Lucent Technologies
Bell Labs Innovations

2001 Annual Report
Environment, Health and Safety

Welcome



Patricia Russo
President and Chief Executive Officer

While 2001 was a year of restructuring, it also was a year in which Lucent continued to build on its proud heritage of Environmental, Health and Safety (EH&S) management. Our values continue to guide our behavior, and one — "a strong sense of social responsibility" — remains the driving force behind Lucent's support of EH&S. But we do not rest on our past achievements. More than ever, we are designing products for the environment, just as we design for quality and performance. We are working closely with our suppliers to ensure that they provide energy-efficient goods and services to us. And we have reviewed and strengthened our security, safety and emergency practices in the aftermath of the events of Sept. 11, 2001. Lucent's commitment to the environment is both socially responsible and a business imperative. Our thoughtful stewardship of the land and its natural resources helps enhance the communities where we work and live. Our commitment to employees translates into safeguarding their work environments and protecting their health and well-being. This 2001 Environment, Health and Safety annual report updates our progress and highlights the achievements that illustrate these commitments. As individuals and as a corporation, we need to continue to make our planet healthier by conserving, recycling, reusing and protecting our natural resources. It's a battle that must be waged today and every day.



Roy Femenella
Lucent Environment, Health and Safety Vice President

For both Lucent and the Lucent EH&S community, 2001 was an enormous transition year. Lucent's EH&S community was affected by multiple triggering events, including the outsourcing of manufacturing, the spinoff of Agere and the sale of Optical Fiber Solutions. The EH&S transition, which we initiated two years ago to focus more efforts on products rather than on traditional processes, has served Lucent well. As Lucent's customers continue to ratchet up their level of urgency regarding Lucent products' EH&S impacts, Lucent EH&S has developed tools, capabilities and processes to ensure positive steps are being taken. I am proud of the Lucent EH&S community and the results it has achieved in both the traditional areas of environment and safety performance and in reducing the impact of Lucent's products on the environment and contributing to sustainable growth. There is more opportunity ahead to demonstrate that Lucent's EH&S team is a valuable partner in the effort to contribute to Lucent's success. I look forward to more positive impacts as a result of EH&S efforts in the future. The Lucent EH&S community has demonstrated an ability to assess the needs of the business and redefine itself to make a positive difference for the company.

Results FY2001

We exceeded our targets in 2001. We...

- Reduced or avoided more than $5.5 million in EH&S costs through the deployment and use of effective EH&S management systems.
- Improved safety performance as measured by 4.1% reduction in lost workday case rate to a Lucent rate of 0.63.
- Reduced greenhouse gas emissions by 37,867 metric tons through targeted energy projects and recycling activities.
- Minimized the EH&S impacts of Lucent products by:
  - Developing the Lucent Standard Life Cycle Assessment (LCA) Methodology
  - Developing the Eco-Target (Sustainability) Metric
  - Developing the Eco-Target Reference levels for six key impact categories
  - Completing the LCA & Eco-Target for key products in each Business Group

We invite your comments, questions and suggestions for improving the information we provide here. You can contact us at drossback@lucent.com

Lucent Technologies
environmental, health and safety policy

Lucent Technologies is committed to protecting the environment and the health and safety of our people, our customers and the communities where we operate. Meeting this commitment is a primary management objective and the individual and collective responsibility of all Lucent employees and Lucent Business Partners worldwide. To that end, we shall:

comply with all applicable environmental, health and safety laws, regulations and Lucent's Global EH&S standards

continue improvement in our environment, health and safety performance by implementing management systems

ensure that our products are safe, and work with suppliers and customers to promote responsible use throughout their life cycles

reduce environmental impact of our operations and products by: conserving natural resources; striving to eliminate waste, emissions and use of hazardous materials; reusing and recycling materials; and responsibly managing energy use

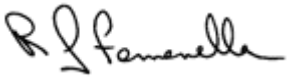
motivate and prepare all employees to take personal accountability for protecting the environment and creating a safe and healthy workplace

be a leader in deploying and promoting innovative, cost-effective environmental, health and safety technologies and procedures.

We will regularly review and improve this policy, communicate it to all employees, and make it available to all stakeholders.



Patricia Russo
President and
Chief Executive
Officer



Roy Femenella
Environment,
Health and
Safety
Vice President

Goals for 2002

Lucent's EH&S 2000+ Goals are specific, measurable, time-bound objectives directed to drive continual improvement in overall EH&S performance. Goal achievements for fiscal year 2001 and proposed targets for fiscal year 2002 reflect the EH&S Policy and are representative of all business groups and corporate centers worldwide.

For 2002, 2003, 2004, we will:

Improve safety performance by implementing incident investigation and corrective measure programs, and by achieving Business Unit-specific reductions in lost workday cases.

Use energy efficiently to avoid over the next five years what would otherwise be the emission of 50,000 metric tons of greenhouse gases relative to the 1999 baseline.

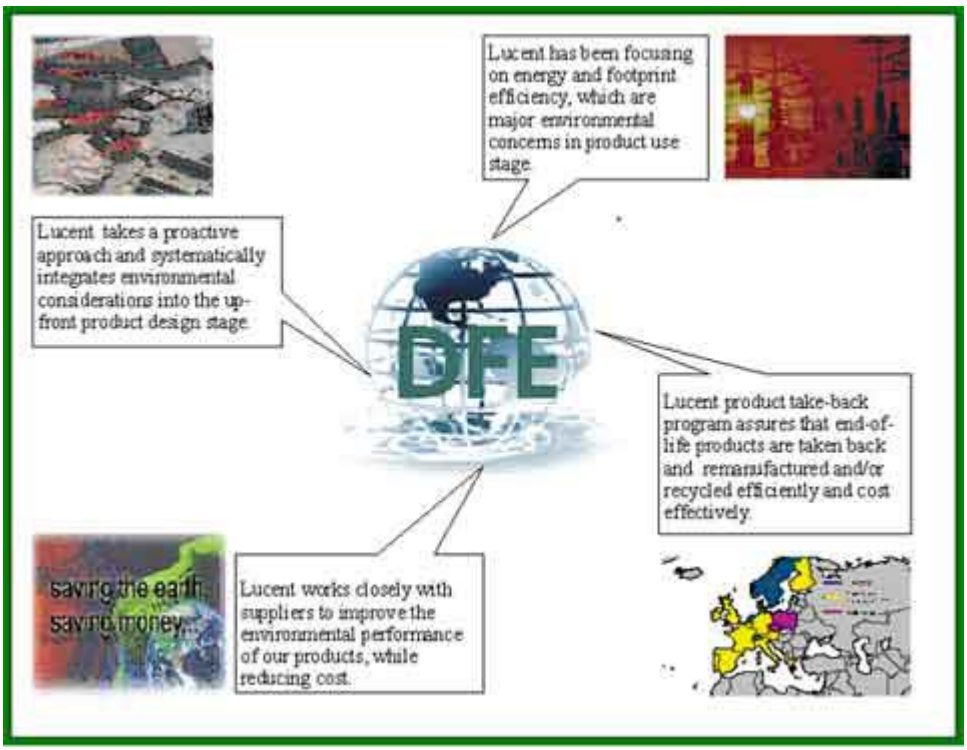
Minimize EH&S impacts of Lucent products over their full life cycles by:

Determining EH&S support infrastructure contacts within INS & MS
Developing methods/metrics to baseline material and energy efficiency within product platform and system architecture to match evolving technologies
Measuring energy and material efficiencies for flagship products
Integrating results into product requirements

Revised from original 2000+ Goals to reflect the "New Lucent" after the spinoff of Avaya Communications on Sept. 30, 2000, the sale of Power Systems in December 2000 and the spinoff of Agere Systems (Microelectronics) in 2001.

Design for Environment Makes a Difference

For a typical product, the environmental impacts and total cost of ownership are largely determined in its design phase. By systematically integrating environmental considerations into the upfront product design, a process known as Design for Environment (DFE), Lucent is able to reduce product environmental impacts. Lucent also reduces total cost of ownership, increases product marketability, fosters innovation and reduces environmental liability.



Lucent's DFE initiative is a product-focused umbrella program that covers environmental issues throughout the product's life cycle-from design, supply chain, manufacture and use, to end-of-life management. Working closely with our designers, suppliers, electronic manufacturing services, customers and recyclers, the DFE program is designed to make a difference on the society and environment in which we operate.

Lucent diligently applies DFE principles to its business practices. Over the last year, Lucent conducted many exciting DFE-related projects, as the following examples illustrate:

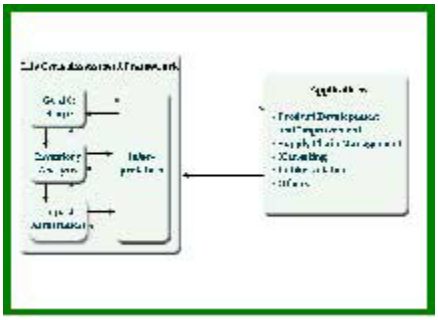
Using the Right Tools

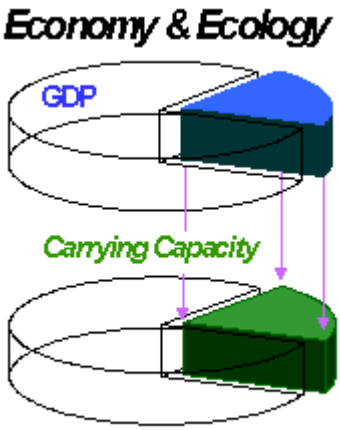
Product design is paramount in all efforts that Lucent employs to maximize our products' environmental performance. Also critical is the work performed by our researchers, system architects and designers in inventing and developing our products with minimized environmental impacts throughout their life cycles. This goal is so important that Lucent has developed a set of design rules and guidelines, called OneDFE, for use throughout the design and manufacturing community. OneDFE provides a complete set of requirements, guidelines and checklists for key areas such as energy efficiency, batteries, plastic parts, printed wiring boards and circuit packs, equipment and apparatus, wire and cable, and product packaging.

OneDFE requirements ensure compliance with environmental regulations and reduce uncertainty with respect to future environmental requirements, either regulatory or customer driven. They assist designers in identifying opportunities to improve product environmental performance, increase product added value to our customers, and reduce our products' total cost of ownership. Mapped into these requirements are substances that are believed to be hazardous, and as such are being banned, restricted or targeted worldwide. We have developed an eco-roadmap, which is being used to ensure that informed decisions on these substances are taken into consideration in each product's design stage.

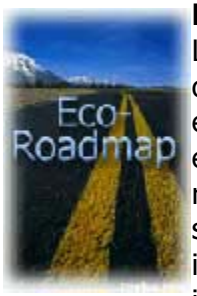
Quantify Environmental Impact of Our Products

Lucent Technologies uses life cycle assessment (LCA) tools to measure environmental impacts of our products during each stage of their life cycle — pre-manufacture, manufacture, distribution, shipping, use, reuse, maintenance, and end of life management, such as recycle and disposal. LCA makes it possible to identify those points or processes where improvement is possible.





In addition to standard LCA, Lucent has developed and implemented an assessment tool that links the evaluation of life cycle environmental aspects to benchmarks for sustainability. This tool's foundation is an environmental performance metric developed at Bell Labs that uniquely identifies and quantifies the elements of "resource productivity" and "eco-efficiency." The Lucent method links the economic contribution of a business with its effect on the earth's carrying capacity to provide specific, practical sustainability criteria for any business, product or service. This replaces the traditional economy vs. ecology conflict with a synergy that will drive to sustainability. This metric is now being determined for a number of Lucent's flagship products to develop a baseline for improvement.



Look into the Future
Lucent's eco-roadmap is one of the key elements of our DFE program. It outlines for us where we are and where we are headed with product environmental considerations. It also provides a path for our products to evolve environmentally over time. Today, product-based eco-environmental requirements from legislators, regulators and customers are becoming more stringent, and public concern over industry's impact on the environment is increasing. We continually review these drivers to ensure that the eco-roadmap is kept up-to-date.

Bell Labs Designers Create All-Silicon Chip
Base station radio transceivers currently use gallium arsenide (GaAs) technologies. However, this results in products that exhibit a relatively high price, high material use, and high power consumption. Bell Labs researchers developed a process to realize base station radio frequency integrated circuit integration utilizing low cost silicon technologies (all-silicon chip). This new technology reduces material use and reduces energy consumption.

A life cycle assessment was performed on an "all-silicon chip" designed for use in base station radio transceivers. Results showed that the new design could substantially reduce the product's overall environment impacts (from raw material acquisition to end of life). Significant environmental benefits are realized through the application of silicon chip technologies to replace gallium arsenide technologies. Through decreased board size and integrated circuitry, as well as reduced electrical energy consumption, the environmental impacts could potentially yield reductions exceeding 20 percent, all of which would occur during the manufacturing and use stages.

Lucent's Mobility Solutions Group is now integrating the research findings into Lucent's 3G mobile infrastructure platform.



Working with Suppliers
During the past few years as Lucent has outsourced manufacturing operations for improved efficiencies, we have focused attention on the EH&S performance of suppliers to ensure that they meet our customer requirements and to minimize the risk of business interruption. We have included forward-looking requirements with an emphasis on management systems in our contracts with key electronic manufacturing services suppliers to encourage continuous improvement.

To ensure that suppliers are aware of the commitments Lucent has made to customers regarding the material content of Lucent products, we have placed our "Listing of Banned Substances for Products and Packaging" on the Lucent Supply Chain Portal at https://scportal.lucent.com/, where the information is readily accessible to suppliers. To reach suppliers with design responsibilities, we also have placed on the site our guidelines for tracking and minimizing the use of environmentally hazardous substances: "Use of Environmentally Hazardous Substances in Product Design." Sharing these requirements

with suppliers helps us keep the promises we have made to our customers to reduce the overall EH&S impact of our products.

During 2001, EH&S professionals partnered with Lucent Supply Chain Network (SCN) personnel to develop a Supplier Capability Assessment format to be used by SCN personnel to evaluate performance at suppliers' manufacturing locations. The EH&S element of the assessment focuses on the effectiveness of suppliers' systems to assure compliance to customer, legal and Lucent requirements and to continually reduce any negative EH&S impacts and associated costs. Over time, this standard assessment will identify suppliers with the strongest capabilities to support the manufacture of Lucent products to help Lucent make a difference.

Working with Customers



Many Lucent customers are environmentally conscious. To win their business, Lucent must adhere to their environment, health and safety concerns. Lucent has an EH&S bid response process in place to answer customer inquiries on issues such as material content of products, government regulation compliance and environment management systems, just to name a few.

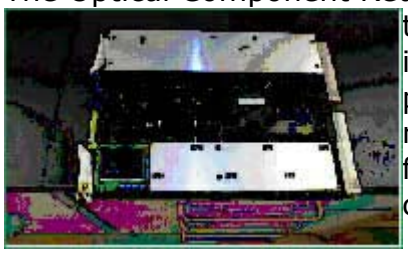
In 2001, Lucent's EH&S organization answered many environmental, health and safety related questions contained in requests for proposals (RFPs) and requests for information (RFIs) from our customers. Questions ranged from generic ones about Lucent's environment policy to product-specific energy efficiency. The trend of incoming questions clearly shows that environment, health and safety issues are becoming more and more important to our customers.

Product Take-back and Reuse



Based on enacted national legislation in the Netherlands, Norway, Sweden, Denmark and Switzerland, and proposed European Union legislation, companies manufacturing electronics, including those in the telecom industry, are required to organize product take-back programs and reporting. Lucent is working to introduce processes covering the take-back of products at end of life. While closely monitoring the upcoming legislation in Europe, Lucent has been involved in industry efforts to assure that business needs are properly addressed. Business planning to meet these legal requirements is well under way with full program implementation scheduled for 2002. Lucent currently works with customers on a case-by-case basis to address any needs they have for the removal and proper handling of end-of-life equipment.

The Optical Component Reuse Team at Merrimack Valley in North Andover, Mass., part of



the Lucent Supply Chain Network, was established to reduce inventory costs and avoid the environmental impacts of defective parts disposal and manufacturing by repairing and reusing returned optical components. This program is incorporated in the facility's ISO 14000 Environmental Management System. A life cycle assessment of the program was completed to determine

the environmental impacts avoided by this program, including those associated with raw material extraction and manufacturing. It found that the reclamation efforts reduced carbon dioxide emissions by more than 300 kilograms, which contributes in efforts to help prevent global warming.

Medical Emergency Response Teams In Place To Respond to Emergencies Make a Difference

When an emergency occurs at a Lucent facility, medical personnel respond quickly with help and assistance. But who responds to an emergency at a Lucent location that doesn't have a medical staff?

Now, in the aftermath of the Sept. 11 tragedies, Lucent Environment, Health & Safety and Lucent Real Estate teamed to ensure that medical emergency teams (MERTs) had been organized at 25 Lucent locations across the company. Volunteers will be trained on evacuation procedures, CPR, first aid, automatic external defibrillators and blood-borne pathogens. Lucent Environment Health and Safety and Lucent Real Estate also ensured that each location had designated fire searchers and wardens, and that the MERTs had adequate first aid supplies and were equipped with defibrillators.

Lucent is concerned about employees' health and safety and is taking the necessary steps to ensure that in emergency situations, the response is swift, thorough and effective. Employees appreciate having a resource for medical emergency response-knowing that people are on-site, prepared and equipped to provide aid to them if they need it.

EH&S E-learning Initiatives in 2001 Make a Difference

In 2001, Lucent EH&S converted several education courses to a Web-based format to maximize their availability and to offer online resources for additional information. The courses provide health and safety e-learning alternatives to Lucent employees around the world.

The courses reside on the internal LEH&S Web page and serve as valuable health and safety resources. Modified courses include Accident Investigation, Compressed Gas Safety, Hydrofluoric Acid Safety, Lockout / Tagout, Ionizing Radiation Safety Training, Ionizing Radiation Safety Re-Training, and Sulfuric Acid Safety.

Web site on Ergonomics Makes a Difference

EH&S also developed and implemented a new Web site in 2001 to assist Lucent employees in self-education on the important topic of ergonomics. It includes resources on ergonomic injuries, workstation setup, effective work practices, exercises and stretches, ergonomic resources, safe lifting and a quiz. It also features information about office and industrial workspace configuration to meet ergonomic requirements.

2001 EH&S Champions Award Program

The EH&S Champions Award Program is a process by which Lucent employees or teams who successfully address environmental, health or safety issues in their business practices, workplaces or communities may be nominated for an EH&S Champions Award. A nomination is submitted online, summarizing the details of the activity, which must exceed the normal requirements of job responsibilities, and which would be considered "role model" work. Winners receive an award and a certificate and are asked to provide the name of a qualified, external nonprofit organization of their choice to receive a donation of $1,000. This program is administered by Lucent Cares, in association with the Lucent Environment, Health and Safety organization.

Nominations have been submitted according to the following 4 categories:

- Environmental, Health and/or Safety Program Effectiveness—Awarded for programs that improve pollution prevention, waste reduction, energy efficiency, or have an impact on accident prevention and the reduction of on-duty injuries or illnesses.
- Environmental, Health and/or Safety Management Practices—Awarded for achievements in advancing environmental and safety commitments on behalf of the company, such as the development of effective EH&S management programs within Lucent, in partnership with government agencies or outside organizations or the promotion of a positive safety climate.
- Environmental, Health and/or Safety Planning for the Future—Awarded for innovation in environmentally sound design, technology or manufacturing methods and processes; and workplace design innovations that prevent job-related injuries/illness.
- Environmental, Health and/or Safety Social Responsibility—Awarded for demonstrating outstanding individual or corporate citizenship in communities where employees live and work. Areas include but are not limited to environmental education, land preservation and beautification, conservation and wildlife habitat protection, safety education, accident prevention, health promotion and wellness.

The winners for each category for 2001 are as follows:

Program Effectiveness

Merrimack Valley Manufacturing Team
Saving energy is a primary concern at Merrimack Valley in North Andover, Mass., where Worldwide Waste Watcher Teams discovered potential savings by reducing manufacturing's energy use. The teams found that by streamlining product-testing requirements and optimally using environmental test chambers, they could reduce the facility's electrical consumption. By eliminating two test chambers, more than $280,000,

or 5 percent, of the facility's electrical costs can be avoided. The optimization also saves 5,000,000-kilowatt hours a year of electricity while reducing emissions by 2,000 tons of carbon dioxide greenhouse gas each year. Team members: Donald Welling, Jeff Jones, Greg Jones, Byron Kitsos, Maria Scascitelli, Tim Perkins, Lynn Maynard, Bob Brown, Randi Mayfield, Leslie Mann, Ron Reynolds and Jim Machearn

Mobility Solutions Flexent® Macrocell Team
While wireless base stations are an essential part of Lucent's business, they also have an impact on the environment, suggests the findings of the Mobility Solutions Flexent Macrocell Ecological Product and Assessment Team, Hilversum, the Netherlands. The team set out to explore the environmental impacts for the life cycle stages, including raw material extraction, production and customer use phase. The Life Cycle Assessment targeted energy efficiency for improvement, which led to future design modifications to the OneBTS base station platform.

The energy improvements identified could result in both financial and environmental savings. A 10 percent to 30 percent reduction in power used by base stations, resulting in up to $15,000 in savings and the equivalent of 375 kilograms of carbon dioxide global warming impact over a 10-year life of a base station could result from the improvements.

Team members: Arjen Salemink, Albrecht Schuh, John Mosovsky, David Dickinson and Iris van de Graaf

PacketStar® PSAX Team - Recycling Project
Even though recycle bins to collect recyclable materials were as common as wastebaskets at Lucent prior to the arrival of Norma Emery in 1998, little effort had been made to reduce the use of recyclable materials, including plastic and new paper. That all changed when Emery, a senior manager of information, design and development, and the PacketStar PSAX Multiservice Team in Landover, Md., began a program to reduce use four years ago.

After working with numerous vendors to identify paper materials that contain the highest possible recycled content, the team developed a statement that appears on all of Lucent's information products indicating the recycled content and encouraging the customer to recycle the information product when it is no longer needed. This helped reduce the amount of new paper being used. The team also championed the cause of switching from jewel cases for product document and software CDs to a paper CD sleeve that is both visually appealing and 100 percent recyclable. A CD recycling program also was implemented within Landover where all CDs are shipped to a recycling vendor rather than thrown in the garbage.

Team members: Sharon Gobrecht, Norma Emery, Eric Mendez and Dana Rusen

World Trade Center Disaster Recovery Project
In the aftermath of Sept. 11, Lucent teams were on site in lower Manhattan to restore service for its customers. But how were the employees protected from environmental hazards at Ground Zero? An LWS Environmental Health and Safety team, led by Tom

Finley of Warren, N.J., began offering training classes on risk assessment, medical evaluations, personal protective equipment, hazard communication and on-site safety support. In the early stages of the recovery process, the team provided training 12 hours a day, seven days a week.

The result of the project helped prevent accidents and illnesses by providing employees with the equipment and information to evaluate air-monitoring data, conduct daily safety tours, and update newly arriving employees through orientations. Only two accidents around the site resulting in days away from work were reported. The project has resulted in the development of an EH&S disaster recovery process that can be put into place whenever the need arises.

Team members: Buzzy Buzgierski, Yvonne Dekayie, Tom Finley, Joe Foley, Red Garfield, Bill Hemp, Bill Hoell, Donal Morrissey, Carol Perret, Ellen Pietroforte, Remo Rosano, Juanita Sanchez, Lisa Schubert, Joe Valente, Karen Van Varick-McGuire, Laslo Varadi, Michael Vinas, Quynh Vo, Jim Walton and Doug Zabrin

EH&S Management Practices

Improvements on Safe Driving Performance
Flavio Fernandes de Souza, director, Lucent Worldwide Services (LWS) Engineering Services director in Campinas, Brazil, became concerned about motor vehicle accidents by LWS employees in Brazil, and decided to do something about it. To increase management commitment and visibility regarding this issue, Fernandes de Souza and his team became early adopters of the LWS Safe Driving Program, which has been instituted in the CALA (Caribbean and Latin America) region. As part of his commitment, Fernandes de Souza is present at the defensive driving program and has set up additional Safety Huddles for his group to increase awareness of safe driving and work habits.

As a result, the number of vehicular accidents and occupational injuries in the region has decreased. These activities not only improve their safety record, they also help to reduce insurance and maintenance costs to Lucent.

Team members: Relington Paracho de Barros, Marcio Carvalho, Victor Marcos Dantas Henriques, Rodrigo Otavio Libanori, Carlos Eduardo Mendes, Sergio I. Mukai, Flavio N. Nemoto, Luis Geraldo Santos Nunes, Emerson Ribeiro Reis, Flavio Fernandes de Souza, Fernando Silva de Barros, Marcio Franca, Luiz Antonio de Souza and Rubens Peterlevitz

LWS Web-Based EH&S Management System
Across the United Kingdom, where LWS field-based engineers, supervisors and installers perform electrical work and travel long distances for various projects, the need for environmental, health and safety information is essential to help them perform their jobs. However, downloading the bulky information was frustrating due to the low-speed remote access connections in the field. Concerned for the workers, Mark Edwards, LWS Quality manager in Swindon, England, developed the Web-based EH&S Management

System that allows easy access to specific documents, training materials, safety alerts and other resources. Workers are routinely e-mailed links to specific information, thus eliminating the need to e-mail whole documents or bulky paper copies to the field-based team.

Edwards will continue to expand access to the Web-based Management System beyond the LWS organization in the U.K., and is using an external audit to confirm the system's compliance with the LWS EH&S Management System standards.

Planning for the Future

Improvements in Electronically Conductive Polymers
Jack Dispenza, technical manager, Advanced Technologies in Whippany, N.J., is awaiting a patent on an electrically conductive thermoplastic elastomer (CTPE) that can be molded into specialized gaskets for wireless cellular products. Why is that so exciting? The new gaskets are more environmentally friendly than Lucent's traditional beryllium-copper and thermoset gaskets, and cost less to manufacture, as the new CTPE material requires less heat to mold. "Using this plastic will reduce assembly labor, installation time, service calls, energy consumption, and improve the recycling process, heralding in a new wave of environmentally improved materials," said Dispenza.

Team members: Fred Blechinger and Jack Dispenza

Improving Product Packaging Using Plastic Pallets
Many of Lucent's access products, including the Stinger® FS, the APX 8000™ and the MAX TNT,™ have traditionally been placed on wooden pallets and shipped to customers' premises. The wooden pallets are expensive, cause splinters, and leave dirt and debris on the factory floor. After observing the situation, the Lucent Team proposed using injection-molded plastic rather than wooden pallets. They reasoned that the plastic would weigh less than wood, cost less and, as an added bonus, be recyclable.

After working with a manufacturer to develop pallets made entirely of a high-density polyethylene resin plastic, they tested customer reaction to the change by contacting several customers in Spain, Germany and Ireland. Not only were the customers satisfied with the new material, but they appreciated the environmental impact of using plastic over wood.

Team members: Joan Mulvihill, Bill Schaeffer, Brendan J. Keogh, Essi Mansoori, Chris Douglas, Aidan Harrington, Fred Blechinger and David Bretones

Eco-Target Metric
Tom Okrasinski, EH&S Product Support manager in Murray Hill, N.J., and his team were curious about the environmental performance of a Lucent product throughout its life cycle, from manufacturing through product retirement. They specifically wanted to know if a product could be efficient in its use of materials and energy, not only as a benefit to the environment but also to provide added value for our customers.

So the team utilized a tool, recently developed at Bell Labs, called the Eco-Target metric, to measure a product's environmental sustainability, including its environmental impact, societal benefit and economic value to customers. The way this tool works is such that a high Eco-Target score for a specific product indicates better performance from both an environmental and economic point of view. Using the Eco-Target tool, five Lucent products were successfully evaluated, and the team's recommendations for improvements to subsequent product releases were accepted by the research and design community.

Because of their successful application of this tool, the Eco-Target metric system has been accepted as Lucent's universal sustainability tool for "design for environment" product development in Lucent's product groups.

Team members: Fred Blechinger, Bryan Stolte, Tom Okrasinski, Greg Munie and David Dickinson

LambdaUnite™ and the Environment
A product goes through three basic phases in its life cycle — manufacturing, use and recycling. Menno Nagel, a senior engineer in Hilversum, the Netherlands, investigated the environmental impact of the LambdaUnite MultiService Switch, and discovered that the "use" phase of the product's life cycle expends 80 percent to 90 percent of the total energy. As a comparison, the manufacturing phase expends 10 percent to 20 percent of energy. Nagel proposed a redesign of the product to reduce its mass and power consumption, thus delivering cost savings to Lucent and its customers, and reducing the impact on the environment.

According to Nagel, the LambdaUnite project has shown that innovative improvements to a product's power and mass are key elements in reducing costs to our customers as well as improving the environment.

Team members: Jan Venema, Menno Nagel, Dick Lammerts and Daniella Nobbe, a student of the Higher Technical School

Social Responsibility

Washington Township, N.J., Farmland Preservation
Dave Dempski has a passion for preserving the natural harmony of the past and present in his hometown of Washington in rural Warren County, N.J. For several years, Dempski, of Mobility Solutions in Whippany, N.J., has served on the Washington Township Land Use Board and is currently chairman of the Washington Township Farmland Preservation Committee. Among his many achievements, Dempski and his Preservation committee have secured more than $2 million in funding from the State of New Jersey and have successfully preserved 100 acres to date.

Dempski also serves on the Pohatcong Creek Watershed Association, which has received more than $14,000 in Geographical Information System software donations, as well as

two Lucent Cares Grants worth $500 each. "Suburban sprawl threatens New Jersey's prime agricultural soils," said Dempski. "By preserving farmland, we preserve the rural character of the area, thereby preserving our past and our future."

The United Mounted Peace Officers of Texas
In 1996, a young boy became lost in the woods. It took two days to find him, partly because there were no horse-mounted search units, which would have made the task of search and rescue quicker and easier to perform.

With that in mind, Bonnie Martinez, a Softswitch product manager in Moody, Texas, helped create The United Mounted Peace Officers of Texas. As the contact for the Sheriffs' departments, Martinez's duties include assisting in the organizing of a mounted unit in each county, training the unit and certifying the horses and riders. In addition to search and rescue operations, the units are used for crowd control and have begun offering riding programs for children who have been identified as "at risk." According to Martinez, only the Canadian Mounties offered this type of program. Thanks to her, that's changing.

Project Home of the Good Seed, Holmdel, N.J.
When Sergio Martin in Holmdel, N.J., raised funds for a program in South America that nurtures abandoned and abused children, a house became a home. The Home of Good Seed focuses on the well-being and health of children facing life-threatening situations—either as abandoned kids in the streets, or in abusive family environments in Sao Paulo, Brazil. The program, which was founded in 1998, currently houses 13 children, 24 hours a day, seven days a week. The efforts of a staff of six and a host of volunteers provide the basic needs, as well as lessons in the arts, music and English, along with tours to parks and other facilities.

Martin developed and initiated fund raising programs yielding $3,000 in 2000 and more than $8,000 in 2001, helping the home to function. This type of response has set the table for future programs like it in the company.

Adolescent Formation and Development Program

In April 2001, Lucent took a new step in preparing adolescents for their professional lives. The Adolescent Formation and Development Program in Brazil provides youngsters from the street with an apprenticeship that will help them lead their future careers within or outside of Lucent. During the program, Lucent provides educational seminars while conducting monthly interviews and meetings with the adolescents.

Prior to this program, Lucent did not have any criteria for contracting adolescents. After the implementation, Lucent now has a policy to contract them according to labor laws, which has resulted in significant financial savings to the company — while giving these young adults exposure to the workplace and a glimpse of career possibilities to come.

Team members: Edvaldo Moreira, Vilson Fernando da Mata Jr. and Alexandre de Brito Simoes

Guild of Volunteer Millers
Huub Schreurs is a process engineer in Hilversum, the Netherlands, and is dedicated to keeping the last few windmills in the Netherlands alive and spinning. Schreurs is working on the last windmill in the Lucent Hilversum region, the Laarder Windmill. The windmill is fully operational and was restored in 1994. It still grinds grain and corn, using only the wind as the natural power resource. The flour is sold in a small store next to the mill. Besides working on the mill, Schreurs organizes guided tours that are free to the public.

Aside from saving energy, Schreurs points out that a working windmill is much cheaper to maintain than a non-working mill, as a non-working windmill deteriorates within a few years and maintenance costs rise each year after that.

West Chicago Prairie Stewardship Group
Lucent's Lisle-Naperville campus in Illinois is "grounds" for a good environment, in more ways than one. With help from the West Chicago Prairie Stewardship Group, Lucent restored some of its land into a natural habitat, which provides a productive environment for wildlife, naturally cleanses runoff associated with watersheds and is a cost-effective alternative to the mowing and chemical inputs associated with non-native lawns.

The West Chicago Prairie is a volunteer organization formed in 1983 whose primary responsibility is to aide in the management and preservation of the West Chicago Prairie preserve. Volunteers remove invading woody growth, eliminate weeds, collect seeds of native grasses and sow the seeds in recently restored areas and adjacent fields.

Steven Sentoff, product developer in Integrated Network Systems, has implemented these strategies not only on the prairie, but also on the Lucent campus in Lisle-Naperville. The utilization of the prairie has saved Lucent and DuPage County costs that would be associated with mowing the grounds.

Holly Park Open Space Designation Program
Lucent Project Manager Claire Ross of Highlands Ranch, Colo., gave new meaning to the concept of a grass roots campaign when she went above and beyond to preserve 40 acres of open space in a densely populated suburb of Denver. Last year, Ross created The Holly Park Open Space Designation Program, a five-member organization that began in Highlands Ranch, and is dedicated to classifying Holly Park as Open Space. The South Suburban Parks and Recreation District (SSPRD) owns the prairie lands within this suburban Denver setting.

The Holly Park Open Space Designation Program has educated the SSPRD Board of Directors to the value of protecting the open space that it manages. Through the program, 36 species of native grasses and wildflowers, along with wildlife such as coyote, fox and beaver, are being protected in the area between the Rocky Mountains and the Denver prairie.

Team members: Claire Ross, Joan Boehmer, Kathleen DeMars, Timothy DeMars and Roland Miller

3G
Third-generation mobile communication systems that offer higher user data rates and multimedia capacities.

EH&S
Environment, Health and Safety

Electronic Manufacturing Services
Also known as contract manufacturer, a third-party supplier to whom manufacturing function is transferred to and then sold back as a service.

Environmental Aspect
Environmental aspects refer to activities that can generate environmental impacts. Examples are electrical energy used in product manufacturing and package materials used in product transportation.

Environmental Impact
Environmental impacts refer to substances generated by human activities and released to the environment that can cause environmental damage. Examples are carbon dioxide that causes global warming and chlorofluorocarbons that cause ozone layer depletion.

ISO 14001
Guidance of International Standard Organization on implementing environment management system.

ISO 9001
Standard of International Standard Organization on implementing quality management system.

Life Cycle Assessment
Life Cycle Assessment (LCA) is an analysis method that quantifies the environment aspects and impacts of products and services throughout their entire life cycle.

Product's Environmental Performance
Product's environmental performance refers to the total environmental impacts of a product during its life cycle.

Sustainability
A state wherein environmental impacts of business operations are reduced to a point that the needs of the current generation can be met without jeopardizing the needs of future generations.

TL 9000
TL 9000 is the telecommunications industry's extension to ISO 9000 quality management system standard.