# BT and the environment

Better World BT's Social & Environment Report





# BT and the environment

Telecommunications is generally perceived as an environmentally friendly technology. However, any company the size of BT is bound to have an impact on the environment, as well as on the individuals and organisations we do business with. Indeed, we are one of the largest single consumers of energy in the UK.

We have a duty to manage our environmental impact. We also believe we have a duty to report on our performance, and have been doing so since 1992.

In this document, we report on the wide range of environmental aspects relevant to our business.

## **Environmental management system**

ISO14001 is an international standard for the certification of environmental management systems. Three of the key requirements are summarised below:

- The organisation shall identify and assess the significance of the impact its activities can have on the environment.
   These impacts are described as environmental aspects.
- Objectives and targets designed to reduce the organisation's environmental impact shall be established and a programme for achieving these objectives and targets shall be in place.
- The company's environmental policy must contain a commitment to continuous improvement, prevention of pollution and a commitment to comply with relevant environmental legislation, regulations and other requirements.

ISO14001 certification helps keep us focused on reducing the environmental impact of our operations at a time of very significant business, organisational and cultural change for BT.

However, experience has shown us that good environmental management not only yields financial savings, but also leads to efficient business practice.

BT's main impacts on the environment are classified into eight key groups, which are independent of local organisation or location.

The eight elements are:

- fuel, energy and water
- waste
- transport
- emissions to air
- procurement
- product stewardship
- local impacts
- benefits

We used to have a separate aspect group for Environmental Risk, which was formed to ensure that a concentrated effort was made to reduce our major environmental risks arising from fuel storage and hazardous telephone exchange materials. Major projects were put in place to minimise these risks, and as a result we have been able to integrate this aspect into the other aspect groups.

BT's strategy of classifying its environmental impacts by aspect, each with an 'aspect owner' (rather than by location, as is usually the case in business), has proved a sound one. Since 1999, BT has undergone radical structural changes, but the aspect-based registration has proved flexible enough to retain certification for all UK operations, with the exception of BT Global Services and BT Openworld.

An initial environmental impact identification audit of BT Global Services UK and European operations has just been completed and an assessment of US/Asia Pacific operations will be covered later this year.

The output from these assessments is being used to development systems for the collection of environmental performance data from our international operations and the incremental inclusion of the data in BT's environmental reporting on the Better World site.

### See also:

- Better World Environmental management system
- Better World Business principles

### Our environmental policy

As part of our continuing drive for quality in all that we do, we developed a comprehensive policy statement. This establishes our targets in sustainable environmental improvement and enables them to be regularly measured and monitored.

In this way we contribute to the future well-being of the environment.

We have undertaken to help every BT person understand and implement the relevant commitments of this policy in their day-to-day work, through regular communication of the Group's environmental objectives, action plans and achievements.

### **Policy extract**

BT is committed to preventing pollution and minimising the impact of its operations on the environment by means of a programme of continuous improvement. In particular BT and its wholly owned subsidiaries will:

- Meet and, where appropriate, exceed all relevant legislative and other requirements; where no regulations exist we shall aim to set our own exacting standards.
- Seek to reduce consumption of materials in our operations, reuse rather than dispose of whenever possible, and promote recycling and the use of recycled materials.
- Design energy efficiency into new services, buildings and products and manage energy wisely in all operations.
- Reduce wherever practicable the level of harmful emissions
- Market products that are safe to use, make efficient use of resources, and which can be reused, recycled or disposed of safely.
- Work with our suppliers to minimise the impact of their operations on the environment through a quality purchasing policy.
- Site our buildings, structures and operational plant so that we minimise visual, noise and other impacts on the local environment.
- Support through our community programme the promotion of environmental protection by relevant external groups and organisations.
- Include environmental issues in discussions with the BT unions and in BT training programmes; encourage all

BT people to implement sound environmental practices. As a minimum, monitor progress and publish details of our environmental performance in our Social and Environment Report, on an annual basis.

### See also:

• Full Environmental Policy – http://www.btplc.com/ system/OurEnvironmentalPolicy.htm

### **Environmental prosecutions ENV**

BT was prosecuted once during the period April 2002 to March 2003.

On 9 December 2002, at Oldbury magistrate's court, BT pleaded guilty to pumping out contaminated water from a manhole, causing pollution of the River Tame in Oldbury. BT was fined £12,500 plus costs.

The magistrates took into account BT's excellent environmental record.

As a result of the prosecution, BT's water testing and pump-out processes, which contributed to the incident, have been reviewed and revised to avoid any recurrence.

### Fuel, energy and water

This section of the report looks at how BT manages its fuel, energy and water resources. It covers the principles, practices and technologies behind our drive to increase the efficiency of lighting, heating, ventilation, air-conditioning, utility, process and power systems, as well as the processes we employ to manage the storage of fuel at our sites.

As in previous years, we continued to focus on our energy management programme, through which we maintain:

- our energy efficiency accreditation
- our fuel storage tank integrity testing and remedial works programme
- our ISO14001 certification.

Another key objective has been to consolidate our energy management and plant replacement strategy, and build on the delivery mechanisms within our supply chain in property, facilities management and energy supply.

Throughout the year, we continued to invest in energy efficiency and in making it part of our normal business process. However, this integrated approach does make it more difficult to separate out the financial data and report fully on the cost savings we have made through energy efficiency initiatives.

Our most significant achievement this year was the continued rollout of 'interval half-hour metering' now installed at 5,900 sites. We now have 85% of all our electrical energy remotely metered, which allows us to identify and eliminate waste energy more effectively. It also means we no longer have to rely on poor quality industry-standard billing.

In addition, our energy management team is now working effectively in partnership with Telereal, owners of the BT estate, to drive forward the delivery of our long-term programmes and efficiency improvements.

### See also:

- Better World Data and targets
- Recycling and resource use http://www.doingyourbit.org.uk

### Renewable energy

We are committed to meeting and improving on the UK Government's sustainability targets for the purchase of renewable energy, and are working with our suppliers to increase capacity.

Renewable energy has major environmental benefits compared to more conventional methods of electricity generation. These include:

- a reduction in atmospheric pollution which has a negative impact on human health, materials, crops, forests, freshwater fisheries and unmanaged ecosystems
- a reduction in greenhouse gas emissions
- a reduction in noise pollution and improvement in visual amenity.

In 2002/03 we continued to build on our renewables strategy and increased supplies from our Combined Heat





and Power (CHP) contract to 1.6 TWh of electricity. CHP produces 40% less CO2 when generated.

Also during 2002/03 we managed to secure 17GWh of new green capacity feeding BT Tower and its key exchange building. A further green supply contract was secured, feeding 90% of BT payphones of almost 28GWh. This represents 2.1% of BT's total electricity consumption in the UK.

However, during 2002/03, our new green electricity purchases dropped to 45GWh: our 2002 achievement was 93GWh. This drop in new green purchases was due to the lack of available capacity.

Taken together, the use of new green and low CO2 electricity deliver a reduction in CO2 emissions of 286,000 tonnes compared to brown electricity. (pop up glossary)

### **Energy consumption**

We continuously monitor energy consumption throughout our operations, using one of the largest computer-based monitoring and targeting systems in the UK. This has been significantly expanded, using the half-hour interval data collected from over 5,900 sites.

Our investment in new electricity meters, which enable us to monitor consumption on a half-hourly basis rather than on the monthly receipt of a bill, helps us to identity wastage earlier.

Energy consumption for BT's network and estate during 2002/03 was 2676GWh. This is made up of 1727GWh electricity (approximately) for our network, 392GWh electricity (approximately) for our premises and 557GWh (gas and oil use) for our premises.

The approximate emissions from our use of energy can be seen in the data and targets section of this site.

### Trends in energy use

Network electricity use has continued to grow but at a lower rate than expected. The actual growth in consumption was 124GWh compared to the 250GWh we predicted last year. Further work is being undertaken to improve our network growth forecasting and assess the impact of broadband networks. However, the growth in network electricity consumption has been offset by the reduction in electricity use by our office estate of 34GWh. We expect this trend to continue in 2003-04.

Heating fuel use (gas and oil) continues to reduce with improvements shown when the data is weather corrected. Gas use is continuing to rise due to oil to gas heating conversions.

### **Energy initiatives**

BT is a heavy user of electricity. Here are some of the ways we are trying to reduce our consumption.

### Plant replacement

Our partners in Telereal have continued to use a cradle-tograve principle of whole-life cost to help us to reduce energy waste.

Whole-life costing continues to deliver savings on our network power and cooling investment programme.

Replacing refrigerant-based cooling units with fresh-air based cooling systems, which are fitted with high efficiency DC motor drives and have more accurate control systems, increases plant efficiency and reduces the use of CFCs.

Our investment in DC power systems also continued, with the roll out of a programme to control and switch off excess rectifier capacity.

# Heating, ventilation and air conditioning (HVAC) investment programme

We have continued to invest in economic efficiency improvements. Initiatives include:

- the installation of liquid pressure amplification (LPA) pumps in the air conditioning chillers of central refrigeration plants. LPA is a new technology designed to increase the efficiency of refrigeration systems. This initiative, which was delivered to ten key sites last year and delivered average savings of 32%, was rolled out to a further two buildings at our Madley earth station site in 2002-03.
- replacement of system controls on our heating plant with Building Management System (BMS) controls.
   This allows us to integrate the plant heating and cooling control regime to eliminate waste.
- Retrofitting inverter-based motor controls (SAVAWATT) to pumps and fans on HVAC plant continued at a further 73 sites.

### **Energy awareness**

We have continued our in-house energy awareness programme, both through in-house publications, and an intranet guide to our ISO14001 certification. Workshops with our suppliers and contractors help them to help us maximise our environmental performance. External awareness has also been maintained, with BT winning the 'Liveable City' energy management awards, and finalists in 'Energy Management Team of the Year'.

### **Energy benchmarking and surveys**

A number of energy-related key performance indicators have been built in to the contract with Monteray, our building facilities supplier. The facilities management team continues to conduct energy surveys at poorly performing sites, with a view to minimising consumption of energy and water. Web-based electricity exception reports, using half-hour data, have helped our building facilities supplier to focus further on waste, thus benefiting from our investment in metering. This has been augmented by energy surveys from BT within our network buildings, and surveys carried out by specialist consultants as part of the government 'Actionenergy' programme.

### Home working

BT continued its home-working programme, which enables many of our people to travel less and also allows us to close some of our older and less efficient office buildings.

### Contract and supply strategy

BT, in common with many UK organisations, has found

that poor quality of electricity billing from the industry has had a negative effect on its energy programmes: because it makes it difficult to quantify the effectiveness of our energy initiatives. We have are tackling this problem at a supplier, industry and regulatory level.

### Eliminating waste

Energy targets help our business focus on eliminating waste. They cover the following areas:

- Purchase of green/renewable energy
- Process energy
- Premises energy
- Metered water use (link to data and targets)

In 2002-03, BT Wholesale invested £845,000 in its energy conservation programme. This has resulted in savings of over 10GWh. A further £40 million was invested in plant replacement of Mechanical & Electrical (M&E) plant.

### **Premises energy**

Premises energy includes all the electricity, oil and gas required for more than 1,000, offices, warehouses and depots.

Energy usage within our premises is decreasing with further rationalisation of our office estate and the continued refurbishment of our office and depots. The modern office requirement of air conditioning has increased energy usage slightly per square metre, as older buildings are refurbished to our cradle-to-grave benchmark standards. However, as utilisation of these buildings is significantly higher the result is a reduction in office energy use.

Premises energy consumption decreased by 2.74%. Degree-day (pop-up glossary) corrected heating energy was also down by 0.63% from 2002-03, the equivalent 1,630KWh per degree-day. The average degree-days for 2002-03 were 2% higher than for the previous year.

Gas use is continuing to rise due to oil to gas heating conversions. This is clearly shown by the large fall in oil use.

### See also:

• Better World – Data and targets, energy consumption

### Process energy

Process energy includes all the electricity to power more than 6,300 radio stations, satellite earth stations and telephone exchanges that support our voice, data and Internet Protocol (IP) (pop up glossary) networks.

We continually seek to improve the accuracy of our data collection systems and over the past year, as a direct result of our investment in half-hourly metering and energy management reporting systems, we are now able to quantify and report on the amount of electricity we generate.

BT generates electricity on site using its on-site generators. This is done for load management at peak demand periods, for business continuity or during mains supply failures.

The total amount of electricity we generated in 2002-03, was 9.17GWh.

We have invested extensively in our networks in order to meet the strong growth in demand for new telephony services and second lines, together with the massive demand for mobile and Internet services. In particular, investment continues in new broadband networks, upgraded SDH (pop up glossary) transmission systems, IP-based switching centres and the rollout of ADSL (pop up glossary) to our customers.

During 2002-03, broadband penetration increased to over 800,000 connections. We anticipate a further increase in network demand in 2003-04.

### Water

Water is principally used in the BT estate for catering and hygiene purposes. 99% of it is consumed and measured at sites, which have water meters.

A concerted effort has been made to reduce our water consumption by increasing investment in leak detection, underground pipe replacement and water-saving devices. As a result, we have reduced our water consumption by 1.84%, from 2.14 million cubic metres in 2001-02 to 2.01 million cubic metres in 2002-03

We are close to the economic benchmark for optimising water efficiency in most of our buildings but despite the fact that we did not achieve our 5% target in 2002-0/3, we will continue to target metered water use.

### See also:

- Better World: data and targets
- Reducing water use http://www.doingyourbit.org.uk

### Fuel tanks

We have several thousand oil storage tanks, many of which are below ground. The oil is used both for heating and to supply stand-by diesel generators, which power the network in the event of electrical supply failure.

Oil is the single largest contaminant of land and ground water. It poses a real threat to drinking water supplies – particularly in sensitive areas close to water abstraction points.

To reduce the likelihood and/or severity of oil pollution incidents, two pieces of legislation, the Groundwater Regulations 1998 and the Control of Pollution (Oil Storage) Regulations 2001, were recently enacted in the UK.

### Fuel tank integrity

The testing, repair and decommissioning of fuel tanks is a vital part of BT's programme to reduce the risk of pollution to ground water and land from the storage of diesel fuel.

### Testing and remedial programme

### Aims

Four years ago, we initiated an ambitious programme to test all our fuel tanks. A project control board – set up to manage a variety of issues relating to fuel tanks – highlighted the potential environmental impact of these tanks.

To date, we have spent £8.2 million on the testing and remedial work programme and have substantially reduced the risk of pollution from our oil storage tanks.





### Scope

A project team, led by our network power and cooling systems team and supported by BT Property Partners, PSL Ltd. – an expert integrity testing company – has visited 5,065 sites, tested 5,594 tanks, passed 4,153 (74%) and provided detailed recommendations for remedial action.

### Action

Over 2,985 remedial jobs were identified, 771 of which resulted in the decommissioning of the existing tank and replacement with a new internal tank. The remainder required either pipe-work repairs or other minor works. The testing programme has also identified 782 tanks, which no longer pose a risk to the environment, either because they had already been concrete/foam/slurry filled, or because the tanks had previously been removed from site or the site had been sold.

To enable us to monitor the speed of our response when an integrity test reveals the need for major remedial work, we introduced a measure to ensure that work is concluded within three months of the test date. Our fuel tanks database now contains a facility to alert planners if a failed tank has not been dealt with three months after the test report was logged. However, this is only a 'backstop', and in practice, the link between the test contractor and the remedial works contractors ensures that remedial work is completed sooner than this.

### Incident reporting

Because of the sheer size of BT's operations, even with good controls, environmental incidents occasionally happen. To reduce the number and severity of these incidents, it is important that they are investigated promptly, lessons are learnt and any changes are implemented quickly. BT classifies environmental incidents as:

- local, where a minor spillage is contained within a very small area
- *significant*, where the spillage covers a wide area but is confined to a hard standing area only and there is no evidence of entry into the drainage system or topsoil
- *serious*, where the spillage has, or is likely to enter either the drainage system or topsoil.

For significant and serious incidents, the Facilities Management helpdesk is informed and a specialist contractor is contacted to clean up the spillage. For serious incidents, the Environment Agency (EA) or the Scottish Environment Protection Agency (SEPA) are also informed about the incident.

### Investigation process

The BT Wholesale Power Technology Support team, which already investigates major power-related incidents, now investigates fuel-related serious environmental incidents. The team's investigative skills, technical understanding and legal/regulatory awareness are helping to improve our performance in this area.

Last year, a new process was established, which required details of incidents to be recorded on a database. In the financial year 2002-03, 20 actual, or potential, spillage

related incidents were investigated by the PTSG, with recommendations made for improvement where appropriate. Of these, 16 were classified as serious, one as significant and one as local. Additionally, two cases were investigated where conditions found on site required remedial work to avoid any potential incident occurring in the future.

The approximate known quantity of diesel fuel lost as a result of these incidents is 3,623 litres.

### Site questionnaires

A comprehensive site questionnaire has been developed to improve our detailed understanding of the environmental risks associated with each of our facilities. It covers information such as drainage plans, the proximity of the fuel delivery points to drains, and whether the site has oil interceptors that are regularly maintained.

By the end of September 2002, questionnaires were completed for all of BT's sites.

The programme will now continue and the assessments will be reviewed as part of an annual cycle by BT's contracted Facilities Management supplier, Monteray.

### Oil recovery

In the last financial year 2002-03, 994,133 litres of oil have been removed from tanks that have been decommissioned as a result of our integrity testing programme or conversions from oil to gas-fired heating systems.

Of this, 174,833 litres have been re-used for heating purposes at other BT sites. 507,200 litres has been reused in replacement generator tanks. Where it has not been possible to re-use internally within BT, other external re-use options have been considered. 238,500 litres of recovered oil have been sent for reuse in the manufacture of road surface material. As a last resort, we disposed of 73,600 litres as controlled waste so that the fuel tank decommissioning programme would not be delayed.

### See also:

• Better World: data and targets

### Waste

The production and correct disposal of waste from our operations are key environmental issues for BT. We produced around 90,000 tonnes of waste in 2002/03 and to maintain our ISO14001 certification, it is essential that we have efficient and effective waste management systems.

As with BT's other environmental aspects, all BT's waste management activities are under the control of a single aspect owner. This ensures a uniformly high standard of waste management throughout the company.

In the financial year 2002-03, we recycled 24% of the total waste we generated (27,809 tonnes) and sent 89,878 tonnes of waste to landfill. We increased the amount of waste we recycled by 16% and we reduced the amount of waste sent to landfill by 1%.

### Types of waste generated

- Category 1 waste that does not present a danger of environmental pollution.
- Category 2 waste that is not toxic or hazardous in unmodified form, but which has the potential to become so if not treated properly on disposal.
- Category 3 waste that is inherently toxic or hazardous and requires the most careful handling at all stages of the disposal process.

### See also:

• Better World – Data and targets

### The BT Waste Forum

Our Waste Forum is chaired by the 'Waste Aspect Owner' and meets every two months. It is attended by key people from across the Group.

The Forum's role is to:

- set and monitor waste environmental targets
- review contractors' environmental performance
- ensure BT complies with all environmental legislation
- manage BT's packaging obligations
- promote and communicate environmental initiatives and awareness
- consider any new environmental ideas.

### Waste targets 2002-03

In this period we had mixed success in meeting our environmental improvement targets:

- We increased the amount of items we recycled (measured in tonnes) by 16%, a significant improvement to the 10% target we set.
- Unfortunately, we only managed to reduce the amount of waste going to landfill by 1%, against our target of 5% (based on the outturn figures for 31 March 2002). This is because, as stated when the target was set, we were carrying out a major clean up of many of our large sites, which significantly increased the amount of waste we recovered. However, the clean-up campaign has had a positive effect on the amount of waste we recycled! (see above).

BT's Waste Aspect Owner is also responsible for a number of targets in other environmental impact areas where there is Facilities Management involvement.

### These are:

- We met our target to phase out all Halon portable fire extinguishers in advance of anticipated legislation.
- We met our target to phase out all Halon fixed automatic flood systems in advance of anticipated legislation.
- We have met our target to identify the total volume of refrigerant used in our 'estate' cooling plant (excluding networks).
- We met our target to ensure that risk questionnaires were completed for the whole of the BT estate. These questionnaires are designed to improve awareness of the environmental impact of our facilities.

- We met our target to complete routine tests to the modified MM23 routine, on all bulk fuel tanks.
- We met our target to have drainage plans at all our sites.

### See also:

• Better World - Data and targets

### **Outsourcing initiatives**

In one of the biggest property deals ever seen, BT sold the vast majority of its estate in the year 2001-02 to Telereal, a joint venture between Land Securities and The Pears Group. However, we still retain responsibility for the environmental impact of our activities.

Facilities management of the whole estate, comprising around 7,000 properties, was outsourced in April 2001. A key factor in choosing our contract partner, Monteray, was their ability to work to the same high environmental standards that we set ourselves.

### Contract management

A team known as the 'Informed Client Unit' (ICU) manages both the Telereal and Monteray contracts and liaises with them to improve environmental performance.

### Recycling

We continue to promote a wide variety of recycling initiatives. This is not only good environmental practice, it makes good economic sense by reducing our landfill costs, and in some cases earning revenue.

Here are the quantities recycled during 2002-03 for some of our schemes:

Cable	4,434 tonnes
General office recycling	7,719 tonnes
Telegraph poles	6,551 tonnes
Metal	2,056 tonnes
Telephone exchange equipment	2,679tonnes
Telephone directories	359 tonnes
Clothing	2.88 tonnes

In addition BT disposed of over 17,203 tonnes of waste from manhole pump-outs (see Better World data & targets section, waste model).

### **Initiatives**

Material Recycling Facilities (MRFs) were introduced into the BT Waste Management process in 2001-02 as part of the waste contracts managed on our behalf by Monteray. MRF facilities continue to be introduced.

At an MRF site, general waste is sorted at a waste station before being sent to landfill. Any items which can be recycled (such as paper, cardboard, metals, uncontaminated plastics, etc) are taken out and only the remainder goes to landfill. We have actively supported the introduction of such activities for our waste contracts: MRFs are now working at a number of sites across the country and will expand further.





# **Transport**

BT fleet manages BT's commercial and company car fleets. The scale of our business makes BT a major player in the fleet industry; and we use our considerable purchasing power to ensure we achieve the best possible value for money and lowest whole-life costs.

We provide end-to-end transport services for BT, including full-service leasing, specification and procurement, service maintenance and repair, fleet management and used vehicle sales.

To minimise our environmental impact, BT Fleet adheres to environmental standards including ISO14001. We work collaboratively with our customers on fleet efficiency and cost reduction initiatives. BT Fleet has an ongoing commitment to report to BT on the environmental impact of its vehicles.

As part of the strategy to grow the business in both the internal and external markets, BT Fleet became a wholly owned subsidiary within BT in 2002, and has a five-year exclusive contract with BT.

### Commercial vehicle fleet

BT's commercial fleet of 33,979 vehicles is one of the largest in the UK. Over the past five years, the size of our fleet has reduced by 7.5% and fuel consumption has reduced by 16%. Full details are available in the data and targets section of the Better World site.

These beneficial environmental reductions have been influenced by a number of initiatives and policies:

- Engineering productivity targets and systems that have improved vehicle routing to eliminate unnecessary travel.
- Operational policies that optimise vehicle utilisation.
- Vehicle replacement cycles that ensure the current fleet benefits from latest technologies and emission standards, while delivering greater reliability and lower maintenance frequency and costs.

### See also

• Better World – Data and targets

### Company car policy

BT's most recent company car scheme supports the key objectives of the government's emissions-based company car taxation initiative, by offering the following benefits:

- Increased allowance to employees who choose to opt out of company car ownership.
- Improved tax efficiencies for employees with a 'business need' for a company car that opt for lower-emission cars.
- Improved advice and communications to company car drivers, encouraging users to choose loweremission cars.

### Reducing fuel consumption

As car users will no longer be chasing mileage thresholds in order to benefit from the tax breaks in the current regime, we anticipate that our overall mileage will reduce. We also now reimburse our people for business travel according to their grade, and not, as was previously the case, according to car engine size – in other words, we will no longer finance 'gas-guzzlers'.

We also have a 'penalty' for those who still choose to be gas-guzzlers! Cars that fall in Fuel Category A (those that return less than 23 miles per gallon), are subject to a £20 per month surcharge on their users' hire charge.

Since the introduction of these initiatives, the company car fleet size has reduced by 21%. There has also been a combined mileage reduction of 64 million kilometres, for company cars and private vehicles on BT business, as well as a reduction in hire car mileage of 46%.

However, as a result, we believe that this is what has caused us increased expenditure on second class rail travel of 7.5%, offset against a decrease in first class rail travel of 2.87%.

### Online ordering

Our company car ordering system for car drivers is completely web-based, with links to all the vehicle manufacturers as well as all new vehicles Fuel Consumption and CO2 Emission data. This enables drivers to make fully informed new car choices and supports the government's aim of encouraging the selection of lower-emission cars.

Information to help drivers minimise their impact on the environment is also included on the site.

### **Alternative fuels**

BT's fleet consists predominantly of medium and large vans – nearly all dieselpowered. There are alternatives, but each has its drawbacks:

- We could replace diesel vehicles with petrol-run vehicles, but this would reduce fuel economy, as petrol vehicles are inherently less efficient than diesel equivalents.
- Liquid Petroleum Gas (LPG) is the cleanest-burning fossil fuel, but supplies are limited. Moreover, the additional space and loading specification needed to store the LPG tanks would mean replacing existing vehicles with larger, less fuel-efficient vehicle types.
   Equally, replacing diesel vehicles with petrol would further reduce fuel economy, as petrol vehicles are inherently less efficient than diesel equivalents.
- 'Dual fuel', since it is not possible to convert diesel engines to run on LPG, we would have to bring in new vehicle types with LPG tanks – and currently, these are larger and less fuel-efficient than our existing fleet vehicles. However, as manufacturers expand their model range of dual fuel vehicles this has become a more viable option for BT. We will therefore review their use for 'business need' company cars and fleet vehicles operating in cities, in order to reduce vehicle emissions and gain exemptions from congestion charges.

### See Also:

Better World – Data and targets

### Fuel econom

For the past three years BT Fleet has taken part in vehicle technical trials organised jointly by Institute of Road Transport Engineers (IRTE) and Brewery Transport Advisory Committee (BTAC). The aim of the trials is to test the effect of new vehicle models and/or market enhancements on vehicle fuel efficiency. This two-day event is funded by the DETR under its Energy Efficiency Best Practice Programme.

At the 2003 trials we tested our 3.5 tonne engineering vehicle, comparing the fuel economy of the 1995 and 2000 model year vehicles. The 1995 model has a 2.5 litre capacity diesel engine compared to the smaller capacity 2.4 litre diesel engine and lower body profile of the 2000 model. The vehicles tested were equally laden, had been in service for approximately 10,000 miles and therefore considered to be 'run-in'.

The vehicles were subject to a series of test cycles on the track that resulted in a 3.3% overall improvement in fuel consumption for the 2000 model over the 1995 model:

### Fuel efficiency devices

BT fleet has recently been evaluating a fuel economy device. The analysis of the data and final report concluded average fuel savings of 12.49% and emissions reductions (smoke) of 36.42%.

Further tests, involving the new generation Transit at Vauxhall's proving ground at Millbrook, found similar reductions. We have now asked Ford to investigate for any detrimental effect the device may have on the engine. They have found a 'wax' build-up in the fuel injection system of the trial vehicle, and we await their final report.

Together with the vehicle manufacturer BT has also been exploring a new product that has potential for our heavy engineering vehicles. This device regulates LPG into the inlet manifold of diesel engine vehicles and effectively reduces the amount of diesel fuel used. The manufacturer

1995 Model	Cycle 1 MPG	Cycle 2 MPG	Combined MPG	Veh Average
Driver A	23.90	26.46	25.18	24.49
Driver B	23.25	24.35	23.80	
2000 Model Cycle	1 MPG	Cycle 2 MPG	Combined MPG	Veh Average
2000 Model Cycle Driver C	1 MPG 24.58	Cycle 2 MPG 26.46	Combined MPG 25.52	Veh Average 25.29

of the product claims that independent tests have confirmed improvements of between 5 and 18% fuel economy, 20% more power and up to 20% more torque. However, the vehicle manufacturer has advised that the device is not compatible with their new diesel engines and would therefore invalidate the warranty.

### **Noise suppression**

We have worked hard to develop specifications that minimise noise for our operators and those in the vicinity of our specialist cabling vehicles. Over the years we have:

- Developed the vehicle specifications to include higher horsepower engines (allowing operation at lower engine revs).
- Introduced sound deadening panels behind the engine.
  Revised the hydraulic valve component to reduce noise.
- Despite increased power demands, we have reduced 'noise at the operator's ear' which means that our operators do not have to use ear defenders.

We also specify that all vehicles fitted with hydraulic systems return to tick over when not powering the system. This reduces fuel usage and exhaust fumes, and keeps operating noise to a minimum.

### Electric vehicle trial

BT is again taking part in the TH!NK@bout London mobility project launched and supported by motor manufacturer Ford.

This project helps businesses and environmental groups in London join forces with local, regional and central government to introduce electric vehicles to the city's streets.

Phase 1 began in August 2001 when London Mayor Ken Livingstone presented BT Fleet with the keys to a brand new electric vehicle for the company to use around the capital. Phase 2 began on 9 April 2003 when BT Fleet were again presented with a Th!nk car to use in London for 18 months.

The silent, zero-emission electric car provided by TH!NK@bout London will again be used by a network planning team for light delivery work and site visits in and around the capital. The electric car, which replaces a Ford Fiesta van, is fitted with telemetry systems to check performance. The data is sent directly to Ford for analysis.

Like phase 1 of the scheme, phase 2 was heavily oversubscribed and BT was one of 15 companies chosen to participate as we were considered an environmentally aware, high-quality and innovative organisation that reflects the diversity of transport users in London.

There are now 88 Th!nk cars on the road in the UK under various schemes, including – Th!nk@bout London, Th!nk@bout London Boroughs, Th!nk@bout Edinburgh.

The Th!nk electric car will continue to be rigorously tested around the streets of London on a daily basis.

### See also:

 Th!nk@boutLondon – http://www.thinkaboutlondon.co.uk/default\_ns.html



# **Emissions to air**

Emissions to air simply means the release of gases into the environment, similar to exhaust gases that come from a car engine. It is an environmental aspect that is particularly highly regulated.

At BT we monitor the emissions to air of a number of substances that impact adversely on the environment and contribute to climate change (ozone depletion and global warming). The most significant of these are emissions from the use of fuel in our vehicles, and losses of refrigeration from air conditioning plant and fire-suppressant gases.

For the past four years, BT has been reporting on its impact on climate change in accordance with the Department of the Environment, Transport and the Regions (DETR) Guidelines for Company Reporting on Greenhouse Gas Emissions, which recommend that 'impact' is measured in equivalent tonnes of CO2. Our records show that:

- compared to 1991 we have achieved a 60% reduction in CO2 emissions due to the energy programmes we have introduced.
- compared to 1992 we have achieved a 35% reduction in CO2 emissions due to the transport programmes we have introduced.

This is equivalent to an annual saving of almost 1.2 million tonnes of CO2.

For further details see data and targets section of the Better World site (CO2 Model and CO2 equivalent emissions chart).

We also report on our ozone-depleting substance emissions (as defined by the Montreal protocol) in accordance with the requirements of the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines – i.e. equivalent tonnes of CFC-11. For further details see the data and targets section of the Better World site (CFC-11 equivalent emissions chart).

### Refrigerants

Wherever possible, we use fresh air to cool the telecommunication equipment in most of our telephone exchanges. However, on warm or hot summer days the outside air temperature results in high internal temperatures and we have to switch on the refrigeration cooling of our air conditioning units.

On a broader level we also play an active role in making telecommunications products and environments more efficient in terms of cooling.

### Fresh air cooling

We are able to use fresh air cooling because we insist that as far as possible communications equipment complies with the requirements of the European Telecommunications Standards Institute. This means we can make full use of fresh air cooling – with its inherent lower energy and maintenance costs – for about 70% of the year.

### Refrigeration cooling

Our key environmental concern here is to prevent the accidental release of refrigerant gas.

To this end, all cooling units purchased since February 2000, use ozone-friendly, chlorine-free refrigerant R407C, and hermetically sealed refrigeration units.

In addition, air conditioning units are fitted with pressure transducers, a new control system, and are designed to be operated without the need for refrigerant analyser gauges, through which refrigerant gas can escape.

At five large London sites, we are refurbishing and replacing large centralised chilling plants that use the CFC R11, an ozone-depleting refrigerant. Refurbishment of three of the sites was completed by March 2002 and the fourth site was completed in July 2002. The remaining site is being left in operation until building closure in 2005.

We continue to monitor available refrigerants that comply with the requirements of the Ozone Depleting Substances Regulations 2037/2000 and will, where possible, use HFC refrigerants in new and existing plant.

### Product design

Through our active participation in the European Telecommunications Standards Institute (ETSI), we continue to explore opportunities to improve the energy/cooling efficiency of the equipment we purchase and influence the design of future communication equipment to ensure that standard cooling practices can be applied.

In the financial year 2002-03, BT and Marconi jointly submitted a proposal to ETSI intended to aid a harmonised cooling approach in the interests of energy/cooling efficiency and the free movement of goods into Europe.

### IT environment design

We have also participated in a research project with the Buildings Services Research and Information Association (BSRIA) on the Integrated Design of IT Communications Rooms. This looked at:

- the different options for air flow management to allow optimum cooling—for example, raised modular floors, ventilated ceilings, ducted distribution and 'free blow' installations.
- alternative methods of cooling fresh air, refrigeration cooling and chilled water.

The project has now been completed, with the final report due for publication in the very near future. We will provide an update on this project as part of our next report review.

### Action on climate change

BT has been reporting on its greenhouse gas emissions since the publication of the Department of the Environment, Transport and the Regions (DETR) Guidelines for Company Reporting on Greenhouse Gas Emissions.

### **Energy and vehicle emissions**

Energy and fleet management is firmly embedded in our management systems and we have been monitoring our energy and fleet-related CO2 reductions over the last few years.

- Compared to 1991 we have achieved a 60% reduction in CO2 emissions due to the energy programmes we have introduced.
- Compared to 1992 we have achieved a 35% reduction in CO2 emissions due to the transport programmes we have introduced.

This is equivalent to an annual saving of almost 1.2 million tonnes of CO2.

### **Exceeding government targets**

Our emissions savings already exceed the UK Government's 'self-imposed' target – which in itself goes beyond the Kyoto Protocol target of 12.5% and is intended to achieve a reduction of 20% in greenhouse gas emissions (from a 1990 baseline) by the year 2010.

### See Also:

• Better World – Data and targets





# Procurement and the environment

BT spent over £8 billion pounds this year on products and services, ranging from telephone exchange equipment and vehicles to accommodation, fuel and energy, stationery, office machinery and postal services.

This makes us one of the UK's largest purchasers, with an environmental influence that extends well beyond that of our own staff and workplaces. In recognition of this fact, for ISO14001 certification, BT identified 'Procurement' as one of eight company activities that have an impact on the environment (an 'environmental aspect').

### **Environmental objective**

BT reviewed Procurement's environmental objective in 2002. The outcome of this review is as follows:

We will continue to seek to influence our suppliers and contractors through our purchasing policy concerning the environment. However, we now have specific objectives to ensure appropriate supplier environmental data is collected and, following evaluation of our suppliers' environmental impacts, to encourage improvement of poor performers in significant risk areas.

We have therefore adopted a risk-based approach – focusing attention on encouraging environmental improvements where the greatest impact can be made.

### See also

• Better World – Data and targets

### Progress in 2002-03

Development of new purchasing 'environment processes' Since 1992, BT has aimed to influence the environmental performance of many of our suppliers through the use of a supplier environmental questionnaire (GS13). In 2002, we underwent a comprehensive review of this process and have created a new two-pronged process for managing environmental issues with our suppliers. Utilising technology to ensure central collection of data and minimise the resources required, we have developed two questionnaires to enable us to identify risk and take appropriate action where required:

- Product Stewardship Questionnaire (GS19). This takes account of environmental issues relating to electrical and electronic products supplied to BT. In particular, it addresses the issues covered by the WEEE (Waste, Electrical and Electronic Equipment) directive. Responses are considered at the tender stage.
- Environmental Impact Questionnaire (GS13). This takes account of a supplier's overall policies and procedures for managing environmental issues. With a pre-contract award commitment to working towards continuous improvement if required, this questionnaire is completed post-contract award and enables BT to identify and to drive continuous improvement in significant risk areas where required.

The new process, having successfully undergone a trial and been approved by external auditors, was launched in November 2002.

### Buyers awareness training

To support the implementation of the new purchasing environment processes (GS13 and 19), 11 training seminars have been attended by 182 (57%) of BT's buyers. The training was designed to help them understand why this initiative is important to BT, the reasons for changing the process and their role in ensuring its successful delivery with BT's suppliers. This effectiveness of this training is being reviewed in June, and if necessary, further training seminars will be arranged.

Following the launch of the new process in November 2002 and the delivery of the training sessions, a total of 80 requests have been made by buyers for suppliers to complete the GS13 questionnaire. Forty-nine suppliers have already submitted a response, and BT's buyers are working with 20 of these to encourage environmental improvements.

# Recognition of suppliers excellent environmental performance

Through the BT Investor in Excellence awards, which recognise best practice among our suppliers, we have continued to reinforce the message to our suppliers that their environmental improvements are important to us. The winner of the Commitment to Social Responsibility award category for 2002 was given to Finnforest, who had made improvements to its water treatment, waste reduction, and groundwater monitoring processes. (see case study)

### See Also:

Selling2bt –
 http://www.selling2bt.com/html/working/environment/default.asp

### Case study

### Telephone poles – Finnforest BBH Limited

Last year's winner of the Investing in Excellence Awards (Commitment to Social Responsibility category) was Finnforest BBH Limited.

Finnforest BBH Limited is a company with whom BT has a long partnership history. For over 100 years they have been supplying us with telephone poles.

Finnforest has clearly recognised the need to revisit established business practices in order to make a positive contribution to the environment in which they work.

The judges commented:

"This company is a long-established operation" Dyed in the wool' specialist suppliers can sometimes be hard to shift when a sea change in social responsibility challenges their established way of doing things. Not this company. Their commitment, and what has resulted from it, has strengthened their future and turned them into a very modern contender."

As part of their aim to achieve an environmental accreditation standard, Finnforest appointed an environmental consultant and an environmental scientist to look at their business processes. Great changes and great improvements followed:

- They have modified their creosote treatment process, introducing an energy efficient heat exchanger unit that has greatly reduced their CO2 emissions.
- Importing dressed, as opposed to rough wood poles, has enabled them to reduce freight costs to the UK, a saving that has been reflected in the cost of the product to BT. This, together with further energy efficiency savings, produced total savings of almost £70,000 per annum.
- At their treatment facility in Scotland, close to a salmon fishing river, Finnforest carry out groundwater monitoring on a weekly basis to check that the river remains pollution free.
- On a wider scale, their environmental management team now plays an active role in initiatives such as Forests Forever and other sustainability programmes.

It is for these reasons that BT awarded Finnforest the Investing in Excellence Award for 'Commitment to Social Responsibility' for 2002.

### **Future plans**

- Over the coming year a key focus for us will be to encourage environmental improvements with our suppliers, where this is identified as a requirement following their completion of the GS13 risk assessment questionnaire.
- In April 2003, BT signed up to level A2 of the Mayor of London's Green Procurement Code. We are therefore committed to holding one-to-one discussions with London Remade over the coming year, to explore practical opportunities for us to specify and purchase products made from recycled materials.

In association with these activities we have set a number of targets.

### See also:

Better World – Data and targets
 London Remade – http://www.londonremade.com





# Product stewardship

Our linked-up world runs on electronic products. The drive to make better, faster, cheaper products can be good for customers and good for business, but it also creates waste.

We accept that when we buy products for use in our own business or for onward sale, we are placing demands on the Earth's resources:

- Our organisation may not carry out mineral extraction, but through our supply chain, we inevitably cause minerals to be extracted.
- We may not manufacture goods, but the demand we create inevitably causes materials and energy to be consumed and waste to be produced.
- Our responsibility does not end when we supply on to others. Even when we no longer own products, we have caused them to be created. We share a responsibility for: minimising the energy consumed during the life of our products; reducing the use of hazardous materials in their manufacture; and enabling reuse, recycling and ultimately, safe disposal.

Product Stewardship' is a set of principles designed to reduce the environmental impact of a product throughout its life cycle. Because it focuses on the design stage, when critical decisions affecting the product's future performance are made, Product Stewardship plays an important part in sustainability.

As well as benefiting the environment, Product Stewardship can also bring benefits to the business. This can be achieved by:

- Taking back products at the end of their useful life enables them to be refurbished and reused, thus reducing landfill and increasing revenue.
- By Incorporating eco-design into products, it is
  possible to reduce manufacturing, use and recycling
  costs, because issues such as energy use, durability,
  materials content and recycling options are considered
  at the design stage, when recommendations for
  improvements can be more easily adopted.

In this section we report on the legislative and business drivers of Product Stewardship in BT, and on our own initiatives in this area.

### See also:

• Better World – Data and targets

### Legislation

BT is a major buyer and user of electronic equipment, and as such we are subject to new or pending legislation designed to encourage sustainability in industry. We strongly support this move, rather than implementing the minimum measures necessary to comply with the law.

BT's Product Stewardship team advises the company on the impact of specific pieces of impending legislation.

Chief among these are EU Directives which became European Law on 13 February 2003, which member states must implement by 13 August 2004:

• Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE).

 Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

Both Directives aim to minimise the use of hazardous materials in electrical and electronic equipment, to minimise the amount of hazardous waste going to landfill, and to encourage reuse of materials.

This will be achieved by setting targets for collection, treatment, recycling and recovery of waste electrical and electronic equipment. It embraces the concept of extended producer responsibility, requiring manufacturers to finance 'take-back' schemes of for equipment at the end of its life.

Furthermore, certain materials defined as hazardous will be banned from electrical and electronic products. For example, lead-based solders, mercury, cadmium and brominated plastics will no longer be allowed to enter landfill sites without appropriate pre-treatment. This will significantly reduce the environmental pollution created by these materials (and their potential to enter the food chain and impact human health). We welcome this groundbreaking legislation because it supports our desire for sustainability.

In preparation for the RoHS directive, BT is researching a number of alternative materials such as lead-free solder and substitutes for polymer additives – like brominated flame retardants – found in electrical and electronic equipment.

In preparation for the WEEE directive, BT has launched a new process (GS19) requiring its supplies to provide information about their products and how they propose compliance with the new directive.

The Framework for Ecodesign of End Use Equipment Directive (EuE), was proposed by Directorate-General for Enterprise and Directorate-General Transport & Energy in November 2002. This Directive will mean that any new electrical or electronic equipment must have its environmental impact measured using life cycle analysis, and have followed eco-design principles, before it can be 'CE' marked and sold in Europe.

### **Contributing to legislation**

BT continues to make a positive contribution to legislative developments by working with industry bodies, such as the Industry Council for Electronic Equipment Recycling (ICER), which provides forums for discussion with trade associations and feedback to UK government departments such as DTI and DEFRA.

More information about the work of these EU Directorates can be found at:

- http://europa.eu.int/comm/enterprise/ and
- http://europa.eu.int/comm/energy/index en.html

### See also:

- ICER http://www.icer.org.uk/
- DTI legislation http://www.dti.gov.uk/sustainability/index.htm

### **Initiatives**

These are the steps we are taking beyond what is legally required of us to embed the principles of Product Stewardship into our working lives.

### Product stewardship standard (GS 19)

We have created a new company Standard based on Product Stewardship principles, to help us select products.

This new Standard is now an integral part of BT's buying process for electrical and electronic equipment. The process requires suppliers to complete an internet-based questionnaire designed to help them minimise and improve the environmental impact of their products and operations.

Gathering information about a product's material content, lifespan, consumables and energy use, will help BT meet the requirements of the WEEE and RoHS Directives, once they become law in the UK. Understanding more about products will also help us to make better purchasing decisions. Furthermore, the information will provide clear evidence to the government regulator of BT's commitment to compliance.

### Support for Broadband rollout

The ACTNOW project (Access for Cornwall through Telecommunications to New Opportunities Worldwide) is a partnership comprising Cornwall Enterprise, BT, The South West Regional Development Agency, Business Link and Cornwall College. It aims to bring ADSL to Cornwall.

The project is supported by EU Objective One funding. All such EU projects must include an environmental assessment.

Our unique Rapid Life Cycle Assessment tool (RLCA©) was used to help ACTNOW undertake its environmental impact assessment. This work assessed the environmental impact of the project's telecommunication infrastructure equipment – such as line cards, filters and cabling and other consumable products.

A further benefit of the ACTNOW consumables assessment is that the recommendations identified not only apply to the 13 exchanges involved in the project but can be made for all ADSL Broadband exchanges. The key learning points from the assessment will help us to:

- Understand the costs of introducing changes to process and additional stocking requirement.
- Consider a more flexible design.
- Explore of the possibility of using reusable items longer lifespan designs and closed loop recovery and recycling.
- Minimise hazardous material content.
- Use designs which easily fit into closed loop recovery and recycling of materials.
- Use designs which incorporate increased energy efficiency and longevity.

Additionally, the information from the assessments relating to in-life energy consumption and CO2 emissions, is now being used as input into a project being run by the European Telecommunications Network Association (ETNO), which is looking at energy usage and the benefits of ICT technology (see Glossary). This same information is also being used to answer a question posed by BT's European stakeholder panel on the climate change implications of Broadband.

### e-living project

BT is helping co-ordinate the European Union's 'e-living – Life in a Digital Europe' project. The project's nine partners are evaluating, among other things, the direct environmental impact of the use of Information Communication Technologies (ICT) equipment.

We are taking part in setting and analysing the responses from the surveys within the project that concern Product Stewardship – particularly on the impact of the WEEE and RoHs Directives.

### Product design assessment

We have assessed the eco-design of 18 products that are supplied to BT. The general findings can be summarised as:

- Products need to be designed with disassembly in mind
- Use of mixed plastics should be avoided.
- Alternatives to adhesive labels should be used to avoid contamination of plastic materials.
- Identification marking of plastic components would aid recycling.

As part of the product assessment process, we also took the opportunity to identify potential scope for improvement to the environmental and financial performance of the 18 products. Some examples of areas where savings could be realised are as follows:

- By recalling more of the products that we collect through our service/exchange schemes.
- How to extend the life span of some products.
- How to cut costs when we eventually dispose of our products.
- How to save on materials and packaging costs.

### Raising awareness

Since the launch of the Product Stewardship training programme within BT, over 2,500 people have completed our computer-based training package.

The programme aims to:

- Raise awareness of environmental issues.
- Help employees appreciate the financial benefits of adopting good environmental practice.

Our campaign to promote Product Stewardship throughout BT has continued with:

- PS road shows at three key BT buildings.
- Relaunch of the PS website for BT employees.
- Publication of the first Newsletter for BT employees.
- Training seminars for Buyers of Electrical & Electronic Equipment on the use of the new PS Standard (GS19).

### See also

- Better World Data and targets
- EU legislation –

http://europa.eu.int/comm/environment/legis en.htm

- ICER http://www.icer.org.uk/
- e-Living http://www.eurescom.de/e-living/
- Government guidelines on sustainability http://www. defra.gov.uk/environment/sustainable/index.htm)



# Local impacts

BT's commitment to the wider environment is well known, but we also recognise that our products, services and operations affect our customers' immediate surroundings too. Disturbance to the local environment can take a number of forms, whether it's the visual intrusion of telephone wires, or disruption caused by construction work.

BT's approach to 'local impact' is embedded in our Network planning rules and procurement policies. We have recognised channels enabling customers to communicate with us on these issues.

### The infrastructure

BT provides communication services the length and breadth of the UK, from the most densely populated cities to the remotest Scottish islands.

The infrastructure needed to support our 28 million customer lines includes around four million telegraph poles, millions of manhole covers, thousands of roadside cabinets, 24 tunnels running through cities and hundreds of radio stations.

We are conscious that infrastructure on this scale has a potential impact on the environment – on the countryside, on skylines and cityscapes – that is of concern to all our stakeholders.

In tackling issues concerning the local environment, we support the four principal elements set out in the UK government's sustainable development agenda i.e.:

- social progress which recognises the needs of everyone
- effective protection of the environment
- prudent use of natural resources
- maintenance of high and stable levels of economic growth and employment.

### Visual amenity

What do we mean by 'visual amenity'? BT proposed the following definition, in response to the then Department of Environment, Transport and the Regions (DETR) consultation on telecommunications development:

"the preservation of a view or prospect available to a member of the local community from a public location which is designated as protected".

But when it comes to putting this into practice, it can be difficult to strike the right balance.

For example, replacing overhead wires with buried underground cable has both positive and negative environmental impacts.

Underground cables may have less visual impact, but burying wires consumes much more energy and material resources.

Poles are made from timber grown in managed forests and can be regarded as a renewable resource; underground installation requires plastic ducting, concrete and metal manhole covers, which are made from non-renewable sources.

Recognising that there is no 'one size fits all' solution for all situations, we work with our customers to try to achieve a balance between visual impact, cost and resource use.

### Street furniture

Our roadside cabinets are sometimes vandalised by fly posters and graffiti, and this year has seen increased activity by local authorities to improve streetscapes. BT is working in partnership with local authorities and community groups to find a suitable and commercially viable solution to deal with this issue.

### **Environmental complaints**

Based on 2002 data, the number of environmental complaints received represents less than 1% of the total complaints that BT receives. However, we are currently reviewing our data collection methodology, to decide how best to identify any possible trends and issues.

### Street works

BT works closely with developers of housing estates to minimise the impact of construction activities when extending our network. Our agreement with the House Builders Federation ensures a co-ordinated on-site approach by all service providers.

The disruption caused by digging in the street is of concern to our stakeholders. BT was involved in the consultation undertaken by the then DETR regarding the New Roads and Street Works Act 1991: specifically Section 74 of the Act, Code of Practice, which is seeking to reduce disruption to road users caused by utility street works.

The working party helped develop the Street Works Regulations 2000 (charges for prolonged occupation of the Highway), which came into effect on 1 April 2001.

These regulations itemise the responsibilities of all parties and set out the penalties to be imposed should the 'utilities' fail to meet their responsibilities.

BT is committed to working within this revised framework. Using our e-business experience, we also worked with the then DETR to develop the Electronic Transfer of Street Works Notices (pop up glossary), launched in 1999. This eliminates the need to use paper and significantly speeds up the street work notices transfer process.

### Wires and cables

Complaints relating to our wires and cables range from the visual intrusion to birds sitting on wires creating noise and mess.

2002-03 saw a major initiative to validate all reported instances of overhead wires and cables, which were not at the correct height. Remedial work is now being carried out as a result of that survey.

### Overhead works (telephone poles)

There are a number of reasons for replacing poles – safety reasons, raising the height of wires to enable larger vehicles to pass, and so on.

When constructing new pole routes, consideration is given to the environment in which the apparatus is to be placed e.g. tree roots and hedgerows, particularly in areas of outstanding natural beauty, on listed buildings and other protected areas.

### Overhead works (radio masts)

BT has around 300 radio stations throughout the UK.

Radio communication remains an important part of our network, particularly where the terrain is difficult – for example, in the mountainous areas of the Scottish Highlands.

Of course, where there is radio there are also radio masts, which can impair the beauty of the landscape. While we are undertaking experiments with the use of modern satellite technology, it will be necessary for these masts to remain a feature of our landscape for some time to come.

### **Biodiversity principles**

### What is biodiversity?

In simple terms, biodiversity means the whole variety of life on Earth.

Biodiversity is a key test of sustainable development because it:

- enhances quality of life
- provides natural assets from which economic benefits can be derived (e.g. pharmaceuticals)
- demonstrates that the environment is in good health
- enables future generations to meet their needs

There is now a statutory basis for biodiversity conservation, in the Countryside and Rights of Way Act (2000).

We would argue that most of BT's impact on biodiversity is not directly through our land holdings, but indirectly through our transport, energy and natural resource use. Our environmental policy and environmental management systems cover these indirect impacts. We measure and report on our environmental emissions, energy and fuel use etc, using DETR (see glossary) guidelines where possible.

Nevertheless, we take every opportunity to promote and encourage biodiversity. To see what steps we're taking, please go to biodiversity action.

### **Biodiversity action**

Where we have significant land associated with our sites, we work with the appropriate organisations to conserve their biodiversity.

BT also has a positive impact on biodiversity through a wide range of programmes including procurement, property and product stewardship:

- Publications BT has published Variety and Values in order to advance the discussion of global cultural and biodiversity issues.
- Our Environmental Policy contains an extract of policy, from which users can go to full report) describes how we site our buildings, structures and operational plant to minimise their impact on the local environment.
- **Procurement**: We will only procure telephone/telegraph poles that are sourced from sustainably managed forests.

We are continuing to change over from the solvent-based paints that we used to use to spray our large microwave towers, to water-based ones. These towers are often located in remote rural locations often surrounded by unspoiled habitats, and we do not wish to cause possible contamination with the volatile organic compounds that make up the solvents.

### Waste management:

A comprehensive recycling programme is in place for the company and its customers, preventing nearly 28,000 tonnes of waste per annum ending up in landfills (24% of our total waste). Operational plant, cable, batteries, oil, mobile phones, paper, toner cartridges and telephone directories are all recycled.

### Property:

Many of our new flexible 'workstyle' office buildings and our telephone exchanges incorporate fresh air rather than refrigerated cooling to minimise their emissions, and have bird/bat boxes to encourage local biodiversity.

### Campaigning:

- a) Work with Forum for the Future
  - In order to progress our biodiversity strategy we have worked with Forum for the Future (link to ) to focus on:
  - the impact of the telecommunications sector on biodiversity
  - best practice business approaches to management of biodiversity within the telecommunications and other sectors.

The reports resulting from these studies have highlighted that nearly all major companies implicitly manage some of their biodiversity impacts as part of broader environmental, social or sustainability management strategies without drawing these together under the biodiversity umbrella.





### b) Work with schools

In addition to internal initiatives, many companies sponsor biodiversity-related projects. BT has in the past sponsored 'Grounds for the Future' to promote biodiversity within schools.

We are now sponsoring the GLOBE UK schools project to measure local biodiversity indicators and post these onto a database via the internet.

### Special projects

### a) Goonhilly Downs SSSI

One of our satellite communications centres, which is 171 acres in area and a component of The Lizard Special Area of Conservation, is located on Goonhilly Downs, designated a Site of Special Scientific Interest (SSSI) for its rare lowland heath habitat. Here we have agreed a site management statement with English Nature (EN) to manage the site to maintain and improve its biodiversity. We received the 'English Nature SSSI Award for Outstanding Achievement' for the site management statement and follow-up work plan in 1997. Examples from the work plan have appeared in the Earthwatch booklet 'Case Studies in Business and Biodiversity'.

- b) Madley Environmental Education Centre
  The Madley Environmental Study Centre (MESC) is a
  facility for environmental educational studies.
  The MESC, which is part of 218 acres of land owned by
  BT, has made available 11 acres of wetland, woodland
  and meadows where children and adults can study or
  just enjoy the wildlife. MESC is supported by the
  Environment Agency (EA), Hereford Council and BT.
  BT already manages the land for wildlife and provides
  technical facilities and support as well as purposebuilt, innovative classrooms and a lecture auditorium
  on the site.
- c) Adastral Park

The BTexact site at Adastral Park shows how development can contribute to the socio-economic stability of an area without biodiversity loss provided good environmental management practices are adopted. To ensure we optimise biodiversity at Adastral Park, a 99-acre site, in the Suffolk Coast and Heaths Natural Area, we have partnered with English Nature on their 'Lifescapes' initiative. This aims to achieve landscape-scale changes to favour wildlife through habitat recreation, wildlife-friendly land use and generally by building a landscape that encourages biodiversity.





# **Benefits**

"ICT is a wonderful tool for creating value, creating an inspired work environment and an opportunity for people to develop themselves"

### Ben Verwaayen 2002

For BT Chief Executive Ben Verwaayen, communications technology not only benefits business, but the people doing business. Within BT itself, creative use of BT's own products and services enables us both to reduce our consumption of finite materials and to improve the worklife balance of our people.

In this benefits aspect section, we attempt to identify some of the benefits that ICT is bringing to BT – the impact of phone and video-conferencing on travel, the social and travel implications of more flexible workstyles, and the impact of e-Business.

Last year we were also closely involved in the Global e-Sustainability Initiative ICT sector report prepared for the 2002 World Summit on Sustainable Development. This sets out the views of the communications sector and the impacts of our products and services on the Sustainable Development Agenda.

### See also:

- BT Better World Sustainability and Employees sections
- GeSI http://www.gesi.org/

### Conferencing

Conferencing by video, phone or the web is not only more time and cost-efficient than meeting in person, it improves the quality of life for those shouldering the burden of frequent travel. It's also a major benefit for BT's 6,600 home-based workers and a growing number of teleworkers – those who occasionally work from home.

BT Conferencing provides all BT's internal phone, video and e-conference facilities, as well as providing conferencing solutions for customers.

### Improving facilities

This year BT Conferencing enhanced its range of meeting enablers. Traditional methods of conferencing have been coupled with new internet technology to create even more options for BT people to share information remotely

### Research

The group also conducts regular surveys of the economic, social and environmental performance of our phone conferencing services. The results can be seen in the following section, Impacts of conferencing.

### Impacts of conferencing

In October 2002, a representative sample of BT staff were surveyed about their use of conferencing. 14% of the people contacted replied; this group is broadly representative of BT in terms of business unit and age, but includes a higher proportion of managers and women than BT as a whole.

The main findings of the survey are summarised below. For full data see BT Conferencing Survey Report v14.pdf.

### **Economic impacts**

Conferencing is reducing BT's travel costs.

Most respondents felt that conferencing was benefiting their work. 66% said it was essential to their job, and over 80% believed it had improved their performance.

### **Environmental impacts**

The survey suggests that the average conference call has the following benefits:

- avoiding travel of at least 91 miles for car users; 94 miles for train users.
- freeing up road space and seats on public transport at the busiest times of day. (Nearly half the trips would have taken place at this time.)
- alleviating congestion in London. (Around a third of replaced meetings would have been in the capital.)
- Reducing harmful CO2 emissions. (At a conservative estimate, each conference call saves a minimum 22.05 kg of CO2; all conference calls save at least 20,060 tonnes of CO2.)

### Social impacts

Conferencing is also creating personal benefits for BT staff. Three quarters of respondents said conferencing had a positive impact on their quality of life, with only 2% reporting a negative effect.

One respondent's comment summed up most people's view of teleconferencing:

"Travelling less = more time at home = balance of home/work priorities = less stress = better performance."

### See also:

BT Conferencing Survey Report v14.pdf

### Flexible workstyles

Technology is providing more flexible working solutions to better suit the needs of both individuals and businesses.

It is giving us the freedom to work away from the office, but with all the resources we need to do our jobs effectively.

BT has supported and sponsored the development of work-style choices for our people for a number of years. More than 6,600 BT people are now full-time home-based workers, experiencing personal benefits to their lifestyle while reducing the environmental impact of their travel to and from work.

In this section we look at the pros and cons of teleworking, as indicated by two linked studies:

- 1) An internal BT survey, which acted as a pilot for,
- 2) An external survey conducted by SUSTEL (www.SUSTEL.org).SUSTEL is an EU-sponsored survey assessing the economic, social and environmental aspects of teleworking.

### **SUSTEL Pilot Report**

The report summarises an online survey, carried out in October 2002, of staff registered with Workabout, BT's official teleworking scheme. Answers were received from 1,874 people – a response rate of 36.5%.

The main findings of the survey are summarised below. For full data, see SusTel Pilot Report.pdf

- The majority of respondents felt that they had a better life through teleworking than if they commuted to an office. Many reported an increased contribution to domestic and community activities, while a small number believed that they would be unable to do their present job if unable to telework.
- Most teleworkers reported an increase in working hours – of over nine hours per week for nearly half the respondents. This was the main reason given by the small minority of respondents who felt teleworking had a negative effect on their lives.

So for the majority of people, teleworking has resulted a higher quality of life as well as an increase in working hours. How can this paradox be explained? One reason is reduced time commuting, which can free time for both work and private life, and also greatly reduce stress. Another is the ability to multi-task – for example, hanging out washing during breaks – so that there is more quality time at the evening or weekends.

### See also:

• SusTel Pilot Report.pdf

### **SUSTEL UK**

The report summarises the UK results of SUSTEL (Sustainable Teleworking), a European Commission research project on the social, economic and environmental consequences of telework.

In the autumn of 2002 the project conducted 30 case studies and six surveys in Italy, United Kingdom, Germany, the Netherlands and Denmark.

The main UK surveys were carried out with BAA Heathrow and BT, [The two companies, along with four other organisations – Acre (a small NGO), Bradford Council, East Midlands Electricity and Word Association (a small internet company) – were also the subject of case studies for the project.

The main findings of the survey are summarised below. For full data, go to (UK SusTel Summary Report.pdf)

### Personal and social benefits

The vast majority of respondents felt that they had a good quality of life over the past 12 months, and that teleworking was having a positive effect.

 Most respondents felt that they had a good work-life balance and that teleworking had positive impacts on partners, children and adult dependants.

- Particular impacts noted were: more time spent on domestic activities (particularly shopping, cooking and washing up) than previously; positive effects on respondents' health; increased involvement in community activities and greater use of local services.
- For a minority of people, teleworking was the only way they could remain in employment at all.
- Most respondents felt that teleworking had a positive influence on career development, although a minority (15.5%) of BT respondents felt that it had a negative effect.

However, teleworking does have some downsides:

- Many respondents felt that their working hours had increased – by more than 11 hours a week in the case of some BT respondents.
- Respondents feel isolated from work colleagues and to a lesser extent, from non-work contacts – something, which doesn't seem to matter for most people but does disappoint a large minority of BT staff.
- While most people find that teleworking has no effect on domestic conflict, a quarter of BT respondents and nearly 30% of BAA respondents find that it has slightly increased.

### Kev economic benefits

Better performance, reduced absenteeism and need for less office space are among the economic benefits of teleworking:

- Nearly half of BT respondents who felt that their performance had improved believed that teleworking had made a major contribution.
- Performance improvement mainly took the form of higher productivity and better quality of work, and the main causes were reduced stress and better concentration.
- Three of the six case study companies showed major reductions in space requirements, with one Word Association, a small internet company using telework to give up a central office entirely to become a 'virtual' organisation, thus saving £10.000 pa.
- Three of the six cases also found that teleworking was reducing absenteeism and job turnover. Nearly three quarters of both of BT and BAA respondents reported that they worked when illness or travel disruption prevented them from reaching a desired working location.
- Nearly a quarter of BT employees reported a positive benefit of more than 800 Euros a year from teleworking.





### Travel reduction

SUSTEL, like previous research, found that teleworking reduces commuting travel. However, it went further by offsetting the extra journeys people make as a result of working from home. This showed that:

- Non-work-related journeys resulted in mean additional weekly travel of 60 miles at BT and 16 miles at BAA.
- However, set against weekly commuting savings of 253 miles at BT and 61 miles at BAA, teleworking still results in considerable travel reductions.

Most respondents stated that teleworking had had no impact on their in-work travel.

Of the people whose number of journeys had changed, 18% of BT people reported an increase in in-work travel, and only 9% a decrease. (However, of that 9%, the average decrease was 393 miles – greater than the average increase of 266 miles.

Teleworking was also saving large quantities of time at BT with 64.7% of BT respondents were saving six or more hours a week, with 22.9% saving 11 or more hours per week.

### Conclusions

Although there are some downsides, such as increased working hours and some concerns about career development, teleworking in the UK appears to be a mutually advantageous activity for both individuals and organisations. It is creating net economic, environmental and social benefits.

### See also:

- UK SusTel Summary Report.pdf
- Full report available at www.sustel.org

### e-Business (e-BT)

The increased use of electronic transactions in BT has had clear environmental and social benefits, as well as a positive impact on the bottom line. In the last five years, as we have been transforming BT into e-BT, the use of ebusiness transactions has resulted in a reduction in the use of paper, ink and other stationery items.

Although the increased use of e-mail is often believed to lead to increased local printing and greater use of printer/copier paper and other consumables, this is not proving to be the case in BT.

### Paper consumption

BT's Billing and Telephone Directories operations remain the largest areas of print and paper usage.

During the year 2002-2003 BT's billing operation was outsourced and paper consumption data for this operation is not currently available. This section will be updated as soon as the data is available.

Highlights:

- Copier Paper 500 tonne (28%) reduction
- Billing Paper (including envelopes) prior to outsourcing monthly usage was down by almost 40 tonnes
- Office Paper supplies (forms etc) decrease of 93 tonnes, contributing to a 60% reduction over the last five years
- Print decrease of 550 tonnes (26%) last year

• Overall decrease (excluding billing) in consumption of nearly 2,900 tonnes (35%) last year

Last year's paper consumption figures included the documentation for the rights issue and BT Wireless demerger, amounting to 957 tonnes of paper. Excluding this one-off requirement BT has seen a 1,915 tonne reduction in paper used during the year. Due in part to increasing adoption of eBusiness solutions (this report being an example) and in part due to the focus on cost reduction during the year.

### e-Donation

In 2002, BBC Children in Need introduced a new e-Donate platform from BT.

This provided real-time statistics to aid future event planning and helped it earn extra interest and increase online donations by 50% – every penny of which goes directly to those in need.

e-Donate supported BBC CiN's web and digital satellite TV donation channels, enabling card donations to be automatically processed into the bank. Previously, online donations were taken on the night, then manually processed after the event, taking up to two weeks for the money to go into the BBC CIN account. e-Donate has not only saved BBC CiN several thousand pounds in processing costs and resources, but has also enabled it to earn extra interest as the money goes into the bank almost immediately.

### **Customer solutions**

### Online Directory

BT's online Directory Enquiries holds number information for both people and businesses, including organisations such as government bodies and charities. Users are entitled to 10 free searches per day and can search by name, town or the initial letters of the post code

### e-Billing

BT produces millions of bills every year, using millions of sheets of paper. We are developing ways of using our technology to reduce the amount of paper we use and to improve customer service:

- a) Business Online Paper-Free bill
  - The advantages of paper-free billing are as follows:
  - No more paper better for the environment
  - The facility to sort and analyse your fully itemised call details
- An online VAT statement that is fully supported by Customs and Excise which can be printed if needed
- The ability to download your billing data to your PC
- 2,000 extra FREE online directory enquiry searches every month
- b) Other paperless payments

Customers can arrange to pay by direct debit without completing any paperwork, simply by phoning BT and speaking to an advisor, or by accessing bt.com. Each paperless sign-up saves us mailing one paper direct debit instruction, one leaflet explaining payment options and one return envelope -as well as the

envelope it is all sent out in. There is also an automated **See also:** telephone set-up service on 0800 150111.

### BT and Entropy lead government revolution

The BT environment unit together with BT Retail, has developed a partnership with an external software company, Entropy. Our collaboration with Entropy means that we can now offer the company's award-winning Envoy software as part of an integrated solution. Designed to ensure compliance with ISO 14001, EMAS, ISO9001 and OHSAS18001, Envoy covers environmental, quality, and health and safety (EQS) management and monitoring. Some of the departments now using this solution are:

- Department of Trade and Industry
- Office of the Deputy Prime Minister
- Department for Transport
- Department of Environment, Food and Rural Affairs
- Department for Education and Skills
- Driving Standards Agency
- Highways Agency
- Inland Revenue
- HM Treasury
- Driver and Vehicle Licensing Agency
- Kent County Council
- Bristol City Council

Many of these are using the Envoy EMS and Monitoring modules to achieve certification to ISO14001, in line with the Central Government targets.

### Working with others

Ongoing dialogue with a number of national organisations gives us an independent view of how we manage our environmental performance and the ways in which this could be improved. In particular, these partnerships focus on the application of information and communications technology for social and environmental benefit.

### **UK CEED**

BT has worked with the UK Centre for Economic and Environmental Development (UK CEED) an independent charitable foundation specialising in sustainable development research, for several years.

We are also supporting the further development of UK CEED's sustainIT centre. SustainIT is a new research and development centre focusing on the relationship between ICT and sustainable development.

### Forum for the Future

We are corporate partners of Forum for the Future, a research organisation formed by three of the UK's leading advocates of sustainable development.

- Telephone conferencing www.conferencing.bt.com
- residential & business billing http://www.bt.com
- CEED http://www.ukceed.co.uk/
- SustainIT http://www.sustainit.org/
- Forum for the Future http://www.forumforthefuture.org.uk/



# **Payphones**

As the UK's leading Payphone provider, BT Payphones is a highly visible aspect of BT's operations.

BT Payphones was the first group within BT to gain certification to ISO 14001 in May 1999. The fact that we still maintain separate certification shows the strength of our commitment to the environment.

Approximately, 18 million customers, 37% of the UK population, use our 113,000 public payphones every year.

Our payphone operations raise a number of environmental issues, primarily:

- siting of kiosks and advertising
- materials purchase and maintenance activities
- payphones and the community
- cleanliness

### Siting and advertising

When siting a payphone, we always consider the environmental impact it will have on its surroundings. And we often work with local authorities to ensure that a wide range of views and options are considered.

In addition, we have drafted a code of practice for responsible advertising on public phone box housings.

Our code of practice goes beyond the scope of legal planning requirements by looking at issues such as safety, planning and amenity. We believe that self-regulation by means of our own code demonstrates our responsible approach to advertising.

### Advertising code of practice

Our self-imposed code excludes advertising in:

- areas of outstanding natural beauty
- national parks
- the Norfolk Broads
- the Greenbelt
- open countryside
- areas of special control of advertisements
- areas of special county value
- the setting of a listed building
- the setting of a Royal Park
- a World Heritage site and its setting.

In these areas, advertising space on kiosk glass is reserved exclusively for local community action groups.

The Office of the Deputy Prime Minister (ODPM – previously DTLR) is due to announce shortly that kiosk advertising will be given its own class under the Outdoor Advertisements Control legislation. This means that BT payphones, or other payphone companies, need no longer apply for express consent from the planning authority, subject to certain limitations and restrictions.

BT will also work with closed circuit television (CCTV) operators to ensure that advertisements do not obstruct the visibility of cameras.

Advertising will be confined to modern kiosks and to one side of the kiosk.

Posters will not be displayed on consecutive sides where kiosks are next to each other.

### Materials purchase

All BT Payphones' suppliers are required to demonstrate their commitment to supporting our environmental impact considerations.

For many years this has involved 'recovering' – i.e. refurbishing and reusing – a wide range of the payphone portfolio (products and spares). This minimises the amount of waste within the business as well as maximising savings.

Last year, BT Payphones (BTP) embarked on an extensive rationalisation of our street payphones, which involved recovering approximately 13,000 kiosks by the end of March 2003. BTP has set up recovery and refurbishment contracts with its main suppliers to ensure that the products and housings recovered are refurbished and reused wherever possible. Where this is not possible, secure disposal routes have been established with the relevant supplier – for example, to granulate polycarbonate and recycle stainless steel.

### **Maintenance activities**

We operate a road transport fleet and have made steady progress this year in reducing our environmental impact in this area. Over the last year we have reduced vehicle numbers by 9%.

We continue to monitor vehicle usage carefully and take opportunities to reduce it where we can; it's good for the environment and good for BT.

### Payphones and the community

As the UK's largest payphones provider, BT Payphones (BTP) sustains a presence throughout Britain's many and varied public spaces. We currently operate approximately 79,000 public payphones and 34,000 managed sites (managed sites are those generally accessible to the public but which are located on private land, such as train stations).

At present, we maintain approximately 16,000 traditional red boxes (K2 and K6), including listed kiosks, even though they involve higher running costs than modern boxes (KX100, KXplus).

We are keenly aware of the important role that the payphone network plays in society and we are committed to safeguarding this.

Payphones can help to raise local amenity standards by promoting social inclusion, particularly amongst those in areas of greatest poverty.

Payphones are also critical to promoting community safety. 8.4% of genuine emergency calls are made from payphones (based on 2001 data); they give people going about their daily lives extra confidence, in much the same way as the presence of CCTV does.

### Cleanliness

BT Payphones has a dedicated team overseeing the cleaning of the BT payphone network, which is undertaken by specialist contractors on BT Payphones' behalf.

BT Payphones adheres to the very highest standards in maintaining and cleansing our estate of payphones. The frequency of cleansing of payphones depends on usage and need, and ranges from monthly to daily. We offer a four-hour turnaround when responding to requests for special cleans reported by customers or local authorities and this is monitored by the National Contracts Office.

Graffiti, fly-posting, vandalism and litter have a negative impact on this local amenity by discouraging public usage. Our own customer satisfaction research shows us that cleanliness and vandalism are significant factors, which impact on customer use of our kiosks.

BT Payphones spends approximately £20 million annually on maintaining and cleaning payphones' housing.

### Frequency and monitoring of cleansing

BT operates two processes for carrying out cleaning:

a) Scheduled Cleaning – On average, high usage payphones are cleaned four times a week. Frequency of cleaning is linked to the level of usage of the payphone. This means that some payphones may be cleaned seven times a week, whereas those in very remote areas, where usage is extremely low, may be cleaned once a month. As a minimum, all payphones are cleaned on a monthly basis.

b) Special Cleaning – This is undertaken normally within four hours (and as a legal requirement, within 24 hours) of BT Payphones becoming aware of a particular issue in an individual payphone, such as a noxious substance. When a Special Clean is required, we are usually alerted by customers via the operator or, given the frequency of visits to a payphone, via our own staff.

The value of individual cleaners' contracts is linked to the quality of contractors' cleans, to encourage the highest possible standards. Furthermore, we try to motivate cleaners, who have a sometimes unpleasant job, through excellence awards.

Standards of cleaning are monitored by BT's Local Contracts Officers, and by separate contractors responsible for posting kiosk glass advertising. They provide feedback to the cleansing team each time they visit a payphone. From April 2003, we will be introducing an extra support to this monitoring of cleansing levels, by requiring our engineers to report on cleanliness levels.

In future there are likely to be even higher numbers of visits to payphones and, therefore, increased opportunity to check on standards of cleanliness, as BT Payphones installs and maintains new services in payphones, such as multimedia terminals and CCTV cameras for street surveillance. This means that we have a system of ongoing, random checking of payphones in high volumes.

### Fly-posting

We are currently funding trials on measures to discourage fly-posting, in co-operation with local authorities.

Fly-posters are subject to the same processes and levels of attention for cleansing as set out above. In addition to removing material and cleansing the boxes, we have been working with local authorities to identify ways to prevent fly-posting in the first place.

Pilot projects have shown that fly-posting is less likely to take place over legal, smartly designed and maintained kiosk glass advertisements. This is particularly the case when advertisements are posted on the outside of kiosks, as the fly-posters stick less readily to the advertisements' material.

In areas very badly hit by fly-posting, BT Payphones is looking at trialing a number of products with which to coat kiosk glass, to which materials cannot easily be fixed. However, this option carries with it substantial costs which may be disproportionate to the benefits they bring.

BT Payphones is active in pursuing those who consistently disfigure kiosks with fly-posters through the courts. However, it is often difficult to secure convictions, as fly-posting is often not enough to prove actual damage to the kiosk, as required under current legislation.

### Prostitute cards

BT led the campaign for criminalisation of prostitute carding, which was successful in May 2001. BT Payphones removes millions of prostitute cards from payphones every year at significant cost to us. These cards would otherwise cause ever-higher amounts of litter, as well as offence to payphone users.

Our dedicated Police Liaison Unit co-operates with police and local authorities to log and share the telephone numbers on the cards for enforcement action. We are currently awaiting confirmation from other operators that they will follow suit.

We are currently trialing the application of various products on the inside of kiosks, where cards are usually placed, to reduce the effectiveness of any adhesive used to stick the cards to the kiosk.

### Other measures

- Police Liaison Unit BT Payphones operates a 24/7
  Police Liaison Unit that provides administrative and
  training support to the police, both in relation to
  payphones and wider street crime.
- Environmental policies All BT Payphones contractors must complete environmental questionnaires, as required by BT's procurement processes. We also have ISO14001 certification. We had no environmental prosecutions during the period April 2001 to March 2003.





• School and community initiatives – BT Payphones has a number of long-running programmes to encourage community co-operation in tackling problems such as graffiti, vandalism and fly-posting. An example of this is 'Kiosk Kate' which we use as a focal point to showcase anti-vandalism messages to schoolchildren around the country.

Another initiative we have introduced to encourage community co-operation is our new website. In November last year, BT Payphones launched a new website (see http://www.bt.com/payphonecitizen) aimed at Key Stage 3/S1-S2 schoolchildren studying the new Citizenship curriculum. The website contains interactive pages for students, worksheets and teachers' notes about community involvement, the emergency services, the effects of crime (including vandalism and hoax calls), and the 'digital divide'.

We also launched a national competition for schoolchildren to create a poster to illustrate 'kicking vandalism out of payphones'. The competition winner will have their artwork made into a poster and displayed in phone boxes around their area, and their school will receive £2,500 worth of computer equipment of their choice.



