness training for all people managers within the Company.

### 7.1.2 Women's coaching and mentoring in Asia-Pacific

In 2012, 20 women from across the Asia-Pacific region were selected to take part in a new gender diversity program, with each participant given a sponsor, executive coach and customized plan to support her career development. The program also featured face-to-face and virtual workshops on topics such as leadership, communications and flexible work practices. By becoming more aware of how they can contribute to the organization as women – and by gaining exposure to both men and women at the executive level – participants were encouraged to take on additional roles within the Company. By the end of 2012, two-thirds of participants had taken on new responsibilities.

### 7.1.3 Celebrating International Women's Day

More than 1,000 Alcatel-Lucent site leaders and employees in more than 50 countries hosted a variety of debates, workshops, seminars, roundtable discussions, award ceremonies and networking sessions in celebration of International Women's Day on March 8, 2012. Topics discussed included work/life balance, female representation at the management level and driving an equal-opportunity workplace.



Highlights from these celebrations included:

1. **United States:** The third annual 'Women & Patents' celebration was held in Murray Hill, New Jersey, with video-conference participation from staff in Naperville, Illinois. This event featured a panel discussion with Alcatel-Lucent women inventors, moderated by Susanne Arney, Head of Bell Labs North America. In addition, Alcatel-Lucent women who had filed or granted patents from 2007 to 2011 were acknowledged and celebrated with a small reception.
2. **Australia:** Open dialogue on gender diversity
3. **Central and Latin America:** Multiple events in Mexico, Brazil, Venezuela and Colombia, including a 'Manage Your Career' webinar
4. **New Zealand:** Networking session with three prominent New Zealand women
5. **India:** Women from Alcatel-Lucent Mumbai distributed books, clothes and sweets at two organizations for destitute, blind and mentally challenged women and children. Later, the day's events were capped off by a colorful blast of Holi celebrations.
6. **Bangladesh:** All-staff email on the importance of diversity; women's luncheon
7. **China:** 'Gold Leaf' awards were given to women at Alcatel-Lucent Shanghai Bell who combined a good work/life balance with outstanding job performance.
8. **Sri Lanka:** Staff reached out to a girls' orphanage to help empower underprivileged young girls. In addition, 'The Lady' award was presented to the most outstanding female employee in Sri Lanka.
9. **Indonesia:** Diversity celebrations
10. **Japan:** Presentation of survey results on working as a woman at Alcatel-Lucent
11. **Korea:** Employee bazaar with proceeds benefiting a Korean women's welfare center
12. **Malaysia:** 'Dare to Dream' themed event
13. **Singapore:** Tea reception with rose bouquets for all female staff
14. **Taiwan:** Luncheon for women leaders with a talk from a senior woman at Asia-Pacific Telecom
15. **Thailand:** Presentation to all female staff on the importance of developing their talents
16. **Vietnam:** Alcatel-Lucent Vietnam used the occasion to launch its new teleworking policy, with a special focus on providing flexibility for female employees. In addition, four women were recognized with 'She' awards for excellent performance.
17. **Middle East, Turkey and Africa:** Debates, roundtables and networking events
18. **Ghana:** Lunch meeting with external speaker on balancing family life with work
19. **Morocco:** Networking and exchange event on how to increase representation of women in management
20. **South Africa:** Lunch with guest speaker and discussion on fostering women's contributions
21. **Nigeria:** An experienced female professional was invited to talk to employees about the importance of work/life balance. A gift exchange was also held among female staff.
22. **Belgium:** Women's networking breakfast; 'Women Making the Difference' contest

23. **France:** Networking coffee sessions; series of intranet articles profiling women and their careers at Alcatel-Lucent
24. **Spain/Portugal:** Panels featuring the names of women at Alcatel-Lucent were displayed at the main entrance of the buildings, where anyone could leave messages celebrating the day and what it inspires.
25. **Italy:** Intranet interview with HR director and comments on gender diversity from colleagues
26. **Romania:** Panel discussion on gender diversity
27. **Sweden and Norway:** Women's networking luncheon

#### 7.1.4 Local initiatives in gender diversity



#### HIGHLIGHT

Employee women's networks such as StrongHer and the Women's Leadership Network help foster gender diversity by bringing motivation and inspiration to Alcatel-Lucent employees, allowing women and men to share their experiences and ideas on parity and women's leadership.

#### StrongHer

StrongHer is an employee networking and support group created by Alcatel-Lucent women in 2011 using our internal collaborative platform, Engage. Today the group has more 830 members (16% of whom are men) in more than 40 countries. In 2012, StrongHer organized some 50 events (mostly in France, India and the U.S.) on topics such as work/life balance, leadership and openness. It boosted its internal presence within Alcatel-Lucent by establishing new groups in Germany, France and Ireland, and by adding to its highly collaborative online community, which features more than 500 blog posts and discussions to date. It also developed its external presence by establishing contacts with other diversity-aware companies and by launching its own Twitter account (@Strong\_Her).



#### WOMEN'S LEADERSHIP NETWORK (WLN)

The WLN has local chapters and members-at-large in the U.S., Brazil, China, France, Germany and India. Its mission is to provide an avenue for all women in Alcatel-Lucent to demonstrate their leadership abilities, to mentor and be mentored, and to be a positive presence within the business and throughout the communities in which they work.

## WOMEN IN CALA

Through a series of conferences and workshops, this program provides participants with tools for self-development in a comprehensive way and for achieving balance in three different dimensions of life: body, mind and spirit. In 2012, nearly 40 women attended these conferences and 12 women completed the training.

## APAC DIVERSITY FORUM

To ensure a consistent and focused approach to gender diversity in the Asia-Pacific (APAC) region, a diversity champion was identified for each country to create an APAC Diversity Forum, which meets monthly to discuss corporate priorities, country-level execution plans and best practices. The focus for 2012 was to create awareness around gender balance and develop the leadership capabilities of women in the region.

## WOMEN EMPOWERMENT PRINCIPLES (WEP)

Offering guidance on how to empower women in the workplace, marketplace and community, the WEP is the result of a collaboration between the United Nations Development Fund for Women (UNIFEM, part of UN Women) and the United Nations Global Compact, of which Alcatel-Lucent is a member. In addition to being a signatory of the WEP, we support its activities by providing input on the gender dimension of good corporate citizenship. Alcatel-Lucent representatives participated in the WEP 2012 conference to share the practices we have launched to advance women in the workplace.

## EUROPEAN ROUNDTABLE OF INDUSTRIALISTS

A number of women from Alcatel-Lucent attended a workshop on becoming 'board-ready' last year. Hosted by the European Roundtable of Industrialists – an initiative that aims to improve gender diversity on company boards – the event was sponsored by Vodafone and supported by international business school INSEAD.

[Read more](#)

### Professional equality label and agreement in France

As part of an agreement between the unions and the Company signed in January 2011, funding was allocated to support programs designed to promote gender equality, including reducing the salary gap between men and women. In the first year of the three-year program, the salary gap was reduced from a 7% difference to 1%. Also, a specific training program has been implemented to fight against gender stereotypes and a skills-based professional development model has also been proposed.

Thanks to this agreement and other initiatives to improve work/life balance, Alcatel-Lucent was granted the Association Française de Normalisation (AFNOR) Label for Professional Equality, which was awarded officially on February 9, 2012, by Roselyne Bachelot-Narquin, France's Minister of Solidarity and Social Cohesion.

[Read more \(in French\)](#)



## 7.2 Accessibility and integration

### 7.2.1 Accessibility and integration

We are committed to fostering the integration of disabled people into our workforce and creating access solutions for people with disabilities.



#### HIGHLIGHTS

##### France

**Mission Handicap:** Designed to integrate disabled employees into the workplace, the Mission Handicap program run in France has established training courses to educate employees on the challenges of working with a disability and the benefits of including people with disabilities in the workforce. Awareness-raising activities are hosted at Alcatel-Lucent campuses every year and trainees with disabilities are systematically integrated into Alcatel-Lucent working teams. The program also invested in structural modifications to our buildings, providing adapted equipment and computer accessibility tools between 2009 and 2011. In 2012, 11 people were recruited and the program was renewed for three years.

**@talentEgal:** A non-profit association created by Alcatel-Lucent in France, @talentEgal helps disabled post-graduate students gain employment with us by providing them with training, internships or other work experience. @talentEgal will help us recruit 60 disabled people from 2012 to 2014 — a significant step toward meeting the French government's requirement that 6% of a company's employee base is made up of disabled employees. (This number is currently 2.5% in Alcatel-Lucent France.) In 2012, 20 students were recruited. Another objective for the next three years is to create an ambitious Handicap & Innovation program that will mix handicapped students with R&D and Bell Labs project teams to focus on addressing accessibility projects.

##### Support for disabled employees in Spain

In 2012, Alcatel-Lucent celebrated the 30th anniversary of its collaboration with Spain's ADFYPSE, the Association of Workers and Pensioners of Standard Electrica who struggle with mental and physical handicaps. As part of that celebration, our company provided economic support, materials and ICT infrastructure for a new ADFYPSE center in Arroyo Culebro. ADFYPSE creates and promotes centers and institutions that work toward the recovery and rehabilitation of those with handicaps — not only mental handicaps but also physical and sensory. It pays special attention to adolescence and youth, with criteria based on training and participation.

##### Accommodation for disabled employees in the U.S.

Alcatel-Lucent provides reasonable accommodations to qualified employees with disabilities or handicaps. Employees may request accommodation by various means — for instance, contacting their people manager or HR partner or submitting a Request for Accommodation form via the Company's Diversity, Inclusion and Compliance webpage.

Accommodations are typically granted but, when it is not possible, other options are considered and discussed with the individual and his/her people managers. In more complex cases, a committee involving representatives from HR and Health Services helps ensure that the requested accommodation and other alternatives are given full consideration.

Information about job accommodations is available to employees and people managers in Alcatel-Lucent's North American HR policy guide.

### 7.2.2 Commitment to non-discrimination

Our commitment to advancing equality and non-discrimination is reflected in specific initiatives against harassment and discrimination in several countries (in particular, France and the United States).

Some employees are 'out' (i.e., open about their gender identity or expression) and others may not be. Given that many transitioning employees come out to their employers to be able to live consistently with their gender identity full time, employers necessarily become involved in an employee's transition. As such, guidelines have been developed to foster dialogue and understanding of transgender issues in the workplace. This document includes recommendations for employees, people managers and HR on providing a welcoming and supportive environment for employees undergoing transition at Alcatel-Lucent.

[Read more](#) | [Read more](#)



#### HIGHLIGHT

### Supporting LGBT employees

In the U.S., gender transition guidelines were created and are consistent with company policies and practices at Alcatel-Lucent, which treats all employees consistently and without discrimination based upon a protected classification including, but not limited to, those employees who may be transitioning or dealing with gender identity issues.

In France, Alcatel-Lucent joined eight other companies in signing a Charter of Commitment for persons who are lesbian, gay, bisexual or transgender (LGBT). The Charter was drafted by l'Autre Cercle, an LGBT association founded to combat discrimination in the workplace. The nine signatories stand out as pioneers in diversity related to sexual orientation and gender identity, and are committed to comply with a number of good practices to combat discrimination against LGBT people in employment.

[Read more \(in French\)](#)

## 7.3 Generation diversity

In 2012, we continued our support for generation diversity through our ongoing projects in the Benelux countries along with local programs in France, Germany and the U.S. These projects aim to produce a better understanding of the specific work habits and expectations of various populations and communities.

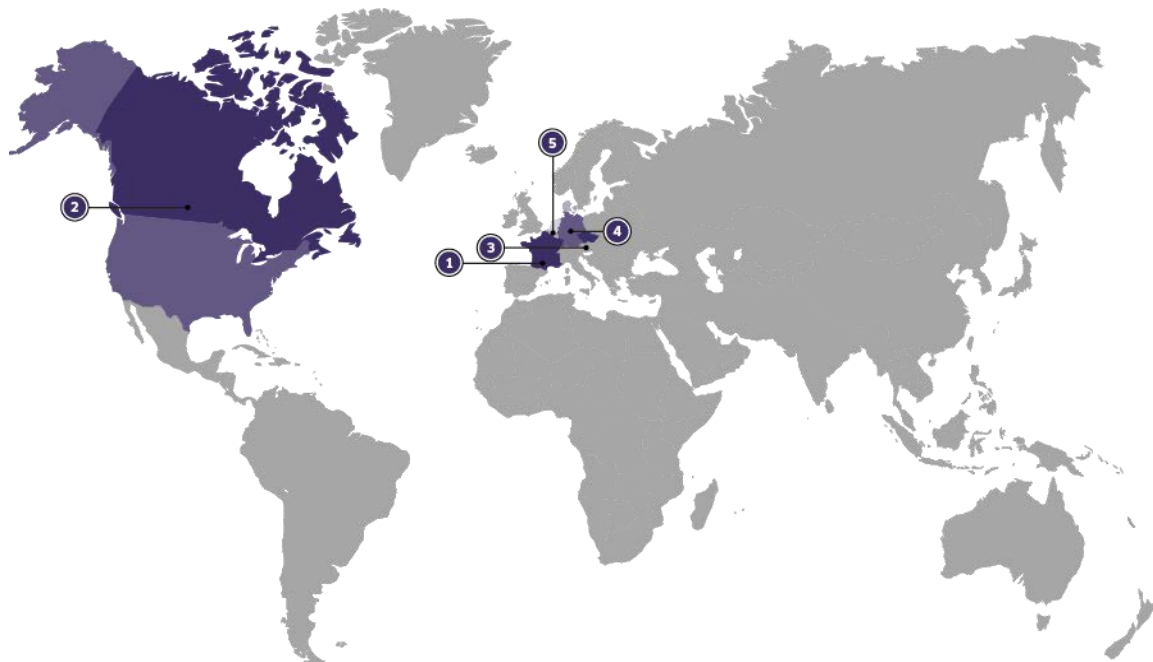


#### HIGHLIGHT

In August 2012, Alcatel-Lucent Malaysia organized a panel discussion on mobile learning (mLearning) with more than 30 students from Multimedia University (a local private university). Topics discussed included the development of communication networks for the future, and entrepreneurship and opportunities in the creative multimedia industry.



### 7.3.1 Local initiatives in generation diversity



#### 1. Generation & Talents in France

The two-part Generation & Talents program seeks to improve generational diversity within Alcatel-Lucent and to support younger generations in building lifelong careers in science and technology. It works closely with APEC, an external organization focused on employee and executive development. In 2012, Generation & Talents proposed a complete program for senior employees, including conferences on career management and mentoring skills development. It also implemented a program encouraging senior employees to mentor younger employees and to be mentored themselves. Today a network of 50 mentors has completed the validation process.

#### 2. Increasing generational diversity in North America

In 2012, University Relations North America filled 382 student positions in a variety of areas within our business, 85% of which were in technical areas such as in STEM (Science, Technology, Engineering & Math) or R&D at Bell Labs.

#### 3. Generation Y in Austria

By engaging the next generation of talent at Alcatel-Lucent, this program helps inject new ideas and fresh perspectives into our business. In keeping with the diversity of the markets we serve, a total of 12 young interns from eight countries (France, Serbia, Russia, Macedonia, Portugal, Turkey, Mexico and Bulgaria) took part in the program in 2012, bringing unique insights to our offices while developing their skills with Alcatel-Lucent experts. Six of these individuals have since been hired for permanent positions in the company.

Based on its success to date, this program is now being replicated in North Africa, Nigeria, Egypt, the UAE and South Africa – with the aim of better connecting our regions through these young talents to generate an even bigger impact in 2013.

#### 4. Vocational training in Germany

Alcatel-Lucent conducts cooperative education programs in Germany, providing more than 100 university students with a solid professional education in mainly technical and business-focused studies. National and international internships at Alcatel-Lucent (e.g., in France, Australia or China) are a substantial part of this training, offering the students practical challenges in addition to theoretical studies. Students are trained in soft skills such as their attitudes toward change, team collaboration and development of maturity. Alcatel-Lucent partners with local schools, building a win-win platform of dialogue between the German educational system and our innovative industry.

## 5. bell.y in Belgium


bell.y was formed by and for the young talented people of Alcatel-Lucent Belgium, connecting more than 100 young people across different domains, nationalities and levels of education. Activities in 2012 focused mainly on after-work networking events – for example, crewing a dragonboat in Antwerp's Drakenboot Festival 2012. At the Alcatel-Lucent Bell Science Day open house in Antwerp in November 2012, bell.y members gave visitors, families and students presentations about the products and technologies being developed within Alcatel-Lucent. Over the last year, bell.y's presence has increased in technical as well as non-technical departments, with members working as technical project managers, team leads, software and hardware engineers, and in marketing and pre-sales positions.

# 8 DEVELOPING OUR WORKFORCE

## 8.1 Workforce planning

In 2012 we strengthened our strategic workforce planning activity. In line with our long-term strategy and multi-year financial performance direction, we defined targets for skills and talents necessary to execute our business strategy. Hence, we continue to strengthen the long-term strategic workforce planning in the different business segments of the company. With respect to our product portfolio and financial performance, it is strategically essential in the long term that we align critical talent:

1. By adopting a prospective view on the necessary employee population changes; and
2. By enhancing our ability to conduct focused recruiting (internal and external) and targeted training, and to plan our geographic footprint consistency for the future.

In 2012, we also strengthened our operational workforce planning capability, allowing countries to express their workforce feasibility of the business needs in the context of their country. This new capability allows a better anticipation of hiring, departures by country and by organization, taking into account the local labor market. 

We also established a global governance process to ensure the references that support operational workforce planning (e.g., Job Catalog, Competency Catalog, Skills Catalog) provide clear definitions so that employees and people managers are speaking a common language. This allows Alcatel-Lucent organizations to align core competencies, organizational competencies and competencies applicable to job families and functions in a way to help employees understand their job requirements. For critical jobs (24 in 2012), profile descriptions were enhanced and made available to employees for career development planning purposes.



**2012  
ACHIEVEMENT**

We successfully launched a three-year workforce plan with development plans and human capital performance metrics, and built on 2011 achievements to drive mid- and long-term resource-planning capabilities.

## 8.2 Employee learning

We have prioritized learning and training based on ongoing dialogue between managers and employees. Alcatel-Lucent University – whose mission is to provide timely, relevant and innovative learning solutions to support employee performance and development – has enhanced its ability to provide learning, coaching and mentoring to all employees with:

- Common learning tracks across all leadership competencies
- Employee accreditation programs aligned with profiles defined by our strategic workforce plan
- Community learning – a new concept that reduces the time involved in acquiring best-in-class skills by making it easier to learn from the best in our company
- State-of-the-art learning facilities and e-learning components

In 2012, Alcatel-Lucent University was reorganized to improve its performance and better serve its internal and external customers, with the end goal being to achieve a standard of excellence in learning and build a reputation for innovation and quality.



## 2012 ACHIEVEMENTS


Exceeding our objectives for 2012, we now have community learning sites for eight critical job functions and programs to foster learning from best-in-class employees.



## 2013 TARGET

Build a company-wide learning architecture that combines existing enterprise support for formal training with the new interactive employee-centric knowledge and learning platforms.

Alcatel-Lucent University maintains 22 training centers around the world and a body of 530 learning professionals. All learning hours are tracked through a formal learning management system that provides auditable learning volume reports.

In 2012, Alcatel-Lucent University delivered a total of 2.2 million hours of training (46% for customers and 54% for internal learners<sup>1</sup>) to more than 109,000 total students<sup>2</sup> across 162 countries. In 2012, the University delivered an average of 15 hours of training per internal learner.\*

About 51% of 2012 internal learning was delivered online, up from 40% the year before.



## HIGHLIGHT

### Global Day of Learning

In June 2012, Alcatel-Lucent University sponsored its second annual Global Day of Learning (GDOL), an event for employees to enhance their product knowledge, learn about the company's market strategy and enhance their professional skills. GDOL presented a full day's schedule of live, virtual and recorded sessions for each of the company's major regions (APAC, EMEA and Americas).

Speakers from throughout Alcatel-Lucent highlighted the strategic importance of building and leveraging a highly skilled and knowledgeable workforce as a competitive advantage. The goal was for all employees to gain a better understanding of the company's significant investment in their professional development and the resources available to them to accelerate their performance and ability to effectively compete in the market.

As a special feature of GDOL, Alcatel-Lucent's former CEO Ben Verwaayen presented the 2012 CEO Excellence Award, which recognizes superior execution on projects that advance Alcatel-Lucent behaviors and demonstrate our commitment to sustainability. The employee participation was very successful, with 83% of employees surveyed saying they would participate in GDOL again in 2013.

#### Key Stats from GDOL 2012:

- 6,600+ employee sign-ins
- 2,800+ webcast participants
- 1,300+ GDOL additional hits offline after the event

<sup>1</sup> Internal learners include employees and contractors.

<sup>2</sup> Total students are all internal learners plus external customer learners.



## HIGHLIGHT

### Green learning solution

Alcatel-Lucent University's Going Green initiative includes an environmentally friendly, non-print policy. The idea is to reduce consumption of paper in classrooms by providing students with course materials as electronic PDF files. By the end of 2012, 53.6% of all classes delivered by the University were conducted using 'green' materials.

#### 8.2.1 Professional accreditation and development

To support strategic employee development, the Learning & Accreditation organization runs People@Alcatel-Lucent, a global professional accreditation and development program focused on building competencies and skills. In concert with our Strategic Workforce Plan, People@Alcatel-Lucent develops and deploys learning programs for corporate-priority jobs in R&D, Delivery and Sales. Implementing a job-oriented approach, People@Alcatel-Lucent reinforces the links between training and workforce planning.



## 2012 ACHIEVEMENTS

In 2012, we doubled the number of newly accredited employees. More than 1,000 employees worldwide – including integration professionals, solution architects, project managers and network planners – achieved professional accreditations for 18 different job-specific learning programs.

#### 8.2.2 Online learning

In 2012, Alcatel-Lucent University continued its efforts to promote the greater use of online learning for employees. Combined, the self-paced e-learning and virtual classroom training accounted for more than half (51%) of all internal learning delivery over the past year.



## 2012 ACHIEVEMENTS

We maintained 22 training centers worldwide and carried out 51% of internal training and education online.

Employees have access to a variety of learning opportunities, including the SkillPort™ portal for skills-related e-learning and e-books, video-based learning through the Learning2.g0 tool, and the Product and Solution Course Navigator to learn more about Alcatel-Lucent products. In addition, the Alcatel-Lucent University maintains its global offering of training for all employees through the Learning Management System. New forms of online learning (such as community learning) are continually being introduced, largely implemented through the Engage social networking platform.

Alcatel-Lucent University recently introduced a more personal, social-networking-based learning platform called My Personal Learning Environment (or My PLE), which allows students to better drive and manage their own learning programs. Designed around learning communities, My PLE makes it easier for students to learn from their peers and from content experts internally – which, in turn, helps to make learning more relevant to the job. My PLE also provides a more immersive learning experience that features both self-paced and interactive learning, virtualized lab experience and built-in competency reviews.

## 9 TALENT ATTRACTION AND RETENTION

As a technology company, it is critical that we demonstrate how much we value expertise and that we promote technical careers for our innovators and technical experts, particularly those engaged in R&D.

### 9.1 Alcatel-lucent technical ladder

The Technical Ladder initiative provides employees with:

- A better view of their career path to identify where to focus to excel in their particular areas of expertise
- Career opportunities and development growth
- Recognition of the technical excellence and innovation they are delivering



Launched in 2011, the Technical Ladder pilot program was extended to the engineering and research communities in 2012, allowing for further testing and enhancement of the concept and process. A global launch of the program is currently being evaluated.



Deployment of Technical Ladder career development path for technical professionals as a complement to the company's best-in-class Leadership Pipeline.

### 9.2 Performance management

Launched in 2011, the Alcatel-Lucent performance management process, OurTalent Dialogue, focuses on the importance of continuous, person-to-person dialogue between people managers and employees. It supports direction setting, goal clarity, guidance and feedback, enabling employees to drive their own career development and performance in alignment with the business strategy, and helping ensure their and the Company's performance.



In 2012, performance management was a requirement in each organization, with emphasis on reinforcing people managers' responsibilities to ensure an engaged workforce. Going forward, performance management will continue to support people managers' effectiveness to ensure a better understanding of the linkage between management and leadership attributes to promote explicit and open accountability to further ensure the performance and engagement of employees.



### 9.3 Mobility

Providing employees the opportunity to explore new career options and pursue professional advancement is essential to build our HR capabilities. By increasing the visibility of the skills and competencies required for career growth and advancement within Alcatel-Lucent, the Internal Job Opportunity Market launched in 2011 creates an open and fair internal market for employees seeking roles that best fit their talent and motivation.

Celebrating two years since its launch, the Internal Job Opportunity Market is a driver for our transformation, and helped us fill more than 40% of open positions with internal talent. Accompanied by platform upgrades, regional job market newsletters and a dedicated recruiting team, the Internal Job Opportunity Market has resulted in multiple success stories across all the regions where we operate.



#### 2012 ACHIEVEMENTS

More than 20,000 employees have provided their CV information and candidate details to participate in the Internal Job Opportunity Market.

We aim to attract the most competent managerial talent while respecting our diversity hiring policies whenever external hiring is required. Our goal is to continually reduce the number of expatriate employees, leveraging the local talent market and ensuring expats transfer their knowledge and skills to their host teams, allowing for both their repatriation and enhancement of our global capabilities.

### 9.4 Remuneration


Our policy is for all employees to be fairly paid regardless of gender, ethnicity or disability. Our compensation structure also reflects both individual and company performance.

A long-term compensation policy:

Besides our renewed commitment to provide our employees with a competitive compensation package by country and in line with those of major companies in the technology sector, our compensation policy, applicable to all managerial and professional employees, strives to strike a balance among various elements:

- **Clarity:** Common worldwide incentive criteria
- **Simplicity:** Clear performance achievement levels communicated to all beneficiaries
- **Global approach:** Common sales incentive policy, worldwide equity grant policy
- Harmonization of global policies



Our policy is for all employees to be fairly paid regardless of gender, ethnic origin or disability. Particular emphasis is placed on the development of our employees rewarding the development of highly needed skills driving our Group's innovation and ensuring a long-term engagement with us through appropriate and dedicated policies, processes and recognition tools. 

Our compensation structure also reflects both individual and company performance. The grants of long-term incentives (stock options and performance shares) are decided almost every year at the same time by the Board of Directors upon recommendation of the Compensation Committee. It corresponds to various objectives: to involve employees in the Group's results; to encourage and reward performance; and to attract and retain talent in a highly competitive industry where quality and employee motivation are key factors for success. Group employees benefiting from performance shares (7,936 beneficiaries in 2012) have the disposal of the shares at the end of the fourth year following the year of grant, to the extent the presence and performance conditions are reached. Regarding stock options in 2012, the company granted 10.8 million to 7,950 recipients.

For 2013, the Board of Directors decided against implementing an annual plan for stock options and performance shares for employees, executive directors and officers of the Company. This decision was made due to market conditions and the difficult situation that the Company experienced in 2012. Employee compensation evolution (wages and salaries) over the last three years is specified in Note 35 of the consolidated financial statements.

## 10 TALENT DEVELOPMENT

### 10.1 Leadership Pipeline identification and development

---

Beginning in 2011, we refreshed our Leadership Profile as well as our approach to identifying and developing our Leadership Pipeline to better address our current and future business. The leadership talent identified through this new process populates a strong and diverse Leadership Pipeline and will develop as potential candidates for the most senior positions in the company.

A new Leadership Development Offer has been designed and pilots are being deployed to support the development of this new generation of leaders. It will be articulated around Alcatel-Lucent key business challenges, our corporate values and the new Leadership Profile.



#### 2012 ACHIEVEMENTS

In 2012, we deployed a renewed Leadership Pipeline process accompanied by a new Leadership Development Offer more tailored to individuals and in line with organizational development and business requirements, with greater emphasis on experiential learning. This new process can be rolled out more easily on a global basis to a widespread community of talent via increased use of online business simulations. In addition, refreshed global processes for talent identification, succession planning and development mean we can more efficiently develop leadership capabilities for our present and future business needs.

In 2012, 117 talents initiated the newly designed leadership development tracks — a significantly faster rate of completion over our previous development offer and testament to the efficiency and flexibility of our new development offering.

By the end of 2012, the Leadership Pipeline included approximately 1,400 employees from around the world, a robust proportion in line with industry best practice. More than 23% are women, a higher percentage than the overall proportion of women in the Company.

### 10.1.1 Alcatel-Lucent Leadership Profile

The Alcatel-Lucent Leadership Profile translates business priorities and company values into key competencies and behaviors required for employees and people managers to excel in their jobs and act as leaders. One of its objectives is to share, across Alcatel-Lucent, a common understanding of key leadership characteristics for the success of the company. It is also used to identify strengths and development needs for individuals and organizations, and to take the necessary steps to increase individual and collective efficiency.

The new Alcatel-Lucent Leadership Profile, which was validated by our CEO and his Leadership Team, reflects the leadership characteristics and values serving our business vision of success today and in the future. Applied in the talent identification process, the Leadership Profile helps improve the calibration of our leadership bench, ensuring its excellence and diversity. It is also used for targeting the development of the new Leadership Pipeline and for all employees as a shared backbone and direction.

We want leaders who...

- Project a winning mindset,
- Shape a compelling future,
- Break boundaries and barriers,
- Lead with authenticity,
- Lead courageously,
- Mobilize teams and grow potential,
- Make it happen,
- Live to corporate values.

The new Leadership Profile is available to all employees and leaders on the Human Resources intranet.

As one of the key foundations of our talent identification and development strategy, the Leadership Profile serves as the basis for a set of development programs and tools.

- **360° Feedback** is an online tool proposed to employees and leaders to gather the feedback of colleagues and management about their behaviors at work. The 360° Feedback tool and process is meant for personal development purposes only, helping employees identify key strengths and development needs so they can build individual, on-the-job development action plans with a certified coach of their choice. The 360° Feedback tool ensures confidentiality for participants and respondents. Commitments to ethical use and confidentiality are signed by the coaches and certified by PDI, our external provider.

The objectives of the 360° Feedback process are to develop employees' self-awareness about their strengths and development needs and to spread a development culture within Alcatel-Lucent, promoting the Leadership Profile and corporate values.

Involvement in the 360° Feedback process is mandatory for participants of the Corporate Leadership Development Program and some regional or functional training or certification programs (such as the General Project Management Accreditation). It is also offered to other employees and leaders on a voluntary basis (with the approval of management and HR).

- Related to performance management and dialogue, the **Alcatel-Lucent Leadership Profile self-assessment tool** can help employees, together with their people managers, assess their leadership competencies, identify strengths and development needs, and build a development plan accordingly.
- **Job descriptions and recruitment needs** are both based on required functional competencies as well as the leadership behaviors and values identified in the Alcatel-Lucent Leadership Profile.



# Key leadership characteristics

## ● Shapes a compelling future

- Sees the big picture and takes a long-term perspective
- Believes in the mission and values of the Company
- Articulates the company vision compellingly and provides clear direction
- Cuts through complexity and ambiguity to get to the heart of the issues
- Anticipates market trends and translates them into business opportunities

## ● Breaks boundaries and barriers

- Puts company goals first
- Acts for the common good
- Values differences and welcomes diversity
- Works across boundaries and challenges counter-productive silos
- Creates a collaborative environment built on trust and respect
- Cultivates and supports ideas and initiatives no matter where they originate

## ● Leads with authenticity

- Acts with conviction, even when challenged
- Acts with integrity and ethics
- Takes responsibility for successes and failures
- Balances modesty with professional determination
- Builds self-awareness of values and strengths and seeks further development
- Shows curiosity and seeks to learn continuously

## ● Leads courageously

- Takes intelligent personal and business risk
- Stands up to objections and breaks through resistance
- Takes needed action no matter how unpopular
- Has the difficult conversations, communicating openly and respectfully
- Recognizes and deals constructively with emotions and concerns

## ● Makes it happen

- Translates strategy into relevant and achievable actions
- Simplifies execution and focuses on results
- Maintains focus during uncertainty and change
- Demonstrates sound judgment
- Delivers consistent performance and financial results

## ● Projects a winning mindset

- Aims high and strives to make the company number one
- Perseveres through challenges and difficulties
- Inspires others with passion, energy and purpose
- Recovers quickly from setbacks

## ● Mobilizes teams and grows potential


- Leads by example, and emphasizes "the right thing to do"
- Builds high-performing teams by leveraging people's strengths and interests
- Creates a culture of excellence, discipline and accountability
- Attracts, identifies and develops the next generation of leaders
- Empowers others to achieve beyond expectations
- Gives feedback and encouragement

### Lives the Alcatel-Lucent values

- Customer first
- Innovation
- Teamwork
- Respect
- Accountability

## 10.1.2 Leadership Pipeline

Alcatel-Lucent has a tradition of investing in identification and development of leadership potential. Following an extensive and thorough review of practices, in 2011 a refreshed talent identification and development process called the Leadership Pipeline was implemented. This process includes approximately 1,400 employees from around the world, more than 23% of whom are women.

The Leadership Pipeline focuses on delivering excellence and diversity in the pipeline for the senior leadership roles in the company, and relies on three pillars: identification of talent in a consistent way across the company; talent movement across geographical, functional or business boundaries; and development using a broad variety of methods. HR professionals ensure the execution of this strategy by supporting people managers and talent through identification, movement and development. 

Fully deployed across the Company in 2012, the Leadership Pipeline represents a significant change in how Alcatel-Lucent identifies and develops talent to fill senior leadership roles. Through the use of specific requirements, tools and processes, people managers and leaders work with their HR team to identify leadership talent. Considerations for identification as leadership talent include a record of sustained high performance, readiness and aspiration to take on a senior leadership role, level of 'learning agility', and demonstrated behaviors aligned with the Alcatel-Lucent Leadership Profile.

Learning agility can be assessed through eChoices, an online assessment tool completed by the participant, one or more people managers and HR. An internal pool of certified HR professionals then conducts eChoices debriefings with employees, highlighting their strengths and potential development needs.

The outcome of the identification process and related career development discussions are documented in the OurTalent tool: part of our integrated web 2.0 talent management solution that supports various events throughout an employee's lifecycle, from recruitment to career planning and internal mobility.

Prospective leaders are expected to take risks and make career moves across boundaries. As such, non-linear careers are supported at all levels of the Leadership Pipeline and disruptive moves are expected. The succession pools that are part of the Leadership Pipeline framework support this implementation.

Succession pools promote global talent visibility and movement across organizational boundaries. They support career-driven development at the individual level and succession planning at organizational level. In preparation for career moves and during career transition, individuals with leadership talent receive support from people managers and HR through career conversations and development plans, on-the-job development, mentoring, coaching and training according to their identified personal needs.

### **10.1.3 Leadership development at Alcatel-Lucent**

Alcatel-Lucent differentiates itself from our competition through the leadership characteristics we promote and develop, and in the way we develop employees and leaders by focusing on self-awareness, strengths and motivation of our talents.

The Alcatel-Lucent approach to leadership development relies on the following principles:

- Encourage authenticity and diversity by developing the individual's self-awareness and acknowledging his/her personal leadership style
- Build on strengths rather than focus on gaps
- Support a development purpose, not recognition
- Each individual takes responsibility and ownership for her/his own development
- Customize leadership development to individual needs and organizational requirements
- Address group leadership challenges and build collective leadership capability
- Make the leadership development approach continuous and sustainable
- Diversify the leadership development approach by expanding experiential development and relationships
- Link leadership development to career development

Based on these principles, new leadership development tracks were piloted in 2012 (and will continue throughout 2013). Involving 117 individuals and 38 senior HR coaches, these programs are:

- Setting up an eco-system that customizes leadership development to individual needs, career aspirations and business priorities, while offering continuous development over time
- Addressing leadership development both at individual and collective levels
- Enhancing the '70/20/10' model (i.e., 70% experience-based development, 20% relationship, 10% residential) through concrete career development plans, peer-to-peer coaching, individual mentoring, networking and sharing experience across communities (both internal and external to Alcatel-Lucent), and giving feedback and influencing decisions at the executive level.

## 10.2 Mentoring

### 10.2.1 Passeport Avenir



For the seventh consecutive year, Alcatel-Lucent took part in the Passeport Avenir program, a public/private partnership dedicated to helping young people from troubled urban areas in France. Formerly known as Cercle Passeport Télécoms, this program uses sponsorships and mentoring to help young people enter top-rate French business and engineering schools and universities.

With support from the Alcatel-Lucent Foundation, Passeport Avenir held its second Internship and Apprentice Forum on March 8, 2012, giving approximately 160 students the opportunity to meet with recruiters to discuss internship and apprenticeship opportunities. At this event, Alcatel-Lucent HR teams met with Passeport Avenir students, providing advice on how to look for internships and prepare for job interviews.

[Read more](#)

In addition, a total of 57 Alcatel-Lucent employees served as mentors for Passeport Avenir students in 2012. The Alcatel-Lucent Foundation also encourages all student participants to improve their English by arranging for them to have conversation lessons with English-speaking mentors.

Passeport Avenir students were also invited to Alcatel-Lucent on several occasions throughout 2012. In December, Christel Heydemann, Alcatel-Lucent Vice President of Human Resources, and Sophie Neron-Berger, Chief Audit Executive, met with 20 Passport Avenir students to discuss the role of women in key positions and their place in the economic society.

[Read more \(in French\)](#)

And in October 2012, 24 students met with a number of Alcatel-Lucent executives for an informal discussion about sustainability and communications.

[Read more \(in French\)](#)



### 10.2.2 Bell Labs learning program for students

Roughly 70 students from five New Jersey high schools involved in the Young Science Achievers Program (YSAP) and Junior Achievement (JA) program participated in the second annual Bell Labs 'green tour'. This year's tour focused on the latest sustainability advances in the telecom industry – and also gave students a taste of possible careers in science and technology.

Bell Labs helped launch YSAP in 1988. Now in its 25th year, the program targets students who are under-represented in the science and math professions: women, minorities and students from less-endowed school districts. Bell Labs helped start the program. Student teams apply to the program with a research idea; if accepted, the team works on the program throughout the school year with mentoring and funding from Bell Labs.



## HIGHLIGHT

### AIESEC

Alcatel-Lucent's partnership with AIESEC, the largest student-run organization in the world, showcases our commitment to supporting professional development of Generation Y. The internships offered within the business every year enable young people to acquire leadership skills and business knowledge. They take up a range of different internship positions in the areas of Marketing, Communications, Human Resources, Finance, Submarine Networks and Optics.

Since the start of the partnership in 2004, we have provided internship opportunities to more than 400 AIESEC members worldwide. During 2012, more than 50 AIESEC students and graduates joined our offices in France, Belgium, the UK, the Netherlands, Spain, Norway, Egypt, the UAE, Austria and Thailand.



## HIGHLIGHT

### Junior Achievement of New Jersey

Junior Achievement (JA) is the world's largest organization dedicated to educating young people about business, economics and free enterprise. In New Jersey, Alcatel-Lucent employees participate in JA's volunteer network, which offers in-school and after-school programs for students from kindergarten to the twelfth grade. JA programs focus on seven key content areas: business, citizenship, economics, entrepreneurship, ethics/character, financial literacy and career development.

[Read more](#)



# 11 ENABLING FLEXIBLE WORK ARRANGEMENTS

## 11.1 Teleworking

Flexible work practices such as teleworking are widely recognized as being key to improving productivity. Teleworking also reduces commuting time and costs, real estate costs, operating expenses and our overall environmental impact.

To demonstrate our support of a better work/life balance for our employees, teleworking policies have been put in place across all regions in Alcatel-Lucent. In 2008, we worked with our main unions in Europe to define a collective agreement on teleworking. Through this agreement, all employees in France, Belgium, Spain, Italy and Germany may telework if an organizational analysis of their job activities is positive and there is mutual agreement between the employee, his/her people manager and the HR function. In 2012, we extended the number of countries with teleworking policies by defining agreements across the Middle East and Africa as well as APAC, including in China and India.

Overall, 46% of our employees telework at least one day per week – and some countries have even higher rates, such as Spain (73%), Belgium (71%), the United States (65%), Australia (58%) and France (47%).



### 2012 ACHIEVEMENT

All countries where Alcatel-Lucent has a substantial employee presence now have teleworking policies in place. Overall, 46% of our employees telework at least one day per week – and some countries have even higher rates, such as Spain (73%), Belgium (71%), the United States (65%), Australia (58%) and France (47%).

## 11.2 Services for employees

As part of our effort to create the best conditions for our employees, we provide services at the workplace to alleviate day-to-day constraints linked to professional activities. This translates into a multiplication of company-organized or company-financed services to employees at sites across the globe.

### A selection of local initiatives

#### EMPLOYEE HEALTH CAMPAIGN IN MEXICO

To combat stress and obesity, a health and wellness campaign was launched in 2012 that involved:

- Laboratory visits to diagnose the health of employees
- Free access to expert nutritionists
- Creation of an exercise area within Alcatel-Lucent facilities
- Meditation and Reiki therapy

#### CHILD CARE IN FRANCE

The Crèche agreement was signed in 2007, reserving 26 places in a Vélizy nursery for the children of Alcatel-Lucent employees. Since then, Alcatel-Lucent has become a member of the Club Crèches & Entreprises and has places reserved in child-care facilities near Alcatel-Lucent sites in Ormes, Saclay, Villarceaux and Colombes.

## 12 GLOBAL HUMAN RIGHTS POLICY



### HIGHLIGHT

The Company's Global Human Rights Principles address four areas relevant to its global business operations and ecosystem as an employer, supplier of telecommunications infrastructure, a direct business partner and concerned corporate citizen.



In 2012 we updated our Global Human Rights Policy, which is designed to ensure proper treatment of our workforce and external stakeholders around the world. In parallel, we continue to dialogue with key industry stakeholders on our common responsibilities to human rights across the world.

[Read the full version](#)

It is the policy of Alcatel-Lucent to protect and enhance the human dignity of everyone who works for the Company and anyone who has dealings with it. We conduct business in many countries and believe that our products, services and jobs improve the quality of life in each of these countries.

Excerpt of Alcatel-Lucent Global Human Rights Policy:

Alcatel-Lucent supports and respects, within its sphere of influence, the principles of human rights as embodied in internationally recognized principles and guidelines, including: the UN Declaration of Human Rights; the Ten Principles of UN Global Compact; UN Guiding Principles on Business and Human Rights; International Labor Organizations (ILO) Declaration of Fundamental Principles and Rights at work; and OECD Guidelines for Multinational Enterprises (which refer to the UN Principles). We respect and comply with all Human Rights legislations, regulations or standards in the countries in which we operate.

As an employer, we:

- Prohibit discrimination against any employee or job applicant on the basis of age; disability; race; sex; color; religion; creed; national origin; citizenship; sexual orientation; gender identity, characteristics or expression; marital status; covered veteran status; or any other protected class and will treat everyone with dignity and with full respect for their private lives.
- Help ensure that employment with Alcatel-Lucent is by freedom of choice.
- Uphold freedom of association and the right of any individual to be fairly represented by a labor organization of their choosing, pursuant to local laws.
- Offer employees remuneration packages that meet or exceed the legally required minimum.
- Comply with maximum hours of daily labor set by local laws and complies with overtime pay legal requirements.
- Support the effective elimination of all forms of compulsory labor and child labor and will make this a criterion in the selection and management of our suppliers and contractors.
- Prohibit:
  - Actions that create an intimidating, hostile work environment including corporal punishment, harassment, verbal, written, physical or psychological abuse, threats or intimidation as these are inconsistent with a respect for human dignity.
  - Actions that threaten or insinuate that an employee's or applicant's submission to or rejection of sexual advances will influence any personnel decision regarding that employee's or applicant's employment, wages, advancement, job assignment, or any other condition of employment or career development.
  - Retaliation or other adverse actions against those who report, in good faith, suspected violation of the law or policy. Any employee who believes that they have been subject to retaliation should report the issue immediately.

As a supplier of telecommunications infrastructure, we:

- Offer products and services in compliance with international standards, and support transparency in the way telecommunications technology is used by sovereign countries.

As a business partner, we:

- Maintain the highest levels of business ethics, personal integrity and compliance with our suppliers, subcontractors and business partners – and expect them to adhere to these in their practices as well. We also encourage suppliers, subcontractors and business partners to be consistent and compliant with this policy and the Alcatel-Lucent Code of Conduct.
- Ask suppliers and subcontractors to respect human rights by complying with the Alcatel-Lucent Suppliers Code of Conduct (Electronic Industry Citizenship Coalition Code of Conduct Revision 3) and all applicable human rights laws and regulations, and to assure their respect throughout the supply chain.

As a corporate citizen concerned about communities, we:

- Respect and comply with all human rights legislation, regulations and standards in the countries where we operate, and conduct business and sales activities in strict compliance with international conventions regarding human rights.
- Respect indigenous rights and civil society where we operate, and act in full recognition of our social and environmental responsibilities.
- Play an active role, via the Alcatel-Lucent Foundation, in charitable activities and support its commitment to social responsibility.

Violations of this policy by employees may be reported using the appropriate compliance issue reporting mechanism, as described on the website of the Office of Business Integrity & Compliance.

[Read more](#) | [For more information about the Alcatel-Lucent Foundation](#)

Further to the 2011 revision of our Global Human Rights Principles, and to better reflect the United Nations' Ruggie Principles, we plan to design and define an employee training program on human rights principles in 2013.



# 2012

## SUSTAINABILITY REPORT A BUSINESS IMPERATIVE

### SOCIETY

---

MAKING COMMUNICATIONS MORE SUSTAINABLE,  
MORE AFFORDABLE AND MORE ACCESSIBLE

Alcatel-Lucent builds the networks that bring people, businesses, countries and continents together. We are committed to making communications more sustainable, more affordable and more accessible as we pursue our vision – *realizing the potential of a connected world*. We achieve this through our High Leverage Network™, our research, specific partnerships focused on education, our Public Affairs and stakeholder activities, and our philanthropy.





# TABLE OF CONTENTS

<b>1</b>	<b>OUR APPROACH TO DIGITAL INCLUSION.....</b>	<b>173</b>
1.1	The drivers of digital inclusion and universal access .....	174
1.2	Broadband everywhere – from sea to cloud .....	175
1.3	Innovation for communities – our research .....	180
1.4	Ensuring access to education.....	183
<b>2</b>	<b>HOW WE GIVE .....</b>	<b>185</b>
2.1	Bringing digital literacy to all .....	185
2.2	Philanthropy 2012: achievements and awards .....	186
2.3	The Alcatel-Lucent Foundation governance .....	187
2.4	The Foundation grassroots program.....	187
2.5	Employee volunteering .....	189
2.6	Giving in kind.....	195
2.7	Responding when disaster strikes .....	196
2.8	Corporate charitable contributions .....	196
2.9	Global signature program .....	197



## 1 OUR APPROACH TO DIGITAL INCLUSION



### OUR COMMITMENT

Realize the potential of a connected world and digital inclusion by developing and deploying affordable communication solutions for citizens, expanding their social and economic opportunities. We will address digital inclusion through our innovative products and solutions, including our High Leverage Network™ platform, enabling global connectivity. This will change the way billions of people live and work, improving quality of life around the globe and connecting the world's talent to new opportunities.



'Digital inclusion' is about extending access to information, education and economic opportunities to people and communities regardless of their location, while also encouraging environmental sustainability.

Digital inclusion and broadband universal access are key pillars of our product and solution portfolio, reinforcing our vision of "*realizing the potential of a connected world.*" Our approach to digital inclusion focuses on the following areas:

- **Technology:** Our goal is to make communications more sustainable, affordable and accessible through products and solutions that utilize our High Leverage Network platform and leverage the latest advances in wireline and wireless technologies (e.g., DSL2, GPON, fiber, small cells, 4G LTE).
- **Research:** In 2012, a Bell Labs model for assessing the socio-economic impact of ubiquitous network access was applied to several countries around the world. New market-insight research was also conducted to explore how technology is driving socio-economic development in urban and rural areas of emerging countries.
- **Education and promotion:** By chairing the World Economic Forum (WEF) Global Agenda Council on ICT and by working with organizations such as the GSMA and UNESCO, we significantly expanded our public dialogue on mobile learning (mLearning) and digital inclusion. These public activities were reinforced by our work with governments worldwide, particularly in emerging countries, to promote the benefits of digital economies and inclusion.
- **Philanthropy:** Alcatel-Lucent Foundation's activities support digital literacy benefiting young people in underserved communities around the world.

By supporting digital inclusion, we strengthen our ties to the communities we serve – contributing to the development of new markets for our products and services, and to the betterment of people’s lives around the globe. Our philanthropic activities continue to target the key democratic principle of universal access through Information and Communications Technology (ICT). Working with communities and universities in the domains of energy, health and education, we provide access to information, foster freedom of expression and encourage socio-economic development.

As a company, we have learned there is no single formula for achieving digital inclusion: it is the combination of targeting products, solutions, research and actions to different stakeholders including public authorities and NGOs, complemented by very selective philanthropy for citizens in disadvantaged communities.

## 1.1 The drivers of digital inclusion and universal access

The socio-economic benefits of digital technologies and universal broadband access are profound. Estimates in Brazil, for instance, show a 20% increase in broadband services could reduce unemployment by 4.03%.<sup>1</sup> Countries with developing economies are investing ambitiously in digital technology and connectivity.<sup>2</sup> And the need for broadband is not restricted to developing economies. Rural America comprises the largest portion of the unserved and underserved broadband population in the United States.<sup>3</sup> Making broadband 100% available would result in the retention and creation of 117,000 jobs in the 19 American states with the lowest broadband penetration.<sup>4</sup>

[Read more](#)

Governments and service providers in more than 90 countries have set aggressive national goals and timelines for affordable, universal, high-speed access and wireless services – including targets of up to 100 Mb/s for every person by 2020.



### HIGHLIGHT

#### Bridging gaps with broadband

At the World Economic Forum East Asia 2012 summit, Rajeev Singh-Molares – President of the Asia-Pacific Region for Alcatel-Lucent and Chairman of the World Economic Forum’s Global Agenda Council on Information Communications Technology – said, “Initiatives that combine socially relevant applications, network infrastructure, and affordable business models will provide 36% more GDP growth than a network-only approach...Building a strong digital infrastructure is an imperative for nations that want to compete in the digital economy.”

[Read more](#)

<sup>1</sup> The State of Broadband 2012: Achieving Digital Inclusion for All, Broadband Commission, September 2012

<sup>2</sup> Source: The impact of broadband on the economy report by the ITU from April 2012

<sup>3</sup> Source: FCC (2010). National Broadband Plan estimated housing units without service of 4 Mb/s download speed in

<sup>4</sup> Based on the statistics gathered by the Federal Communications Commission

## 1.2 Broadband everywhere – from sea to cloud

### 1.2.1 Digital inclusion

Digital inclusion, universal access and the ability to provide technology users with a high quality of experience (QoE) all depend on delivering more bandwidth to urban, rural and remote locations quickly and economically. This demands not only next-generation broadband networks but also the innovative use of multiple technologies like copper, wireless, fiber and submarine cable. Alcatel-Lucent has worked with operators on initiatives in each of these areas:

- Exploring the market niche for data services in sparsely populated rural areas or among enterprise segments, with LTE
- Boosting bandwidth to 100G or more in areas where copper is already deployed
- Allowing service providers to deploy enterprise cloud services on a mass scale with our CloudBand™ portfolio
- Helping educational institutions utilize digital content in the classroom

### 1.2.2 High Leverage Network™ (HLN)

Our High Leverage Network (HLN) platform and portfolio of products, solutions and services enable global connectivity and universal access to information while extending education, healthcare and economic opportunities worldwide. HLN provides next-generation wireline and wireless access platforms that can, for example, leverage existing copper assets while fiber is being deployed. It can also augment existing radio access networks with more energy-efficient small cell technology to increase capacity and coverage. An HLN helps service providers to realize the full potential of their networks, cost effectively extending the reach and coverage of broadband to more people – generating lasting social, economic and environmental benefits. Using the latest technical and green innovations, HLN also reduces the power and space requirements of telecommunications equipment. It delivers a high quality of experience across all devices, connecting people with applications and content in the cloud.

[Read more](#)



In 2012, High Leverage Network sales represented more than 53% of total network sales, up from 48% in 2011, with more than 500 new or extension HLN contracts.

### VDSL2 VECTORING

More than 1.25 billion of the world's households are connected to a copper line. In addition, 56% of all broadband subscribers connect via DSL.<sup>5</sup> Governments and network operators can leverage this infrastructure to implement national broadband programs without having to engage in massive fiber deployments. The VDSL2 Vectoring technology Alcatel-Lucent introduced in October 2012 allows operators to deliver super-fast broadband over existing copper lines – reducing investment costs and risks, and helping meet eco-sustainability targets. Through trials and deployment with Belgacom, Telekom Austria and Turk Telekom, VDSL2 Vectoring technology has been proven to boost upstream and downstream bandwidth by 90-150% depending on line conditions and loop length. New technologies such as Phantom Mode and G.fast – which can potentially deliver hundreds of megabits over copper – will also help operators meet broadband goals.

VDSL2 Vectoring technology received the 2012 Telecom Asia Readers Choice Broadband Innovation of the Year Award in recognition of its ability to cost effectively extend mass-market broadband for banking, healthcare, commerce, mLearning and other services. Today, TDC Denmark is evaluating

---

<sup>5</sup> <http://www.alcatel-lucent.com/solutions/vdsl2-vectoring>:

- 2/3 of the world's broadband subscribers are connected through DSL, according to networking and telecommunications market research group Dell'Oro.<sup>2</sup>
- More than 1.25 billion households are connected to a copper line, according to World Bank Group.

VDSL2 Vectoring in support of Denmark's Digital Agenda target of delivering 100 Mb/s to 70% of Danish households by 2020; Belgacom is on track to deliver bandwidths of 50 Mb/s to the vast majority of Belgian households; and Telecom Argentina has selected Alcatel-Lucent VDSL2 to deploy in the most advanced DSL network in Latin America.

[Read more about VDSL2 Vectoring](#)

[Read more about our wireline solutions](#)

## FIBER

Policymakers worldwide have set aggressive targets for broadband coverage, challenging governments and network operators alike to connect the world's citizens to the Internet. High-capacity fiber solutions, such as Gigabit Passive Optical Networking (GPON), help network operators meet today's bandwidth requirements while investing to meet tomorrow's broadband requirements. However, fiber deployment is a significant investment, so it is important for operators to deploy the right solution that protects their investment and evolves with their needs. Alcatel-Lucent helps operators to build fiber networks for the future. In October 2012, Alcatel-Lucent introduced a technique called embedded Optical Time Domain Reflectometry (OTDR) that saves operators time and cost in maintaining their fiber broadband access networks. During deployment, OTDR provides remote validation of the quality of the fiber installation and during operations it continuously monitors the fiber to pinpoint the location of network problems, reducing the need for field technicians to make multiple site visits.

Our expertise in fiber access technologies and solutions — including the highest capacity fiber solution on the market — are helping operators deliver next-generation access networks worldwide. We are present in most major fiber deployments worldwide, including more than 160 Fiber to the Home (FTTH) projects, of which more than 140 are GPON-based. Our experience helps operators to lower the risk and cost of fiber deployment to the benefit of communities worldwide.

[Read more about fiber access](#)

## lightRadio™

Compact, intelligent and energy-efficient, Alcatel-Lucent lightRadio™ mobile broadband solutions bring next-generation wireless access and communications services to remote, rural and developing markets — and address today's challenges of delivering mobile services in crowded urban environments. In the latter case, growing demand for coverage and capacity is creating a need for small cells: low-cost access points that can be installed rapidly. These not only increase available network capacity but also reduce the total cost of ownership of wireless access networks by up to 30% in high-traffic areas. By deploying large numbers of small cells in shopping malls, stadiums, airports and other public venues, mobile network operators can reap benefits not available with outdoor small-cell installations. Due to their small size and low power requirements, small cells can provide capacity and coverage, indoors or outdoors. Research estimates the small-cell sector will be worth more than USD three billion within five years.

[Read more about Alcatel-Lucent lightRadio](#)

[Read more about our wireless IP portfolio](#)

## SUBMARINE NETWORK SOLUTIONS

Submerged fiber optic cables are the most cost-effective and reliable way to transmit high-speed telecommunications worldwide. Alcatel-Lucent announced five new submarine system contracts in 2012 — from upgrades to turnkey deployments — and another in January 2013, adding critical capacity for Internet, data and voice traffic and helping connect some Pacific and Caribbean islands as well as parts of Central and South America.

[Read more about submarine network solutions](#)

### 1.2.3 Our impact around the world

A robust telecommunications infrastructure fosters equality by democratizing information and enabling the promotion of fundamental human rights. Alcatel-Lucent positively affects the communities in which it operates by following policies and procedures that emphasize hiring local personnel, evaluating local suppliers, minimizing environmental impact and developing actions as part of our digital inclusion strategy that enhance quality of life for residents. We then measure the impact of our actions on the communities we serve according to a range of social, environmental and economic indicators. For instance, we measure the success of our digital inclusion initiatives based on user time spent using the technology; user life-quality improvement; social changes and environmental benefits in the community; reputational benefits; and revenues. [Q](#)

Throughout 2012 we engaged in efforts to extend connectivity to users around the world:

#### MARCH 2012

Digicell selects Alcatel-Lucent to help rebuild Haiti and its economy by delivering high-capacity undersea cabling for ICT services.

[Read more](#)

#### MAY 2012

Tonga Cable Limited partners with Alcatel-Lucent to link the remote Pacific island to the global digital economy via undersea cable, increasing broadband connectivity and spurring economic growth.

[Read more](#)

Alcatel-Lucent Shanghai Bell leads the deployment of Fiber to the Home (FTTH) networks across China's 31 provinces, enabling China Telecom to serve millions of households with high-speed services and guaranteed quality of service. (The project is a key milestone in the ambitious 'Broadband China, Fiber Cities' plan, which aims to bring FTTH coverage to 100 million households and 30 million subscribers by 2015.)

[Read more](#)

#### JUNE 2012

Rural areas of Texas in the U.S. look forward to high-speed broadband services on mobile devices thanks to an agreement between Alcatel-Lucent and West Central Wireless.

[Read more](#)

Alcatel-Lucent provides the 4G LTE network that allows Tanzania's Smile to deliver lightning-fast mobile broadband services.

[Read more](#)

Alcatel-Lucent and Telkom SA, one of the largest integrated communications companies in Africa, will expand the availability of super-fast broadband services to subscribers in South Africa.

[Read more](#)

Alcatel-Lucent and Oi subsidiary GlobeNet plan to extend an undersea cable link to Colombia, meeting growing demand for broadband services between Colombia, the U.S. and other Latin American countries.

[Read more](#)

#### JULY 2012

Alcatel-Lucent helps Bulgaria's Vivacom offer customers an exceptional video and Internet experience with broadband access — supporting Bulgaria's efforts to meet the European Union Digital Agenda for next-generation broadband access.

[Read more](#)

## AUGUST 2012

Etisalat Nigeria introduces permission-based mobile advertising to more than 13 million customers using Alcatel-Lucent's Optism™, allowing mobile subscribers in Nigeria to 'opt-in' and receive advertising messages and marketing offers from participating brands.

[Read more](#)

## SEPTEMBER 2012

Leveraging Alcatel-Lucent broadband, fiber optic and Internet routing technology, Azteca Communications continues to build Colombia's national broadband network, addressing the country's aggressive target for increasing broadband availability.

[Read more](#)

Alcatel-Lucent readies to migrate VimpelCom's mobile broadband and business services network in Russia, Kyrgyzstan and Kazakhstan to a high-performance, IP-based network with improved speed and efficiency, laying the groundwork for evolution to 4G LTE.

[Read more](#)

Alcatel-Lucent is engaged to design a new fiber optic network for Ghana's National Information Technology Agency in support of 'e-Ghana', a national initiative to develop local IT services and improve the transparency and efficiency of government.

[Read more](#)

## OCTOBER 2012

Peru's INTERNEXA selects Alcatel-Lucent to deploy its optical network solution, bringing high-quality video and multimedia content to customers in South America.

[Read more](#)

Seaborn Networks and Alcatel-Lucent begin to develop the 100G Seabras-1 system, which will deliver new capacity to the longest 100G transoceanic link for Internet, data and voice traffic between South America and global markets.

[Read more](#)

Alcatel-Lucent Shanghai Bell wins a major contract to deploy the largest share of China Mobile's new TD-LTE trial network rollout as it extends services to 10 cities.

[Read more](#)

Telesis Tanzania helps stimulate industry and economic development with its launch of 4G LTE mobile broadband services enabled by Alcatel-Lucent.

[Read more](#)

## NOVEMBER 2012

Tanzania's Smile expands the availability of 4G services through the deployment of an Alcatel-Lucent LTE network in Uganda and Tanzania.

[Read more](#)

Angola Cables announces the installation of a high-capacity fiber optic communications network to support economic growth and social development.

[Read more](#)

Alcatel-Lucent helps LG Uplus deliver super-fast broadband services to residents of major South Korean cities.

[Read more](#)

Pacific Caribbean Cable System (PCCS) operators, Cable & Wireless Communications, Setar, Telconet, Telefonica Global Solutions and United Telecommunication Services (UTS) plan to link Florida and Ecuador, increasing digital integration and capacity growth in the region.

[Read more](#)



## DECEMBER 2012

Alcatel-Lucent Proactive Services enable Telkomsel — Indonesia's largest mobile provider — to identify and optimize network performance, improve service quality, monitor network performance and ensure network reliability. [Read more](#)

Main One Cable Company Limited renews its marine maintenance contract for a submarine cable system connecting Portugal to Nigeria, contributing to African and international connectivity. [Read more](#)

Alcatel-Lucent and Bharti Airtel announce plans to build an IP-based backbone network across Africa to support all mobile broadband services to Airtel's 17 affiliates (which serve 60 million customers) as well as a more robust interconnection to global networks, including those in the U.K. [Read more](#)

To upgrade its IP networks in Argentina and the Czech Republic for fixed, mobile broadband and IPTV services, Alcatel-Lucent provides Telefónica with one of the industry's most powerful core network routers, the Alcatel-Lucent 7950 Extensible Routing System (XRS). [Read more](#)

Alcatel-Lucent and Tunisiana, part of the Qtel group, deploy a superfast, high-capacity network to provide broadband services across Tunisia. [Read more](#)

Alcatel-Lucent will provide Rio Tinto, a leading international mining group, with a complete end-to-end private 4G LTE network at its West Angelas mine in the Pilbara, a remote region in Western Australia. [Read more](#)

## JANUARY 2013

América Móvil and Alcatel-Lucent set to deliver the longest 100G submarine cable system, linking Latin America to the U.S. [Read more](#)

## FEBRUARY 2013

Bell Labs lays the foundation for the future of ultra-high-capacity optical communication networks, publishing the results of groundbreaking experiments in optical technology — including the achievement of 1 Tb/s per-wavelength channel optical transmission rates, and the ability to increase fiber capacities far beyond the capability of today's wavelength division multiplexing (WDM) systems. [Read more](#)

Alcatel-Lucent and France Telecom-Orange announce the deployment of the world's first 400G optical link, supporting new high-bandwidth, high-performance business and residential services, including on-demand multimedia content, social networking and cloud services. [Read more](#)



#### 1.2.4 A commitment to human rights and democracy



##### OUR COMMITMENT

We believe that enabling improvements to the communication capabilities of a country benefits its people by creating opportunities, promoting economic and cultural wellbeing and, ultimately, the capacity to support or to evolve to democracy. We also believe that reliable, affordable and widely available communications services are a critical engine for economic and social development.

In countries where we operate, we respect and comply with local laws and regulations, standards, and human rights legislation. Within our scope of influence, we support and respect:

- The United Nations Universal Declaration of Human Rights
- The Guiding Principles on Business and Human Rights
- The 10 principles of the United Nations Global Compact
- The International Labor Organization Declaration of Fundamental Principles and Rights at Work
- The Organisation for Economic Co-operation and Development Guidelines for Multinational Enterprises

Our policies and procedures take into consideration hiring local personnel, evaluating local suppliers, minimizing effects on the environment, and developing programs that help enhance quality of life for people in the communities where we operate.

Read more about human rights in the [Our People](#), [Supply Chain](#), and [Ethics](#) chapters of this report.

### 1.3 Innovation for communities – our research

---

To deliver on our commitment of universal access, we perform research and market studies to understand market needs.

#### 1.3.1 New Zealand case study

In February 2012, Alcatel-Lucent and key national stakeholders in New Zealand applied a Bell Labs model for assessing the impact of broadband access associated with Ultra-Fast Broadband (UFB) and Rural Broadband Initiative (RBI) investments across the country. The study showed that by enabling applications such as teleworking, video conferencing, remote patient monitoring, online training and even remote sheep herding, UFB and RBI will add more than NZ\$5 billion to New Zealand's GDP about the Alcatel-Lucent Foundation over a 20-year period. The study also found that the combined consumer surplus from using high-speed broadband applications significantly outstripped the GDP impact of building the UFB and RBI networks. [Q](#)

[Read more](#)

## Seeing the future before it happens

In 2012, Alcatel-Lucent conducted market research and consumer insight studies into key megatrends – developments on the frontiers of ICT and connectivity that are changing the ways we live and work. These included:

- 168 (24x7 connectivity) – the generation of ‘always-on’ people and devices connected to the Internet
- Digital native acceleration – the impact of generations having grown up with digital technology becoming the mainstream
- Ed-you-cation – the ongoing shift, facilitated by ICT, from institutional to individual learning
- Netizens to Government (N2G) – how citizens are using digital media to interact with elected officials, governments and the public sector
- Neo-urbanization – the blurring boundaries between traditional definitions of urban, suburban and rural
- Rejuvenaging – the frontiers of aging and rejuvenation and the far-reaching implications of rapidly increasing life expectancies
- Sustainable by design (SBD) – the accelerated transition from sustainability as a source of competitive advantage to a competitive imperative

[Read more](#)



In 1900, just 13% of people lived in cities. By 2008, urban dwellers accounted for more than 50% of the world's population. And that number continues to climb, with nearly 70% of people expected to be living in cities by 2050.

United Nations Department of Economic and Social Affairs. (2012). Population Division with Status, March 2012.



### 1.3.2 Opportunities without borders – realizing the promise of neo-urbanization

Alcatel-Lucent and Bell Labs India conducted a multi-faceted research study of neo-urbanization in India, assessing its implications for people, urban planning, governance, and the ICT industry. Neo-urbanization is changing the way we look at cities. With neo-urbanization, the traditional definitions of urban, suburban, rural and semi-urban are blurring. This is particularly evident in places that are experimenting with the formation of mega-corridors, mega-cities and converged rural areas – all of which challenge the common definition of ‘city limits’. India was chosen because the effects of neo-urbanization are readily apparent – and because these effects offer substantial proof of the trend’s transformative qualities.

#### METHODOLOGY

The research team gathered the perspectives of more than 80 people from rural and semi-rural areas through individual interviews, focus group discussions and ethnographic immersions. Sessions ranged across numerous topics including the economy, environment, security, education, healthcare and social trends. Workshops were also held with experts from areas such as urban planning, education and sustainability. Secondary research complemented the study.

#### RESULTS

The study’s findings show that urban and rural environments are beginning to merge, with access to facilities and services becoming more common across all areas. The proliferation of mobile devices and the availability of broadband Internet connectivity are the drivers of a better life for people regardless of where they live.



While India was projected to have approximately 150 million Internet users by December 2012<sup>6</sup>, the number of mobile Internet users in India is expected to nearly double and hit 165 million by March 2015, up from the present 87 million in December 2012<sup>7</sup> – evidence of the increased availability of mobile broadband.

Autonomy – financial, cultural, social and for people of both genders – was once a major reason to move to an urban area. Now opportunities can be realized without leaving one's home village. The trend of neo-urbanization promises to establish a new way of being in the world, where big cities are no longer the only source of opportunity and growth, bridging the digital divide and creating benefits including:

- Higher quality education, wider career choices and increased income
- Widespread access to better healthcare and an improved quality of life
- Increased government services and accountability in governance
- Greater awareness of social issues and faster action to address them
- Changing cultural norms that empower women, through education, employment and more

[Read the e-book](#)



[Watch the videos](#)

[Read the blog](#)



## HIGHLIGHT

### Market research contributing to Australia's digital economy

In 2012, Alcatel-Lucent published an in-depth market survey based on perspectives from 275 representatives of medium and large Australian businesses in key industry sectors including retail, government, health, education, manufacturing, hospitality, and professional services. Asking how and why the businesses will use digital economy applications and services, and probing the extent to which they believe these will position their organizations for the future, the study found that 75% of businesses expect investments in next-generation broadband to enhance their participation in the digital economy. It also found that almost 80% are interested in consulting with a telecommunications service provider to develop a business model for a digital future. This means service providers have a unique opportunity to establish a strategic position in the application development ecosystem while positioning their networks as the key enablers of e-business and e-commerce – in Australia and beyond.

<sup>6</sup> Internet and Mobile Association of India. (2012). Rural Internet users to reach 45 million by December 2012.

<sup>7</sup> Internet and Mobile Association of India (IAMAI)



## HIGHLIGHT

### Bridging the digital divide in India

India is expected to have 367 million mobile broadband connections by 2016, making it second only to China in size as a global market.<sup>8</sup> A 10% increase in mobile broadband penetration could contribute as much as USD 80 billion (INR 3,506 billion) in revenue to the country's transport, healthcare and education sectors by 2015.<sup>9</sup> Alcatel-Lucent is working with Bharti Airtel to deliver faster mobile broadband speeds over its IP network, which will allow the Indian provider to meet the surging bandwidth requirements of customers accessing data, video and Internet services on an array of devices – helping bridge the digital divide.

## 1.4 Ensuring access to education

With more than 90 million students enrolled in higher education programs worldwide (a figure expected to climb to 150 million by 2025), new tools and approaches are needed to ensure educational systems have the capacity to deliver – and give students access to – the benefits of learning. Mobile learning (mLearning) has great potential to meet this need, especially in developing countries and rural areas where it could make educational opportunities available despite poor infrastructure and limited access to resources.

Continuing to take a leadership role in the establishment of mLearning, last year Alcatel-Lucent:

Prepared a report and call to action for the World Economic Forum entitled *Accelerating the Adoption of mLearning: A Call for Collective and Collaborative Action*.

[Read more](#)

Released a video on mLearning developed jointly with Peter Gabriel and Rajeev Singh-Molares called *A Powerful Tool for Growth in Developing Countries*.



[Watch video](#)

Published an article in the Millennium Development Goal Magazine in May 2012 titled *mLearning: A Powerful Tool for Addressing the MDGs*.

[Read more](#)

Became an official member of the mEducation Alliance, participating in its working groups and sponsoring its annual symposium in September 2012; participated in several UNESCO workshops including those focused on the creation of global mLearning policy guidelines, which were released in February 2013.

Sponsored and participated actively in the February 2013 UNESCO mLearning symposium.

[Read more](#)

In February 2013, we participated in the February Senior Education Policy Makers Forum on mLearning organized by UNESCO and GSMA. The event aimed to explore mobile learning as a unique and significant contribution to achieving the Education for All goals of increasing education access, quality and equality.

[Read more](#)

Worked with the French Development Bank, operators, the Agence Universitaire pour la Francophonie and the World Wide Web Foundation to form an mLearning alliance for Africa.

<sup>8</sup> <http://www.gsma.com/newsroom/gsma-announces-that-india-will-become-the-worlds-second-largest-mobile-broadband-market-within-four-years>. April 2012.

<sup>9</sup> GSMA and Analysis Mason, August 2011.

Actively contributed to documents about mLearning produced by the French Development Bank.

[Read more  
\(in French\)](#)

[Read more  
\(in French\)](#)

Organized a conference on mLearning in December 2012 at Paris headquarters in partnership with Orange operator and ChangeCorp (mobile content provider) to raise awareness of mLearning and showcase successful projects. The conference was attended by more than 100 people.

Alcatel-Lucent organized a workshop on mLearning at Mobile World Congress in Barcelona in February in cooperation with GSMA, the mEducation Alliance, USAID and the MasterCard Foundation. The session, which showcased successful mLearning projects in the world, presented by company CEOs, was a great success with more than 60 attendants. It was followed by the official launch of the Broadband Commission report on Education in the presence of Dr. Hamadoun Touré (Secretary General of ITU) and UNESCO officials.

In addition to the above, Alcatel-Lucent is continuing to explore ways to participate in a large-scale mLearning project that will train community health workers in Africa, engaging actively in discussions with medical training content providers and technology partners as well as with potential financial sponsors.

[For more  
information  
about  
mLearning](#)

In the fall of 2012, we began working with other potential partners to explore mLearning projects for fields beyond health, and for skills including:

- Entrepreneurial skills
- Financial skills
- Life skills
- Communication skills
- Literacy skills
- Parenting skills



#### HIGHLIGHT

### Encouraging education in Egypt

In Egypt, Alcatel-Lucent is the primary sponsor of the Association of Upper Egypt for Education and Development (AUEED), which helps young girls access learning and educational tools. To date, the initiative successfully contributed to the educations of 300 girls.

[Read more](#)



#### HIGHLIGHT

### “The sky is not the limit.”

As part of our commitment to supporting access to education and mLearning, we sponsor the Valued Citizen Initiative’s Bridging For Life program, which is designed to prepare high school students for university. Compared to the national average of 24%, Bridging for Life sees 70% of its participants reach university and stay past their first year. A 20-year-old student — aptly named Future — who went through the Bridging for Life program told Alcatel-Lucent the experience taught him to think big. “The sky is not the limit,” he said. “The limit is in our minds.”

[Read more](#)



## 2 HOW WE GIVE

### 2.1 Bringing digital literacy to all



#### OUR COMMITMENT

The Alcatel-Lucent Foundation is dedicated to making a difference in communities where our company and customers are present. Its prime mission is to respond to the global challenge of digital inclusion and sustainability. With a focus on helping young people – particularly young women – contribute as citizens and community leaders of tomorrow, the Foundation's programs:


- Provide basic education and keep young people in underserved communities in school
- Help underserved youth return to school
- Provide underserved youth with life skills and vocational training to prepare them for entering the world of work

Alcatel-Lucent   
Foundation

The purpose of the Alcatel-Lucent Foundation is to ensure we meet our commitment to social responsibility by supporting programs that serve and enhance the communities in which our employees and customers live.

The Alcatel-Lucent Foundation leads our charitable activities, managing contributions to programs for underserved communities, with particular emphasis on providing access to education and life skills/vocational training to youth (particularly young women) in underserved communities. In 2012, the Foundation provided USD 8.6 million in funding for carefully selected programs around the world. It also organizes and promotes volunteerism among company employees.

In 2012, the Alcatel-Lucent Foundation also:

- Supported 51 programs in 25 countries
- Delivered its ConnectEd signature program in five countries
- Supported more than 10,100 Alcatel-Lucent employees in donating approximately 60,000 hours to more than 180 goodwill projects in 37 countries 

[Read more about the Alcatel-Lucent Foundation](#)

#### ERNST & YOUNG STATEMENT

##### Foundation reporting tool

In 2011, Alcatel-Lucent's Foundation undertook a project aimed at monitoring the company's philanthropic contributions by adopting a model developed by the London Benchmarking Guidelines. In 2012, this process was reinforced by the deployment of data collection tools that are shared with all employees and institutional partners. This initiative aims to allow the tracking and evaluation of the human, material and financial resources and the local impacts of the philanthropic actions undertaken by Alcatel-Lucent.

## 2.2 Philanthropy 2012: achievements and awards



### 2012 ACHIEVEMENTS

A group-wide strategy was created and aligned with business drivers. A system to measure results/impacts was created using the Foundation guidelines and the London Benchmarking Group (LBG) tool and standards to provide quantitative and qualitative assessments of the economic, societal, environmental and social impact of philanthropic investments.

The Alcatel-Lucent Foundation's digital literacy efforts benefited 58,951 young people in underserved communities around the world.

In 2013, via the Alcatel-lucent Foundation, we will continue to apply our company-wide strategy to guide corporate philanthropic activities that include: priorities aligned with our business drivers; and descriptions of systems that measure results and impacts.

The Foundation has joined the London Benchmarking Group and is using its tools and standards for defining success. This will allow the Foundation to provide quantitative and qualitative assessments of the economic, societal, environmental and social impact of its philanthropic investments – for example, in terms of:

- Improved relationships with local communities and governments
- Contributions to environmental awareness
- Employee skills development

In addition, our 51 grassroots programs have shown steady progress, now measurable thanks to our monitoring and evaluating system; we worked closely with donor-funding agencies to measure impacts and help our grassroots partners achieve their objectives and goals; and we provided employees with access to training on policy, guidelines and procedures for charitable contribution.

Alcatel-Lucent was recognized in several ways last year for its philanthropic activities:

- Alcatel-Lucent Shanghai Bell received the following awards:
  - World 500 China Contribution Ranking – Top 3 (China Southern Weekly)
  - Five Star Eco-Sustainable Enterprise Award (Shanghai Government)
  - 2011-2012 Best Volunteer Participation Award (JA China)
  - Poverty Alleviation Award (China Foundation of Poverty Alleviation)
  - China Charity Award – Company Award (China Charity Festival Organization)
  - Excellent Enterprise in Poverty Alleviation (Yunnan Provincial Government)
  - First Prize in QC Activity of China ITC (China Electronics Industrial Association)
  - Gold Prize in Innovation in Telecom Technology (China Information Port Forum)
- In the U.S., we received the Bronze U.S. President's Volunteer Service Award for our 2011-2012 Junior Achievement program globally
- Red Cross Belgium received a Company with a Heart award for having 83 people donate blood

[For more information about philanthropy achievements](#)



## 2.3 The Alcatel-Lucent Foundation governance

Funded by Alcatel-Lucent, the Foundation is organized under the laws of the U.S. State of Delaware and is a non-governmental, non-profit, private organization. It is governed by its own Board of Trustees, which includes senior executives from Alcatel-Lucent and external organizations. The Board meets on a regular basis to make funding and allocation decisions. It operates four subcommittees: Executive, Grant Making, Finance and Nomination. Additional committees can be organized as needed.

### Foundation Board of Trustees

As of December 31, 2012, the Alcatel-Lucent Foundation Board of Trustees included nine company executives, an employee representative, an executive director and two external trustees (one being the chairperson).

**Chairperson:** Janet Davidson

**External trustee:** William Reese (CEO of the International Youth Foundation)

**Alcatel-Lucent trustees:** Barbara Landmann (Vice-Chairperson), Stephan Vantomme (Treasurer), Yohann Benard (Secretary), Alex Yip (Legal Counsel), Sandy Motley, Gee Rittenhouse, Radwa Hafez, Christine Diamante (Ex-Officio), Frederic Chapelard, and Marco Malfavon (Trustees)

**Executive Director:** Bishalakhi Ghosh

## 2.4 The Foundation grassroots program

In 2012, the Alcatel-Lucent Foundation Board concentrated on advancing a slate of 51 multi-year regional programs proposed by employees with support and advice from regional/country leaders. These address the most urgent educational needs of the regions in question. The Foundation worked closely with these programs throughout the year to create value and encourage community investment, making steady progress; employees have participated in various volunteering activities and spearheaded significant initiatives, a selection of which are described below. For 2013, the Foundation will continue to work with these existing programs and help meet skills development, livelihood training and other requirements.

### GIVING GIRLS THE CHANCE TO LEARN – EGYPT

There are 600 million girls in the developing world, a total expected to increase exponentially over the next decade. Unfortunately, poverty and societal and cultural prejudices often prevent girls from receiving a proper education. UNESCO recently estimated that some 75 million primary or lower secondary school-aged girls do not go to school (Source: UN Global Compact). Through a partnership with Mother's At Risk & Egypt's Association for the Development and Enhancement of Women (ADEW), Alcatel-Lucent helped develop a specialized course – Girls' Dreams and Literacy – to provide girls with valuable life skills and support their efforts to learn to read and write.

[Read more](#)

### OUR PEOPLE GO DIGITAL – SRI LANKA

Mo – Wellawaya J.M. Kumaradasa School has 1,500 students – and 75 teachers. Its classes extend from Grade 1 to Grade 13, including Advanced Level. Alcatel-Lucent helped the school convert a classroom into an ICT laboratory, provided 21 computers and other ICT infrastructure, and provided workshops to students on ICT, career development, English language, and local and foreign job markets. As well, we helped link the school to Sri Lanka's existing national education network, WebPatashala.

[Read more](#)



#### CREATING GLOBAL CITIZENS — GHANA/NEW JERSEY

Alcatel-Lucent's Telepresence Ambassador Program allows students in Africa to communicate, collaborate and respond to changes with others around the world using state-of-the-art video conferencing technology. Students connect live — face-to-face and culture-to-culture — discovering the ways they share dreams and goals. The program not only provides educational lessons on an international platform but also develops cultural awareness, builds relationships and provides practical life experiences by putting knowledge to work in the service of one's peers abroad.

[Read more](#)

#### FOOD SECURITY THROUGH EDUCATION AND EMPOWERMENT — KENYA

The Loitoktok project is an integrated food security and livelihood program targeting Kenya's Inkisanjani community. Its activities include:

- Stream rehabilitation
- Restoration and environmental conservation
- Agriculture and irrigation initiatives
- Health, hygiene and sanitation initiatives
- Provision of clean drinking water
- Nutritional initiatives
- Educational initiatives

The project has more than 1,200 direct beneficiaries — and more than 15,000 indirect beneficiaries.

[Read more](#)

#### VOCATIONAL TRAINING AND SOCIAL TRANSFORMATION FOR THE UNDERPRIVILEGED — INDIA

SGBS Trust is a non-governmental organization in Karnataka, India that provides vocational training to underprivileged, unemployed youth. Focused on developing the skills these youth need to break through the cycle of poverty their families have experienced, often for generations, SGBS Trust ensures employment in reputable organizations on completion. Youth 18 years old and older are handpicked for 70 days of training in one of seven vocations:

- Retail sales
- Field sales
- Guest care (hotel)
- Guest care (office)
- Entry-level voice and data
- Esthetics

The training is provided free of charge and encompasses both vocational and life skills — including communication skills, spoken English and basic computer use.

[Read more](#)

## 2.5 Employee volunteering

### 2.5.1 Our approach

Employees have the opportunity to volunteer during their work time when customer priorities allow, as well as during their time off. Participating in Foundation programs has helped build employee pride in the company and their own roles, and connected the company's brand with local community activity.



#### 2012 HIGHLIGHTS

Employees in 37 countries volunteered for more than 180 projects in 2012. More than 10,100 Alcatel-Lucent employees donated more than 60,000 hours to their communities<sup>Q</sup>, at an estimated value of more than USD 2.5 million.

As well, we introduced an executive program for employee volunteering, including skills enhancement and training in community investment. We also launched Campus in the Cloud – a signature program directly linked to our business objectives and our approach to community investment that shares skills and expertise already available within the company.

[Read more](#)



#### 2013 TARGET

In 2013, we will pursue Campus in the Cloud as a major Alcatel-Lucent Foundation employee in-kind project to build employee skills, talent, awareness of and pride in the company's philanthropic activities.

#### 1.1.1 2012 Volunteering highlights



## MALAYSIA

Alcatel-Lucent provided the platform for Malaysian programmers to develop educational apps and games suitable for primary school children through the *Geek the Genius* contest. Twenty entries were shortlisted and 13 declared winners in competition for prizes worth a total of €12,500. The contest helped position Alcatel-Lucent as a leading broadband connectivity provider and highlighted the company's efforts to help Malaysia develop a robust Internet ecosystem in line with the National Broadband Agenda.

Also in Malaysia last year, the two-day Integrity Champions challenge exposed student leaders from a network of residential schools to concepts of corporate sustainability, integrity and governance. Alcatel-Lucent was the only telecommunications company selected to participate – invited by the Integrity Institute of Malaysia in recognition of its comprehensive compliance system and training.

During Global Days of Caring 2012, a knowledge-sharing session was organized with more than 30 IT professionals and students from the multimedia state university. Under the theme *At the Speed of Ideas*, topics included the development of communication networks for the future, entrepreneurship, and opportunities in the creative multimedia industry.

[Read more](#)



## MEXICO

For Children's Day 2012, Alcatel-Lucent employees collected 318 meters of toys, which were delivered to children in need throughout Cuautitlan Izcalli Municipality. Some 380 children benefited from these donations.

[Read more](#)



## EGYPT

Alcatel-Lucent employees in Egypt engaged in several community-supporting events throughout 2012, including:

- Holding two blood donation campaigns at the company's Cairo office — collecting 78 bags of blood in a single day and earning recognition from the World Health Organization (WHO) on International Blood Donor Day
- Contributing food to the Egyptian Food Bank
- Participating in street rounds led by SamuSocial, an organization focused on providing support to Egyptian street children
- Training to participate as classroom volunteers through INJAZ Egypt's Adopt-a-School program
- Collecting school books, bags, supplies and uniforms to donate to families in need through the StrongHer team's Back to School program

[Read more about our activities in Egypt](#)



## SOUTH AFRICA

Our teams in South Africa helped lead a drive — in partnership with the blanket manufacturing company Aranda — to donate and distribute 200 new blankets to children at four schools to help cope with an excessively cold winter.

[Read more](#)

## VENEZUELA

Our Venezuelan team organized a successful campaign to gather clothes, toys, educational materials and sports equipment to help indigenous communities in the most remote parts of the country. One of the main promoters of this initiative, Joshua Rodriguez, visited Bolivar state in September 2012, delivering the items collected by the Alcatel-Lucent team. He toured a number of villages accessible only by air. The donation benefited 300 families in the communities of Urimán, Sabanita, Frigoles and Tirycá.

[Read more](#)





## KOREA

In Korea last year:

- More than 30 members of the Alcatel-Lucent Korea Female Club held a charity bazaar on International Women's Day at the company's Seoul headquarters, with all proceeds going to a Korean welfare center for women.
- Team members celebrated Global Days of Caring with children from the GyungSaengWon children's shelter, touring the Cheongwadae Sarangchae presidential museum and the largest Korean traditional market, Insadong.
- Twenty-five Alcatel-Lucent staff volunteered to play Santa for 25 kids on December 25 — responding to a wish from the GyungSaengWon Children's Shelter children. They gave gifts including stationery, footballs, books and toys.

[Read more](#)



## CANADA

Alcatel-Lucent has been instrumental in helping the Ottawa Network for Education bring the Junior Achievement (JA) program back to Ottawa schools — providing a special opportunity for Canadian public school students to gain financial literacy, entrepreneurship and other business skills. Many Alcatel-Lucent employees served as JA volunteers.

[Read more](#)



## BELGIUM

In Belgium last year, Alcatel-Lucent teams contributed to:

- The United Nations Global Compact Belgium initiative, networking and discussing a wide range of sustainability topics with other members.
- A fundraising walk by Alcatel-Lucent employee Danny Van Gucht to raise money for the Multiple Sclerosis (MS) Ligue; Danny has MS and, with the support of his colleagues, garnered €500 in donations.
- The annual Sinterklaasparty hosted by the non-profit organization KIEMMA, volunteering for the fourth year and providing new toys to underprivileged children in the Kievit neighborhood where Alcatel-Lucent's Antwerp offices are located.
- De Toevlucht – a charity organization in Flanders – collecting second-hand toys for distribution to children.
- The Raad & Daad and the Homeless Action Committee, collecting 450 kg or 3.81m<sup>3</sup> of second-hand winter clothes and blankets, both located close to our Antwerp offices.

[Read more](#)



## INDIA

Throughout India, Alcatel-Lucent employees gave their time to a number of initiatives including:

- The ABHAS-Alcatel-Lucent Voluntary Employee Engagement Initiative – a collaboration with Indian NGO ABHAS under the ConnectEd umbrella to support spoken English, computer assistance and career mentoring sessions for Indian children.
- 'Lend a Helping Hand' – sponsoring the education of eight deserving children whose parents are HIV infected. A Quarterly Progress Report showed that the contribution has made a clear difference in the lives of these children.
- The efforts of several NGOs in Bangalore to empower women and children through personal visits and events.
- Blood donation camps organized in association with the National Thalesaemic Welfare Society to serve adults and children suffering from thalassemia and leukemia. A total of 162 units of blood were donated.
- Global Days of Caring (GDOC), a fundraising celebration for children in need – with the addition last year of a new location, Orissa, where volunteers spent time with parentless children at the Anand Mission Ashram.

[Read more](#)



## Empowering Young Women for the World of Work

In April 2012, Gee Rittenhouse, Alcatel-Lucent Foundation board member, visited Prerena Resource Centre (a beneficiary of the Foundation) and met with its founder, Mrs. Prashantha. He spent time understanding the work that is being done and Prerana's future plans. The main focus of Prerana has been the uplifting of neglected, disabled poor girls especially the blind, by training them, providing employment and instilling confidence in them to lead a normal cheerful life despite their handicap. Prerana is also involved in many activities for the uplifting of the local poor and also bringing about social and cultural awareness in them.

[Read more](#)

## FRANCE

Teams in our headquarters country supported FFDys, a federation of bodies specializing in Specific Learning Disabilities such as dyslexia, dysphasia and dyspraxia, as part of the Global Days of Caring organized by the Alcatel-Lucent Foundation. We collected and will donate more than 900 computers to the local branches of the FFDys, helping facilitate education for these children. Our volunteers were eager to include personal notes with each computer pack to let the children know they can count on their support.

Our colleagues also participated in Odyssey, a race supporting the fight against breast cancer. 2012 was the 10th edition of the event, which has raised more than €2M since its inception. Some 25,000 people participated in this year's race, all over France. Our teams took part in Paris – more than 140 women and men – through the StrongHer network.

[Read more](#)





## 2012 PASSEPORT AVENIR SESSIONS

In 2012, we organized two workshops at our Paris headquarters, meeting with students to discuss topics such as corporate social responsibility and the role of women both in corporations and the economy more broadly.

Attendees at the first meeting in October 2012 were Christel Heydemann, Vice-President of Human Resources; Christine Diamante, Director Corporate Responsibility; Joel Pagot, Manager Sustainability (Green); Sandra Cornet-Vernet Lehongre, Director Communications; and Mireille Holopherne, Manager Communications. On December 20, 2012, Sophie Neron-Berger, Chief Audit Executive, and Christel Heydemann hosted the second session.

[Read more](#)



### 2012 HIGHLIGHT

#### Global Days of Caring

In 2012, we organized the Alcatel-Lucent annual global volunteering initiative, Global Days of Caring, which ran throughout the month of July. Under the 'WE CARE' signature, employees throughout the company, in every region, volunteered with various grassroots programs and with our global signature program, ConnectEd.

Employees organized 32 local initiatives in 16 countries: Argentina, Australia, China, Colombia, the Dominican Republic, France, Germany, Ghana, India, Indonesia, Korea, Philippines, Poland, Sri Lanka, the U.S. and Venezuela. Volunteering activities ranged from food, clothing, toy and book drives to educational, training and career-orientation workshops. More than 900 employees gave their time and support to these various initiatives, which benefited more than 2,700 people.

#### Global Days of Caring – Country in focus: Colombia

In Bogotá, employees were invited to donate items such as clothing and books or to provide cash donations or nonperishable food. As well, a site visit to Hechos para Trascender was arranged – a foundation that supports vulnerable populations, with a special focus on pregnant teenagers and teenage mothers who do not have the company and support of their families, a responsible adult or the baby's father. Alcatel-Lucent's contribution to Trascender met the immediate needs of approximately 500 people.

[Read more](#)

## 2.6 Giving in kind

In addition to direct financial contributions and volunteering, we provide in-kind donations to NGOs under the guidelines of Alcatel-Lucent's Global Charitable Contributions policy. In 2012, our IT department launched a PC refresh program; employees turned in some 3,000 old-but-still-functioning laptop and desktop computers, which IT arranged to be donated to various charities around the world. Country teams also donated school items, clothes, food and other necessary items to NGOs and disaster relief measures throughout the year.

### Donation campaigns

Every year, employees donate clothes, food, toys and school supplies to various charitable organizations. In 2013, we will increase commercial in-kind giving per our business priorities, with a particular focus on product donations.



## 2.7 Responding when disaster strikes

---

In 2012, we made a contribution of USD 66,000 through Kenya Red Cross and Red Cross International to help with the food crisis in east Africa. Additionally, when Hurricane Sandy hit the U.S. east coast, employees helped with donations of food, clothes, blankets, and other items needed in affected areas.

## 2.8 Corporate charitable contributions

---

Alcatel-Lucent's global charitable contributions policy empowers the company's regional offices and business units to donate funds to worthwhile causes, often in alliance with customers and suppliers. The policy requires close tracking and auditing of all donations by the Alcatel-Lucent Foundation.

Since December 2010, all requests for corporate contributions have been processed through the EZ Visit Tool, a computerized platform used to manage requested submissions, required documentation and legal approval.

In 2012, Alcatel-Lucent donated more than USD four million through various projects around the world and employee payroll giving. These addressed issues such as senior citizens' health, sporting activities for community development, education, housing, child abuse, women issues, autism, technology scholarship, and employment readiness and assistance to people with disabilities.

### Russia – Children's Hearts and Podari Zhizn

In 2012, Alcatel-Lucent ZAO (Russia) introduced special greeting cards for New Year's gifts to make a charitable donation to two funds in Russia: Children's Hearts, which battles congenital heart disease; and Podari Zhizn, which focuses on oncology and hematological diseases.

[Read more](#)

### SPAIN

Supporting Fundación Adsis – the *Youth with Future* project in Barcelona – Alcatel-Lucent helped unemployed youth with little or no professional training or experience start to build career skills and plans. In 2012, 37 youth of 24 nationalities participated in the training. Of the 148 who have gone through the program, 79 youth have gone on to enroll in an educational institution or have found a job, 15 of those in 2012.

As well, the Spanish Ministry of Health, Social Policies and Equality recognized Alcatel-Lucent once again with its equality award for increasing the number of women in managerial positions, the high percentage of employees (90%) voluntarily joining the telework program for work/private life balance, and for collaboration with the European Professional Women Network Association.

[Read more](#)

## PORTUGAL

Hosted by Alcatel-Lucent in collaboration with the municipality of Cascais, Avós n@ Net helps educate the elderly population of Cascais about ICT – specifically the Internet, e-mail, online chats and social communities. This year – marking the 8th edition of Avós n@ Net – saw 50 training sessions delivered over five weeks to 580 elderly people in Cascais libraries.

As a member of Portugal's GRACE Association (Reflection and Support to Corporate Citizenship Group), Alcatel-Lucent participated in the 7th edition of the G.I.R.O. project (Grace, Intervene, Retrieving, Organizing). The largest corporate volunteer action in Portugal, G.I.R.O. was held on October 12 and attracted hundreds of volunteers for a single day to support various causes, aiming to make a difference. In 2012, Alcatel-Lucent teams participated in Dive4All, raising awareness of the problems faced by people with reduced mobility in daily life.

[Read more](#)



## 2.9 Global signature program



Our Global Signature Program – ConnectEd – was launched in April 2011. By September 30, 2012, it had provided digital training to 12,513 youth, 60% of them girls.



In 2013, we will pursue our 2011 commitment to provide digital training to 13,500 children between 2011 and 2014.

### 2.9.1 'ConnectEd' to youth

The ConnectEd program – a partnership between Alcatel-Lucent and World Education – works within the guidelines of the United Nations Millennium Development Goals to see universal primary education for all by 2015. It is addressing factors that limit the work and life options of disadvantaged youth (with an emphasis on girls and women) by preparing 13,500 young people from marginalized communities for work. Today, ConnectEd is active in Australia, Brazil, China, India and Indonesia.

The program puts a special focus on the use of technology to transform educational, work and life outcomes for youth. Another important element of this initiative is the active participation of Alcatel-Lucent employees in ConnectEd activities, using their expertise to help with activity implementation and serving as role models, mentors and advisors to young participants in all countries. In 2012, 922 employees contributed to ConnectEd, positively impacting 3,264 youth.

[Read more](#)

2012 ConnectEd highlights include:

- Continuing our partnership with Brazilian NGO Instituto Aliança com o Adolescente. Under ConnectEd, Instituto Aliança provides access to vocational accredited training, work experience and work placement opportunities for disadvantaged youth. Components include the development of key skills, life project formation, career planning and promotion of citizenship through civic action projects. There were 331 youth enrolled in training in 2012, surpassing the target of 300. Since launching in 2011, ConnectEd Brazil has reached 1,331 youth.



- Partnering with Indian NGO Action Beyond Help and Support (ABHAS) to improve the lives of youth – primarily girls – living in the slums of New Delhi (Tughlakabad), Noida and Uttar Pradesh (Harola and Jhundpura)
- Partnering with local organizations in China to give out-of-school migrant youth access to quality education and skills training programs, and to help migration-affected children stay in school longer, gaining the skills to transition successfully into the workforce. In 2012, 815 youth were reached – bringing the total since 2011 to 1,862. As well, 661 in-school youth benefited from school access and completion-boosting activities such as financial aid assistance, life skills programs and child-to-child reading. A total of 95 out-of-school and 109 in-school migrant youth were enrolled in workplace-related training. Over three years, at least 3,220 youth will benefit from ConnectEd in China.



- Continuing a three-year project with the YWCA in New South Wales, Australia to reach young people who have – or are at risk of becoming – disengaged from education in the Sydney Metropolitan, Western Sydney, Shoalhaven, and Northern Rivers regions. ConnectEd Australia benefited 374 young people in 2012 – surpassing the year's target of 200 as well as the program's three-year goal of 600. (The project has reached 662 youth to date.) ConnectEd has been able to engage far more vulnerable in-school young people than expected through training courses and life skills programs, financial literacy, and work experience immersion.



- Working with disadvantaged youth from the Depok area of greater Jakarta, Indonesia – including street children, migrants, and children who have dropped out of school. To support these youth, ConnectEd has partnered with local NGO Yayasan Bina Insan Mandiri (YABIM). Since launching in May 2012, the program has seen 1,417 youth enroll in program activities. Of these participants, 1,124 have gained access to ICT, and 400 in-school youth and 1,017 out of school have been reached with scholarships, remedial coaching and tutorials.



## 2.9.2 The employee connection



In 2012, 922 Alcatel-Lucent employees volunteered 8,900 hours of their time to ConnectEd.

Alcatel-Lucent employees are essential implementers of and resources for ConnectEd, serving as role models and sharing expertise with students. Employees mentor individual students, assist in curriculum development and suggest how ICT can be used to improve the overall effectiveness and reach of the program. Various engagement modules – particular initiatives developed by a group of employees – have been assigned to each country as determined appropriate by World Education, its implementing partners and Alcatel-Lucent ConnectEd volunteers.



### Employee connection

Alcatel-Lucent Shanghai Bell (ASB) employees donate their CEO Excellence Award to ConnectEd schools in Shanghai

In 2012, Alcatel-Lucent Shanghai Bell (ASB) received the prestigious annual CEO Excellence Award. The team decided that the award money should be donated to our ConnectEd program in China. This grant will subsidize scholarships for meritorious students. In a fun-filled and colorful ceremony, the award was donated to two migrant schools who are part of the ConnectEd program. The team was very proud to donate this award, which was given in recognition of their contribution to the company.

[Read more](#)



# 2012

## SUSTAINABILITY REPORT A BUSINESS IMPERATIVE

### SUPPLY CHAIN

---

#### SUSTAINABILITY IS A REQUIREMENT

Alcatel-Lucent is fully committed to promoting sustainability throughout its supply chain and, in particular, among suppliers – the third parties who provide us with components, products, software, support or services.



# TABLE OF CONTENTS

<b>1</b>	<b>OUR COMPREHENSIVE SUPPLY CHAIN APPROACH .....</b>	<b>202</b>
<b>2</b>	<b>MANAGING OUR SUPPLY CHAIN .....</b>	<b>203</b>
2.1	Monitoring sustainability performance with supplier scorecards .....	203
2.2	Engaging with suppliers .....	204
2.3	Act local in the supply chain .....	204
<b>3</b>	<b>OUR REQUIREMENTS FOR SUPPLIERS AND SUBCONTRACTORS .....</b>	<b>205</b>
3.1	Adherence to the EICC Code of Conduct .....	205
3.2	Adherence to international standards .....	205
3.3	Products and services that support sustainability commitments .....	205
3.4	Strong environmental performance .....	206
3.5	Product traceability and conflict minerals .....	207
3.6	Supplier diversity .....	208
<b>4</b>	<b>ASSESSING SUPPLIER SUSTAINABILITY PERFORMANCE .....</b>	<b>209</b>
4.1	Supplier risk assessments .....	209
4.2	Rolling out EcoVadis sustainability ratings .....	209
4.3	Sustainability audits .....	211
<b>5</b>	<b>PERFORMANCE IMPROVEMENT ACTIONS .....</b>	<b>212</b>
5.1	Professional development in purchasing .....	213
5.2	Supplier improvement program .....	213
5.3	Supplier sustainability awareness and performance events .....	214
5.4	Supplier feedback on improvement plans .....	215
<b>6</b>	<b>COLLABORATIVE INITIATIVES .....</b>	<b>215</b>
6.1	Teaming with customers .....	215
6.2	Collaborating with industry .....	215
6.3	Supplier management practices .....	216
6.4	Collaborating with non-governmental organizations .....	216





## 1 OUR COMPREHENSIVE SUPPLY CHAIN APPROACH



### OUR COMMITMENT

We are committed to promoting sustainability throughout our supply chain and, in particular, among the third-party suppliers who provide us with components, products, software, support or services.



### 2013 PRIORITIES

- Continue toward our objective of having 80% of suppliers assessed as satisfactory by 2014 by further integrating sustainability into business considerations and supporting suppliers' sustainability efforts.
- Roll out our conflict minerals project to comply with regulations and meet stakeholders' expectations by 2014.

### Our Comprehensive Approach to Responsible Purchasing Stands on Three Pillars:



Communicate clear sustainability requirements to suppliers through contractual purchasing requirements and product or service specifications

Evaluate suppliers' sustainability performance through ratings and onsite audits

Push and support the improvement efforts of suppliers whose performance is not at the expected level

REQUIRE

ASSESS

IMPROVE

## 2 MANAGING OUR SUPPLY CHAIN

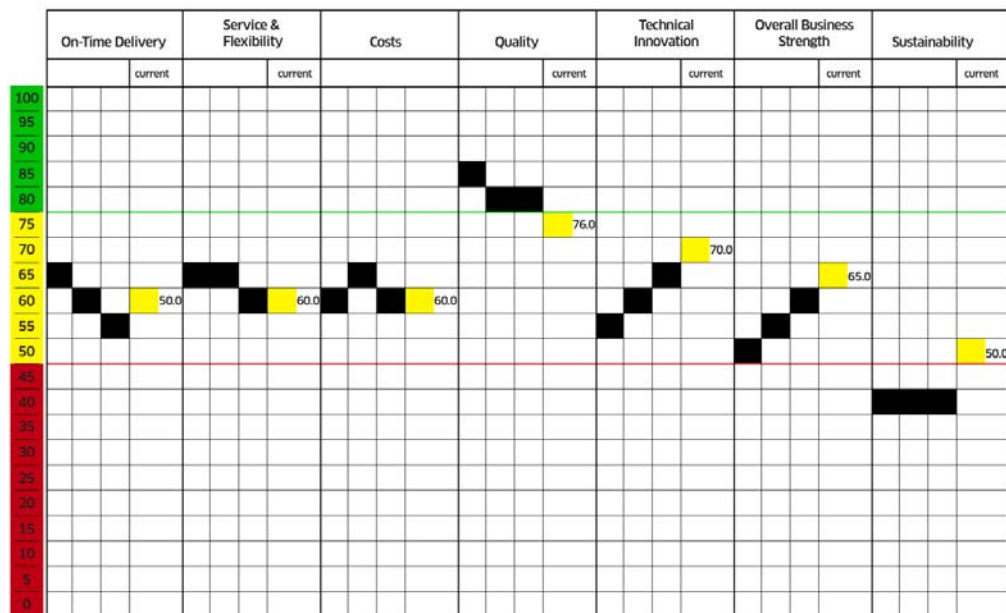
### 2.1 Monitoring sustainability performance with supplier scorecards

We bring a partnering mindset to supply chain management, working with suppliers to support their improvement and share best practices. Because maintaining an open dialogue is essential, we regularly engage suppliers in business reviews to discuss and manage their ongoing performance across a broad set of criteria.

We enhanced our supplier scorecard in 2012 to differentiate between supplier commodity areas, ensuring that we clearly communicate our requirements and priorities to suppliers and subcontractors. The enhancements allow us to produce specific customer project-level scorecards that differentiate performance at subcontractor work locations in addition to determining the overall performance of the subcontractor.

All scorecards cover eight common areas:

- On-time delivery
- Service
- Flexibility
- Costs
- Technical innovation
- Quality
- Overall business strength
- Sustainability performance



These scorecards are developed through periodic supplier performance reviews involving members of our purchasing community (such as commodity managers, technical experts and supplier quality managers) and other relevant evaluators (business divisions, end users and onsite project managers, for instance). They are shared during business reviews. Their easy-to-understand format allows for simple, effective communication of subjective comments and quantitative results as well as anonymous supplier-to-supplier comparisons and performance trending reports.

Sustainability scores are based on EcoVadis ratings, complemented in some instances by other parameters such as supplier diversity performance and/or onsite compliance to Alcatel-Lucent's Environment, Health and Safety (EHS) guidelines. In total, the sustainability component represents 10-20% of the total weighting (depending on the supplier commodity area).

[For more information](#)



## 2.2 Engaging with suppliers



70 innovation projects initiated with our suppliers since 2011.

In 2011, we identified strategic suppliers and started evolving traditional transactional relationships into more collaborative ones to develop new technologies or new supply chain models. The goal of our strategic supplier business alliances is to facilitate the development and sharing of both intellectual property and design capabilities for mutual benefit, and to create an environment that encourages innovation and sustainability. At the same time, these alliances allow our company and our suppliers to improve quality, flexibility, responsiveness and inventory management, among other things.

Since its inception, this approach has generated more than 70 innovation projects. We have also established closer relationships with 72 key suppliers who, in total, account for about 75% of the Company's spend on components for production — and have set up corporate general purchase agreements to strengthen our relationships with most of them. Over the course of 2012, we held four formal reviews with each of these 72 suppliers to discuss our relationship with them, their scorecard performance, and business opportunities.



### HIGHLIGHT

#### Business partnership with Finisar

In 2012, we undertook several projects with Finisar — a strategic supplier for optical communication components and subsystems — to develop energy-efficient solutions for our optical products and improve supply chain logistics by building a 'buffer stock' of semi-finished goods common to all our product divisions. These projects were managed by a steering committee of executives from both companies as well as R&D and product-management representatives.

Such joint projects are a 'win-win': Alcatel-Lucent benefits from faster time to market, with greater value in its optical products; Finisar gains access to new business areas and aligns its offerings with customers' roadmaps.

## 2.3 Act local in the supply chain

We have made it our policy at Alcatel-Lucent to manufacture products regionally in order to avoid the need for overseas shipments from our factories to our customers. Similarly, we intend to have regional suppliers for each manufacturing site to provide selected commodities: our sourcing strategy is to have at least one preferred supplier per region. This enhances local development while reducing our inventory requirements, costs and CO<sub>2</sub> emissions related to transportation. It also makes our supply chain more flexible. As maintaining regional suppliers is managed at the regional level with manufacturing subcontractors, we have no metric to measure progress in this area.

## 3 OUR REQUIREMENTS FOR SUPPLIERS AND SUBCONTRACTORS

### 3.1 Adherence to the EICC Code of Conduct

As a mandatory element of all agreements, Alcatel-Lucent requires suppliers to comply with clearly defined principles based on international and sectorial standards. Our key references are the United Nations Global Compact's 10 principles and the Electronics Industry Citizenship Coalition (EICC) Code of Conduct.

All suppliers who sign a business agreement with Alcatel-Lucent are required (through contractual templates) to commit to the EICC Code of Conduct and cascade its requirements throughout their own supply chains. In 2012, to maintain industry best practices, we migrated from EICC Code of Conduct Revision 3 to Revision 4, which features new sections on conflict minerals — a major focus for Alcatel-Lucent.

### 3.2 Adherence to international standards

Alcatel-Lucent encourages suppliers to meet certified international standards such as ISO 14001 for environment and OHSAS 18001 for health and safety. We track supplier compliance with these standards as part of our risk analysis and supplier assessment processes, and strongly encourage suppliers to implement or enhance their sustainability approaches based on them.



**2012  
ACHIEVEMENT**

In the first half of 2012, we completed our objective to have sustainability requirements identified for 70% of our own-use procurement sectors. This enabled us to deepen the knowledge and interest of commodity managers purchasing own-use products and services for sustainability.

### 3.3 Products and services that support sustainability commitments

In 2012, we developed specific sustainability requirements for several major types of commodities and successfully integrated them into a number of supplier bids. We will continue to enrich those sustainability elements as our purchasing requirements evolve, and will include a greater variety of products and services in keeping with our own commitments and stakeholder expectations.



**HIGHLIGHT**

Sustainability is increasingly becoming a consideration and a decision element in our supplier management. How these considerations integrate into purchasing processes varies according to the type of commodity purchased. Typically:

- Suppliers must have a satisfactory sustainability rating to become a preferred production supplier of Alcatel-Lucent.\*
- General or product/service-specific sustainability requirements are integrated into suppliers' bids and tenders and account for a portion of the total scoring and selection decision.
- Sustainability performance is one of the eight areas of the supplier scorecards we discuss in business reviews with suppliers (see section 2.1).

\* Preferred suppliers are those sources for a given purchasing family that we consider first for new projects. We have objectives to concentrate our spend on these suppliers. Preferred suppliers take priority for incorporation into new designs and must be used for purchase orders whenever possible (see section 4.2 on sustainability ratings).



## HIGHLIGHT



When it came time to replace old batteries in our Alcatel-Lucent labs in Bangalore, India, our buyer selected the vendor with the highest battery selling price but who presented the best environmental offer and a more compelling total cost of ownership. The supplier committed to recycle old batteries in an environmentally friendly way, offered a good price for buying them back, and promised to conduct battery 'health checks' during the warranty period.

**PRAKASH NAYAK,**  
Commodity Manager in Bangalore

### 3.4 Strong environmental performance

We make sure our suppliers and contractors take the necessary steps to protect the environment throughout the production of the goods and materials they deliver to us. We systematically monitor critical metrics and indicators of environmental impact for our manufacturing subcontractors, measuring aspects such as energy efficiency, materials usage, and efficient distribution and transport of materials. We expect major suppliers to report on emissions generated in support of Alcatel-Lucent activities so we can incorporate their information into calculations of our own Scope 3 emissions.

Environmental criteria are critical elements in the selection and management of suppliers. Recent supply chain initiatives have helped us improve the efficiency of ourselves and our suppliers while reducing our collective impact on the environment.

Transporting equipment around the world, we recognize emissions from our product logistics chain are significant. We are constantly seeking ways to improve the efficiency of our logistics operations, balancing cost with customer need. One critical area in which we have implemented a shift is our manufacturing strategy. By becoming more geographically decentralized and manufacturing products closer to our customers, we have the opportunity to use more efficient, less carbon-intensive ground transport.



## HIGHLIGHT

No matter where in the world we do business, ensuring third-party compliance with environment, health and safety (EHS) policies is a key focus for our company. In India, for example, all third-party contracts for customer installation projects include a copy of the Alcatel-Lucent EHS requirements and manual. More than 400 subcontractors were sent a letter in 2012 emphasizing our zero tolerance policy for EHS non-compliance, illustrating our commitment to the highest standards of project safety management.

Because having compliant partners is critical not only to our growth but also that of our suppliers, a 'Partner's Meet' was arranged in January 2012 to set expectations and review business perspectives with 48 subcontractors in Mumbai and Bangalore. We reviewed our ethics and EHS policies, and attendees completed a partner feedback questionnaire that included a dedicated section on their level of compliance with EHS policies and processes. We will use the results of this questionnaire to ensure continual improvement among suppliers with respect to EHS.

### 3.5 Product traceability and conflict minerals

---

Components and parts containing minerals such as tin, tantalum, tungsten and gold are commonly used in the manufacturing of electronics and telecommunications equipment. The exploitation and trade of such minerals originating in the eastern region of the Democratic Republic of the Congo and its neighboring countries is, in some instances, helping directly or indirectly finance or benefit armed groups – with serious social and environmental consequences. The minerals involved are called conflict minerals.

In the past few years, the ICT industry has demonstrated leadership through the Global e-Sustainability Initiative (GeSI) and the Electronic Industry Citizenship Coalition (EICC) in developing strategies and tools for improving the traceability of minerals used in the industry's supply chain – to ensure they do not originate in conflict areas.

In 2012, the first legal requirements related to conflict minerals were finalized in the U.S. Securities and Exchange Commission (SEC) guidelines on Section 1502 of the *Dodd-Frank Act*. Alcatel-Lucent falls within the scope of the *Dodd-Frank Act*.

To help improve the traceability of conflict minerals, last year we:

- Communicated a conflict minerals policy as the baseline of our due diligence approach
- Rolled out a conflict minerals traceability pilot program with select suppliers to raise their awareness of conflict minerals and gain experience with the EICC/GeSI data collection and validation process
- Emphasized conflict minerals in a supplier seminar in Murray Hill, New Jersey
- Provided input to the Organisation for Economic Co-operation and Development (OECD) as it develops a letter to suppliers on conflict minerals
- Integrated conflict minerals requirements into our supplier agreements per the EICC Code of Conduct Revision 4

[Read more about conflict minerals](#)

Legal requirements such as the EU RoHS Directive, the REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) Regulation, and Section 1502 of the *Dodd-Frank Act* are intensifying demand for material disclosure. As part of our commitment to integrate sustainability deeper within our supply chain, we include sustainability criteria in our contract requirements and implement specific data collection processes when necessary.

[Read more  
about GeSI](#)

[Read more  
about EICC](#)

[Read more about  
our responsible  
purchasing policies](#)

## 3.6 Supplier diversity

Our customers want a more diverse supply chain and have high expectations – and in many cases, specific requirements – for performance in this area. The Alcatel-Lucent Supplier Diversity Program broadens our business relationships across North America and provides bidding opportunities for a wide range of suppliers, driving inclusion throughout our supply chain. Complying with U.S. legislation such as the *Small Business Act*, *Public Law 95-507*, and the *Federal Acquisition Regulations*, our Supplier Diversity Program has been recognized as best in class by the North American telecom industry.



### KEY FIGURES

We currently have 230 active diversity suppliers, and more than 400 diversity suppliers in our database.

- In 2011, 17.6% of our North American region spend was with minority- and women-owned businesses.
- In 2012, that increased to 20.9% – double the industry average for diversity inclusion.

Part of this increase came from expanding our diversity initiatives beyond just purchasing goods and services to include the outsourcing of internal functions to diversity suppliers.

We actively engage with regional and national diversity councils in the U.S. and Canada, leveraging their resources to locate suppliers in specific areas and to network at events and conferences.



### HIGHLIGHT

Diversity inclusion is important both in its own right and because 85% of our North America region revenue has hard requirements tied to diversity inclusion. We report supplier diversity performance to more than 14 customers on a quarterly and annual basis. In 2012 we achieved the best results ever towards meeting customer goals. For two of the four quarters we exceeded all customer goals.

In 2012, our Supplier Diversity Program received numerous awards, including:

- Top Corporation Award (Women Business Enterprise National Council)
- Top 50 Corporate Supplier Diversity Programs for Hispanic Suppliers (Olive Tree Publishing)
- Honorable Mention: Best 10 Corporations (National Veteran-Owned Business Association)
- Recognition at the National Minority Supplier Development Council's annual awards gala



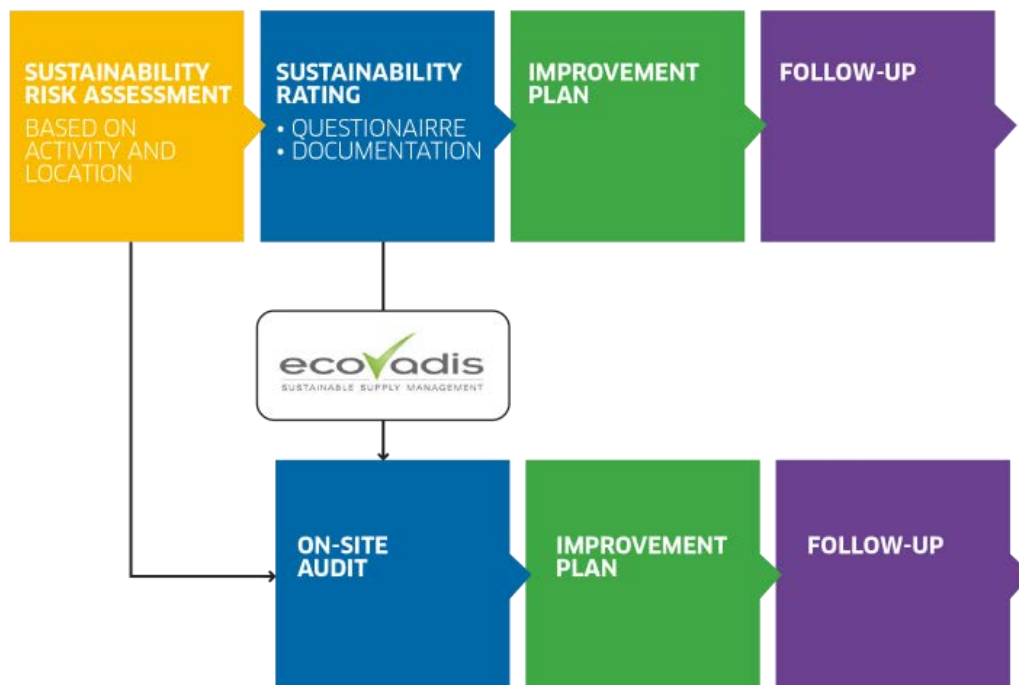
Alcatel-Lucent was recognized at the 2012 National Minority Supplier Development Council awards gala.

From L to R: Mark Artigues, Head of the Alcatel-Lucent Supplier Diversity Program; Nancy Hahn, Alcatel-Lucent VP Americas Planning/Supplier Diversity; Lisa Carlee, Alcatel-Lucent Americas Procurement & Design to Cost; Tomas Wiemer, Alcatel-Lucent Americas Procurement & Design to Cost; Nick De Tura, VP Americas Supply Chain.

## 4 ASSESSING SUPPLIER SUSTAINABILITY PERFORMANCE

Our fully integrated assessment approach for evaluating suppliers' ethical, social and environmental practices includes risk analyses, sustainability management systems ratings and onsite sustainability audits.

### Sustainability Assessment Process



#### 4.1 Supplier risk assessments

We perform risk assessments when evaluating new suppliers. We also reassess the risk levels of our major suppliers on an annual basis. These assessments measure the level of risk according to the supplier's type of activity, location and other factors. If the overall risk level is excessive, either the supplier may be rejected or actions such as a formal sustainability rating process may be taken to ensure the supplier's practices meet our requirements.

#### 4.2 Rolling out EcoVadis sustainability ratings

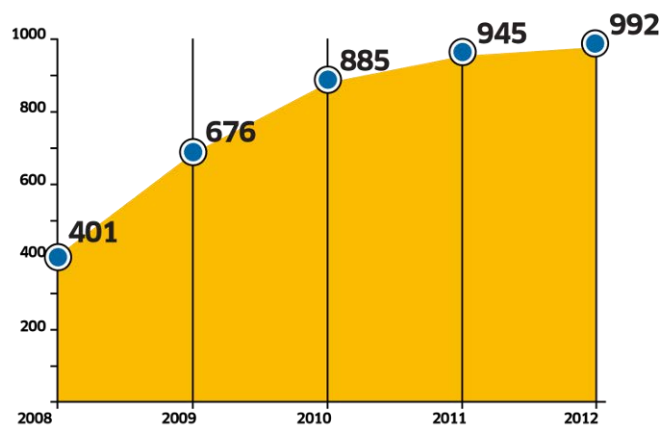


Suppliers' assessments are performed by EcoVadis, a company specializing in sustainable supply management solutions. Based on internationally recognized standards such as the Global Reporting Initiative and the UN Global Compact, the EcoVadis rating system focuses on suppliers' social, ethical, environmental and health and safety practices, as well as their management of their own supply chains. Ratings are determined by EcoVadis experts who combine supplier questionnaire responses, supporting documentation and third-party information and risk factors mapped according to industrial sector and country. EcoVadis ratings give Alcatel-Lucent a clear, external, objective point of reference. Suppliers can decide to share their assessment results with any EcoVadis platform member and thereby capitalize on their sustainability rating.

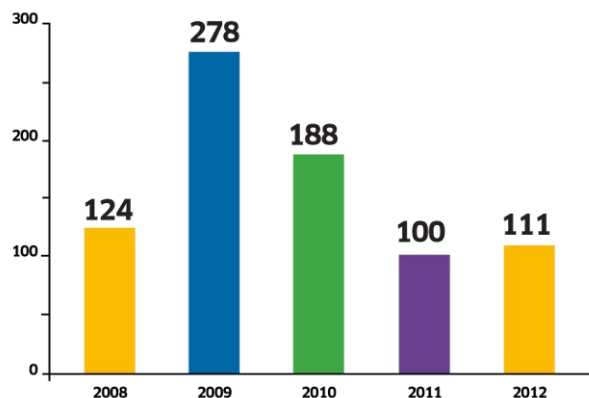
Our main contractors are covered by assessments: The sustainability practices of 94% of our key and product preferred suppliers were assessed by the end of 2012. [Q](#)

We will continue to monitor the sustainability ratings of key and preferred suppliers – and will take actions to continuously improve the spend coverage of assessed suppliers. Because our suppliers' portfolios must adapt to changes in our business, and because strategic alliances are difficult to predict, it would be inappropriate to set quantified targets on these areas.

Total Number of Suppliers Assessed On Sustainability



Number of Ecovadis Sustainability Assessments Performed



Our new supplier assessment needs were lower in 2012 than in 2011 as a result of concentrating our business on existing and preferred suppliers. Last year our main focus was to reassess suppliers who had not been assessed for a long time.

[Read more about EcoVadis](#)



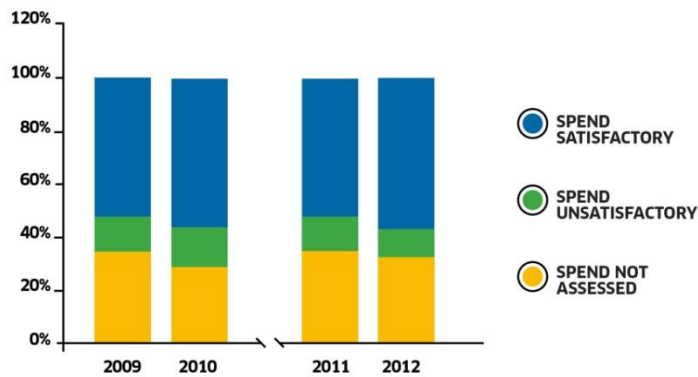
#### HIGHLIGHT

In 2012, the percentage of spend assessed on sustainability was 67% versus 65% in 2011. The percentage of key and preferred suppliers assessed was 94%.

Alcatel-Lucent assesses its suppliers against 21 GRI criteria, across several sustainability areas: suppliers' social, freedom of association, collective bargaining, human rights, child & forced labor, ethical, environmental and health and safety practices, as well as their management of their own supply chains. The sustainability practices of 94% of our key and product preferred suppliers were assessed by the end of 2012.



## Suppliers Sustainability Assessment: Spend Coverage Evolution



### 4.3 Sustainability audits

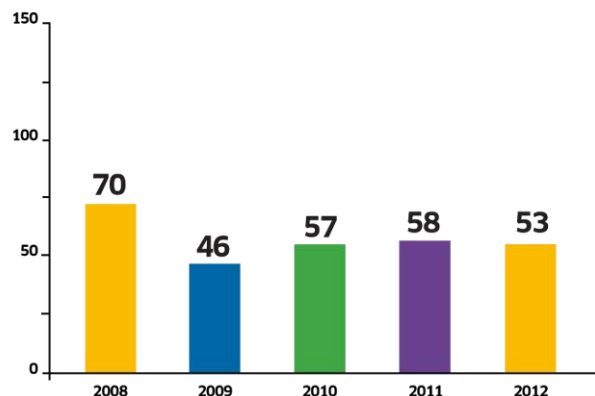
We conduct two types of audits of our suppliers: quality audits (which include sustainability criteria) and more comprehensive sustainability-dedicated audits. Onsite sustainability audits are typically conducted for suppliers having an unsatisfactory EcoVadis rating and with a high sustainability risk profile. Quality audits are a supplier selection element and are performed by our Supplier Quality team.

Since 2011, our supplier sustainability audits have been performed by SGS, the world's leading inspection, verification, testing and certification company. The Alcatel-Lucent Sustainability Purchasing team is responsible for systematic follow-up on all audit findings, working directly with suppliers to achieve acceptable results. This team is supported by internal experts (such as those with compliance or EHS expertise) who may be asked to comment and make suggestions on corrective actions proposed by the supplier.

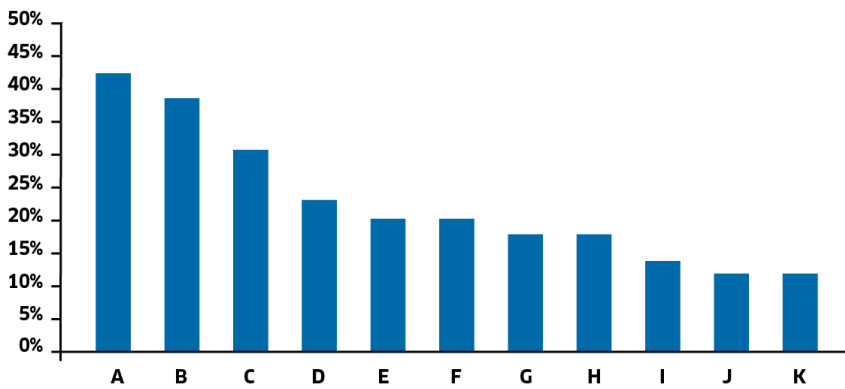


In 2012, 53 quality and sustainability audits were conducted with suppliers in Latin America, North America, Asia (including China) and Eastern Europe. 69% of these were audits of suppliers providing products, while the remaining 31% were of suppliers of services.

Number of Quality Audits (including Sustainability)



## Most Typical Sustainability Findings During Quality Audits



Weakness Identified during audit	(Occurrence %)
A Availability / use of Personal Protective Equipment	44.23%
B Social policy does not cover all the EICC code of conduct elements	38.46%
C Health and safety procedures / instructions	30.77%
D EHS legislation tracking process	23.08%
E Waste management	21.15%
F Compliance with EHS external requirements	21.15%
G Training of supervisors on social rules	19.23%
H Information on disciplinary measures	19.23%
I Accidents recording and investigation	15.38%
J Ethical trading information	13.46%
K Environmental performance tracking	13.46%

[Read more](#)

## 5 PERFORMANCE IMPROVEMENT ACTIONS




### 2012 ACHIEVEMENT

In 2012, we met our target of having 70% of active suppliers rank satisfactory or higher in their sustainability performance. A considerable achievement given that we performed 110 new assessments or reassessments. This strong result is due to:

- Integrating sustainability performance criteria into our business relationships
- Enhancing supplier awareness of sustainability
- Serving as an advisor to suppliers by conducting tailored discussions with them on sustainability improvements
- Developing internal and collaborative tools to support supplier acquisition of sustainability expertise

We require suppliers with unsatisfactory EcoVadis ratings or audit results to draft and implement remedial plans addressing the identified weaknesses. To support them, we provide recommendations and determine if the overall improvement plan is sufficient.

Our ‘satisfactory level’ definition is demanding: in 2012, 60% of the companies assessed by EcoVadis were unsatisfactory following Alcatel-Lucent requirements.

Both high spend and high risk suppliers are covered by assessments and pushed to improve: 70% of active suppliers assessed on sustainability by EcoVadis were rated as “satisfactory” or above by the end of 2012 versus 60% by the end of 2011.  Active suppliers are key, preferred and other active suppliers who may require assessments because of their risk level.

We have determined the most effective way to develop sustainability performance is to help strengthen our suppliers' sustainability management systems (and not simply seek compliance), as this addresses root causes of non-compliance and sets the ground for further improvement. The EICC Code of Conduct highlights the key role of management systems in sustainability, while the EcoVadis methodology assesses these management systems and identifies their weaknesses (which, when corrected, yield short- and long-term improvements).

## 5.1 Professional development in purchasing

---

In 2012, we provided training on responsible purchasing for 78% of employees in our Purchasing group. Blending face-to-face training and e-learning, these sessions delivered information on the latest updates to our purchasing processes.

We also delivered training to internal buyers of network installation services, which represent a major Environment, Health and Safety (EHS) risk area. These sessions raised awareness of risks and available processes and tools to mitigate them. In 2012 we targeted buyers in Asia-Pacific and Latin America; in 2013 we will extend the training to our Europe, Middle East and Africa region.

## 5.2 Supplier improvement program

---

If a supplier receives an unsatisfactory rating through the EcoVadis assessment process, we seek to implement and manage an improvement plan. The process is as follows:

- Kickoff meeting with buyer and supplier to explain the process and our expectations.
- The supplier initiates the improvement plan through the EcoVadis web platform.
- The Alcatel-Lucent Sustainable Purchasing team provides the supplier with recommendations on how to address identified weaknesses.
- The supplier takes corrective actions and sends supporting documentation to Alcatel-Lucent.
- Our Sustainable Purchasing team reviews the documents to determine if the corrective action is satisfactory or if new recommendations need to be provided.
- Our Sustainable Purchasing team follows up with the supplier and evaluates the quality of its improvement plan; once that is done, we elevate the supplier to a satisfactory rating if overall progress meets our expectations (otherwise, the supplier is recommended to be reassessed and to keep working on weaknesses that have not yet been addressed).

### 5.2.1 Developing innovative tools

To help suppliers improve their sustainability ratings, Alcatel-Lucent and EcoVadis jointly developed a series of sustainability webinars in late 2012 that:

- Provide information about the EcoVadis assessment methodology
- Give suppliers an overview of our sustainability expectations
- Maximize supplier readiness by answering their questions before they are assessed

We added a new element to our sustainability development toolkit: country-specific sustainability fact sheets for suppliers working on improvement plans. These describe particular sustainability issues; identify drivers for action, standards and best practices (with links to appropriate websites); provide case studies; and give recommendations for improvement. Last year's fact sheets covered health, safety and labor issues such as freedom of association, career management and training in the U.S.

### 5.2.2 Ensuring ethical behavior with suppliers

In 2012, Alcatel-Lucent opened the possibility for all suppliers and stakeholders to access its ethics hotline in order to report any suspicion of corruption.

## 5.3 Supplier sustainability awareness and performance events

We organize free events for suppliers – tailored regionally and according to supplier sustainability performance – to make sure we support their efforts appropriately.

### 5.3.1 Supplier sustainability workshops in China

In May 2012 we hosted a workshop with 16 suppliers in China – building on two previous workshops held in Shanghai in 2011. The purpose was to promote sustainability awareness among suppliers with unsatisfactory EcoVadis ratings and help with their sustainability improvement plans. Four key topics were covered by Alcatel-Lucent experts: environment, labor practices, ethics and supplier management. Ms. Shen Sunan from the Institute of Public and Environmental Affairs (IPE) gave an introduction on pollution in China, marking IPE's second involvement in an Alcatel-Lucent sustainability workshop.



Because sustainability best practices are not unique to the ICT sector, we encourage suppliers to participate in cross-industry sustainability workshops and training sessions. With EcoVadis and four other companies, we piloted such a workshop in Shanghai in August 2012, drawing approximately 40 companies from various sectors, including nine Alcatel-Lucent suppliers. In addition to providing information, recommendations and enabling suppliers to work on practical case studies, we exchanged best practices in supplier sustainability management with peers in different industries.



### 5.3.2 Supplier seminar in the United States

In July 2012, Alcatel-Lucent conducted a sustainability seminar for its U.S. suppliers. Highlights included:

- Presentation of the GreenTouch™ initiative as an example of our commitment to sustainability
- Presentation of our Sustainable Purchasing Program, with a focus on supplier diversity and conflict minerals
- Presentation on Verizon, an Alcatel-Lucent customer, and its sustainability expectations for its supply chain
- Perspective from Business for Social Responsibility (BSR) on the value of a sustainable supply chain
- Information on issues related to sustainability management for operations in China
- Overview of common sustainability weaknesses and our expectations for U.S. suppliers

## 5.4 Supplier feedback on improvement plans

---

### SHENGJIU, A CHINESE SUPPLIER OF MECHANICAL PARTS

*“The Alcatel-Lucent sustainability rating and improvement plan allowed us to understand our company weaknesses related to sustainability and how to implement methods for internal sustainability auditing. We learned how to improve employee working conditions and provide a healthy and safe workplace. As well, we increased our employee satisfaction, with survey scores increasing from 82% in 2011 to 93% in 2012. Employees felt the company cared more for them.”*

### SILTA, AN ITALIAN SUPPLIER OF LABELS

*“Alcatel-Lucent’s support provided us with objective guidance and showed us there is a tailor-made method for pursuing a sustainability approach according to each company’s characteristics, not just one that works for all. We learned how to manage, in a more detailed and punctual manner on a monthly basis, our company’s social and environmental indicators. We wanted to be officially recognized as a responsible company, so have implemented the ISO 14001:2004 standard in a short time thanks to the Alcatel-Lucent sustainability improvement plan.”*

### CINTEL: A CHINESE SOFTWARE SUPPLIER

*“Due to Alcatel-Lucent, our company was introduced to sustainability. Through training and an improvement plan, we have established relevant policies and attached more importance to sustainability. We also identified potential sustainability risks and progressively built up rules and processes to minimize them. Especially in supply chain management, we set up requirements for our existing suppliers and added sustainability audits for new suppliers. We have seen a visible return in terms of productivity, market share and new customer acquisition.”*

### ACE-AXIS, A EUROPEAN RADIO FREQUENCY MODULES SUPPLIER:

*“Thanks to Alcatel-Lucent, we learned how sustainability works and about the required items for a socially responsible company. In addition, we gained knowledge of many specific sustainability items – for example, how to assess CO<sub>2</sub> emissions.”*

## 6 COLLABORATIVE INITIATIVES

### 6.1 Teaming with customers

---

Founded by France Telecom, Deutsche Telekom and Telecom Italia in 2010, the Joint Audit Cooperation (JAC) is an association of telecom operators seeking to verify, assess and develop the implementation of Corporate Social Responsibility (CSR) across the manufacturing centers of multinational ICT suppliers.

In January 2012, JAC hosted its inaugural forum, *Cooperation beyond competition: Let’s CSR together*, which was attended by more than 100 suppliers from various industries. During a roundtable discussion on creating a transparent supply chain, our Sustainable Procurement Manager shared with clients, peers and other stakeholders our sustainability approach and discussed difficulties related to sustainability in China.

### 6.2 Collaborating with industry

---

Alcatel-Lucent is an active participant in the GeSI Supply Chain Working Group, which is developing responses to such sustainability issues as conflict minerals and supply chain education. We also worked closely with EcoVadis and others in the industry to improve existing sustainability tools and develop new ones – for example, the first supplier sustainability training workshop organized by EcoVadis.



[For more information](#)

## 6.3 Supplier management practices

---

Alcatel-Lucent followed through on its commitment to the [French Charter of inter-company relations](#) by volunteering to participate in a pilot program aiming at labeling companies according to their commitment to the charter.



[Read more \(in French\)](#)

The first phase of this program involved an assessment of voluntary companies on their practices versus the charter commitments to establish a baseline. Some highlights of our October 2012 assessment included recognition of how sustainability considerations are integrated into our purchasing processes, our use of the mediation process in supplier relationships and the equal treatment we give all our suppliers. Further to that first phase, we obtained the charter label.

## 6.4 Collaborating with non-governmental organizations

---

Alcatel-Lucent continued its ongoing cooperation with non-governmental organizations like IPE in 2012. We use the IPE environmental database as a supplier monitoring tool, and invited IPE to present its views on environmental issues at our April 2012 supplier workshop in Shanghai. Similarly, we invited BSR to present its views on the value of a sustainable supply chain at our supplier sustainability seminar held in July 2012 in Murray Hill, New Jersey.



[Read more about IPE](#)

| [Read more about BSR](#)

# 2012

## SUSTAINABILITY REPORT

### A BUSINESS IMPERATIVE

## GLOBAL REPORTING INITIATIVE

---

### DELIVERING ON TRANSPARENCY

For the third year, Alcatel-Lucent prepared its sustainability reporting according to the G3 GRI sustainability reporting guidelines. For the second year in a row, our A+ level reporting assessment has been checked and confirmed by the GRI organization.





## Global Reporting Initiative (GRI)

### GRI Application Level Check A+



#### 2012-2013 ACHIEVEMENTS

In 2012, for the third consecutive year, Alcatel-Lucent prepared its sustainability report according to the G3 GRI sustainability reporting guidelines — and received, for the second year in a row, a GRI Application Level Check Statement A+. Our previously submitted report also received A+ certification.

The Global Reporting Initiative (GRI) is a non-profit organization that works towards a sustainable global economy by providing organizational reporting guidance. Its comprehensive sustainability reporting framework is used by companies and organizations around the world. GRI is committed to continuously improving and facilitating the application of its framework to bring disclosure of environmental, social and governance performance into the mainstream.

For the third year, Alcatel-Lucent's sustainability report has been prepared according to GRI sustainability reporting (G3) guidelines. We have also applied the 'Guidance on Defining Report Content' and associated Principles.

Aligned with our continued transparency and leadership principles, for 2012 we have maintained the GRI Application level check A+, a measure of the extent to which we have applied GRI guidelines in our reporting.

The '+' sign indicates that our report has been externally assured, subject to an independent review by Ernst & Young. The full scope of that review and its conclusions can be found in the Independent Verification Statement.

#### ERNST & YOUNG STATEMENT

We reviewed the Global Reporting Initiative (GRI) content index communicated to the GRI and verified that:

- the Index answered the required number and set of standard disclosures for the self-declared A+ Application Level;
- the way in which the reporting had been addressed was in-line with the self-declared A+ Application Level.

Based on the procedures performed, nothing came to our attention that causes us to believe that conditions set out in the GRI G3 guidelines to achieve A+ self-declaration rating are not fully met.

## Statement GRI Application Level Check

GRI hereby states that **Alcatel-Lucent** has presented its report “2012 Sustainability Report” to GRI’s Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 17 April 2013



Nelmara Arbex  
Deputy Chief Executive  
Global Reporting Initiative



The “+” has been added to this Application Level because Alcatel-Lucent has submitted (part of) this report for external assurance. GRI accepts the reporter’s own criteria for choosing the relevant assurance

*The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world’s most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. [www.globalreporting.org](http://www.globalreporting.org)*

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 10 April 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

## GRI INDEX

### Standard Disclosures Part I: Profile Disclosures

#### 1. Strategy and Analysis

Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for omission/Explanation	Sections' starting pages
1.1	Statement from the most senior decision-maker of the organization.	Fully	SR:-MESSAGE of ALCATEL-LUCENT CEO: ,/ Sustainability Management: 4.3-United Nations Global Compact,4.4-World Economic Forum,3-2012 HALL OF FAME,/ 2012 Reporting: 2-2012 ALCATEL-LUCENT DASHBOARD: ACHIEVEMENTS, PROGRESS AND COMMITMENTS		SR:2,34,36,17,48
1.2	Description of key impacts, risks, and opportunities.	Fully	SR:Sustainability Management: 1.4-Materiality assessment, 1.5.6-Environmental risks		SR:8,11

#### 2. Organizational Profile

Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for omission/Explanation	Sections' starting pages
2.1	Name of the organization.	Fully	SR>About Us: Company Overview		<a href="#">Weblink</a>
2.2	Primary brands, products, and/or services.	Fully	SR>About Us: Company Overview,/ 20F: 5-Description of the Group's Activities		<a href="#">Weblink</a> 20F:29
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully	SR>About Us: Company Overview,/ 20F: 4-Information About the Group		<a href="#">Weblink</a> 20F:17
2.4	Location of organization's headquarters.	Fully	SR>About Us: Company Overview		<a href="#">Weblink</a>
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully	SR>About Us: Company Overview		<a href="#">Weblink</a>
2.6	Nature of ownership and legal form.	Fully	20F: 10-Stock Exchange and Shareholding		20F:163
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	SR>About Us: Company Overview,/ 20F: 5-Description of the Group's Activities		<a href="#">Weblink</a> 20F:29
2.8	Scale of the reporting organization.	Fully	20F section 12-CONSOLIDATED FINANCIAL STATEMENTS OF ALCATEL-LUCENT AND ITS SUBSIDIARIES		20F:186
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	20F: 5.1-Business Organization		20F:29
2.10	Awards received in the reporting period.	Fully	SR:Sustainability Management: 3-2012 HALL OF FAME,/ About Us: Bell Labs		<a href="#">Weblink</a>

3. Report Parameters					
Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for omission/ Explanation	Sections' starting pages
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY		SR:46
3.2	Date of most recent previous report (if any).	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY		SR:46
3.3	Reporting cycle (annual, biennial, etc.)	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY		SR:46
3.4	Contact point for questions regarding the report or its contents.	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY		SR:46
3.5	Process for defining report content.	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY / Sustainability Management: 1-OUR APPROACH TO SUSTAINABILITY		SR:46,5
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY / Sustainability Management: 1-OUR APPROACH TO SUSTAINABILITY		SR:46 20F:17
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY		SR:46
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Fully	20F: 4-Information About the Group		20F:17
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Fully	SR:Environment: 1.4-Adopting carbon footprint assessment standards for ICT products,/ 2012 Reporting: 3-ENVIRONMENTAL INDICATORS,4-SOCIAL INDICATORS,		SR:97,52,57
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g.,mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Fully	No restatements		
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY,/ -MESSAGE of ALCATEL-LUCENT CEO: ,/ Sustainability Management: 1.1-The Alcatel-Lucent Sustainability vision		SR:46,2,5
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully	This Table		
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	SR: Verification Statement		SR:218,237

4. Governance, Commitments, and Engagement					
Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for omission/ Explanation	Sections' starting pages
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully	SR:Corporate Governance: 1-BOARD OF DIRECTORS GOVERNANCE SYSTEM,2.2-Board's information and works,/ Sustainability Management: 2-MANAGING OUR SUSTAINABILITY,/ 20F: 7.1-Chairman's Corporate Governance report		SR:64,67,15 20F:77
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully	SR:Corporate Governance: 1.1-Separation of functions,/ Sustainability Management: 2-MANAGING OUR SUSTAINABILITY		SR:64,15
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Fully	SR:Corporate Governance: 1.3-Selection criteria and independence of the Directors,1.2-Staggered Board - Membership and diversity,1.1-Separation of functions,/ 20F: 7.1-Chairman's Corporate Governance report		SR:66,65,64 20F:77
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully	SR:Our People: 5.1-Communication at Alcatel-Lucent,5.3-Discussions with unions,/ Sustainability Management: 4.1-Dialogue and action,/ 2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY		SR:142,145,26,46
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Fully	SR:Corporate Governance: 3-SENIOR MANAGEMENT REMUNERATION,4-SUSTAINABILITY,/ 20F: 7.1.2-Management Bodies of the Company,7.2-Compensation and Long-term incentives		SR:68,70 20F:79,112
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Fully	SR:Corporate Governance: 1.4-Ethics and absence of conflicts of interest		SR:66
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	Fully	SR:Corporate Governance: 1.3-Selection criteria and independence of the Directors,1.4-Ethics and absence of conflicts of interest		SR:66
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Fully	SR:Environment: 1.1-Our approach to environmental sustainability,4.3-Encouraging eco-awareness among our people,/ Ethics, Compliance and Business Conduct: 1-OUR COMMITMENT TO ETHICS AND COMPLIANCE,9.2-Internal communications in 2012,2.2-The role of the Board of Directors,/ Corporate Governance: 1.3-Selection criteria and independence of the Directors,/ Sustainability Management: 1.2-Priorities and values		SR:94,133,77,90, 81,66,5
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Fully	SR:Ethics, Compliance and Business Conduct: 2-OUR COMPLIANCE GOVERNANCE STRUCTURE,/ Corporate Governance: 1.1-Separation of functions,1.2-Staggered Board - Membership and diversity,1.4-Ethics and absence of conflicts of interest,1.5-Board duties,2-BOARD EFFECTIVENESS AND TRANSPARENCY,4-SUSTAINABILITY,/ Sustainability Management: 2.1-Alcatel-Lucent Sustainability Council,1-OUR APPROACH TO SUSTAINABILITY,2-MANAGING OUR SUSTAINABILITY		SR:80,64,65,66,67, 70,15,5
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Fully	SR:Sustainability Management: 2-MANAGING OUR SUSTAINABILITY,/ 20F: 7.1.3-Powers and Activity of the board of Directors		SR:15 20F:98

4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Fully	SR:Corporate Governance: 7-OUR APPROACH TO RISK AND CRISIS MANAGEMENT		SR:72
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Fully	SR:2012 Reporting: 1-HOW WE REPORT ON SUSTAINABILITY,/ Corporate Governance: -CORPORATE GOVERNANCE,/ Sustainability Management: 4.3- United Nations Global Compact, 4.4- World Economic Forum		SR:46,64,34,36
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Fully	SR:Ethics, Compliance and Business Conduct: 11- INTERNATIONAL INITIATIVES,/ Environment: 1.2-Engaging for success: Stakeholder activities,/ About Us: Bell Labs		SR:91,95 <a href="#">Weblink</a>
4.14	List of stakeholder groups engaged by the organization.	Fully	SR:Sustainability Management: 4.1- Dialogue and action		SR:26
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	SR:Sustainability Management: 4-OUR ENGAGEMENT WITH STAKEHOLDERS		SR:26
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully	SR:Environment: 1.2-Engaging for success: Stakeholder activities,2.2.4-GreenTouch™ consortium,4.3-Encouraging eco-awareness among our people,/ Sustainability Management: 4-OUR ENGAGEMENT WITH STAKEHOLDERS		SR:95,104,133,26
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Fully	SR:Sustainability Management: 4-OUR ENGAGEMENT WITH STAKEHOLDERS		SR:26

Standard Disclosures Part II: Disclosures on Management Approach (Dmas)					
G3 DMA	Description	Reported	Cross-reference/Direct answer	Reason for omission/Explanation	Sections' starting pages
DMA EC	Disclosure on Management Approach EC				
Aspects	Economic performance	Fully	20F: 6-Operating and Financial Review and Prospects		20F:41
	Market presence	Fully	20F: 5-Description Of The Group's Activities		20F:29
	Indirect economic impacts	Fully	SR:Society: 1-OUR APPROACH TO DIGITAL INCLUSION,2-HOW WE GIVE		SR:173,185
DMA EN	Disclosure on Management Approach EN				
Aspects	Materials	Fully	SR:Environment: 2.3.2-Managing materials,/ Supply Chain: 3.5-Product traceability and conflict minerals	Not material/ See Environment 4.2.4- Protecting biodiversity	SR:109,207
	Energy	Fully	SR:Environment: 2.3.7-Increasing the energy efficiency of products in use,/ 2012 Reporting: 3-ENVIRONMENTAL INDICATORS		SR:112,52
	Water	Fully	SR:Environment: 4.2.6-Conserving water		SR:132
	Biodiversity	Not	Biodiversity is immaterial to Alcatel-Lucent however we take action to protect the limited biodiversity in the areas we operate. See Environment 4.2.4- Protecting biodiversity		SR:131
	Emissions, effluents and waste	Fully	SR:Environment: 4-REDUCING OUR CARBON FOOTPRINT,4.2.7-Handling spills,2.3.8 Takeback, remanufacturing and recycling		SR:121,132,115
	Products and services	Fully	SR:Environment: 2.3-Reducing the impact of our products and solutions,2.3.6-Packaging and distribution		SR:108,112
	Compliance	Fully	SR:Sustainability Management: 1.5.4-EHS Compliance Audit Program		SR:10
	Transport	Fully	SR:Environment: 2.3.6-Packaging and distribution		SR:112
	Overall	Fully	SR:Environment: 1-OUR ENVIRONMENTAL SUSTAINABILITY STRATEGY		SR:94
DMA LA	Disclosure on Management Approach LA				
Aspects	Employment	Fully	SR:Our People: 1-FOCUSED ON OUR PEOPLE,8-DEVELOPING OUR WORKFORCE,9-TALENT ATTRACTION AND RETENTION,10-TALENT DEVELOPMENT		SR:138,157,160,162
	Labor/management relations	Fully	SR:Our People: 5-FOSTERING INTERNAL DIALOGUE		SR:142
	Occupational health and safety	Fully	SR:Our People: 6-EMPLOYEE HEALTH AND SAFETY,/ Sustainability Management: 1.5-Environment, health and safety management		SR:146,9
	Training and education	Fully	SR:Our People: 8-DEVELOPING OUR WORKFORCE		SR:157
	Diversity and equal opportunity	Fully	SR:Our People: 7-DIVERSITY AND EQUAL OPPORTUNITY		SR:148



DMA HR	Disclosure on Management Approach HR				
Aspects	Investment and procurement practices	Fully	SR:Supply Chain: 1-OUR COMPREHENSIVE SUPPLY CHAIN APPROACH,2-MANAGING OUR SUPPLY CHAIN		SR:202,203
	Non-discrimination	Fully	SR:Our People: 12-GLOBAL HUMAN RIGHTS POLICY		SR:169
	Freedom of association and collective bargaining	Fully	SR:Our People: 12-GLOBAL HUMAN RIGHTS POLICY		SR:169
	Child labor	Fully	SR:Our People: 12-GLOBAL HUMAN RIGHTS POLICY		SR:169
	Forced and compulsory labor	Fully	SR:Our People: 12-GLOBAL HUMAN RIGHTS POLICY		SR:169
	Security practices	Fully	SR:Our People: 12-GLOBAL HUMAN RIGHTS POLICY		SR:169
	Indigenous rights	Fully	SR:Our People: 12-GLOBAL HUMAN RIGHTS POLICY		SR:169
DMA SO	Disclosure on Management Approach SO				
Aspects	Community	Fully	SR:Society: 1.3-Innovation for communities - our research,2-HOW WE GIVE		SR:180,185
	Corruption	Fully	SR:Ethics, Compliance and Business Conduct: 1.1-Communicating ethics and compliance,1.2-Zero tolerance policy		SR:78
	Public policy	Fully	SR: Sustainability Management: 4-OUR ENGAGEMENT WITH STAKEHOLDERS		SR:26
	Anti-competitive behavior	Fully	20F: 6.10-Legal Matters		20F:73
	Compliance	Fully	SR:Ethics, Compliance and Business Conduct: 1.1-Communicating ethics and compliance,1.2-Zero tolerance policy		SR:78
DMA PR	Disclosure on Management Approach PR				
Aspects	Customer health and safety	Fully	SR:Sustainability Management: 1.5-Environment, health and safety management		SR:9
	Product and service labelling	Fully	SR:Environment: 2.1-Measuring impact from end to end		SR:99
	Marketing communications	Fully	SR:Sustainability Management: 1.6-Approach to marketing and communications		SR:13
	Customer privacy	Fully	SR:Ethics, Compliance and Business Conduct: 6-PRIVACY PROTECTION AND INFORMATION SECURITY		SR:86
	Compliance	Fully	SR:Ethics, Compliance and Business Conduct: 1-OUR COMMITMENT TO ETHICS AND COMPLIANCE,2.1-A global compliance governance organization,2.2-The role of the Board of Directors		SR:77,80,81

## Standard Disclosures Part III: Performance Indicators

Economic					
Performance Indicator	Description	Reported	Cross-reference/Direct answer	Reason for Omission/Explanation	Sections' starting pages
Economic performance					
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	Fully	20F: 12-Consolidated Financial Statements of Alcatel-Lucent and ITS subsidiaries		20F:181
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Fully	SR:Environment: 1.3-Governance and sustainability,2.2.1-Green innovation,/ Corporate Governance: 7.4-Contingency plans for environmental and sustainability-related risks,/ Sustainability Management: 1.2-Priorities and values		SR:96,102,74,5
EC3	Coverage of the organization's defined benefit plan obligations.	Fully	20F: 12-Consolidated Financial Statements of Alcatel-Lucent and ITS subsidiaries		20F:181
EC4	Significant financial assistance received from government.	Fully	20F:12-Consolidated Financial Statements of Alcatel-Lucent and ITS subsidiaries		20F:See note (1) at bottom of page 218
Market presence					
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Not	See explanation	Not available/ In 2012, we established local purchase requirements for manufacturing facilities. Reporting local spend is very complex given our operations magnitude and complexity. We will further investigate how to track local spend in 2013.  To be reported in 2013	
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Fully	SR:Our People: 9.3-Mobility		SR:161
Indirect economic impacts					
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Fully	SR:Society: 2.8-Corporate charitable contributions		SR:196
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	

Environmental					
Performance Indicator	Description	Reported	Cross-reference/Direct answer	Reason for Omission/Explanation	Sections' starting pages
Materials					
EN1	Materials used by weight or volume.	Fully	SR:Environment: 2.3.4-Product materials content,2.3.8 Takeback, remanufacturing and recycling		SR:110,115
EN2	Percentage of materials used that are recycled input materials.	Fully	SR:Environment: 2.3.4-Product materials content,2.3.8 Takeback, remanufacturing and recycling		SR:110,115
Energy					
EN3	Direct energy consumption by primary energy source.	Fully	SR:2012 Reporting: 3.3 Environmental and energy consumption indicators		SR:53
EN4	Indirect energy consumption by primary source.	Fully	SR:2012 Reporting: 3.3 Environmental and energy consumption indicators		SR:53
EN5	Energy saved due to conservation and efficiency improvements.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Water					
EN8	Total water withdrawal by source.	Fully	SR:2012 Reporting: 3-ENVIRONMENTAL INDICATORS		SR:52
EN9	Water sources significantly affected by withdrawal of water.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EN10	Percentage and total volume of water recycled and reused.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	

Biodiversity					
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Not	Immaterial to Alcatel Lucent. See environment section 4.2.4-Protecting Biodiversity	Not material/ See environment section 4.2.4	SR:131
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Not	Immaterial to Alcatel Lucent. See environment section 4.2.4-Protecting Biodiversity	Not material/ See environment section 4.2.4	SR:131
EN13	Habitats protected or restored.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Emissions, effluents and waste					
EN16	Total direct and indirect greenhouse gas emissions by weight.	Fully	SR:2012 Reporting: 3-ENVIRONMENTAL INDICATORS,/ Environment: 4.1-Tracking and reporting on carbon emissions		SR:52,121
EN17	Other relevant indirect greenhouse gas emissions by weight.	Fully	SR:2012 Reporting: 3-ENVIRONMENTAL INDICATORS,/ Environment: 4.1-Tracking and reporting on carbon emissions		SR:52,121
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Fully	SR:Environment: 4-REDUCING OUR CARBON FOOTPRINT		SR:121
EN19	Emissions of ozone-depleting substances by weight.	Fully	SR:2012 Reporting: 3-ENVIRONMENTAL INDICATORS		SR:52
EN20	NOx, SOx, and other significant air emissions by type and weight.	Not	Immaterial to Alcatel-Lucent. Please see tables in SR: 2012 Reporting section	Not material/ We have calculated NOx and SOx emissions and the result is 116 tonnes of CO2e. Against our baseline of over 1 million metric tonnes, this represents an insignificant amount of emissions and, therefore, we deemed it not material.	SR:52
EN21	Total water discharge by quality and destination.	Not	Water discharge is immaterial to Alcatel-Lucent See SR: Environment section 4.2.6-Conserving Water	Not material/ Water discharge is immaterial to Alcatel-Lucent See Environment section 4.2.6-Conserving Water	SR:132
EN22	Total weight of waste by type and disposal method.	Fully	SR:2013 Reporting: 3-ENVIRONMENTAL INDICATORS		SR:52
EN23	Total number and volume of significant spills.	Fully	SR:Environment: 4.2.7-Handling spills		SR:132

EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Products and services					
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Fully	SR:Environment: 2.3-Reducing the impact of our products and solutions,4.2.6-Conserving water,4.2.7-Handling spills,4.1-Tracking and reporting on carbon emissions		SR:108,132,121
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Fully	SR:Environment: 2.3.8 Takeback, remanufacturing and recycling		SR:115
Compliance					
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Fully	See explanation	For 2012, Alcatel-Lucent has not identified any non-compliance with environmental laws or regulations regarding the provision and use of its products and services and, as such, the company had no fines (significant or otherwise)	
Transport					
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Overall					
EN30	Total environmental protection expenditures and investments by type.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	

Social: Labor Practices and Decent Work					
Performance Indicator	Description	Reported	Cross-reference/Direct answer	Reason for Omission/Explanation	Sections' starting pages
Employment					
LA1	Total workforce by employment type, employment contract, and region.	Fully	SR:Our People: 4-OUR EMPLOYEES		SR:140
LA2	Total number and rate of employee turnover by age group, gender, and region.	Partially	See explanation	Proprietary information/ Total headcount leaving the company on an annual basis is provided in Our People chapter, section 4-Our Employees, Attrition. The split by Gender and by regions is also provided. Due to Privacy laws we cannot provide the split by age.	SR:140
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Labor/management relations					
LA4	Percentage of employees covered by collective bargaining agreements.	Not	This information is proprietary	Proprietary information/ This information is proprietary	
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Fully	SR:Our People: 5.3-Discussions with unions		SR:145
Occupational health and safety					
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	Fully	SR:2012 Reporting: 4-SOCIAL INDICATORS, / 20F Additional Information 4-Sustainability		SR:57 20F Addl info:47
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Fully	SR:Our People: 6-EMPLOYEE HEALTH AND SAFETY		SR:146
LA9	Health and safety topics covered in formal agreements with trade unions.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	

Training and education					
LA10	Average hours of training per year per employee by employee category.	Not	See Explanation	Not available/ Total training hours were provided in section 4-Social Indicators (See subsection in table 3-Training in page 21 of the Sustainability Report). However, total hours of training per employee category is not available as our reporting systems are not currently configured to collect this information. We will continue to investigate in 2013 on possible configurations to our reporting system.	SR:57
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
LA12	Percentage of employees receiving regular performance and career development reviews.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Diversity and equal opportunity					
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Fully	SR:Our People: 4-OUR EMPLOYEES,/ Corporate Governance: 1.2-Staggered Board - Membership and diversity,/ 2012 Reporting: 4-SOCIAL INDICATORS,/ 20F: 7.1-Chairman's Corporate Governance Report		SR:140,65,57 20F:77
LA14	Ratio of basic salary of men to women by employee category.	Not	Data is proprietary	Proprietary information/ Information is proprietary	



Social: Human Rights					
Performance Indicator	Description	Reported	Cross-reference/Direct answer	Reason for Omission/ Explanation	Sections' starting pages
Investment and procurement practices					
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	Not	See explanation	Not available/ Alcatel-Lucent has put in place in early 2013, human rights diligence requirements for future material proposals of significant investment agreements. We will report on it in the 2013 Sustainability Report and onwards.  To be reported in 2013	
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	Fully	SR:Supply Chain: 4.2-Rolling out EcoVadis sustainability ratings,4.3-Sustainability audits,5.2-Supplier improvement program		SR:209,211,213
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Not	In 2012 Alcatel-Lucent designed a training program for employees on human rights which will be implemented in 2013.	Not available	
Non-discrimination					
HR4	Total number of incidents of discrimination and actions taken.	Fully	SR:Ethics, Compliance and Business Conduct: 5.2-Management of incidents declared through the Compliance Hotline		SR:85
Freedom of association and collective bargaining					
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	Partially	See explanation	Not available/ Since 2011, we have carried on discussions with the European union in order to adapt our current agreement, based on more than 17 years experience, to improve our communication with our unions at the group level. Discussion are still ongoing with the new ECID secretary and the coordinating committee. The decision is expected for mid 2013.	
Child labor					
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	Fully	SR:Supply Chain: 3.2-Adherence to international standards,3.1-Adherence to the EICC Code of Conduct,4.2-Rolling out EcoVadis sustainability ratings		SR:205,209

Forced and compulsory labor					
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	Fully	SR:Supply Chain: 3.2-Adherence to international standards,3.1-Adherence to the EICC Code of Conduct,4.2-Rolling out EcoVadis sustainability ratings		SR:205,209
Security practices					
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Indigenous rights					
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Social: Society					
Performance Indicator	Description	Reported	Cross-reference/Direct answer	Reason for Omission/ Explanation/	Sections' starting pages
Community					
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	Fully	SR:Society: 1-OUR APPROACH TO DIGITAL INCLUSION, 1.2.3- Our Impact Around the World		SR:173,177
Corruption					
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Fully	SR:Ethics, Compliance and Business Conduct: 3.1-Anti-corruption approach		SR:173,177
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Fully	See explanation	Alcatel-Lucent did not deploy a formal Anti-corruption training in 2012 to ALU employees but developed training for deployment in 2013.	
SO4	Actions taken in response to incidents of corruption.	Fully	SR:Ethics, Compliance and Business Conduct: 5.2-Management of incidents declared through the Compliance Hotline,/ 20F: 6.10-Legal Matters		SR:85 20F:73

Public policy					
SO5	Public policy positions and participation in public policy development and lobbying.	Fully	SR:Sustainability Management: 4-OUR ENGAGEMENT WITH STAKEHOLDERS,4.6-Public affairs		SR:26,40
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Not	See explanation	Not applicable/ Concerning political contributions, Alcatel-Lucent does not directly spend corporate funds on political activities. Our employees in Alcatel-Lucent USA have formed a voluntary Political Action Committee (PAC), which made \$9,500 in political contributions to candidates for federal office consistent with employee priorities in 2012. The Alcatel-Lucent USA employee PAC operates in accordance with all U.S. Law and federal election commission regulations	
Anti-competitive behavior					
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Compliance					
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Fully	20F: 6.10-Legal Matters		20F:73
Social: Product Responsibility					
Performance Indicator	Description	Reported	Cross-reference/Direct answer	Reason for omission/Explanation/	Sections' starting pages
Customer health and safety					
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Fully	SR:Sustainability Management: 1.5-Environment, health and safety management		SR:9
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	

Product and service labeling					
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Fully	SR:Environment: 2.1-Measuring impact from end to end		SR:99
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Fully	SR:Sustainability Management: 4.2-Customer relationships		SR:30
Marketing communications					
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	Fully	SR:Sustainability Management: 1.6-Approach to marketing and communications,		SR:13,14
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Customer privacy					
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Not	See explanation	Not available/ This is an "additional" indicator that we might report in the future	
Compliance					
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Fully	SR:Ethics, Compliance and Business Conduct: 1.2-Zero tolerance policy		SR:78

# 2012

## SUSTAINABILITY REPORT A BUSINESS IMPERATIVE

### **INDEPENDENT VERIFICATION STATEMENT**

---

Alcatel-Lucent

Year ended December 31, 2012

Independent assurance report on a selection  
of sustainability indicators and statements  
Ernst & Young et Associés



# REPORTING FRAMEWORK

Our sustainability strategy and reporting framework conform to the following key regulatory requirements and international sustainability frameworks:

## Independent verification

*This is a free translation into English of the original report issued in the French language and it is provided solely for the convenience of English speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.*

Alcatel-Lucent  
Year ended December 2012, 31<sup>st</sup>

## Independent verifier's limited assurance report on the social, environmental and societal information in the sustainability report

Ernst & Young et Associés



To the General Management,

Pursuant to your request and in our capacity as independent verifier of Alcatel-Lucent, we hereby report to you on the consolidated social, environmental and societal information presented in the sustainability report (the "Information") issued for the year ended December 2012, 31<sup>st</sup>. Our work is related to the information identified with the symbol **Q** in the present report.

### Management's Responsibility

It is the responsibility of Alcatel-Lucent to establish the entity's internal social, societal, and environmental reporting standards (the "Guidelines"), update them, ensure they are made available for consultation and prepare the Information according to these Criteria.

### Our Independence and Quality Control

Our independence is defined by regulatory requirements, the Code of Ethics of our profession (*Code de déontologie*) and Article L. 822-11 of the French Commercial Code (*Code de commerce*). In addition, we maintain a comprehensive system of quality control including documented policies and procedures to ensure compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Limited assurance report

#### Nature and scope of the work

We conducted our engagement in accordance with ISAE 3000 (International Standard on Assurance Engagements) and French professional guidance. We performed the following procedures to obtain limited assurance that nothing has come to our attention that causes us to believe that the Information in the present report is not fairly presented, in all material respects, in accordance with the Guidelines. A higher level of assurance would have required extending the scope of our verification work.

Our work consisted in the following:

- We assessed the appropriateness of the Guidelines as regards their relevance, completeness, neutrality, clarity and reliability, taking into consideration, where applicable, the good practices in the sector.
- We verified that the Group had set up a process for the collection, compilation, processing and control of the Information to ensure its completeness and consistency. We examined the internal control and risk management procedures relating to the preparation of the Information. We conducted interviews with those responsible for social and environmental reporting.
- We selected the consolidated Information to be tested<sup>1</sup> and determined the nature and scope of the tests, taking into consideration their importance with respect to the social and environmental consequences related to the Group's business and characteristics, as well as its societal commitments.
  - Concerning the quantitative consolidated information that we deemed to be the most important:
    - at the level of the consolidating entity and the controlled entities, we implemented analytical procedures and, based on sampling, verified the calculations and the consolidation of this information;
    - at the level of the sites that we selected<sup>2</sup> based on their business, their contribution to the consolidated indicators, their location and a risk analysis:
      - we conducted interviews to verify that the procedures were correctly applied;
      - we performed tests of detail based on sampling, consisting in verifying the calculations made and reconciling the data with the supporting documents.

The sample thus selected represents on average 21% of the workforce and between 12% and 23% of the quantitative environmental information tested.
  - Concerning the qualitative consolidated information that we deemed to be the most important, we conducted interviews and reviewed the related documentary sources in order to corroborate this information and assess its fairness.
- As regards the other consolidated information published, we assessed its fairness and consistency in relation to our knowledge of the company and, where applicable, through interviews or the consultation of documentary sources.

---

<sup>1</sup> **Social and societal information:** total headcount; dismissals; remuneration; work-related accidents and occupational disease; training; measures taken for gender equality; territorial, economic and social impact of the activity; support activities; sub-contracting and suppliers.

**Environmental information:** waste production, consumption of raw materials and measures taken to improve efficiency of their use; energy consumption; measures taken to improve energy efficiency; greenhouse gas emissions.

<sup>2</sup> Calais (France), Naperville 1960 (US), Naperville 2000 (US), Shanghai - Ningqiao Rd. (China), Shanghai - Xizang Bei Rd. (China), Villarcieux (France).



## Comments on the Guidelines and the Information

We wish to make the following comments on the Guidelines and the Information:

- The Group should assure that the definitions provided in the Guidelines are sufficiently clear and precise to ensure the uniformity of reporting practices between sites for the indicator “number of days of absence due to work-related accidents including occupational diseases per employee”.
- The Guidelines could provide additional details related to internal controls to be performed and extrapolation methodologies to be used, as well as to clarify the roles of data contributors and those responsible for validating the data. This is especially the case for the calculations related to energy consumption and greenhouse gas emissions.

## Conclusion

### Limited assurance

Based on our work described in this report, nothing has come to our attention that causes us to believe that the Information is not fairly presented, in all material respects, in accordance with the Guidelines.

Paris-La Défense, April 9, 2013

The Independent Verifier  
Ernst & Young et Associés

*French original signed by:*

Eric Mugnier

[www.alcatel-lucent.com](http://www.alcatel-lucent.com)

ALCATEL-LUCENT

2012 SUSTAINABILITY REPORT

3, Avenue Octave Gréard  
75007 Paris, France  
Tél. +33 (0) 1 40 76 10 10  
[www.alcatel-lucent.com](http://www.alcatel-lucent.com)

Copyright © 2013 Alcatel-Lucent.  
All rights reserved.

Alcatel, Lucent, Alcatel-Lucent and the  
Alcatel-Lucent logo are trademarks of  
Alcatel-Lucent. All other trademarks are  
the property of their respective owners.  
M2013015681

Design and Production:  
CREATIVE NICHE | Ottawa | Canada  
162B Metcalfe St., Suite 300  
Ottawa, Ont. K2P 1P2  
Phone: +1 (613) 567-3893