

BOC GROUP PLC  
Form 6-K  
December 06, 2004

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16 OF  
THE SECURITIES EXCHANGE ACT OF 1934**

Report on Form 6-K dated December 6, 2004

Commission File Number 0-10906

The BOC Group plc

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(Translation of registrant's name into English)

Chertsey Road, Windlesham  
Surrey, GU20 6HJ England

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(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F:  Form 40-F:

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes:  No:

Enclosure: The BOC Group plc Report and Accounts 2004.

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

The BOC Group plc

Date: December 6, 2004

By: /s/ Anthony Eric Isaac  
Name: Anthony Eric Isaac  
Title: Chief Executive

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This report contains the Report and Accounts 2004 of The BOC Group plc (the Company ) for the financial year ended 30 September 2004. The Report and Accounts 2004 comprises the annual report and accounts of the Company in accordance with United Kingdom requirements and the information required to be set out in the Company s annual report on Form 20-F for the financial year ended 30 September 2004 (the Form 20-F ) to the Securities and Exchange Commission. This information in the Report and Accounts 2004 that is referenced in the Cross reference to Form 20-F table on page 138 shall be deemed to be filed with the Securities and Exchange Commission for all purposes, including incorporation by reference into the Company s annual report on Form 20-F filed with the Securities and Exchange Commission on 6 December 2004.

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**BOC**

**The BOC Group plc** Report and accounts 2004

REPORT AND ACCOUNTS 2004

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**THE BOC GROUP plc IS A PUBLIC LIMITED COMPANY LISTED ON THE LONDON AND NEW YORK STOCK EXCHANGES AND REGISTERED IN ENGLAND. THIS IS THE REPORT AND ACCOUNTS FOR THE YEAR ENDED 30 SEPTEMBER 2004. IT COMPLIES WITH UK REGULATIONS AND INCORPORATES THE ANNUAL REPORT ON FORM 20-F FOR THE SECURITIES AND EXCHANGE COMMISSION TO MEET US REGULATIONS. AN ANNUAL REVIEW AND SUMMARY FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 SEPTEMBER 2004 HAS BEEN ISSUED TO ALL SHAREHOLDERS WHO HAVE NOT ELECTED TO RECEIVE THIS REPORT AND ACCOUNTS.**

**Cautionary statement**

The report and accounts includes forward-looking information within the meaning of section 27A of the US Securities Act of 1933 (the Securities Act ), as amended, and section 21E of the US Securities Exchange Act of 1934 (the Exchange Act ), as amended. Certain sections of this annual report including, without limitation, those concerning (i) the company s strategies, (ii) the company s research and product development, and information technology, (iii) the company s investments, (iv) commencement of operations of new plants and other facilities, (v) efficiencies, including cost savings, for the company resulting from business reviews and reorganisations, (vi) management s view of the general development and competition in the economies and markets in which it does, or plans to do, business, (vii) management s view of the competitiveness of its products and services, and (viii) the company s liquidity, capital resources and capital expenditure, contain certain forward-looking statements concerning the company s operation, economic performance and financial condition. Although the company believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic conditions, changes in the level of capital investment by the semiconductor industry, success of business and operating initiatives and restructuring objectives, changes in the regulatory environment, outcome of litigation, other government actions, natural phenomena such as floods and earthquakes, customer strategies and stability, and fluctuations in interest and exchange rates.

**Financial year**

Throughout the report and accounts, reference to 2004 in the text means the financial year ended 30 September 2004. Similarly, references to other years, eg 2005 , 2003 and 2002 , also mean the financial years to 30 September unless stated otherwise.

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**FINANCIAL HIGHLIGHTS**

<b>Turnover - subsidiary companies</b>	<b>Operating profit</b>	<b>Profit before tax</b>
<b>2004</b> £3,885.4m	<b>2004</b> £559.5m	<b>2004</b> £412.3m
<b>2003</b> £3,718.3m	<b>2003</b> £438.6m	<b>2003</b> £351.9m
<b>2002</b> £3,657.7m	<b>2002</b> £425.6m	<b>2002</b> £335.3m
<b>Turnover - including share of joint ventures and associates</b>	<b>Adjusted operating profit</b>	<b>Adjusted profit before tax</b>
<b>2004</b> £4,599.3m	<b>2004</b> £576.9m	<b>2004</b> £504.3m
<b>2003</b> £4,323.2m	<b>2003</b> £505.6m	<b>2003</b> £418.9m
<b>2002</b> £4,017.9m	<b>2002</b> £500.1m	<b>2002</b> £430.0m

Figures shown as adjusted exclude exceptional items. Other figures shown are prepared under UK Generally Accepted Accounting Principles (GAAP) and include all exceptional items.

Adjusted figures are presented to provide a more meaningful indication of underlying business performance and trends. These are the primary performance figures used by Group management.

In accordance with guidance and regulations issued by UK and US regulatory bodies, where adjusted (or non-GAAP) figures are shown, the comparable GAAP figures are also shown.

Reconciliations between the GAAP figures and the adjusted figures are shown in the operating review on pages 34 and 35, and in the Group profit and loss account on page 78. Return on capital employed is defined on page 13.

**2004 RESULTS****Analysis by business****Turnover**

(including share of joint ventures and associates)	£ million	%
1. Process Gas Solutions	1,275.2	28
2. Industrial and Special Products	1,782.3	39
3. BOC Edwards	816.5	18
4. Afrox hospitals	432.1	9
5. Gist	293.2	6
<b>Total</b>	<b>4,599.3</b>	<b>100</b>

**Adjusted operating profit**

1. Process Gas Solutions	190.3	33
2. Industrial and Special Products	269.5	47
3. BOC Edwards	47.8	8
4. Afrox hospitals	59.8	11
5. Gist	25.1	4
Corporate	(15.6)	(3)
<b>Total</b>	<b>576.9</b>	<b>100</b>

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**Financial highlights****Earnings per share**

2004  
53.5p  
2003 44.5p  
2002 41.4p

**Dividends per share**

2004  
40.0p  
2003 39.0p  
2002 38.0p

**Return on capital employed**

2004  
14.9%  
2003 10.9%  
2002 10.6%

**Adjusted earnings per share**

2004  
63.2p  
2003 52.9p  
2002 55.9p

**Adjusted return on capital employed**

2004  
15.4%  
2003 12.6%  
2002 12.5%

**Analysis by region****Turnover**

(including share of joint ventures and associates)

£ million

%

1. Europe	1,224.6	27
2. Americas	1,218.3	26
3. Africa	699.0	15
4. Asia/Pacific	1,457.4	32
<b>Total</b>	<b>4,599.3</b>	<b>100</b>

**Adjusted operating profit**

1. Europe	155.4	27
2. Americas	77.4	13
3. Africa	108.9	19
4. Asia/Pacific	235.2	41
<b>Total</b>	<b>576.9</b>	<b>100</b>

A reconciliation of adjusted operating profit to operating profit under UK GAAP is shown in the operating review on pages 34 and 35.

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**CHAIRMAN'S  
STATEMENT**

**BUILDING FOR  
GROWTH AND  
PROFITABILITY**

**2004 was a good year for your company. BOC has a consistent strategy that has been well implemented – a testament to all BOC's management and staff.**

Your board owns and reviews this strategy. We follow a well-defined annual process that allows all members of the board to examine every aspect of the Group's progress and opportunities. Much can be learnt by questioning and testing in the formal environment of the boardroom, but there is no substitute for seeing the strategy at work in the real world, with customers, business partners and staff. For that reason we hold two board meetings each year outside our Windlesham headquarters. We went to China in the autumn of 2003 and saw the impressive work underway in the Shanghai and Nanjing areas to develop world-scale petrochemical complexes; these are areas where BOC has established an important presence. We also spent a day with the management team of our logistics business, Gist. For our first meeting of the 2005 financial year we visited South Africa and saw the progressive economic and social developments to which our Afrox subsidiary is making a major contribution. Over the next 12 months we will also visit Poland and the US.

An important element of the strategy over recent years has been to reshape our portfolio of businesses to enhance future growth and profitability. We will continue to examine opportunities as and when they arise.

**Returns to our shareholders**

In 2004 BOC paid a first interim dividend of 15.5p per share in February 2004 and a second interim dividend of 24.5p per share in August, making a total of 40p for the year as a whole, an increase of 2.6 per cent on 2003. Having held the first interim dividend at 15.5p for several years, while growing the second interim dividend, we have reached our aim of a 40:60 ratio between the two interim dividends. As a result your board has decided to raise the first interim dividend by 2.6 per cent to 15.9p to be paid on 1 February 2005. In 2004 our dividends were covered 1.58 times by adjusted earnings and we look to build our dividend cover towards two-times over the medium term. We therefore aim to grow the dividend progressively, albeit at a lower rate than earnings per share growth.

Again this year, as in the two previous years, I include graphs comparing BOC's total shareholder returns since 2000 with all FTSE100 companies and with its main gases competitors. The message remains the same. We have performed well compared with other UK companies but a gap requires to be bridged with our competitors.

Total shareholder return since 1 October 2000 compared with major gases companies relative to respective local indices  
Total shareholder return since 1 October 2000 compared with FTSE100 companies relative to FTSE100

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## **Chairman's statement**

### **Corporate Governance**

BOC complies with the existing Combined Code on Corporate Governance and I reported last year that we already substantially complied with the revisions to the code announced in 2003, even though we need not have done so until 2005. This is part of our continuing commitment to the highest standards of governance and integrity. Throughout BOC there is a strong commitment to the principles of ACTS – accountability, collaboration, transparency and stretch. These principles, supported by a well established Code of Conduct, provide strong safeguards at all levels of the organisation.

### **Corporate responsibility**

Your company is well aware that it is judged not only by its financial success but also by how this financial success is achieved. How well we manage social, environmental and ethical (SEE) risks is important to the long-term health of our business. For the first time this year BOC participated in the independent survey of companies' corporate responsibility performance conducted by the UK's Business in the Community. 500 companies were invited to participate, 139 did so, including 56 from the FTSE100. BOC was ranked 25th with an aggregate score of well over 90 per cent. This was a good result and confirmed our belief that we are performing well against these measures. More recently, we have surveyed all our business units to gain a thorough understanding of how they see our SEE risks and how we are managing them. This will form the basis of our next series of initiatives.

A US subsidiary of The BOC Group, along with other companies in the welding products industry, has been the subject of injury claims based on allegations that manganese in welding fumes causes Parkinson's disease or symptoms similar to Parkinson's disease. We are not aware of any credible scientific evidence linking manganese in welding fumes to neurological damage under typical welding conditions.

### **Board of directors**

We welcomed three new non-executive directors to our board this year. Guy Dawson joined in March. He was until 2003 chairman of European investment banking at Merrill Lynch having previously been with Morgan Grenfell and Deutsche Bank. Anne Quinn and Iain Napier were appointed in May. Anne is group vice president of BP's gas, power and renewables business stream. Iain is chief executive of Taylor Woodrow and brings previous experience of the brewing industry. Fabiola Arredondo and Roberto Mendoza resigned from the board during the year, each because of increasing demands on their time from their other commitments. Both Fabiola and Roberto have made valuable contributions to BOC for which I thank them.

In May I announced that Tony Isaac had accepted the board's invitation to continue as your chief executive until the Annual General Meeting in January 2007. We are very pleased that he will continue to provide leadership in the successful execution of our strategy.

My thanks always go first to BOC's employees around the world as they make your company what it is. It is our talented and dedicated people that make the difference in a competitive market. I thank our customers for choosing BOC. I thank all those who partner, supply and contribute to BOC wherever we do business. Finally, I thank you our

shareholders for your continuing support.

**Rob Margetts** Chairman

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## CHIEF EXECUTIVE'S REVIEW

**BOC performed strongly in 2004 in a generally favourable economic environment. Each quarter we reported adjusted operating profit and earnings significantly ahead of the equivalent period in 2003. Our two gases lines of business, Process Gas Solutions and Industrial and Special Products, saw mostly buoyant trading conditions although the strength of the rand restrained industrial activity in South Africa. Semiconductor manufacturers increased their investment this year after an extended period of reduced activity and this benefited BOC Edwards. As a result we reported adjusted operating profit for the year of £576.9 million, up 15 per cent, on turnover up nine per cent at £4,599.3 million. Adjusted profit before tax rose 20 per cent.**

I explained last year that our adjusted figures eliminate exceptional items that would otherwise create distortions. Also our year-on-year comparisons are at constant currency, shorn of the effects of converting local profits into sterling. This way we show clearly how we performed in the competitive markets of the 50 or so countries where we operate. When I describe our business performance below I will do so on this basis. Our statutory results include exceptional items and reflect currency movements when comparing performance with last year. On this basis turnover increased by six per cent, operating profit by 28 per cent and profit before tax by 17 per cent.

### Successful businesses

Process Gas Solutions delivered a nine per cent increase in turnover and raised adjusted operating profit by ten per cent. At the start of the year in China we and our joint venture partners announced that we would invest over US\$100 million in three schemes at Taiyuan, Suzhou and in the Pearl River region. In June 2004 we announced the setting up of a joint venture with Sinopec Shanghai Petrochemical Company Ltd (SPC). This is the second joint venture with a subsidiary of Sinopec, China's leading petrochemical company, following our agreement in 2002 with Sinopec Yangzi Petrochemical Corporation. This second joint venture intends to invest in some 3,000 tonnes a day of industrial gas production assets currently owned by SPC before embarking on building a new world-scale air separation unit. This flow of new orders means that we will double our production capacity in China by the end of 2005, with a corresponding increase in turnover. Elsewhere we were successful in winning key hydrogen orders for BP and Sunoco refineries in the US, in acquiring Duke Energy's 30 per cent ownership interest in Compañía de Nitrógeno de Cantarell, the joint venture company that owns the world's largest nitrogen complex in Mexico, and in winning the order with our joint venture partners for the largest air separation unit in Thailand. As well as supplying hydrogen for today's applications we continue to invest for the opportunities predicted for hydrogen energy in the decades to come.

Industrial and Special Products grew both turnover and adjusted operating profit by three per cent and ten per cent respectively. 2004 was the first full year of contributions from two recent acquisitions, namely Praxair's Polish gases business and Air Products' packaged gas business in Canada.

**SIGNIFICANTLY  
IMPROVED  
PERFORMANCE  
OVER 2003**

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## Chief executive's review

BOC Edwards saw the long-awaited upturn in investment by the semiconductor industry as well as increased demand from growing markets, notably flat panel displays in Asia. The result was a 27 per cent rise in turnover and a 181 per cent increase in adjusted operating profit.

Gist, our logistics business, did well to maintain turnover following the loss last year of Marks & Spencer's general merchandise business. Adjusted operating profit fell by 14 per cent, but in 2003 we included a £4.1 million gain resulting from the M&S contract termination; without this one-off payment adjusted operating profit would have been flat year on year.

Afrox hospitals continued to grow and perform well, turnover rising by nine per cent and adjusted operating profit by 16 per cent.

In November 2003 we announced that African Oxygen Limited had agreed to sell its majority shareholding in Afrox Healthcare Limited to a consortium led by two major black economic empowerment investors. We then announced in January 2004 our intention to sell our US packaged gas business, part of our north American Industrial and Special Products unit, to Airgas for up to US\$200 million. We completed the US disposal successfully in July this year while the Afrox Healthcare sale remains subject to final clearance by the competition authorities in South Africa. The motives for these two disposals were very different. In Afrox Healthcare we have a business in which we have invested successfully over recent years. The medium to long-term future for private healthcare is uncertain in South Africa and we had the opportunity to sell a highly successful business and let it develop further under new black economic empowerment ownership. Our US packaged gas business also received much attention and investment over the years, but it never fulfilled its promise. Its sale and the successful transfer of over 1,000 of our employees to the new owner is a good outcome. We retain a large presence in the US, with substantial and successful businesses that will benefit from increased management focus and a reduced overhead cost base.

The two significant joint ventures we have established in the last two years – Linde BOC Process Plants and Japan Air Gases – continue to perform well.

### Cash

Operating cash flow was £758.5 million, up some eight per cent on last year, due to improved operating profit and better management of working capital. In addition, proceeds from disposals and lower levels of capital expenditure resulted in a decline in our net borrowings for the sixth successive quarter, ending the year down £405.7 million at £962.4 million. This was after paying a further £64 million into the main UK pensions scheme, an increase of £28 million over last year.

## Managing to the highest standards

We continue to use our global structure to transfer best operating and commercial practice, to offer the highest standards of service to all our customers, and to meet the needs of our key customers wherever they do business in the world. Our operating procedures are supported by global programmes such as our Code of Conduct and we work hard to tap the full potential of our diverse and talented workforce.

It is important that we manage all our business risks, not just the financial ones. Operating as we do in a hazardous industry, everyone must pay the greatest attention to safety, whether it be the safety of fellow employees, of our customers and suppliers or indeed of those in the communities where we live and work. We concentrate on making safety second nature for all our employees. By managing these non-financial risks we protect our business and the reputation of BOC.

There has been one change this year to the executive management team. Greg Sedgwick returned to his native Australia to take up an appointment as chief executive of a listed building products company; I wish him well in his

future career. Mark Nichols, who had been based in Singapore, has succeeded Greg as Group director for business development. BOC is fortunate in having good people at all levels of the organisation and we place great emphasis on recruiting, developing and retaining the best people wherever we find them in the world. We have a diverse workforce and I take a personal interest in ensuring that this diversity is reflected increasingly at all levels.

I thank all employees of BOC for their hard work and for the contribution they have made to a successful year. Keeping our customers satisfied is more important than ever and we strive to deliver the same high standard of service wherever our customers choose to do business with us. We work hard to deliver the financial returns our shareholders expect. We are also well aware of the wider responsibilities we have to the economic and social life of the countries where we operate. All of this depends on the people of BOC and they respond by delivering high performance day by day.

**Tony Isaac** Chief executive

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## BOARD OF DIRECTORS

### **Rob Margetts CBE np(01)**

58, chairman.

Appointed chairman in January 2002. He is chairman of Legal & General Group plc, a non-executive director of Anglo American plc and chairman of the Natural Environment Research Council. Previously he was with ICI PLC for 31 years, becoming a main board director in 1992 and vice chairman in 1998. He is a fellow of both the Royal Academy of Engineering and the Institution of Chemical Engineers.

### **Tony Isaacnp4ê(02)**

62, chief executive.

Appointed an executive director in October 1994 and became chief executive in May 2000. He was previously finance director of Arjo Wiggins Appleton plc, which he joined shortly before the demerger from BAT Industries p.l.c. in 1990. Prior to that he had been finance director of GEC Plessey Telecommunications Ltd since its formation in 1988. He is a non-executive director of International Power plc and Schlumberger Ltd.

### **Julie Baddeleylmp(03)**

53, non-executive director.

Appointed in May 2001. She was an executive director of Woolwich plc until October 2000, responsible for e-commerce, information technology and human resources, and was previously head of change management for Maritime Region, Accenture. She is a non-executive director of the Yorkshire Building Society, the Government Pensions Group and director of four venture capital trusts. She is also an Associate Fellow of Templeton College, Oxford and a Companion of the Institute of Management. She has an MA honours degree in zoology from Oxford University.

### **John Bevan4ê(04)**

47, chief executive, Process Gas Solutions.

Appointed an executive director in December 2002. He joined BOC in 1978 as a graduate in the Australian gases business and has held various positions in general management in Australia, Korea, Thailand and the UK. He was formerly chief executive Asia. He has a degree in commerce (marketing) from the University of New South Wales.

### **Andrew Bonfieldlmp(05)**

42, non-executive director.

Appointed in July 2003. He is senior vice-president and chief financial officer of Bristol-Myers Squibb Company. He qualified as a chartered accountant in South Africa, working for Price Waterhouse, before joining SmithKline Beecham in 1990 and rising to become chief financial officer in 1999. He joined BG Group plc in 2001 as executive director, finance, before assuming his current role at Bristol-Myers Squibb Company in September 2002.

### **Guy Dawsonlmp(06)**

51, non-executive director.

Appointed in March 2004. He was chairman of European investment banking at Merrill Lynch until 2003. Before joining Merrill Lynch in 1995 he held senior positions in Morgan Grenfell and Deutsche Bank. He is a partner in Tricorn, an independent corporate advisory business that he co-founded in 2003, and he is also a non-executive director of Boots Group PLC.

### **René Médorip4ê(07)**

47, group finance director.

Appointed an executive director in July 2000. He joined BOC in 1987 and has held several finance appointments in the Group. He was appointed finance director of BOC's gases business in the Americas in 1997. Before joining BOC, he worked for Accenture and Schlumberger Ltd. He is a non-executive director of Scottish & Southern Energy plc. He is a finance graduate of the Université de Paris-Dauphine and has a doctorate degree in economics.

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## Board of directors

### **Matthew Miaulmn(08)**

58, non-executive director.

Appointed in January 2002. He is chairman of MiTAC-Synnex Group, one of Taiwan's leading high-tech industrial groups. He is also a Convenor of Civil Advisory Committee of National Information and Communications Initiatives (NICI) and on the Board of Directors of the Institute for Information Industry (III), Taiwan. He obtained a BS in electronic engineering and computer science from U.C. Berkeley, an MBA from Santa Clara University and holds an honorary doctorate degree from the National Chiao Tung University, Taiwan.

### **Iain Napierlmn(09)**

55, non-executive director.

Appointed in May 2004. He is chief executive of Taylor Woodrow plc and a non-executive director of Imperial Tobacco Group PLC. Previously, he was chief executive of Bass Brewers, a director of Bass plc and a member of the executive management committee of Interbrew SA.

### **Sir Christopher O Donnellmn(10)**

58, non-executive director.

Appointed in March 2001. He is chief executive of Smith & Nephew plc. Previously he held senior positions with Davy Ashmore, Vickers Limited and C R Bard Inc. He has an honours degree in mechanical engineering from Imperial College, London and an MBA from the London Business School. He is a chartered engineer and a member of the Institution of Mechanical Engineers.

### **Anne Quinn CBElmn(11)**

53, non-executive director.

Appointed in May 2004. She is group vice president of BP's gas, power and renewables business. Previously she was managing director of BP Gas Marketing Ltd, managing director of Alliance Gas Ltd and an executive with Standard Oil of Ohio. She serves on the President's Advisory Committee to the Sloan School, Massachusetts Institute of Technology.

### **Dr Raj Rajagopal4ê(12)**

51, chief executive, BOC Edwards.

Appointed an executive director in July 2000. He joined BOC in 1981 and has held several positions in BOC Edwards including manufacturing systems manager, director of manufacturing and managing director, being appointed chief executive in 1998. He was appointed a non-executive director of FSI International Inc in January 2001 and in June 2004 he joined the board of the business support organisation, Sussex Enterprise. He was appointed to The Council of Science and Technology in March 2004. He is a Fellow of the Royal Academy of Engineers as well as the Institution of Mechanical Engineers, the Institution of Electrical Engineers and the Chartered Management Institute. He has an MSc in manufacturing technology and a PhD in mechanical engineering both from Manchester University and an honorary degree from Cranfield University received in May 2004. He was awarded the Sir Eric Mensforth Manufacturing Gold Medal in March 2003.

### **John Walsh4ê(13)**

49, chief executive, Industrial and Special Products.

Appointed an executive director in July 2001. He was previously president, Process Gas Solutions, north America. He joined BOC in 1986 as vice president, special gases and has held various senior management positions in the Group, including president, BOC Process Plants. He has a BA in economics from Harvard College and an MBA from

Harvard Business School.

**Board committees**

- l Audit committee
- m Remuneration committee
- n Nomination committee
- p Pensions committee
- 4 Executive management board
- ê Investment committee

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**EXECUTIVE  
MANAGEMENT BOARD**

**John Bevan (01)**

47, chief executive, Process Gas Solutions since January 2003.

Appointed to the executive management board in June 2000. See page 08 for biographical details.

**Nick Deeming (02)**

50, group legal director and company secretary since May 2001.

Appointed to the executive management board in May 2001. He has over 17 years in-house counsel experience, including Schlumberger SEMA and Axa PPP Healthcare, specialising in corporate and commercial law. He has a degree in law from Guildhall University, an MBA from Cranfield University and qualified as a solicitor in 1980.

**Stephen Dempsey (03)**

53, group director, corporate relations since February 1999.

Appointed to the executive management board in October 1999. He joined BOC in 1990 as director of marketing services for the UK gases business and has held various communications roles in the Group. He has an MA in geography from Oxford University and an MBA from Cranfield University.

**Peter Dew (04)**

44, group director, information management since February 1998.

Appointed to the executive management board in October 1999. He joined BOC in 1986. He has held information technology roles in the Group's businesses in South Africa, the UK and most recently as information management director for the Group's businesses in Asia/Pacific.

**Tony Isaac (05)**

62, chief executive since May 2000.

Appointed to the executive management board in July 1996. See page 08 for biographical details.

**Rob Lourey (06)**

47, group human resources director since June 2000.

Appointed to the executive management board in June 2000. He joined BOC in Australia in 1996 and most recently was human resources director for Asia/Pacific. Since October 2003 he has been a non-executive director of Michael Page International PLC. He has a bachelor of business degree in personnel management.

## **Executive management board**

### **Kent Masters (07)**

43, president, Process Gas Solutions, north America, since July 2001.

Appointed to the executive management board in December 2002. He joined BOC in 1985 and has held positions of increasing responsibility in engineering, marketing and general management, most recently, president, BOC Process Plants. He holds an engineering degree from Georgia Institute of Technology and an MBA from New York University.

### **René Médori (08)**

47, group finance director since June 2000.

Appointed to the executive management board in June 2000. See page 08 for biographical details.

### **Mark Nichols (09)**

47, group director, business development since January 2004.

Appointed to the executive management board in January 2004. He joined BOC in February 1988 and held senior financial roles in the UK and US before moving into general management, most recently as managing director, Industrial and Special Products, East Asia. Before joining BOC he worked for Total Oil and Merck. He is a Fellow of the Association of Chartered Certified Accountants.

### **Dr Raj Rajagopal (10)**

51, chief executive, BOC Edwards since June 1998.

Appointed to the executive management board in July 1996. See page 09 for biographical details.

### **John Walsh (11)**

49, chief executive, Industrial and Special Products since June 2001.

Appointed to the executive management board in June 2000. See page 09 for biographical details.

**GROUP FIVE YEAR RECORD****Turnover****Profit before tax****Adjusted profit before tax<sup>4</sup>**

	2000	2001	2002	2003	2004
	£ million	£ million	£ million	£ million	£ million
<b>Profit and loss</b>					
<b>Turnover<sup>1</sup></b>	3,579.7	3,772.9	3,657.7	3,718.3	<b>3,885.4</b>
Total operating profit before exceptional items <sup>2</sup>	496.4	530.6	500.1	505.6	<b>576.9</b>
Exceptional items	(4.4)	(108.3)	(74.5)	(67.0)	<b>(17.4)</b>
<b>Total operating profit<sup>2</sup></b>	492.0	422.3	425.6	438.6	<b>559.5</b>
Profit/(loss) on termination/disposal of businesses	12.5		(20.2)		<b>(79.5)</b>
Profit on disposal of fixed assets		3.6			<b>4.9</b>
Profit before interest	504.5	425.9	405.4	438.6	<b>484.9</b>
Interest on net debt	(111.5)	(123.4)	(103.1)	(96.1)	<b>(88.4)</b>
Interest on pension scheme liabilities	(100.7)	(107.2)	(106.1)	(110.2)	<b>(117.4)</b>
Expected return on pension scheme assets	149.5	166.9	139.1	119.6	<b>133.2</b>
Other net financing income	48.8	59.7	33.0	9.4	<b>15.8</b>
<b>Profit before tax</b>	441.8	362.2	335.3	351.9	<b>412.3</b>
Tax on profit on ordinary activities	(135.2)	(104.6)	(106.2)	(96.4)	<b>(101.7)</b>
Profit after tax	306.6	257.6	229.1	255.5	<b>310.6</b>
Minority interests	(28.0)	(33.5)	(26.2)	(36.4)	<b>(46.6)</b>
<b>Profit for the financial year</b>	278.6	224.1	202.9	219.1	<b>264.0</b>
<b>Earnings per 25p Ordinary share</b>					
Basic:					
on profit for the financial year	57.2p	46.0p	41.4p	44.5p	<b>53.5p</b>
before exceptional items	53.5p	57.5p	55.9p	52.9p	<b>63.2p</b>
Diluted:					
on profit for the financial year	56.9p	45.9p	41.2p	44.5p	<b>53.5p</b>

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before exceptional items	53.3p	57.3p	55.7p	52.9p	<b>63.1p</b>
Ordinary dividends per share					
<b>3</b>					
Actual	35.0p	37.0p	38.0p	39.0p	<b>40.0p</b>
Number of fully paid Ordinary shares in issue at the year end (million)	492.2	494.4	497.3	497.7	<b>498.8</b>

1. Subsidiary undertakings only.
  2. Including share of operating profit of joint ventures and associates.
  3. Dividends paid in the calendar year.
  4. Excludes exceptional items. A fuller explanation of the term adjusted , and the reasons for presenting such a measure, is given in the operating review on pages 34 and 35. A reconciliation of adjusted profit before tax to profit before tax is given in the profit and loss account on page 78. A reconciliation of adjusted return on capital employed to return on capital employed is given in the operating review on page 35.
- All turnover and operating profit arose from continuing operations.

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**Group five year record****Capital employed****Capital expenditure**

	2000 (restated) £ million	2001 (restated) £ million	2002 (restated) £ million	2003 (restated) £ million	2004 £ million
<b>Balance sheet</b>					
Fixed assets					
intangible assets	49.2	48.1	150.7	206.1	<b>174.9</b>
tangible assets	3,294.0	3,168.6	3,027.4	2,913.4	<b>2,618.4</b>
joint ventures, associates and other investments	395.8	390.3	426.1	608.6	<b>548.2</b>
Working capital (excluding bank balances and short-term loans)	282.8	257.0	203.1	220.1	<b>154.5</b>
Deferred tax provisions	(295.8)	(294.3)	(291.8)	(279.2)	<b>(253.0)</b>
Other non current liabilities and provisions	(181.4)	(184.3)	(173.7)	(145.8)	<b>(126.9)</b>
Net borrowings and finance leases	(1,308.4)	(1,272.1)	(1,325.6)	(1,368.1)	<b>(962.4)</b>
Net assets excluding pension assets and liabilities	2,236.2	2,113.3	2,016.2	2,155.1	<b>2,153.7</b>
Pension assets <sup>5</sup>	402.0	107.0	54.3	50.7	<b>68.9</b>
Pension liabilities <sup>5</sup>	(31.1)	(56.0)	(311.0)	(341.8)	<b>(344.5)</b>
Net assets including pension assets and liabilities	2,607.1	2,164.3	1,759.5	1,864.0	<b>1,878.1</b>
Shareholders' capital and reserves	2,333.5	2,026.7	1,641.6	1,686.7	<b>1,675.3</b>
Minority shareholders' interests	273.6	137.6	117.9	177.3	<b>202.8</b>
Total capital and reserves	2,607.1	2,164.3	1,759.5	1,864.0	<b>1,878.1</b>
<b>Other selected financial information</b>					
<b>Capital employed<sup>6</sup></b>					
Total capital and reserves	2,607.1	2,164.3	1,759.5	1,864.0	<b>1,878.1</b>
Non current liabilities and provisions	477.2	478.6	465.5	425.0	<b>379.9</b>
Net borrowings and finance leases <sup>7</sup>	1,308.4	1,272.1	1,325.6	1,368.1	<b>962.4</b>
	4,392.7	3,915.0	3,550.6	3,657.1	<b>3,220.4</b>
Total assets	5,557.8	5,000.5	4,904.9	4,883.7	<b>4,665.7</b>

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Long-term liabilities and provisions	1,399.0	1,554.5	1,897.5	1,851.5	<b>1,652.9</b>
Capital expenditure <sup>1</sup>	413.7	352.6	354.3	281.2	<b>256.1</b>
Depreciation and amortisation <sup>1</sup>	313.3	329.5	330.9	333.4	<b>324.0</b>
<b>Employees</b>					
UK	9,929	10,597	11,266	10,414	<b>10,682</b>
Overseas	32,780	32,574	35,014	34,093	<b>32,701</b>
Continuing operations	42,709	43,171	46,280	44,507	<b>43,383</b>
<b>Ratios</b>					
Return on capital employed <sup>8</sup>	12.6%	10.4%	10.6%	10.9%	<b>14.9%</b>
Adjusted return on capital employed <sup>4,9</sup>	12.7%	13.1%	12.5%	12.6%	<b>15.4%</b>
Net debt/capital employed	29.8%	32.5%	37.3%	37.4%	<b>29.9%</b>
Net debt/equity	50.2%	58.8%	75.3%	73.4%	<b>51.2%</b>

5. Pension assets represents the excess of pension assets over pension liabilities in countries where pension assets exceed pension liabilities. Pension liabilities represents the excess of pension liabilities over pension assets in countries where pension liabilities exceed pension assets.
6. As defined in note 1 b) to the financial statements.
7. Analysed for 2004 and 2003 in note 20 to the financial statements.
8. Operating profit as a percentage of the average capital employed excluding net pension liabilities. The average is calculated on a monthly basis.
9. Operating profit before exceptional items as a percentage of the average capital employed excluding net pension liabilities. The average is calculated on a monthly basis.

Information for years 2000 to 2003 has been restated to be on a comparable basis with 2004 following the application of UITF37 and UITF38 in 2004, as explained on page 83.

## GROUP PROFILE

### Introduction

The BOC Group began its business life over 100 years ago as the Brin's Oxygen Company. The company was incorporated in England in 1886 and adopted its present name on 1 March 1982.

A technology to extract oxygen from the air in commercial quantities had just been developed and in 1886 the Brin brothers started production at a factory in Westminster, London. Two uses had already been found for oxygen. One was to intensify limelight, which was then used in theatres. The other was to assist patients breathing during and after surgery. New technology was soon developed that allowed air to be separated into all its major components - nitrogen, oxygen and argon. By 1960, industrial gases were in widespread use and BOC's business was firmly established. Tonnage plants were supplying steelworks with oxygen and the customer base had been broadened to extend from metal cutting and welding to food and medicine. The business had also spread overseas with subsidiaries or associated companies as far away as Australia and South Africa. During the 1980s, BOC's South African subsidiary began to invest in private hospitals. This diversification was the basis of the current Afrox hospitals segment.

BOC acquired the vacuum equipment company Edwards High Vacuum International Limited in 1968 and this formed the basis of what was to become the BOC Edwards line of business today.

The BOC Distribution Services business (now called Gist) was first established in 1970, initially providing a chilled food distribution service for Marks & Spencer and relying upon distribution skills and liquid nitrogen chilling technology, acquired as a result of BOC's involvement in gases.

In 1978, BOC completed the acquisition of Airco Inc in America, a predominantly gases business that doubled the Group's size and brought BOC for the first time into the US gases market. In the period from 1970 to 1990 The BOC Group significantly increased its presence in the Asia/Pacific region through participation in several joint ventures or associated companies. BOC established strong market positions in Thailand, Indonesia, Taiwan, the Philippines, China and Korea.

An investment in 1982 gave BOC effective management control of the Japanese gases company Osaka Sanso Kogyo KK (OSK). Conversion of loan stock and subsequent purchases of shares raised BOC's holding in OSK to 97 per cent. In September 2002 BOC and Air Liquide announced a conditional agreement to merge their industrial and medical gases businesses in Japan. The merger became effective in January 2003 and BOC's subsidiary in Japan has retained a 45 per cent interest in the joint venture company called Japan Air Gases Ltd. In the period from 1998 to 2001, BOC increased investments in its gases companies in Thailand, Indonesia and the Philippines by acquiring the interests of joint venture partners or minority shareholders.

The BOC Group has an international portfolio of companies operating as three lines of business. These are Process Gas Solutions (PGS), Industrial and Special Products (ISP) and BOC Edwards. In addition there are two separately managed specialist businesses, Afrox hospitals and Gist. Operating results are reported separately for these five segments.

The main exports of the Group in 2004 were special products from the UK, helium from the US and vacuum equipment and semiconductor manufacturing equipment from the UK, the US and Japan. Trade between Group undertakings is conducted at fair market prices.

Although BOC Process Plants was combined with Linde Engineering in the US with effect from September 2002, BOC retains an interest in the manufacture of industrial gas equipment through its Cryostar business based in France. Cryostar makes specialist cryogenic pumps and expansion turbines that are used by most manufacturers of industrial gas plant. In recent years Cryostar has also developed a strong position in the market for shipboard compressors and heat exchangers used aboard liquefied natural gas (LNG) tankers. Management believes that Cryostar is the leading manufacturer of its product range worldwide.

**Analysis of results by business**

(including share of joint ventures and associates)

	Turnover		Operating profit		Adjusted operating profit	
	£ million	%	£ million	%	£ million	%
Process Gas Solutions	1,275.2	28	189.5	34	190.3	33
Industrial and Special Products	1,782.3	39	253.9	45	269.5	47
BOC Edwards	816.5	18	46.8	8	47.8	8
Afrox hospitals	432.1	9	59.8	11	59.8	11
Gist	293.2	6	25.1	5	25.1	4
Corporate			(15.6)	(3)	(15.6)	(3)
	4,599.3	100	559.5	100	576.9	100

Adjusted operating profit excludes exceptional items. See also pages 34 and 35 of the operating review.

The BOC Group contributes to the economies of some 50 countries throughout the world. The UK is the largest single source of sales revenue for the Group's products and services, followed by the US. Other major geographic areas for the Group are Australia, South Africa, Japan and other markets in the Asia/Pacific region. The business therefore operates from a broad geographical base with local manufacturing in most of the key overseas markets.

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## Group profile

### Analysis of results by region

(including share of joint ventures and associates)

	Turnover		Operating profit		Adjusted operating profit	
	£ million	%	£ million	%	£ million	%
Europe	1,224.6	27	155.4	28	155.4	27
Americas	1,218.3	26	62.6	11	77.4	13
Africa	699.0	15	108.9	19	108.9	19
Asia/Pacific	1,457.4	32	232.6	42	235.2	41
	4,599.3	100	559.5	100	576.9	100

Adjusted operating profit excludes exceptional items. See also pages 34 and 35 of the operating review.

The UK accounts for the largest part of the Group's activities in Europe but BOC has significant gases subsidiaries in Ireland and Poland, vacuum products manufacturing in France and a pharmaceutical packaging machinery operation in the Netherlands.

Gist, BOC's supply chain solutions business, operates principally in the UK but also has operations in other countries.

Subsidiaries in the US are engaged in the Group's three lines of business. The Group's other principal subsidiaries, joint ventures and associates in the Americas are located in Canada, Venezuela, Colombia, Chile and Mexico.

The largest Group subsidiary in Africa is African Oxygen Limited (Afrox), a South African public company in which the Group owns 56 per cent of the equity. The largest shareholder, other than BOC, holds less than 15 per cent of the equity. Afrox, primarily through wholly-owned subsidiaries, is engaged in the manufacture and sale of products within the PGS and ISP lines of business. Afrox also has interests in private hospitals, clinics and other health care services in southern Africa, primarily through its 69 per cent holding in Afrox Healthcare Limited.

There are other Group or Afrox subsidiary companies in Africa located in Botswana, Kenya, Malawi, Mozambique, Namibia, Nigeria, Swaziland, Zambia and Zimbabwe. These companies are engaged primarily in the manufacture and/or sale of products in the ISP line of business.

BOC has businesses in most of the Asia/Pacific markets, including Japan, Korea, Thailand, Taiwan, Indonesia, Malaysia, Singapore, China, the Philippines, India, Pakistan, Bangladesh, Australia and New Zealand. In Australia, the Group's business is conducted by BOC Limited. This company, as well as its subsidiaries, joint ventures or associates, is engaged in the manufacture and sale of products in the PGS and ISP lines of business. BOC participates in the liquefied petroleum gas market in Australia through a 50 per cent shareholding in Elgas Limited. Elsewhere in the Pacific region, the Group conducts its business through subsidiaries, joint ventures and associated companies.

### Management organisation

BOC's management structure is based on three global lines of business and two specialist businesses. Each line of business serves a clearly defined type of customer and each pursues its own strategy for growth and performance at a local level. The organisation is designed to maximise BOC's global as well as local strengths. The lines of business have global responsibility to set strategy and prioritise investment. They include operational business units and these

local units are responsible to the Group chief executive for delivering financial, safety and operational performance. The business units contribute to the development of the strategies of the lines of business and customise and implement them in local markets. The business unit heads collaborate in order to share best practice and to maximise growth and profit opportunities wherever they may appear.

Process Gas Solutions (PGS) manages all aspects of BOC's business with customers requiring bulk supplies of industrial gases from on-site plants or by pipeline as well as deliveries of liquefied gases. Typical customers are found in the oil and chemicals, food and beverage, metals, and glass sectors all round the world. Marketing, business development and the execution of investments to provide customer specific solutions for the supply of industrial gases are handled by Process Systems, which forms part of PGS. Until 2002, Process Plants, another unit forming part of PGS, was responsible for supplying air separation technology within the Group with plants of its own design or acquired from alliance partners and others. In March 2002 BOC announced plans to merge its Process Plants operations with Linde Engineering in the US to form a new company, Linde BOC Process Plants LLC. The transaction was completed just before the end of 2002. BOC owns 30 per cent of the combined company and Linde Engineering has become the principal supplier of industrial gases plant to BOC worldwide.

Industrial and Special Products (ISP) covers BOC's business with customers in the fabrication, medical and leisure sectors as well as the special products and liquefied petroleum gases businesses.

BOC Edwards embraces all aspects of business with semiconductor industry customers worldwide including the supply of bulk gases and electronic materials, vacuum and abatement technology, chemical management systems and semiconductor-related services. BOC Edwards also serves general vacuum markets around the world and manufactures pharmaceutical freeze-drying and packaging machinery.

## Group profile

The segment reporting as Afrox hospitals operates through Afrox Healthcare Limited, which is quoted on the Johannesburg Stock Exchange. It owns and manages private hospitals and clinics in southern Africa. Additional services include a direct medicines service for chronic medication, occupational health services, nursing training, pharmacy management and laboratory services. BOC's majority-owned subsidiary, African Oxygen Limited (Afrox), holds 69 per cent of Afrox Healthcare Limited (AHealth). In July 2003 Afrox announced that it was in the process of considering its strategic options with regard to its shareholding in AHealth. On 17 November 2003, Afrox announced that it had agreed to sell its entire holding in AHealth to a consortium led by two major black economic empowerment investors. The sale remains subject to approval by the South African Competition Tribunal, at which closing hearings are currently scheduled for March 2005. In addition an application has been brought in the South African High Court by two shareholders in Afrox Healthcare Limited to have the Scheme of Arrangement, by which the disposal would be implemented, declared to have lapsed. This application, which is being opposed, is currently due to be heard in the week commencing 29 November 2004.

During 2001, BOC Distribution Services was re-named Gist to reflect the changing nature of its business. Gist operates as a separate business unit outside the lines of business structure. It remains focused on developing business with major customers, including Marks & Spencer, and has developed capability in supply chain consultancy and end-to-end supply chain solutions.

## Corporate development

Over the last three years BOC has continued to invest in its core businesses at the same time as divesting assets and businesses that were no longer consistent with its strategy.

As a result of a successful tender offer, BOC increased its shareholding in Osaka Sanso Kogyo KK (OSK) in Japan from approximately 55 per cent to over 93 per cent with effect from 8 May 2001. The holding was further increased during 2002 to 97 per cent. In September 2002 BOC and Air Liquide announced a conditional agreement to merge their industrial and medical gases businesses in Japan. The merger became effective in January 2003 and BOC's subsidiary in Japan has retained a 45 per cent interest in the combined company called Japan Air Gases Ltd. In June 2001, BOC increased its holding in Thai Industrial Gases Public Company Limited (TIG) from approximately 60 per cent to over 90 per cent and launched a tender offer for the outstanding shares leading to 99 per cent ownership.

In October 2001 BOC Edwards agreed terms for the acquisition of the vacuum and pressure business of the Smiths Group. These businesses are located in the UK, north America and continental Europe and typically serve customers in the metallurgy, water treatment, food, power and chemical industries.

Hydromatix and Semco were also acquired during 2002 with the intention of positioning BOC Edwards in those market segments expected to deliver the fastest growth. These two companies, based in the US, are involved principally in semiconductor wet processing technology including chemical blending delivery and collection systems as well as liquid waste abatement systems.

BOC Edwards sold its glass coating business, based in the US, in April 2002 but retained its Temescal business that supplies technology for compound semiconductor manufacturing.

The acquisition of the turbomolecular pumps business from Seiko Instruments Inc in Japan was announced in February 2002 and completed in March 2002 with the principal objective of enhancing the ability of BOC Edwards to develop vacuum sub-systems to satisfy the growing trend to on-tool pumping in the semiconductor industry.

In April 2002 BOC purchased Matheson Gas Products Canada Inc, thereby adding an important special products capability to BOC's Industrial and Special Products range in Canada.

In May 2002 BOC acquired Unique Gas and Petrochemicals Public Company Limited (UGP), in Thailand. UGP is a leading supplier of liquefied petroleum gas (LPG) and packaged ammonia in the industrial and special products

markets.

In March 2002 BOC announced plans to merge its Process Plants operations with Linde Engineering in the US to form a new company, Linde BOC Process Plants LLC. The transaction was completed at the end of September 2002. BOC owns 30 per cent of the combined company and Linde Engineering has become the principal supplier of industrial gases plant to BOC worldwide.

BOC's associated company in Malaysia acquired 35.6 per cent of the gases company Nissan Industrial Oxygen Inc (NIOI) in March 2002 and increased its holding to 100 per cent in September 2002 following a tender offer. Each of BOC's three lines of business has absorbed a part of NIOI.

At the end of August 2002, BOC announced an agreement to purchase Praxair's Polish gases business. The transaction was completed at the end of January 2003 following approval by the Polish competition authority. The business acquired includes a high proportion of industrial and special products sales.

In October 2002, BOC acquired Environmental Management Corporation (EMC), a privately owned water services company based in St Louis, Missouri. EMC manages water and wastewater treatment facilities for both industrial and local municipal customers around the US. EMC forms part of the PGS line of business, which intends to expand the range of solutions offered to its industrial customer base.

At the end of January 2003, BOC acquired the partial oxidation syngas plant at Clear Lake, Texas, from Celanese. Under the agreement BOC fulfils a significant proportion of the industrial gas requirements for the Celanese chemical facility at Clear Lake.

In March 2003 BOC announced an agreement to purchase the Canadian packaged gas and related welding equipment business of Air Products. The acquisition was completed in April 2003 following approval from the Canadian regulatory authority.

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## Group profile

In June 2003, BOC announced an agreement to obtain half the output of a new helium extraction facility to be constructed in Qatar. Deliveries from the new source are scheduled to commence in July 2005.

Following a strategic review of its investment, African Oxygen Limited (Afrox) announced on 17 November 2003 that it had agreed to sell its majority shareholding in Afrox Healthcare Limited to a consortium led by two major black economic empowerment investors in South Africa. The sale remains subject to approval by the South African Competition Tribunal, at which closing hearings are currently scheduled for March 2005. In addition an application has been brought in the South African High Court by two shareholders in Afrox Healthcare Limited to have the Scheme of Arrangement, by which the disposal would be implemented, declared to have lapsed. This application, which is being opposed, is currently due to be heard in the week commencing 29 November 2004.

On 27 January 2004, BOC announced that it intended to dispose of part of its US Industrial and Special Products business to Airgas Inc. The transaction was completed on 30 July 2004. The initial consideration was US\$175 million in cash with up to a further US\$25 million to be paid on or about 15 November 2005 subject to certain conditions.

In May 2004 BOC agreed to buy Duke Energy's 30 per cent ownership interest in the Cantarell joint venture company for US\$59.7 million in cash. This increased BOC's overall stake to 65 per cent on completion in September 2004. This company supplies Pemex with nitrogen for the pressurisation of its oilfields in the Gulf of Mexico.

## Industrial gases

The BOC Group is one of the major producers of industrial gases in the world. Its products include the atmospheric gases (nitrogen, oxygen and argon) produced by air separation plants as well as hydrogen, carbon monoxide and syngas (a mixture of hydrogen and carbon monoxide) made by technologies including steam-reforming or partial oxidation of hydrocarbons. The Group also markets carbon dioxide, helium and liquefied petroleum gas. These are generally derived as by-products from chemical processes or from natural sources and are also purchased from other producers. In addition, the Group markets dissolved acetylene and a wide range of special gases, medical gases, gas mixtures and gaseous chemicals.

**Industry structure and consolidation** The industrial gases business is capital-intensive, with increasing demand, together with economies of scale, leading to the need for large production units and distribution networks. The need for fixed asset investments, the trend towards global customers and the benefits from the transfer of applications technology worldwide have resulted in the business being handled by a relatively small number of companies internationally.

One or more other major international producers compete in each of the industrial gases markets served by the Group, and in many of the markets there are smaller local producers as well. International competitors include Air Liquide, Praxair, Air Products and Chemicals, Linde, Airgas and Nippon Sanso. The world market for gases and related products is estimated to be over £20 billion a year.

On 13 July 1999 the board of The BOC Group agreed the terms of a pre-conditional cash offer at £14.60 per share to be made jointly by Air Liquide and Air Products. Making the offer was conditional upon those companies obtaining satisfactory regulatory clearances in Europe, Canada and the US by 13 March 2000. Following an extension to the pre-conditional offer period to conclude discussions with the Federal Trade Commission (FTC) in the US, the bidders allowed the offer to lapse on 10 May 2000.

**Principal industrial gas products** Nitrogen possesses two key characteristics that make it the world's most widely used and versatile industrial gas. Nitrogen is almost inert and when liquefied it is intensely cold. This makes liquid nitrogen a highly effective, versatile and non-polluting agent for freezing and chilling.

Under normal conditions nitrogen is chemically inactive. This makes it an important purging and blanketing gas in the chemical and refining industry as well as in the electronics industry.

Oxygen, in contrast to nitrogen, is useful for its reactivity. It supports combustion and it supports life. Oxygen has been used in welding and medicine for over 100 years and in steel production since the 1950s.

Iron and steel producers use oxygen to accelerate melting and to improve metal quality during the refining process. It is also used by the oil and chemicals industries and many others for a variety of oxidation processes. Mixed with fuel gases, oxygen provides a heat source for many welding, cutting and metal fabrication processes.

Argon makes up less than one per cent of the atmosphere but it is the most abundant truly inert gas. It is used to provide a shielding atmosphere in welding, metal fabrication, aluminium processing, microelectronics, glass coating, advanced ceramics and other industrial processes. It is also used in the steel industry, principally in the production of stainless steel.

Hydrogen is typically produced by steam reforming or partial oxidation of natural gas, petroleum gas, or liquid or solid hydrocarbon feedstocks. Hydrogen may also be recovered from by-products purchased by BOC from external suppliers. Hydrogen is used primarily in the oil and chemicals industries for applications aimed at upgrading crude oil through hydrocracking to form lighter fractions and to remove sulphur in the production of cleaner fuels. The chemicals industry also uses hydrogen where it is required as an active ingredient in many large-scale processes.

Helium is extracted from natural gas deposits. Only a few sources in the world contain a sufficient proportion of helium to justify its separation. The Group's supplies now come from the US, Poland and Russia and are secured by long-term contracts. In June 2003, BOC announced an agreement to obtain half the output from a new helium extraction facility to be constructed in Qatar. Deliveries from this new source are expected to begin in July 2005. Because of its high value, helium is the only major industrial gas to be extensively traded internationally. Helium is used in welding, leak detection, hospital MRI scanners and in the production of optical fibres. Helium gas mixtures are used in balloons.

## Group profile

Carbon dioxide supplied by BOC is obtained as a by-product from other companies' manufacturing processes, from natural sources or recovered in the generation process for hydrogen or syngas and put to constructive use. Solid carbon dioxide is, like liquid nitrogen, used for chilling and freezing in the food industry. As a gas it is used to carbonate and dispense beverages of all kinds.

Acetylene is normally supplied in cylinders and used together with oxygen in metal cutting and welding applications. BOC is a major manufacturer of dissolved acetylene.

Liquefied petroleum gas (LPG) is a fuel gas with a wide variety of domestic, industrial and transport applications. BOC is a major distributor of LPG in South Africa and Thailand, and its joint venture company Elgas Limited is a major distributor in Australia. BOC has smaller market positions in several other countries.

**Production of industrial gases** Oxygen was first extracted from the atmosphere by a chemical process. This was superseded over 80 years ago by the cryogenic (low temperature) process involving the liquefaction and distillation of air. The cryogenic process is still by far the most widely used, but non-cryogenic techniques (pressure swing adsorption and membrane diffusion), which were first developed during the 1970s, are becoming increasingly significant for smaller or less demanding on-site applications.

Cryogenic air separation is a mature and stable technology, although incremental technical advances are still yielding improvements in capital cost, operating cost, ease of operation and reliability. The only significant raw material, apart from the air itself, is electricity, which is used in large quantities to drive compressors, pumps and other equipment. The production process in modern air separation plants is highly automated, and remote operation of BOC's plants from control centres is becoming increasingly common.

The production of hydrogen and syngas uses steam reforming or partial oxidation of hydrocarbon feedstocks such as natural gas, petroleum or coal to separate the hydrogen and carbon compounds. The choice of feedstock is related to their prices in local markets.

**Distribution of industrial gases** Industrial gases may be supplied to customers in a variety of ways; through pipelines from on-site or nearby cryogenic or non-cryogenic plants, by deliveries of liquefied gases in road or rail tankers, in portable cryogenic containers or in cylinders (also called compressed or packaged gases).

Distribution is an important competitive factor in the industrial gases business and the methods of distribution vary according to the nature of the products themselves and the customer's volume requirements. Most gases have to be stored and distributed either under great pressure, which requires them to be carried in heavy and bulky cylinders, or at extremely low temperatures in specially insulated tankers, which limits how far they can be transported before carriage costs become unacceptable. Pipeline delivery involves high capital costs and the routing is inflexible. As a result, there is little international trade in industrial gases. Production has to occur in or near the market being served and there is a trend towards production at customers' own sites.

## Business segments

The BOC Group reports financial results for the three lines of business and for Afrox hospitals and Gist separately.

## Process Gas Solutions (PGS)

This line of business covers BOC's business with larger-scale industrial customers worldwide, typically in the oil and chemicals, food and beverage, metals, and glass sectors. Gases and services are supplied as part of customer-specific solutions that create the most value for customers at the lowest cost to BOC. These range from supply by pipeline or from dedicated on-site plants to the largest users, to supply by road tanker in liquefied form to others.

Tonnage (pipeline) customers are usually supplied on the basis of long-term contracts, typically containing a fixed facility charge together with a variable charge for product supplied in excess of a set minimum quantity. Revenues from these contracts thus have a measure of stability with respect to changes in demand for product. Tonnage plants are often built to produce merchant gases in addition to those required by the tonnage customer and these gases can be sold to other customers. The BOC Group has substantial positions in the tonnage markets of the UK, the US, Australia, South Africa and Asia as well as in some smaller markets. The products supplied to tonnage customers have traditionally been the atmospheric gases oxygen, nitrogen and argon. More recently, hydrogen and syngas are becoming significant tonnage products as are associated utilities including steam and power.

The delivery of liquefied gases by road or rail to the customer's site is normally limited by transport costs to a radius of about 200 miles. Product for this market is supplied either from merchant plants or from tonnage plants incorporating liquefiers. Larger users are typically supplied with product in liquid form delivered in cryogenic tankers into special storage vessels installed at customer premises. Tankers and vessels are often BOC Group owned. Liquefied gases are usually supplied on the basis of contracts with terms of one to five years. Revenues are generally based upon the actual quantity of gas consumed, with an additional fixed charge for the use of storage equipment.

The growth of sales and profit in this line of business is driven by investment in new production facilities. Such investment is predominantly the result of opportunities to satisfy long-term supply contracts with one or more heavy industrial customers for each plant.

Marketing, business development and the execution of investments to provide customer-specific solutions for the supply of industrial gases are handled by Process Systems, which forms part of PGS.



## Group profile

**Business development** A plant to supply OneSteel at Whyalla in South Australia was commissioned in November 2001 also replacing and increasing capacity over previous and less efficient merchant plants in Adelaide. Shortly afterwards in January 2002 a new plant began supplying Huntsman on Teesside in the UK with hydrogen to be used for the production of aniline.

In April 2002, BOC established a joint venture in Nanjing with Yangtze Petrochemical Corporation (YPC), which is a subsidiary of Sinopec, China's leading petrochemical company. BOC purchased existing air separation assets with effect from May 2002 and construction of new air separation capacity is almost complete. BOC's joint venture will be a supplier to a new BASF and YPC joint venture plant also under construction and scheduled to begin production in 2005. Additional liquefaction capacity was added to the existing air separation facility during 2003. These investments give BOC a strategic position as a key supplier in the Nanjing area, which is being developed through foreign investment as a leading centre for chemical production in China.

In the US a new plant began to supply WCI Steel in Ohio in May 2002 and a plant at Midland, North Carolina, began production in June 2002.

The merger of BOC Process Plants operations with Linde Engineering in the US to form a new company, Linde BOC Process Plants LLC was completed at the end of September 2002. BOC owns 30 per cent of the combined company and Linde Engineering has become the principal supplier of industrial gases plant to BOC worldwide.

In October 2002, BOC acquired Environmental Management Corporation (EMC), a privately owned water services company based in St Louis, Missouri. EMC manages water and wastewater treatment facilities for both industrial and local municipal customers around the US. EMC's management services extend to steam systems, cold and chilled water systems and wastewater treatment. Customers include small to medium sized municipalities and industrial customers, many of which are in the food sector. EMC forms part of the PGS line of business and BOC's strategy is to expand the range of solutions offered to its industrial customer base.

At the end of January 2003, BOC acquired the partial oxidation syngas plant at Clear Lake, Texas, from Celanese. Under the agreement BOC fulfils a significant proportion of the industrial gas requirements for the Celanese chemical facility at Clear Lake. The Celanese facility is located on the Houston ship canal, and includes a world scale vinyl acetate monomer plant and the world's largest acetic acid plant. These require large quantities of oxygen and nitrogen as well as carbon monoxide.

A new hydrogen and carbon monoxide (HyCO) plant supplying the Thai Polycarbonate Company for the manufacture of plastic resins began production in 2003.

In October 2003, BOC commissioned a new hydrogen plant supplying Citgo's oil refinery at Lemont, Illinois. The hydrogen is used in the removal of sulphur to produce clean fuels.

In the same month BOC, and its joint venture partners, announced plans to invest over US\$100 million in developing three schemes in China, at Taiyuan, Suzhou and in the Pearl River region.

BOC-TISCO, the joint venture between BOC Gases and Taiyuan Iron and Steel Corporation (TISCO), will build two new air separation units (ASUs) with each to supply 1,400 tonnes a day of oxygen to TISCO's plant in Shanxi province in north-central China. The new ASUs represent an investment of US\$82 million and they are scheduled to begin coming on stream after the end of 2005. This investment is in response to strong demand for stainless steel in China and will support TISCO's vigorous expansion plans.

Through Hong Kong Oxygen, its joint venture company in southern China, BOC has reached an agreement with Guangzhou Iron & Steel (GIS) for their joint venture company Pearl River Gases (PRG) to build a further two ASUs, adding around 400 tonnes of production to its current operations. This new investment is scheduled to come on stream early in 2005, supporting the expansion of steel manufacturing in southern China.

BOC's wholly owned subsidiaries in Suzhou have begun construction of new on-site supply scheme pipelines to meet increasing demand for industrial gases from key customers in Suzhou Industrial Park and the Suzhou New District Industrial Park.

A new hydrogen plant to supply both a Sunoco refinery, and a nearby BP refinery is to be built at Toledo, Ohio. The hydrogen will be used by both BP and Sunoco in the production of ultra-low sulphur gasoline and diesel fuels. The complex will be capable of supplying over 120 million standard cubic feet a day of hydrogen. BOC's partner for engineering and construction is Linde BOC Process Plants of Tulsa, Oklahoma. BOC is investing more than US\$100 million in the facility, which is scheduled to be completed in the fourth quarter of 2005.

In May 2004 BOC agreed to buy Duke Energy's 30 per cent ownership interest in the Cantarell joint venture company for US\$59.7 million in cash. This increased BOC's overall stake to 65 per cent on completion in September 2004. This company supplies Pemex with nitrogen for the pressurisation of its oilfields in the Gulf of Mexico.

In China, significant new business was won in the chemical sector with the Sinopec Shanghai Petrochemical Company. BOC will form a joint venture to invest in existing assets and then add further air separation capacity.

BOC's subsidiary in Thailand is to invest in a venture establishing a 1,300 tonnes-a-day plant to supply TOC Glycol Co. Ltd. (TOCGC) in Map Ta Phut and to increase merchant capacity in the area. When completed early in 2006, this will be the largest air separation unit in Thailand. It will be owned and operated by a joint venture between BOC's Thai subsidiary (TIG) and Bangkok Industrial Gas Company.

## Group profile

### Industrial and Special Products (ISP)

Gases for cutting and welding, hospitality, laboratory applications and a variety of medical purposes are mainly distributed under pressure in cylinders. The ISP line of business covers products and services provided to this section of the market together with sales of packaged chemicals and liquefied petroleum gas (LPG). Customers are typically in the fabrication, engineering, automotive, refrigeration, hospitality or medical sectors. The customer base is therefore broad and varied. The number of separate customers served by ISP is much greater than the other two lines of business and the quality of service is often the key factor in securing existing or obtaining new customers. In order to raise service standards at the same time as reducing costs, national customer service centres have been successfully established in all the major markets.

In addition to supplying gases, BOC also supplies a range of associated equipment in many of its major markets. This includes cutting and welding products and, in some markets, associated safety equipment.

BOC has devoted considerable attention over the last three years to understand the requirements of different types of customer in its major markets and to provide the required service at an appropriate price. Such customer segmentation programmes have been implemented in the UK, South Africa, Australia, Asia, Latin America and are in progress elsewhere.

The cutting and welding applications are a relatively mature part of the industrial gases business and growth opportunities are principally in other segments of the market such as medical applications, packaged chemicals, hospitality and services. BOC is pursuing these opportunities by the development of new products, packages and services as well as by marketing initiatives to take advantage of BOC's global capabilities by introducing existing products to new regions. Electronic commerce has also become an important tool for sustaining and growing sales by making it easier for customers to manage their business with BOC as a supplier.

BOC is a leading supplier of helium and has liquid helium distribution centres, or transfills, in many markets around the world. With 48 helium transfills in its global network, management believes that this is the largest of its kind. Helium has a broad range of applications, including welding and the refrigeration of medical scanner magnets, and is vital to the production of optical fibres, semiconductors and special alloys. It is also used for leak detection, underwater breathing mixtures and lifting.

**Business development** In April 2002, BOC acquired Matheson Gas Products Canada Inc, one of Canada's leading providers of special gases and equipment. Unique Gas and Petrochemicals Public Company Limited (UGP), a leading distributor of liquefied petroleum gas (LPG) and ammonia in Thailand, was acquired in May 2002. BOC's associated company in Malaysia acquired 35.6 per cent of the gases company Nissan Industrial Oxygen Inc (NIOI) in March 2002 and, following a tender offer, increased its holding to 100 per cent in September 2002. At the end of August 2002, BOC announced an agreement to purchase Praxair's Polish gases business. The transaction was completed in January 2003 following approval by the Polish competition authority. The business acquired includes a high proportion of ISP sales.

Since 2002, BOC has continued its global roll-out of a light-weight medical cylinder with an integrated valve and regulator for homecare patients and emergency services. Heliox, a helium and oxygen mixture formulated to ease the respiratory effort associated with airway obstruction, was launched in the UK.

Capacity at BOC's Otis, Kansas, helium plant was expanded in 2002 to match market demands. In addition, BOC has access to helium produced by other US plants, as well as to product from Poland and Russia. In 2003 BOC and KRIO, a division of the Polish Oil and Gas Company, entered into a new helium supply agreement. BOC will purchase for export all of KRIO's helium that is not sold to its domestic customers in Poland. BOC has been KRIO's sole customer for bulk liquid helium since the original agreement was signed in 1972. In June 2003, BOC announced

an agreement to obtain half the output from a new helium extraction facility to be constructed in Qatar. Deliveries from this new source are expected to begin in July 2005.

Magnetic resonance imaging (MRI) systems use liquid helium to cool superconducting magnets. BOC provides helium as well as a liquid nitrogen filling service to meet MRI operators' total requirements. In 2002, ISP signed a major helium supply scheme with Oxford Magnet Technology in the UK.

BOC continued to invest in refrigerant filling facilities during 2002 and in 2003 new filling facilities were installed in Hong Kong, Malaysia and the Philippines. Each of these was built to a standardised global design. BOC now supplies refrigerants in 19 countries compared with six countries in 1999. In June 2003, BOC announced a global alliance with Hudson Technologies to promote technology for cleaning and recycling used refrigerants.

Significant progress in developing web-based customer portals was made in 2002. Amongst others, ISP launched customer portals in the UK, Australia and New Zealand. Thousands of customers are now able to access detailed material on BOC's product service offers, manage and settle their accounts and place orders on-line.

BOC acquired the Canadian packaged gas and related welding equipment business of Air Products in April 2003.

BOC completed the disposal of the packaged gas part of its US ISP business to Airgas Inc on 30 July 2004. The initial consideration was US\$175 million in cash with up to a further US\$25 million to be paid on or about 15 November 2005 subject to certain conditions. All packaged gases and associated hardgoods were included in the sale. This comprised compressed industrial, speciality (excluding electronic) and medical gases in the US, sold through BOC retail and distributor channels. The sale did not include BOC's bulk liquid helium, bulk medical gases and distributor businesses.

## Group profile

### BOC Edwards

This line of business specialises in gases, services and equipment for the semiconductor industry as well as vacuum products for a range of other industries. It is organised into four customer-facing divisions for sales and marketing and into four manufacturing divisions. The customer-facing divisions are Asia/Pacific, Japan, the US and Europe and the manufacturing divisions are Vacuum and Exhaust Management, Chemical Management, Bulk Gases and Electronic Materials. Kachina (semiconductor process tool component management service), Coating Technology and Pharmaceutical Systems are managed separately. The major markets for BOC Edwards products are in Asia, north America and Europe.

Management believes that BOC Edwards has a unique position as a fully integrated supplier of gases, vacuum, chemical, slurry and exhaust management products, as well as services to the global semiconductor industry and is a leader in the design and manufacture of vacuum pumps, instrumentation and systems for both general vacuum and semiconductor applications.

The vacuum and exhaust product ranges are manufactured or assembled primarily in the UK, with additional manufacturing and assembly in the US, Japan and Korea. They include vacuum pumps, coating systems, exhaust management systems, temperature control systems and heat exchangers, instrumentation and controls, vacuum accessories and leak-detection equipment. The range also includes specially designed systems for specific applications, depending on customer requirements.

In addition to the semiconductor industry, the leading customers are in the chemicals, scientific instruments and other industries, as well as in educational and research establishments. General vacuum products are sold to such customers by a separate sales force.

Chemical Management Division specialises in the design, manufacture and installation of the systems used to deliver liquid process chemicals, including planarisation slurries to the point of use within semiconductor fabrication facilities. BOC Edwards chemical management products are manufactured mainly in the US.

BOC Edwards service facilities, including plants for cleaning semiconductor process tool parts, are located near concentrations of semiconductor fabrication facilities around the world.

Technology is important to maintain a competitive edge in this business, and considerable resources are committed to enable the business to address new applications and markets. The major research centres are in the UK, north America and Japan.

The Group's vacuum products are sold directly by Group companies to end-users and also through distributors and agents. Management believes that the Group is a leading manufacturer of the types of vacuum products that it makes and provides. The business is highly competitive, with product design and quality, leading to the lowest cost of ownership, being very significant factors.

Sales opportunities for much of BOC Edwards semiconductor equipment business are dependent upon capital investment by the semiconductor industry. Management believes that semiconductor production remains on a long-term growth trend but capital investment by semiconductor manufacturers has been subject to sharp variations for a number of reasons, some of which arise from advances in technology.

The products of BOC Edwards Pharmaceutical Systems are tailored specifically to individual customer requirements in the pharmaceutical industry and are used mainly for injectable products. Freeze-drying systems are made in Tonawanda, New York, US. Filling, sterilising and packaging lines for the pharmaceutical industry are made at Dongen in the Netherlands.

**Business development** Throughout the period 2002 to 2004, new ranges of dry pumps for the semiconductor industry were introduced as well as a comprehensive new range of exhaust management products. These new products meet the needs of 300mm wafer and flat panel manufacturing facilities.

In 2004 a new range of high-speed iGX pumps were introduced, offering attractive features for semiconductor applications such as small size, reduced power consumption and lower lifetime costs.

The range of exhaust management products was also expanded with new burners, wet scrubbers and an advanced plasma-based system for the destruction of reaction products without the use of methane fuel.

In July 2000, BOC Edwards acquired Kachina Semiconductor Services, a US company specialising in the cleaning of process tool chamber parts. In the same year a new facility and divisional headquarters was established in Phoenix, Arizona, followed by a new facility in Portland, Oregon. Additional facilities were opened in France and China during 2002.

Production of nitrogen trifluoride (NF<sub>3</sub>) gas for the semiconductor industry was started at a plant in South Africa during 2000 and production capacity was further increased during 2003. This product is an important etchant that is also used for in-position cleaning of semiconductor process equipment.

In September 2001, BOC acquired Fluorogas Limited, a UK based company with expertise in the development and operation of low pressure on-site fluorine generators. The acquisition was made to assist in BOC Edwards development of alternative cleaning systems for semiconductor process tool chambers. On-site fluorine generators were installed at a number of semiconductor and flat panel display manufacturing facilities during 2004.

During 2001, a decision was taken to concentrate electronic materials production into fewer locations and to close some existing facilities in the UK and the US to increase efficiency and reduce costs. These closures were completed in 2002.

## **Group profile**

BOC Edwards' range of electronic materials in Asia was expanded in 2004 with the addition of ultra-pure wet chemicals through a partnership with Asia Union Electronic Chemical Corporation (AUECC) and through that company with Huayi, a chemical manufacturer in China.

In 2002 BOC Edwards acquired the vacuum and pressure business of the Smiths Group. The operations are located in the UK, north America and continental Europe and typically serve customers in the metallurgy, water treatment, food, power and chemicals industries rather than semiconductor manufacturing.

The acquisition of the turbomolecular pumps business from Seiko Instruments Inc in Japan was completed in March 2002 with the principal objective of enhancing the ability of BOC Edwards to develop vacuum sub-systems to satisfy the growing trend to on-tool pumping in the semiconductor industry.

Hydromatix and Semco were also acquired during 2002 with the intention of positioning BOC Edwards in those market segments expected to deliver the fastest growth. These two companies, based in the US, are involved principally in semiconductor wet processing technology including chemical blending delivery and collection systems as well as liquid waste abatement systems.

BOC Edwards sold its glass coating business, based in the US, in April 2002 but retained its Temescal business that supplies technology for compound semiconductor manufacturing.

## **Afrox hospitals**

Afrox Healthcare Limited owns 60 hospitals and clinics and has a minority interest in a further seven hospitals managed by others. It also manages the Lifecare group of chronic-care hospitals. In addition to hospitals and clinics, which are the core business, Afrox Healthcare Limited also includes Afrox Healthcare Services, which facilitates a direct medicines service for chronic medication, and provides occupational health services, nursing training and laboratory services. Management believes that Afrox Healthcare Limited is the leading provider of private health care in southern Africa.

During 2000, African Oxygen Limited (Afrox) increased its holding of Afrox Healthcare Limited to 82 per cent. During 2001, the 55 per cent interest in Lifecare Special Health previously held by Afrox was bought by Afrox Healthcare Limited.

In January and July 2002, Afrox sold parts of its holding in Afrox Healthcare Limited but retains a 69 per cent interest. This disposal was in accordance with the terms of the transaction between Afrox and PresMed that took place in 1999.

In July 2003 Afrox announced that it was in the process of considering its strategic options with regard to its shareholding in Afrox Healthcare Limited. On 17 November 2003, Afrox announced that it had agreed to sell its entire holding in Afrox Healthcare Limited to a consortium led by two major black economic empowerment investors. In April 2004 the South African Competition Commission advised that the transaction should be approved subject to certain conditions, which were acceptable to both the buyers and the seller. The sale remains subject to approval by the South African Competition Tribunal, at which closing hearings are currently scheduled for March 2005. In addition an application has been brought in the South African High Court by two shareholders in Afrox Healthcare Limited to have the Scheme of Arrangement, by which the disposal would be implemented, declared to have lapsed. This application, which is being opposed, is currently due to be heard in the week commencing 29 November 2004.

## **Gist**

Gist is a provider of specialist supply chain solutions. The name Gist was adopted during 2001 to reflect both the continuing focus on supply chain operations and an increased emphasis on supply chain consulting, end-to-end supply

chain solutions and logistics support to e-fulfilment opportunities. This realignment of the business followed a planned withdrawal from most non-Marks & Spencer primary temperature controlled operations in the period 1999 to 2000.

High quality supply chain operations remain at the core of the business. Gist manages a range of supply chains on behalf of retailers, mainly in the UK, as well as some overseas. For over 30 years Gist has been the largest supply chain provider for Marks & Spencer. Gist currently handles all of its UK food distribution and the consolidation and dispatch of all overseas shipments to subsidiaries and franchised operations.

During 2003, Gist ceased to operate general merchandise logistics and garment stockholding operations on behalf of Marks & Spencer.

Gist has provided supply chain consultancy services to major supermarket and catalogue retailers in the UK and demonstrated its capabilities in managing international supply chains. In addition an on-line wholesaling operation has extended the range of Gist's skills offered externally.

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**EMPLOYEES**

At 30 September 2004 the Group had 43,383 employees (2003: 44,507 employees, 2002: 46,280 employees). During the year the disposal of the US packaged gas business resulted in the successful transfer of over 1,000 employees to the new owner. Employees of the company and its subsidiaries were located as follows:

Europe	12,712
Americas	6,283
Africa	16,790
Asia/Pacific	7,598

Unplanned employee turnover remains low and as a result the employee base remains stable. BOC invests time and energy in developing the potential of its people. Opportunities are reviewed and discussed with identified individuals to provide cross-line of business experience or to set up a range of functional and geographical assignments. This contributes to BOC's success in retaining and developing the core skills and capabilities it needs to meet its business, customer service and health and safety targets. BOC regularly reviews its succession planning processes and the availability of essential capabilities. Results show it has solid capability in most areas and adequate succession depth to meet both its technical and leadership requirements.

**Employee satisfaction and commitment**

Employee satisfaction is measured and managed both centrally and in the business units.

Levels of employee satisfaction and commitment are generally high. A culture of accountability, collaboration, transparency and stretch, known as ACTS, has been developed throughout BOC. The ACTS principles provide a framework that employees can use in their dealings with each other and with customers, suppliers and other stakeholders. The GROW programme introduced this year helps employees maximise their performance and unlock their potential. It provides on-line facilities for employees to develop their individual development plans and to have access to all their career development information in one place.

**Employment policies and Code of Conduct**

The BOC Group takes its responsibilities as a global organisation seriously. It is committed to fostering a workplace that is safe and environmentally sound. It will always act in line with all applicable laws, regulations and industry standards. It expects people to respect confidential information and company time and assets. It believes in open and honest communication, fair treatment and equal opportunities. It opposes public corruption, anti-competitive behaviour and insider trading, and it supports the fundamental principles of good governance and human rights.

BOC is a signatory of the UN Global Compact. It subscribed to its nine original principles and supported the addition of a tenth principle this year on bribery and corruption. These principles represent minimum standards for BOC and in many areas existing standards exceed those set out in the Global Compact.

BOC launched a global Code of Conduct in 2003. An extensive programme of communications has seen over 99 per cent of the target population of BOC trained in the substance of the code, which is a framework of legal and ethical standards for all BOC people to work and live by. The code is supported by a number of processes. BOC has a confidential helpline to deal with questions that is available in every country where it operates. It has translated the standards into key languages.

In addition to the Code of Conduct, BOC provides guidance and human resources policies to support BOC people in their day-to-day activities and long-term career planning. These are aligned to the corporate values and principles. At the heart of this approach is the recognition that the energy and application of individuals and teams throughout the organisation will determine which companies have competitive advantage in today's complex global market.

BOC's employment policies are designed to underpin the Group's operating requirements and growth strategies. The human resources units implementing these policies are aligned to the business units in each geography and, as far as practicable, Group policies are adapted to meet local requirements.

### **Communication and involvement**

BOC places a high priority on two-way communications with its people. The primary communication channels are within the business units, where local managers work with their people and two-way communication is most achievable.

The Group also uses a number of formal and informal communication channels to share information and to shape behaviour. In addition to traditional media such as videos, magazines, newsletters and briefing packs, BOC has continued to invest in e-mail and web-based communications technologies to ensure that consistent and coherent messages are conveyed speedily to its people around the world.

The Group surveyed nearly 4,000 of its employees this year to understand the issues that employees saw as being important and their satisfaction with how these issues were communicated to them. It confirmed that the most important as viewed by employees was safety, followed by the performance and goals of their own business unit and information about customers. This survey will be used to improve communications further over the coming year.

The Group actively searches for ways to involve employees in shaping the future. Teams meet to review or jointly create processes, systems or strategies. A variety of employee structures exist for these purposes, including peer groups, special interest groups, teams of excellence and quality teams. Multi-disciplinary and cross-geographic groups of employees regularly meet, either face-to-face, or by using tele-, video- and web-based meeting technologies which have been installed for these purposes.

### **Resourcing, training and development**

Resourcing, training and development programmes are designed to ensure that the Group has a pool of well-qualified, gifted individuals able to meet day-to-day operational needs and plans for the future. BOC conducts a robust annual process to assess the strengths and weaknesses of its units.

It is committed to providing its people with opportunities to develop and grow, but also to bring new blood into the organisation through targeted external recruitment. A global, web-based recruiting platform is in place to supplement other recruitment channels.

## **Employees**

BOC continued to place great emphasis on personal and career development over the past year. Employees are encouraged to be proactive about their future careers and development opportunities. The aim is for all employees to have regular discussions with their managers regarding their aspirations, prospects and development needs. These result in the formulation of an individual development plan, which is an agreed course of action to meet employees needs as well as the needs of the organisation. The GROW process not only aids the development of individual development plans but also performance management. Action plans can be developed and monitored incorporating input from 360 degree appraisals. BOC offers many opportunities for career and personal development. Employee development takes the form of on-the-job coaching and training, development projects, secondments, e-learning, as well as more traditional classroom-based training.

In addition to the development that takes place to achieve current job effectiveness of all employees, high potential employees are identified and developed with future roles in mind. Lead is an ambitious executive development programme for high potential senior managers, facilitated by world class external providers as well as senior BOC executives. It is customised for BOC and is comprehensive in its scope. The programme offers a tailored curriculum and is designed to equip the participants with the broad range of skills and experiences they will need to be successful leaders within the Group. To date, over 130 senior managers have had the opportunity to participate in Lead programmes.

A parallel leadership development programme, iLead, has been developed for high potential middle managers and is run regionally around the world. Lead and iLead augment many other management development initiatives, which are provided to all BOC's supervisors and managers.

International assignments are used to develop high potential executives and to create opportunities within local management teams. The success of such programmes are reviewed regularly with business unit heads as part of their performance contracts.

BOC believes that how its employees work is as important as what they produce, which is why it has concentrated on the behaviours associated with accountability, collaboration, transparency and stretch – the ACTS cultural principles. Accountability comes through people knowing what they are accountable for and being empowered to deliver. Collaboration is about drawing on the rich diversity of styles, talents and skills across the Group to maximise achievements. BOC values transparency because of the belief that visible problems can be solved and that informed people make better decisions. Finally, stretch advocates continually pushing the boundaries of performance. BOC has created a set of leadership competency models, which are aligned to ACTS. All recruitment, development, recognition and enhancement processes are being aligned to this comprehensive and unified BOC view of leadership and management.

## **Reward and recognition**

An organisation that aspires to excellence must recognise and reward the achievement of excellence. The Group continues to refine the key value drivers of its business units and to ensure it can reward and recognise outstanding individual and team performance in the fulfilment of business goals. Programmes to achieve this are cascaded throughout the organisation to heighten focus on effective performance at all levels.

The Group continues to move towards a total reward system that allows people to structure their remuneration and benefits to suit their individual needs. Senior executives' remuneration is linked to a Group-wide variable compensation plan, which is described in the report on remuneration on page 64.

## **Retirement benefit plans**

BOC considers it important that its people provide for their retirement and fully supports their efforts in this regard. Around the world, the Group provides opportunities for people to participate in retirement programmes tailored to suit local conditions. Just as importantly, the board's pensions committee takes prudent steps to monitor and control Group-wide retirement benefit plans with local managers being responsible for safeguarding the security of each retirement plan that they sponsor.

BOC closed its UK defined benefit pension schemes to new members in 2003 and replaced them with a defined contribution plan.

The financial position of the Group's main pension funds is detailed in note 8 to the financial statements.

## **Diversity**

BOC believes that diversity is a key driver of future organisational and operating effectiveness. As one of the UK's few truly global companies, BOC highly values the rich diversity of its people. While the Group consistently champions a set of unifying values and principles, they are not imposed regardless of local sensibilities. Rather, the Group strives to build on the qualities inherent in its global environment by encouraging people with different views, styles and approaches. Wherever in the world it operates, BOC is committed to maintaining a workplace free from discrimination for reasons of race, creed, culture, nationality, religion, gender, sexual orientation, age or marital status. The success of its diversity programme is monitored and reported regularly.

Disability is not considered a barrier to employment and, as far as local conditions allow, employees are selected on the basis of their ability to perform the job. Further necessary training is arranged, taking account of their particular needs and the resources required to meet them.

## **Employee share schemes**

Many BOC employees in the UK and some other countries have built up an equity interest in the Group's business through employee share schemes. Options may be granted at a discount to the market price at the date of grant. The term of options granted could be from three to seven years and any option is conditional on a commitment by the individual to make regular savings from pay that are then held by an independent organisation to purchase shares at the end of the option period. The exercise of options under these schemes can be satisfied by the issue of new shares or the transfer of existing shares.

## **SOCIAL, ENVIRONMENTAL AND ETHICAL PERFORMANCE**

Exercising sound corporate responsibility is fundamental to the way BOC operates. The Group aims always to behave ethically and to manage risk strategically. It has a process for identifying, evaluating and managing all risks in accordance with best practice.

This section outlines the Group's systems for managing its social, environmental and ethical (SEE) risks and opportunities in line with guidelines set out by the Global Reporting Initiative, the Association of British Insurers, the UK's Combined Code on Corporate Governance and the provisions of the US Sarbanes-Oxley Act 2002 as it applies to foreign private issuers. More details about BOC's risks and corporate responsibility performance can be found in the sections on risk factors on pages 32 and 33 and corporate governance on pages 56 to 63 and on the company's website, boc.com.

The Group works actively with its stakeholders – shareholders, customers, suppliers, employees, local communities and governments. Underlining the Group's adherence to best practice, BOC engages with a wide variety of employee, safety, environmental and community bodies.

BOC is a signatory to the UN Global Compact. This year BOC participated in the Global Compact's review and implementation of a tenth principle against corruption. All Global Compact principles are integrated into BOC's Code of Conduct. BOC continues to review and adapt its business practices to achieve the Group's SEE objectives and activities.

### **Executive responsibility**

BOC has an integrated approach to SEE risks, managing them in the same way as all other business considerations through business unit and Group risk management programmes. These processes are applied to major business decisions such as acquisitions, disposals, new ventures and major supplier contracts. BOC business dealings are guided by a global Code of Conduct. The code sets out the safety, environmental, social, legal and ethical parameters that Group businesses and employees are expected to follow. The code is the responsibility of the executive management board (EMB), whilst BOC's businesses are responsible for day-to-day implementation.

EMB members are responsible for each of the code's standards, supported by the appropriate business and functional structures. The Group chief executive has ultimate responsibility for the code programme. He delegates oversight to an EMB sponsor board and day-to-day management to a code advisory group. The code advisory group is chaired by the general counsel, global compliance.

Safety, health and environmental management systems are the responsibility of the Group chief executive and implemented by the Group director for safety, health, environment and quality (SHEQ). Workplace issues, including labour relations, diversity, equal opportunities and human rights, are managed by the Group director, human resources (HR). Marketplace issues, including customer relations and ethical trading practices, are managed by the line of business chief executives. The director of supply management oversees BOC's supply chain and ethical purchasing policy and reports to the Group chief executive. The Group director, corporate relations, manages community relations, including sponsorships and charitable support.

The EMB regularly reviews Group systems for managing risks and opportunities, including business assurance audits, legal, SHEQ and HR reviews, appropriate training and communications, and performance management and remuneration incentives through the Group's performance contract process. Directors are provided with appropriate SEE training and communications. For example, they are given regular safety briefings and Code of Conduct progress reviews. Training on defensive driving and other SHEQ priorities is provided. The EMB sets a strategic direction with regards to all business issues including SEE matters. Business units implement and develop the EMB's strategy through their own management teams.

## The Code of Conduct

BOC has spent two years developing and rolling out a global Code of Conduct. It covers SEE risks and expectations. This year the code programme consisted of:

- setting minimum and consistent standards around the world;
- communicating Group priorities, principles and standards to all employees;
- stakeholder engagement to identify, prioritise and respond to key issues;
- training for employees;
- setting standards for agents, consultants, distributors and suppliers through the Group's ethical purchasing policy;
- managing Group performance in line with the code;
- assurance, using the Group's business assurance audit/risk management, SHEQ and HR functions as well as external auditors where appropriate.

This year the Group moved from the code's implementation phase into its sustainability phase. This is aimed at further embedding the code and so far as possible measuring the Group's performance against standards laid down by the code.

A global network of implementation managers drove the code's roll out in workshops across more than one thousand locations worldwide and has been superseded by a network of implementation managers. A code sustainability strategy ensures the programme remains visible, accessible and relevant to all BOC employees.

The code is available on boc.com and available to employees via intranet, CD or paper copy. The code is linked to a number of other BOC systems, notably the Group's integrated management systems and standards (IMSS).

BOC operates a confidential 24 hours a day/seven days a week helpline to receive and answer questions and concerns about legal compliance, ethical conduct and adherence to the Code of Conduct. It is managed by the global compliance department. Investigations are overseen by global compliance and managed by appropriate functions, notably HR, SHEQ and business assurance audit/risk management. Code sustainability issues are reported to the EMB and appropriate managers on a monthly basis. In its inaugural year, the helpline received 103 allegation cases from around the world. Of these 21 per cent resulted in disciplinary action, and 50 per cent were found to be unsubstantiated or non-violations. The remaining cases are still being investigated.

## **Social, environmental and ethical performance**

### **BOC's global management system (IMSS)**

IMSS (integrated management systems and standards) is a system developed by BOC. It has three distinct parts: the IMSS Library, Traccess and Audit Manager. The IMSS Library houses electronic copies of BOC's reference material, instructions, procedures and standards. Traccess is BOC's online training and testing system storing individual learning profiles and employee training histories. Audit Manager reviews all stages of the audit cycle and tests site performance and compliance against best practice and minimum standards defined in the IMSS Library. IMSS documents Group knowledge from high level policies to detailed work instructions, enabling employees to be trained and assessed in the skills required by their roles. IMSS outlines the correct protocols and minimum standards and tracks the performance of actions needed to ensure the safe, environmentally sound and efficient management of BOC businesses worldwide. IMSS and the Code of Conduct are mutually supportive.

### **Stakeholders**

BOC's code is segmented into key stakeholder groups, each of which is addressed by specific code standards and management structures and procedures. Details are posted under the corporate responsibility section of boc.com. For example, BOC works with its suppliers through its ethical purchasing policy, which is managed by the Group supply management function, underpinned by the Code of Conduct and supported by IMSS and a number of other web-based platforms. A supplier evaluation, selection and performance appraisal (SESPA) system assures minimum standards of supplier performance, quality assurance and legal, ethical, social and environmental compliance.

### **Identifying and prioritising SEE risks**

BOC introduced a formal process to identify and manage its SEE risks and to identify potential opportunities. EMB directors, business unit heads and other key managers around the world submitted potential SEE risks which were consolidated by the Group risk management function and rated using predetermined scoring criteria. Each risk was rated according to its potential impact, the adequacy of plans to mitigate the risk, and its urgency.

The broad areas identified by the SEE risk and mitigation process are: managing the safety of people associated with BOC; managing major operational hazards; minimisation of greenhouse gases emissions; energy efficiency; water conservation; global adherence to and the effective working of the Code of Conduct; managing an ethical supply chain; and continuing enhancement of product stewardship procedures.

The Group's SEE review found that management systems and mitigations already exist for identified risks, but in some minor instances enhanced measures may be required.

### **Managing corporate responsibility performance**

This year the Group participated in the UK's Business in the Community (BiTC) corporate responsibility index for the first time. The index assesses companies' performance against a wide range of environmental, social and ethical measures. BOC has participated in the index's sister survey, the Business in the Environment (BiE) index since 1995. BOC scored 91.69 per cent in BiTC's index, ranking it 25th out of 139 participating companies, including 56 from the FTSE100. Completing the index demonstrates the Group's commitment to managing, measuring and reporting its corporate responsibility performance in an open and transparent way. BOC's completed survey and BiTC's independent assessment of the Group's performance is published on boc.com. The BiTC index is the Group's common measure and standard response to corporate responsibility and SEE enquiries.

## **Safety, health and the environment**

There are no greater priorities for BOC than the health and safety of colleagues, contractors, suppliers, customers and local communities, and the protection of the environment. BOC is committed to excellence in managing these areas through normal business practice assisted by its safety, health, environment and quality (SHEQ) function.

SHEQ policies and procedures are the responsibility of the Group chief executive and implemented by BOC's businesses with the support of the SHEQ function. The SHEQ department works within the businesses to ensure that the Group has a deliverable policy, is active in its risk assessment and professional in its mitigation.

BOC has well-established programmes to drive improvement in SHEQ performance. Employees are required to comply with all external regulations and the Group's policy and Code of Conduct. Suppliers are expected to meet minimum standards set by BOC's ethical purchasing policy.

Standards, procedures and tools are embedded in Group practice by the organisation's integrated management systems and standards (see IMSS section above). IMSS outlines the minimum standards and actions needed to align with or conform to management systems such as ISO 9000 (quality assurance), ISO 14001 (environment) and ISO 18001 (health and safety).

BOC met its objectives in 2004 when the Group:

- updated its safety, health and environment policy;

- launched Safety in BOC focusing on key safety behaviours across the organisation;

- continued to conduct its audit programme of safety standards and assessment of the organisation's safety culture.

- Annual safety action plans are derived from these processes, and integrated into individual and business performance contracts;

- continued to conduct its annual environment survey. Annual environmental action plans are derived from the survey's results, which are integrated into individual and business performance contracts;

- commenced the sustainability phase of its Code of Conduct programme, ensuring that SHEQ considerations continue to be reinforced and integrated into the organisation's legal and ethical framework.

Along with the Code of Conduct and the Group's ACTS operating principles, Safety in BOC ensures that SHEQ issues are managed consistently across all countries and businesses.



**Social, environmental and ethical performance****Overall safety performance**

	2003 <sup>1</sup>	2004 <sup>1</sup>
Lost workday case rate	0.45	<b>0.41</b>
Total recordable case rate	1.18	<b>1.18</b>
Passenger car avoidable accident rate	1.99	<b>2.12</b>
Truck avoidable accident rate	2.75	<b>2.38</b>

**Lost workday case rate****Total recordable case rate****Passenger car avoidable accidents per million miles****Truck avoidable accidents per million miles**

1. 2003 and 2004 safety statistics include mergers, acquisitions and all joint ventures. Previous years have not been restated.

**Safety**

Safety is BOC's highest priority. Safety is the first agenda item at every EMB and business executive meeting. Great emphasis is put on providing employees with all the necessary training, equipment and safeguards. Business managers around the world, with SHEQ support, continually strive to improve safety performance concentrating on individuals behaviour and the effect safe behaviour has on the organisation.

Each business unit has a safety function, reporting to the business unit's executive and the Group SHEQ function through a global peer group. This ensures that global best practice and the functional requirements of the business and Group are always at the forefront of management thinking.

BOC manufactures and distributes products that are potentially hazardous, some being stored at very low temperature or under pressure, and some having toxic or flammable properties. BOC is committed to operating safely and communicating safe working practices as an integral part of its safety and product stewardship processes. It is important for the Group to disseminate these safe working practices to customers and suppliers and to have clear and measurable performance standards practised by all BOC plants, depots and distributors.

Controlling process-related risks is of the utmost importance. Any incidents that do occur are thoroughly investigated and the lessons learned are applied throughout the organisation to minimise the likelihood of recurrence. Safety lessons are shared throughout the gases industry and BOC continues to participate fully in the development and application of industry-wide codes.

This year the Group implemented Safety in BOC. It complements and strengthens the organisation's existing safety systems and standards. An independent safety audit in 2002 showed that safety performance could be improved by

emphasising the behaviour of all employees. Business unit leadership teams have conducted education, leadership and planning workshops around Safety in BOC. These are being followed up with a focus on leadership skills to influence people's behaviours. A new technique, LeadSafe, is being introduced to help drive change. These elements will continue to be important features of BOC's overall safety strategy.

Safety in BOC aims to prevent people getting hurt by guiding managers to effect lasting behavioural change. Independent studies suggest that more than 90 per cent of all incidents in the workplace are the result of unsafe acts, so changing behaviour has a significant impact.

Safety in BOC draws together and strengthens the Group's safety policies, principles, standards, procedures and tools. It underpins the principle that safety is 100 per cent of our behaviour, 100 per cent of the time. A safety roadmap charts how the businesses and sites will continue to develop globally consistent strategies to move the Group towards world class safety performance.

This year BOC further developed its approach to tracking key performance indicators for safety. The Group traditionally tracks reactive or lagging indicators, for example: lost workday cases, medical treatment cases, passenger car and truck incidents. Lagging indicators measure past events and measure business unit safety performance. The organisation has also introduced a set of proactive or leading indicators, for example: safety meetings held, the close out of corrective actions from audits, investigation reports completed on time, and training. Leading indicators have been integrated into individual and business performance contracts and business unit reviews. Site managers compile leading indicator statistics and report these to their business unit heads.

Over half of BOC's major incidents involved vehicles and the Group is focusing attention here. Safety-related driving initiatives and programmes are in place around the world for both commercial and passenger car drivers. These include defensive driving training, observation and feedback, vehicle design, use of on-board monitoring technology, and anti-rollover and jack-knife training. Other areas being addressed include the embedding of safety criteria as part of employee recruitment, induction and ongoing training.

Developing and sharing best practice across the world helps reduce risk and the number of driving-related incidents. The Group strengthened its major vehicle incident investigation procedures to improve consistency of approach, understanding and analysis of contributing causes, assessing the trends and implementing remedial strategies to prevent recurrence. This process has been successfully piloted and is being further integrated into Group reporting systems and standards.

Every year, BOC takes steps to prevent and address the underlying causes of incidents as well as to ensure employee security in the workplace. It is a matter of great regret that four Group employees died in work-related activities in 2004. Two employees died in road incidents, one in the Czech Republic and one in South Africa. One employee in South Africa was electrocuted at a BOC site and a driver in the US died whilst delivering product to a customer. The Group chief executive, SHEQ director and business unit managers review every fatality and major incident personally. Investigations are only closed when the chief executive is fully satisfied that the root causes of the incident are understood and action has been taken to prevent future occurrences.

The Group has four principal reactive indicators to provide a consistent measure of its workplace and vehicle safety performance. These are:

- lost workday case rate (LWCR) per 200,000 hours. This includes all accidents resulting in the loss of one complete day of work, according to best international practice. Many companies only report cases resulting in three or more lost workdays as deemed reportable under RIDDOR regulations;
- total recordable case rate (TRCR) per 200,000 hours. This includes all LWCRs and medical treatment cases;
- passenger car avoidable accident rate (PCAAR) per million miles;
- truck avoidable accident rate (TAAR) per million miles.

### **Occupational health and hygiene**

BOC requires its businesses to manage employee health activities in accordance with local laws and regulations and according to BOC's codes of practice, standards and procedures. The Group's occupational health and hygiene (OH) function provides a global service, striving to eradicate work-related health hazards.



## **Social, environmental and ethical performance**

### **Non-compliances**

(violation of laws, complaints and spillages)

No. sites reporting incidents

### **Hazardous waste**

(variability in national legal classification)

Tonnes x 1,000

### **Ozone depleting potential substance release (solvents and refrigerants)**

Tonnes (ODP) released

### **General waste disposal 2004**

Total 26,675 tonnes

### **Types of general waste**

Total 26,675 tonnes

Employees have access to guidance on OH from qualified SHEQ managers. This is supported by a range of training programmes, manuals, videos and safety data sheets, which are available through local and global SHEQ functions and on dedicated SHEQ intranet sites.

The OH function carries out reviews in all business units to provide information and guidance on the main health issues that exist in BOC operations globally and how best these potential hazards may be minimised or eliminated. This is achieved by providing best practice standards and guidance to local SHEQ personnel who then implement these standards and policies as necessary. Adverse employee health effects are monitored through local occupational health checks around the world. These vary according to risk and requirement. Some are internal and others are out-sourced to professional OH providers. Voluntary and routine Well-person medical checks for employees engaged in hazardous activities or facing other risk factors are conducted throughout the year.

The main potential health issues that exist in BOC operations differ across business units. When dealing with gases, the main potential health issues are:

- exposure to noise from gas compression activities and from cylinder handling;
- potential exposure to some gases filled into cylinders;
- potential exposure to chemicals used in metal cleaning;
- painting operations;
- ergonomic and manual handling risks.

OH programmes have been developed to deal with these issues and are applied across the Group. BOC programmes include: a new OH service with a global provider to enhance the emergency care given to BOC business travellers taken ill away from home; an AIDS/HIV prevention, treatment and care programme for employees in southern Africa; an education programme to raise awareness of the effects of noise; a manual handling training video; a legionella

control programme for water systems such as cooling towers present on sites; a programme for the assessment of manual handling and display screen equipment to minimise ergonomic health risks; a chemical assessment and management programme; and specific work to reduce the use of solvents. The last includes a new training video addressing the specific hazards of using chemicals to clean plant and equipment for use with oxygen.

OH programmes strive to reduce employee exposure to present and potential hazards, drive best practice across the businesses and are part of the Group's commitment to continuous improvement. OH programmes are being piloted in response to occupational stress, drugs testing, and to provide fast-track physiotherapy to aid employees' recovery from injury.

One of the most visible OH programmes is the Afrox AIDS/HIV programme in southern Africa. The objectives of the programme are: to encourage prevention of HIV and AIDS infection through education and awareness training; to provide treatment to prolong life expectancy to employees living with HIV through the provision of anti-retroviral therapy and a disease management programme; and to provide pastoral care, which includes counselling and other types of support for HIV-positive employees.

## **The environment**

BOC is committed to sound environmental practices, implemented through a worldwide environmental management system which includes operating instructions, training, performance tracking and auditing, and the sharing of best practice through the Group's integrated management systems and standards (IMSS) together with an annual global environment survey managed by the SHEQ department. The results of the environment survey are reviewed by the EMB, business unit management teams and the Group SHEQ director. Annual environment action plans are integrated into business unit management processes together with business and individual performance contracts.

BOC is classified as part of the chemicals sector, but does not have the same direct or significant environmental issues to deal with as traditional chemicals manufacturers. The nature of BOC's activities and the type of chemicals handled are quite different. However, in line with other industries, BOC is committed to the conscientious stewardship of its products and services.

Management of environmental issues that are relevant to the Group's businesses is overseen by the SHEQ department. Many BOC business units have programmes to achieve ISO 14001 environmental certification. The Indura business in Chile obtained ISO 14001 in August 2004 at its Solcon plant that manufactures MIG wire. The St Helen's site in the UK renewed its ISO 14001 certificate this year. In 1995 St Helen's was one of the first sites in the UK to receive ISO 14001. In addition, BOC's hydrogen plant on Teesside in the UK obtained its certificate this year. All BOC sites operate in accordance with ISO standards even if not specifically accredited, because IMSS, containing the Group's global operating systems and standards, is aligned to ISO 14001.

This year BOC's global environment working group teamed up with occupational hygiene professionals to develop best practice strategies. The Group's web-based environmental survey, which covers approximately 550 industrial sites around the world continues to be used to develop action plans and report performance on-line. This system reveals opportunities for the development and sharing of best environmental practice across sites and businesses. For example, Afrox hospitals at Kingsbury and Claremont installed a water recycling system for their autoclave sterilisers in response to survey findings. The water saving at one hospital on average equates to 3.5 million litres a year.

BOC has operated a comprehensive environmental survey programme of its sites for more than ten years. The annual survey highlights issues relevant to the businesses and assesses how well they are being managed. Objectives for improved performance remain an integral part of business performance contracts.

Disappointingly ozone depleting potential (ODP) substance releases have increased this year. 60 per cent of the total released was from two plants. Plans are in place to improve performance by modifying both plants and developing action plans to improve other plants.



## Social, environmental and ethical performance

Climate change is now recognised as a significant environmental issue. This presents BOC with challenges and opportunities. The most significant challenge is the fact that BOC is a major energy user and a partner and supplier of products to energy intensive industries such as iron and steel. Opportunities lie in the development of products and services that help customers manage their own climate change issues, for example, energy efficiency improvements or cleaner production that reduces greenhouse gas emissions.

BOC's electricity consumption was approximately 11.8 Terawatts and emissions for this financial year are estimated to be 7.5 million tonnes carbon dioxide equivalents of which the two gases businesses, Process Gas Solutions and Industrial and Special Products, account for 98 per cent. They produce approximately 2,420 tonnes of carbon dioxide equivalents for each £1 million of turnover. These emissions are from major combustion sources and emissions associated with electricity used by all BOC's major facilities. Whilst emissions associated with Group processes are significant they should be viewed in the context of the nature and scope of BOC's businesses. As a matter of business and environmental necessity, the Group will continue to manage climate change issues effectively and responsibly.

BOC's methodology for emission estimation and addressing emission factors has been independently assessed and confirmed to be appropriate. The Group uses energy data to help improve its energy efficiency with resultant improvements in carbon dioxide emissions. Over the last four years, for example, Process Gas Solutions operations have continued to focus on plant and distribution efficiency improvements, resulting in more than one thousand projects that will deliver significant annual savings. One project was successful in winning an application for New South Wales Greenhouse Gas Abatement Certificates as a result of the installation of a Linear Model Predictive Control (LMPC) system at the Port Kembla site in Australia. This project is one of the largest to qualify under the scheme rules and demonstrates BOC's commitment to improving the energy efficiency of its production processes. LMPC has helped the business to reduce gaseous oxygen losses at the site, which in turn means that the business consumes less electricity.

BOC's commitment to environmental stewardship and partnership is shown in its approach to new plants, facilities and services. BOC and the Australian CSIRO entered into an agreement to commercialise fumigation technology to replace methyl bromide, a widely used fumigant that is being phased out under the International Montreal Protocol. The fumigant ethanedinitrile (EDN) is considered better environmentally and more effective than methyl bromide to sterilise soils from insect pests, weeds and diseases before planting high value crops such as strawberries and carrots. Also in 2004, BOC formed a major alliance with leading refrigerants reclaim firm Hudson Technologies. A seven-year agreement covering 20 countries provides BOC with exclusive access to Hudson's recovery, reclaim, diagnostic, analytical and gas cleaning equipment and software technology. The technology will improve plant efficiency, leading to energy savings and environmental benefits from reduced carbon dioxide emissions.

Selecting the right supplier for BOC is fundamental to conducting business effectively and ethically. Throughout its businesses, BOC has adopted the SESPA process for supplier evaluation, selection and performance appraisal, together with an ethical purchasing policy implemented by the supply management function.

BOC aims to comply fully with all material environmental laws and regulations. Four prosecutions for breaches of environmental regulations were incurred in 2004 resulting in fines totalling £3,670. BOC has responded with measures to abate and prevent future occurrences as part of the Group's programme of continuous improvement.

The US Environmental Protection Agency has named The BOC Group Inc as a potentially responsible party for clean-up costs at a number of hazardous waste sites. Although liability for the remediation of such sites may be legally imposed without regard to the quantity of waste contributed, based on the information available management believes that it is unlikely that any costs incurred will have a material impact on the financial position of the Group.

BOC continues to assist customers to improve their own environmental performance. Environmental legislation also presents BOC with a number of potential business opportunities. BOC and the Cardiff Harbour Authority in the UK won the ABB-sponsored IChemE Environment Award 2004 for the Harbour Four oxygenation vessel that replenishes oxygen into Cardiff Bay. This is a good example of BOC technology benefiting the general public as well as industry. BOC has also patented systems to recover carbon dioxide from other companies' productive processes and

put it to constructive use. For example, reclaimed carbon dioxide is infused in drip-irrigation water or used to enrich atmospheres to enhance crop growth. The glass and metals industries use BOC's oxy-fuel burners to increase the efficiency of combustion, using less fuel and reducing polluting emissions.

The Group continues to develop technology that is more energy efficient, which helps customers and partners meet their carbon dioxide reduction commitments under the Kyoto protocol on climate change. As part of this commitment, BOC's Torrance and City of Industry air separation plants in the US received substantial funding from the energy efficiency programmes run by Southern California Edison.

The Group continues to work actively with its stakeholders to ensure environmental issues are approached responsibly and supported actively. BOC is a signatory to the UN's Global Compact and in the US and Australia supports the chemical industry's Responsible Care programme. BOC continues to participate in the UK's Business in the Environment (BiE) survey. This year the Group improved its overall survey score achieving 88.59 per cent, placing BOC in the top 25 per cent of FTSE and other companies participating in the survey.

Details about the BOC Foundation for the Environment can be found on page 62.

1. BOC's methodology is consistent with all major point sources of carbon dioxide emissions within Scope 1 of the World Business Council for Sustainable Development and the World Resources Institute (March 2004) and all major sources of carbon dioxide emissions under Scope 2 of the protocol. The figure does not include non-carbon dioxide global warming gases (N<sub>2</sub>O, SF<sub>6</sub>, CH<sub>4</sub>, PFCs and HFCs), freight and logistics and minor sources such as business travel, office electricity at small sites and decomposition of wastes and carbon dioxide emissions associated with heat and steam imported to BOC plants.



## RESEARCH, DEVELOPMENT AND INFORMATION TECHNOLOGY

### Research and development (R&D)

Process Gas Solutions undertakes internal development at sites around the world with the primary location being the Group Technical Center in New Jersey. It enters alliances and partnerships with universities and customers, licenses or acquires technologies from third parties, and participates in technology-based ventures. Funding from governments has also been used to progress key developments.

Working with its partners Sumitomo Electric Corporation and IGC Superpower, BOC is installing high temperature superconducting (HTS) cables to provide electricity in Albany, New York. These transmit electricity with significantly lower losses than conventional cables and provide five-times the current carrying capacity when cooled to  $-196^{\circ}\text{C}$ .

Work continues with European Union funding on novel ceramic materials that have the potential substantially to improve oxygen generation and the sequestration of carbon dioxide ( $\text{CO}_2$ ). Funding from the US Department of Energy to generate hydrogen at high pressure through a combination of membrane reactor and a hydride compression system is aimed at the future needs of the hydrogen economy. Novel LPG-based fuel cell technology research is also being undertaken with St Andrews University in the UK.

While world-class hydrogen/synthesis gas technology is available through Linde BOC Process Plants, the development and commercialisation of ceramic-based technologies for the production of  $\text{H}_2$  and syngas continues.

Technology developments for the pulp and paper and food industries using BOC expertise in heat and mass transfer are focused on reducing operational costs while improving environmental performance. BOC's impingement freezer, for example, uses highly directed jets to provide rapid heat transfer. BOC has also successfully developed a crusting tunnel that can achieve a uniform crust freeze on meat logs for slicing in high speed slicing machines.

Industrial and Special Products has introduced several new manufacturing techniques, three of which are specific to filling hydrocarbon mixtures: the continuous sequential filling of components that increases plant throughput; the costing and accurate filling of components at low concentrations; and improved data acquisition techniques to meet the requirements of ISO 6142. An automated system has also been introduced for manufacturing scientific gas mixtures using a thermodynamics data package to determine precise target pressures during filling.

In the medical field new clinical applications are being explored for oxygen and helium mixtures and the use of gases to deliver drugs effectively.

Industrial developments include the use of cryogenic coolants to minimise distortion during welding and the use of cold gas dynamic spraying in a number of industrial processes.

Research and development for BOC Edwards is conducted around the world, with key sites located in the UK, north America and Japan.

BOC Edwards introduced the new iGX range of compact, high-speed pumps with reduced power consumption and lower cost of ownership. These new pumps have remote monitoring and diagnostics. Developments in split-flow turbomolecular pumps combined with dry backing pumps have opened new opportunities in the scientific instruments sector. The combination of high-speed turbomolecular pumps and control technology to provide chamber pressure control enhances the performance of critical etch process tools for semiconductor manufacturing.

Wet scrubbers, burners and other exhaust management units have been developed to help manufacturers in key market sectors abate liquid and gaseous by-products and thus meet strict environmental regulations. An advanced plasma-based system destroys reaction by-products for customers unable to use methane fuel.

A new range of fluorine generators was introduced that reduces the cost of cleaning process tools, without using high global-warming impact gases. On-site fluorine generators have been installed with a number of LCD and semiconductor manufacturers. R&D in low **K** materials has resulted in an investment in trimethyl silane production, an important chemical precursor for microprocessor production. The newly introduced liquid flow control product LiquiSys provides more precise delivery of chemicals for semiconductor fabs. A non-contact weighing system using technology derived from magnetic resonance imaging speeds up vial filling and has been supplied to pharmaceutical customers.

Nitrogen trifluoride production increased in South Africa and ultra-pure chemicals were added to the electronic materials range in Asia through a partnership with AUECC, and through AUECC with Huayi in China. The Spectra range of gas generators is being enhanced to deliver larger gas flows, meeting all demands up to the requirements of the largest flat panel factories.

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### **Research, development and information technology**

BOC Edwards, assisted by Gist technology, has developed supply chain management for gases and chemicals and won a major contract from a leading microprocessor manufacturer. Total materials management and total gas and chemical management capability are part of an innovative and broad service offering. The use of enhanced metal and dielectric coatings on process tool parts has helped reduce customer cost of ownership.

Subsystem developments continue, combining many of our technologies for advanced customer processes. In collaboration with a lithography customer, BOC Edwards has created a subsystem which conditions the ultra-pure water used in immersion lithography tools. Development is already underway on systems for the next generation extreme ultraviolet vacuum-based lithography tools. A supercritical CO<sub>2</sub> tool has been released, and is being used to develop critical cleaning processes for future generations of chip making at a key industry development facility.

Total R&D expenditure in 2004 was £41.6 million compared to £39.9 million in 2003 and £47.0 million in 2002.

### **Information technology**

Standardisation on a common SAP computing system continued with successful deployments in Korea, Malaysia, Colombia and Venezuela. Our newly acquired businesses in Canada and Poland were fully integrated and, following a successful initial implementation in Europe, SAP was subsequently extended to BOC Edwards' operations in the US. Improved devices for electronically capturing data at the point of delivery have been deployed in the Australian and UK Industrial and Special Products businesses. Partnet, an e-commerce system for BOC agents, was implemented in a number of countries.

The south Pacific data centre was closed and data processing from Australia is now done in the global data centre in the UK. In South Africa a new centre has been set up to develop applications and provide support for systems that are specific to BOC. For other systems, development and support capabilities have been established with third party suppliers in India.

## **RISK FACTORS**

This document contains certain forward-looking statements which involve risk and uncertainty as they relate to future events and circumstances. The following risk factors, as well as those discussed on page 50 of the financial review could cause actual results to differ materially from those expressed or implied by these forward-looking statements:

### **BOC is affected by the semiconductor business cycle**

Manufacturers of semiconductors represent BOC Edwards' major customer base, and BOC Edwards' profitability is directly linked to the demand of these manufacturers for vacuum equipment, services and industrial gases. The semiconductor industry has experienced significant growth over the long term, but is cyclical in nature. Recent improvements in the level of demand for BOC Edwards' services may not be sustained due to reduced demand from end users of technology products and/or excess supply of semiconductors. The competitive nature of the semiconductor industry can reduce profit margins for suppliers of products and services to semiconductor manufacturers. Either of these factors or a combination could adversely impact BOC's financial results.

### **Acquisitions may not be successful in achieving intended benefits and synergies**

BOC has completed a number of acquisitions in recent years as part of its growth strategy and may make acquisitions in the future. While BOC identifies expected synergies, cost savings and growth opportunities prior to completing any acquisition, these benefits may not be achieved owing to, among other things:

- delays or difficulties in completing the integration of acquired companies or assets;
- higher than expected costs or a need to allocate resources to manage unexpected operating difficulties;
- diversion of the attention and resources of BOC's management;
- inability to retain key employees in acquired companies;
- inability to retain key customers;
- assumption of liabilities unrecognised in due diligence.

### **The growth of BOC's gases business will depend on the ability to win and execute large projects profitably**

BOC, through its Process Gas Solutions (PGS) line of business, has a strategy for growth that requires significant investment each year to serve key customers in different geographies. Failure to execute projects successfully for these customers will impact PGS's ability to win new projects from these customers, and therefore may impact BOC's future financial results. The specific risks associated with major projects include:

- failure to complete the project on time owing to unforeseen construction problems (which may require BOC to pay penalties under the terms of the customer contract);
- failure of the plant to deliver the contracted volumes and quantities of product required by the customer because of design errors or errors in manufacturing or construction (which may require BOC to pay penalties under the terms of the customer contract);
- inability to operate the plant at costs assumed in BOC's financial evaluation of the project.

### **The safety of BOC's operations is critical to success**

Industrial gases are hazardous substances and BOC recognises that managing safety in operations, transportation and products is critical to achieve growth and financial results. Failure to maintain high levels of safety can result in a number of negative outcomes, including:

- fining and penalties for breaches of safety laws;
- liability payments and costs to employees or third parties arising from injury or damage;
- exclusion from certain market sectors deemed important for future development of the business (such as medical gases);

damage to reputation.

**BOC operates in over 50 different countries and is therefore exposed to economic, political and business risks associated with international operations**

BOC's overall success as a business with global operations depends, in part, upon its ability to succeed in differing economic, political and business conditions. BOC encounters different legal and regulatory requirements in numerous jurisdictions. These include taxation laws, environmental regulations, regulations concerning operational standards and competition laws. BOC is also confronted by political risks such as the expropriation of assets and the inability to export currency. The business risks and challenges faced in each geography include the need to manage credit risks of local customers, appointing and retaining key staff, general economic conditions locally and currency fluctuation. Recognition of changing market conditions in local geographies is critical to BOC's long-term success. In addition, BOC's operations are exposed to varying degrees of natural catastrophe risk, such as earthquake and flood, as well as security risk, in the different countries in which BOC operates.

**BOC relies on development of, or access to, technology to support business growth**

BOC's success is dependent in part on its continued investment in technology to develop new products and services across all businesses, new applications for existing products or to design effective means for producing industrial gases. Failure to access or develop technology or anticipate, manage or adopt technological changes in operations or product applications on a timely basis will have a material impact on BOC's future results. For example, the rapid development of technology in the semiconductor sector requires BOC Edwards to be aware of changes in customer technology requirements and to introduce new products to meet those requirements in a timely manner. Failure to do so could result in reduced market share and profitability.

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## **Risk factors**

### **BOC operates in a highly competitive environment**

The industrial gases market is very competitive, with several large competitors and a significant number of smaller local competitors in different territories. Although the current trend in the industry is to seek price increases for industrial gases, the industry has experienced falling prices in previous years. There is no guarantee that the current trend will continue and there is a risk that competitors will seek to maintain or increase market shares by reducing prices. These price reductions would result in lower revenues, profits and cash flows.

### **Recognising and anticipating changes in the manufacturing economy is key to BOC's success**

BOC's industrial gas businesses serve a wide range of manufacturing customers in major geographies such as the US, UK, Japan and Australia. This is particularly true of the Industrial and Special Products (ISP) line of business which provides products and services to customers involved in the welding and cutting of metal, a major source of revenue for this division. As customers in these traditional manufacturing-based economies seek to move their manufacturing operations to lower cost territories in, for example, Asia and Latin America, the risk arises that BOC's operations in the major geographies will have lower growth opportunities. Failure to recognise these trends and manage the consequences, through the development of alternative markets and/or meeting demand in higher growth territories, could have a negative impact on future Group results.

### **BOC's success depends to a significant extent on its key personnel and employees**

BOC's performance depends on the skills and efforts of its employees and management team across all of its businesses. BOC recognises that failure to attract new talent and retain existing expertise, knowledge and skills in operations, products and infrastructure areas such as information technology could have a negative impact on revenues and profits. In addition, the success of BOC's acquisitions may depend, in part, on BOC's ability to retain management personnel of acquired companies.

### **Litigation may have an adverse impact on financial results**

The global nature of BOC's business exposes it to the potential for litigation from third parties. From time to time BOC is involved in lawsuits resulting from current and past operations or products. The outcome of these lawsuits may result in damages and awards which could have a material impact on BOC's profitability, its business operations or financial condition. Examples of litigation in the US for past products include allegations of injury arising from the use of welding electrodes previously manufactured by a BOC subsidiary in the US.

### **Increased energy costs could reduce profitability**

The production of industrial gases requires significant amounts of electrical energy. Energy costs are a key component of the cost of manufacturing industrial gases, and increases in these costs can impact profitability if they cannot be passed on to customers. Accurately predicting trends in energy costs is difficult to achieve as energy costs are to a large extent subject to factors beyond the company's control – for example, political conditions in oil producing regions. BOC also operates large fleets of commercial vehicles in certain major geographies. An increase in energy costs associated with the use of these commercial vehicles may negatively impact profit levels.

### **Implementation of computer software systems is a key success factor for BOC**

The introduction of software to improve efficiency and effectiveness of various business processes is an important contributor to BOC's growth strategy. Failure to design, select appropriate suppliers or implement such systems effectively could result in reduced levels of customer satisfaction or profitability.

**Further consolidation between major competitors may impact BOC's competitive position**

A merger between any of the major competitors to BOC within the principal geographies subject to competition authority consent, could result in a longer-term deterioration of BOC's competitive position and reduced levels of growth. Possible consequences could include:

- an uncompetitive cost base for large projects;
- an inability to participate in further consolidation due to competition concerns;
- retention and/or recruitment of key personnel;
- weakened geographical positions.

**Managing joint venture relationships is a key success factor for BOC**

BOC needs to ensure that the selection of joint venture partners in new ventures and the relationships with partners in existing relationships is managed effectively to ensure the full potential for the joint venture is achieved. Failure to achieve alignment of objectives and manage relationships effectively may negatively impact future growth and profit levels.

## OPERATING REVIEW

### Introduction

The Group's results are prepared under UK Generally Accepted Accounting Principles (GAAP) and comply with UK Companies Act requirements. While the UK GAAP reporting basis provides the core information for users of this report and accounts to understand the financial performance of the Group, management believes that users will be assisted in understanding the performance relative to previous periods by presenting the results in an alternative manner. This presentation isolates the impact of currency movements from year to year and eliminates the impact of exceptional or non-recurring items. This is consistent with the basis used by management to measure performance of the business and is a component of variable compensation plans. The elements of this alternative presentation are described in more detail below.

### Impact of currency movements

The Group has operations in some 50 countries around the world and the majority of its profit is generated outside the UK. Results of overseas operations are translated at the average rates of exchange against sterling for the year. Changes in such rates from year to year can significantly affect the Group's results when these are presented in pounds sterling. In some cases, such changes may make it difficult to understand underlying business performance trends without providing additional information. For example, the average value of the South African rand to pounds sterling changed by ten per cent in 2004 compared with 2003. When looking at the financial performance of the Afrox hospitals business segment in 2004, it is therefore important to highlight this currency impact to users of the information.

Consequently, management has for many years monitored business performance on a constant currency basis. This basis eliminates the impact of changes in the rates of exchange used to translate the results of overseas businesses into sterling by retranslating the results of the comparative year at the rates of exchange used in the current year. This is the basis for all internal management reporting throughout the year.

In this operating review, the comparison of financial performance between years may in places be referred to as on this constant currency basis. Comments on all segmental performance are on a constant currency basis.

The impact of changes in the rates of exchange used to translate the results of overseas businesses into sterling is shown in the table below.

	2002 results (as reported) £ million	Impact of movements in currency £ million	2002 results (at 2003 rates of exchange) £ million	2003 results (as reported) £ million	Impact of movements in currency £ million	2003 results (at 2004 rates of exchange) £ million
Turnover (including share of joint ventures and associates)						
Process Gas Solutions	1,200.6	(50.5)	1,150.1	1,242.7	(71.1)	1,171.6
Industrial and Special Products	1,605.3	(5.0)	1,600.3	1,751.2	(19.6)	1,731.6
BOC Edwards	688.2	(30.3)	657.9	684.1	(39.4)	644.7
Afrox hospitals	259.0	46.9	305.9	353.4	41.4	394.8
Gist	264.8	(0.1)	264.7	291.8	(0.1)	291.7



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Total	4,017.9	(39.0)	3,978.9	4,323.2	(88.8)	4,234.4
Operating profit						
Process Gas Solutions	161.2	(6.6)	154.6	177.1	(10.3)	166.8
Industrial and Special						
Products	229.3	2.1	231.4	238.2	3.1	241.3
BOC Edwards	(1.4)	(0.8)	(2.2)	7.9	(1.1)	6.8
Afrox hospitals	29.7	5.4	35.1	46.1	5.4	51.5
Gist	25.5	0.3	25.8	29.2	0.1	29.3
Corporate	(18.7)	0.4	(18.3)	(59.9)	6.1	(53.8)
Total	425.6	0.8	426.4	438.6	3.3	441.9
Adjusted operating profit						
Process Gas Solutions	185.2	(7.1)	178.1	184.0	(10.5)	173.5
Industrial and Special						
Products	248.0	2.0	250.0	242.7	2.8	245.5
BOC Edwards	26.1	(1.0)	25.1	18.5	(1.5)	17.0
Afrox hospitals	29.7	5.4	35.1	46.1	5.4	51.5
Gist	25.5	0.3	25.8	29.2	0.1	29.3
Corporate	(14.4)	0.4	(14.0)	(14.9)	1.5	(13.4)
Total	500.1		500.1	505.6	(2.2)	503.4

**Exceptional or non-recurring items**

Management believes that to present the results of the Group in the most meaningful way, items of an exceptional nature should be separately identified and disclosed. This enables users of the information to have a better understanding of underlying business performance. Examples of such items in 2004 include the loss on disposal of the packaged gas business in the US, costs relating to the subsequent restructuring of the remaining US business and charges relating to the integration process in Japan that began in 2003 following the merger of the industrial and medical gases businesses there of BOC and Air Liquide to form Japan Air Gases. Included in 2003 was a litigation settlement expense, the costs of the business initiative programme announced in August 2001, other restructuring programmes and charges relating to the integration in Japan.

## Operating review

Exceptional items include those items classified as both operating and non-operating under UK GAAP.

The review of results excluding exceptional items is part of the normal internal management reporting process. The growth in operating profit excluding exceptional items is also one of the measures used in the variable element of the senior management compensation scheme.

Further information regarding the exceptional items is given in the financial review on page 49. An analysis of all operating and non-operating exceptional items is given in note 2 b) to the financial statements on page 89.

In this review, the adjustments to eliminate exceptional items have been made to operating profit (both Group and by segment), profit before tax and earnings per share. Exceptional items are commented on in the Group results section as well as in the individual business segments to which they relate. A reconciliation of these adjusted items to the equivalent UK GAAP measure is shown in the profit and loss account on page 78. When any results or measures used in this review have been adjusted to exclude exceptional items, they are referred to as adjusted .

Within the individual business segments of the operating review, operating exceptional items are commented on separately. Comments on other aspects of financial trends and performance are based on adjusted operating profit. This provides more meaningful comment on underlying business performance.

A reconciliation of adjusted operating profit to operating profit is given in the table below.

	2004			2003			2002		
	Adjusted operating profit	Operating profit	Adjusted Operating profit	Adjusted Operating profit	Operating profit	Adjusted Operating profit	Adjusted Operating profit	Operating profit	
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	
Process Gas Solutions	190.3	(0.8)	189.5	184.0	(6.9)	177.1	185.2	(24.0)	161.2
Industrial and Special Products	269.5	(15.6)	253.9	242.7	(4.5)	238.2	248.0	(18.7)	229.3
BOC Edwards	47.8	(1.0)	46.8	18.5	(10.6)	7.9	26.1	(27.5)	(1.4)
Afrox hospitals	59.8		59.8	46.1		46.1	29.7		29.7
Gist	25.1		25.1	29.2		29.2	25.5		25.5
Corporate	(15.6)		(15.6)	(14.9)	(45.0)	(59.9)	(14.4)	(4.3)	(18.7)
<b>Total Group</b>	<b>576.9</b>	<b>(17.4)</b>	<b>559.5</b>	<b>505.6</b>	<b>(67.0)</b>	<b>438.6</b>	<b>500.1</b>	<b>(74.5)</b>	<b>425.6</b>

## Other non GAAP measures

This review also presents return on capital employed (ROCE) and adjusted return on capital employed. Adjusted return on capital employed removes exceptional items from the measure of operating profit used in the calculation. Adjusted return on capital employed is used by management for reasons similar to those described above.

A reconciliation of these two measures is shown below.

	2004			2003			2002		
	Average capital employed	Operating ROCE	Operating profit	Average capital employed	Operating ROCE	Operating profit	Average capital employed	Operating ROCE	
	£ million	%	£ million	£ million	%	£ million	£ million	%	
					(restated)			(restated)	

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Adjusted ROCE	<b>576.9</b>	<b>3,752.4</b>	<b>15.4</b>	505.6	4,010.5	12.6	500.1	4,002.9	12.5
Operating exceptional items	<b>(17.4)</b>			(67.0)			(74.5)		
ROCE	<b>559.5</b>	<b>3,752.4</b>	<b>14.9</b>	438.6	4,010.5	10.9	425.6	4,002.9	10.6

1. ROCE is operating profit as a percentage of the average capital employed excluding net pension liabilities.
2. Average capital employed and ROCE for 2003 and 2002 have been restated following the application of UK GAAP UITF37 and UITF38 in 2004 (see note 31 to the financial statements).

The Group commentary in this review also comments on free cash flow. Free cash flow is a measure often referred to by BOC management and other users of financial information to highlight the cash flow available from underlying ongoing business operations before acquisition and disposal activity. Whether or not this remains positive over time is an indicator that dividends to shareholders are being paid out of cash generated by existing Group businesses. As such it is a useful additional measure of financial performance.

A reconciliation of this measure to the nearest equivalent UK GAAP measure, net cash flow, is shown below.

	<b>2004</b>	2003	2002
	<b>£</b>	(restated)	(restated)
	<b>million</b>	£ million	£ million
Free cash flow	<b>257.9</b>	141.8	166.5
Exceptional cash items	<b>(11.9)</b>	(28.3)	(67.3)
Acquisitions and disposals	<b>92.5</b>	(118.3)	(215.5)
<i>Other items within capital expenditure and financial investment:</i>			
Purchases of intangible fixed assets	<b>(0.2)</b>	(1.2)	(0.1)
Net (purchases)/sales of current asset investments	<b>(0.9)</b>	16.6	4.3
Purchases of trade and other investments	<b>(3.8)</b>	(3.3)	(19.7)
Sales of trade and other investments	<b>5.6</b>	5.3	0.9
Net cash inflow/(outflow) before use of liquid resources and financing	<b>339.2</b>	12.6	(130.9)

**OPERATING REVIEW (COMPARING 2004 WITH 2003)****Turnover, including share of joint ventures and associates****Profit before tax****Group**

Turnover including the Group share of joint ventures and associates was £4,599.3 million in 2004, up six per cent compared with £4,323.2 million in 2003. Operating profit was £559.5 million, up 28 per cent compared with £438.6 million in 2003. After charging operating and non-operating exceptional items totalling £92.0 million and net interest and other financing items of £72.6 million, profit before tax was £412.3 million, up 17 per cent compared with £351.9 million in 2003. Earnings per share were 53.5p, up 20 per cent compared with 44.5p in 2003. Excluding the exceptional items, adjusted operating profit for the year was £576.9 million, adjusted profit before tax was £504.3 million and adjusted earnings per share were 63.2p.

Comparisons with 2003 are affected by exchange rate movements. For the currencies that principally affect the Group's results, movements in the Australian dollar and the South African rand were favourable and movements in the US dollar and Japanese yen were adverse. If the results of a year ago had been translated at the rates applied to this year, turnover would have been reduced by £88.8 million. There would have been an increase in operating profit of £3.3 million and a decrease in adjusted operating profit of £2.2 million. Adjusted profit before tax would have been £2.9 million higher and adjusted earnings per share would have been 0.2p lower.

The table set out below summarises results reported both under UK GAAP and as adjusted. Results for 2003 are shown both as reported in that year and on a constant currency basis.

	<b>2004</b>	2003	2003 (at 2004 exchange rates) <sup>1</sup>
Turnover including share of joint ventures and associates (£ million)	<b>4,599.3</b>	4,323.2	4,234.4
Operating profit (£ million)	<b>559.5</b>	438.6	441.9
Adjusted operating profit (£ million) <sup>2</sup>	<b>576.9</b>	505.6	503.4
Profit before tax (£ million)	<b>412.3</b>	351.9	360.3
Adjusted profit before tax (£ million) <sup>2</sup>	<b>504.3</b>	418.9	421.8
Earnings per share	<b>53.5p</b>	44.5p	44.9p
Adjusted earnings per share <sup>2</sup>	<b>63.2p</b>	52.9p	52.7p

1. A reconciliation of turnover, operating profit and adjusted operating profit for 2003 at 2003 and at 2004 rates of exchange is shown on page 34.
2. A reconciliation of adjusted results with UK GAAP results is shown on page 35 and in the profit and loss account on page 78.

Exceptional items in 2004 amounted to a charge of £92.0 million. This comprised a loss of £79.5 million on disposal of the US packaged gas business, a charge of £14.8 million for restructuring the remaining business in the US following the disposal, a charge of £2.6 million relating to the integration of the industrial and medical gases businesses of BOC and Air Liquide in Japan, and a profit of £4.9 million on the disposal of fixed assets.

Exceptional items in 2003 comprised £43.2 million for a litigation settlement, costs of £15.5 million for completion of restructuring programmes and £8.3 million relating to the integration of the BOC and Air Liquide businesses in Japan.

Adjusted return on capital employed for the year to 30 September 2004 was 15.4 per cent. Return on capital employed for the year to 30 September 2004 was 14.9 per cent. Free cash flow (as defined on page 35) was £257.9 million in 2004. Net cash flow, after acquisitions, disposals and other investing activities, and including exceptional cash items, was £339.2 million in 2004. A reconciliation of these measures is shown on page 35.

A first interim dividend for 2004 of 15.5p per share was paid in February 2004 and a second interim dividend of 24.5p per share was paid in August 2004. In aggregate this was a 2.6 per cent increase over the annual dividend of the previous year. A first interim dividend for 2005 of 15.9p per share has been declared for payment in February 2005.

Capital expenditure by subsidiaries (including interest capitalised) was £256.1 million in 2004, compared with £281.2 million in 2003. This was covered by cash inflow from operating activities. Capital expenditure by joint ventures and associates was £109.0 million in 2004, of which the BOC share was £49.2 million. Equivalent expenditure in 2003 was £81.4 million, of which the BOC share was £36.1 million. The Group also made acquisitions of businesses of £50.9 million in 2004 and proceeds from disposals were £98.3 million. Equivalent items in 2003 were £135.5 million and £3.9 million respectively.

### Process Gas Solutions (PGS)

	<b>2004</b>	Change on 2003 <sup>1</sup>	Change (constant on 2003 currency)
	<b>£ million</b>	2003	
Turnover	<b>1,275.2</b>	+3%	+9%
Operating profit	<b>189.5</b>	+7%	+14%
Adjusted operating profit <sup>2</sup>	<b>190.3</b>	+3%	+10%

1. A reconciliation of results for 2003 at 2003 and at 2004 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Increased turnover reflected strong demand worldwide for both steel and non-ferrous metals. In addition, sales from new production facilities accounted for approximately £14 million of the increase in turnover between 2003 and 2004. The principal facilities coming into production in 2003 and 2004 were hydrogen and carbon monoxide plants supplying TPCC at Map Ta Phut, Thailand, and Citgo's refinery at Lemont, Illinois.

Metal production increased in 2004 and world metal prices firmed as a result of strong demand from China. This benefited BOC's steel and non-ferrous metal customers in all the key markets throughout the year.

For 2004 as a whole, the food sector was buoyant outside the US despite the temporary consequences of avian flu in Asia and the imposition of US import tariffs on prawns. In October 2004, a new plant to produce beverage grade carbon dioxide was commissioned in Pakistan to satisfy growing demand for carbonated drinks.

### **Operating review (comparing 2004 with 2003)**

The recovery in the electronics packaging industry created exceptionally strong demand for industrial gases in the electronics packaging sector. BOC was a leading beneficiary of this because of its strong position in Asian markets. The EcoSnow business that was acquired in 2003 performed strongly in 2004 and contributed to the growth of the PGS business in the electronics packaging sector.

Several significant new supply scheme contracts were won in 2004. BOC's hydrogen business with refiners will be substantially increased with a new plant to supply both a Sunoco refinery at Toledo, Ohio, and a nearby BP refinery. The hydrogen will be used by both BP and Sunoco in the production of ultra-low sulphur gasoline and diesel fuels. The complex will be capable of supplying over 120 million standard cubic feet a day of hydrogen. BOC's partner for engineering and construction is Linde BOC Process Plants of Tulsa, Oklahoma. BOC is investing more than US\$100 million in the facility, which is currently scheduled to be completed early in 2006.

Outside the US, significant new business in the chemical sector was won with the Sinopec Shanghai Petrochemical Company. BOC will form a joint venture to invest in existing assets and then add further air separation capacity. BOC's subsidiary in Thailand is to invest in a venture establishing a 1,300 tonnes-a-day plant to supply TOC Glycol Co. Ltd. (TOCGC) in Map Ta Phut and to increase merchant capacity in the area. When completed early in 2006, this will be the largest air separation unit in Thailand. It will be owned and operated by a joint venture between BOC's Thai subsidiary (TIG) and Bangkok Industrial Gas Company.

New business with steel customers was mainly concentrated in Asia. In January 2004, BOC announced that its joint venture with the Taiyuan Iron and Steel Company (TISCO) would expand its existing 1,500 tonnes-a-day capacity with the construction of two new 1,400 tonnes-a-day air separation units. TISCO is already the largest stainless steel producer in China and its expansion to a capacity of 900,000 tonnes a year will make it one of the biggest in the world. In China's Pearl River delta, BOC's associated company is to expand capacity to supply the Guangzhou Iron and Steel Company and is also adding new air separation capacity to supply the Zhujiang Iron & Steel Corporation.

In the UK, BOC supplies Corus at its Port Talbot, Scunthorpe, Rotherham and Redcar plants. BOC is to increase its industrial gases supply to the Port Talbot strip products plant by 30 per cent to increase steel production locally.

Selling prices were generally firm during 2004 and sufficient to offset input cost inflation except in parts of north Asia. Increases in fuel and power costs taking effect at the end of 2004 will require further selling price increases to maintain margins. The expiry of a fixed term contract in the UK will cause a particularly sharp increase in UK power costs in 2005.

Operating exceptional items in 2004 were for the integration of the industrial and medical gases businesses of BOC and Air Liquide in Japan that began in 2003.

**Europe** Turnover increased in all parts of Europe except for Ireland. Adjusted operating profit increased significantly, mainly as a result of more efficient plant operation and careful control of costs.

In the UK, manufacturing activity remained generally weak but customer closures and relocations that had affected business in 2003 were less evident in 2004. Rising steel production led to increased demands for oxygen. The reorganisation of steel processing at Corus will lead to a 30 per cent increase in gases supply for steel production at Port Talbot from the end of 2005.

A new operations centre was established in Poland during 2004 and adjusted operating profit increased through efficiency savings derived from better operational control. Cost savings following the outsourcing of carbon dioxide distribution also led to increased adjusted operating profit in Ireland.

Price increases were generally sufficient to cover higher input costs in 2004. Further increases are being implemented in 2005 to cover sharply higher electricity prices in the UK following the expiry of a fixed price supply contract.

Cryostar manufactures cryogenic pumps, expansion turbines and compressors for a variety of industrial gas applications and for marine liquefied natural gas (LNG) tankers. As in 2003, turnover and adjusted operating profit increased in 2004 principally as a result of demand for shipboard compression units on LNG tankers and following continued investments for gases plants in Asia.

**North America** Turnover increased as a result of including a full year of syngas production for Celanese at Clear Lake, Texas and the start-up of a new plant supplying hydrogen to Citgo's refinery at Lemont, Illinois, in October 2003.

Adjusted operating profit was lower as a result of reduced carbon dioxide volumes to our food and dry ice customers, and reduced argon demand from the stainless steel and wholesale sectors.

In general, demand for industrial gases from steel customers was strong in 2004. Liquid nitrogen volumes for food freezing applications strengthened during the year, mitigating the reduced carbon dioxide volumes into this sector. BOC's carbon dioxide business with beverage customers continued to make good progress in 2004 and new business was won.

Selling prices remained generally firm and significant increases in fuel and energy costs were largely recovered with surcharges or general price rises.

**Latin America** Revenues increased across the region during 2004, although business in Venezuela continued to be affected by political uncertainty. In Brazil, BOC's new 400 tonnes-a-day plant entered production serving CST, the world's biggest producer of slab steel.

The benefits of re-pressurising the Pemex Cantarell oilfield in the Gulf of Mexico with nitrogen from BOC's joint venture company continued to be realised during the year. Pemex attributes an increase of some 600 thousand barrels a day in oil production to the nitrogen injection. Plant reliability was further improved during 2004 leading to some increase in supply. In May 2004 BOC agreed to buy Duke Energy's 30 per cent ownership interest in the joint venture company for US\$59.7 million in cash. This increased BOC's overall stake to 65 per cent on completion in September 2004.

### **Operating review (comparing 2004 with 2003)**

**Africa** Turnover increased and adjusted operating profit was further improved by cost savings and firm pricing trends leading to better margins. Although the stronger rand adversely affected platinum and gold mining in 2004, strong demand and firmer prices led to increased activity in the steel industry. New business was obtained for carbon dioxide in the beverage sector and for the use of oxygen in the de-lignification of wood pulp.

**Japan** The combination of BOC's and Air Liquide's industrial and medical gases businesses in Japan took effect from January 2003. This distorts the comparison of turnover and profit for BOC's three lines of business between 2004 and 2003 and with earlier years. The results of Japan Air Gases were consolidated on an equity basis throughout 2004 and for the last three quarters of 2003. In 2004 turnover increased mainly as a result of equipment sales and adjusted operating profit increased faster as a result of achieving integration cost savings as planned.

**North Asia** Turnover and adjusted operating profit increased in 2004 but at a more modest pace than in 2003. Production plants across the region were almost fully utilized and little new capacity came on stream in 2004. However a number of new plants will add significantly to production within the next 12 months.

In China, turnover and adjusted operating profit increased in line with economic trends but further growth was constrained by available production capacity and by some unplanned shutdowns, mainly at customers' plants. Management expects that new production capacity to be added over the next 12 months will more than double BOC's capacity in China. Four large air separation plants are under construction to supply petrochemical and steel customers and a further five nitrogen generators will supply a variety of customers in the electronics and metals markets.

In addition to the expansions at Taiyuan and Nanjing covered in the operating review last year, BOC has more recently announced a new joint venture with Sinopec Shanghai Petrochemical Company Limited (SPC), a subsidiary of Sinopec Corporation, to meet the industrial gases needs of SPC in the Jinshan District of Shanghai. The joint venture expects to invest in the production of nearly 3,000 tonnes a day of air separation capacity initially through the acquisition of SPC's existing industrial gases assets followed by the construction of a new world-scale air separation unit (ASU). This will support SPC's fast growing petrochemical business and those of additional customers in the area. The Jinshan District is one of the major areas of petrochemical investment in China and, aside from the SPC complex, includes the nearby Shanghai Industrial Chemical Park, where a number of global and local chemical companies are located.

Economic conditions were stable in Korea but increased turnover and adjusted operating profit came from some additional argon and hydrogen capacity to supply customers near Pohang.

The relocation of labour-intensive manufacturing from Taiwan to mainland China that had provided a difficult economic background in 2003 slowed in 2004. Turnover increased as a result of full capacity utilization but adjusted operating profit increased significantly as a result of improved efficiency in plant operations.

Hong Kong also enjoyed a better economic climate in 2004 for the same reasons and adjusted operating profit was sharply better.

**South and South East Asia** These regions came under the same business unit management during 2004. The economies continued to be buoyant across both regions during the year, helped by generally strong steel demand and a more active electronics industry in Singapore, Malaysia and the Philippines. The major market sectors for PGS across the region are steel, petrochemicals and the food industry.

The SARS infection that had adversely affected 2003 was no longer an issue in 2004 but in Thailand and Malaysia the food sector was hit by an outbreak of avian flu. The Thai shrimp industry was further affected by the imposition of US tariffs on imports but some recent relaxation of these should lead to better conditions in 2005. During 2004, BOC began to manufacture food-freezing equipment in Thailand.



Turnover increased in 2004 and adjusted operating profit was significantly better with improved margins arising from business efficiency and productivity gains. Additional carbon dioxide capacity was added to serve beverage industry customers in Pakistan in October 2004.

Although there were few new petrochemical projects started in 2004, demand for industrial gases increased as a result of de-bottlenecking existing facilities. In September 2004, BOC's subsidiary in Thailand announced a major investment in new joint venture air separation capacity to supply oxygen for ethylene glycol production and to increase the availability of products for sale in the expanding merchant market around Map Ta Phut. During 2005 additional air separation capacity will be added at Hyderabad by BOC's Indian subsidiary to support growing demand for merchant products in the area.

**South Pacific** Turnover and adjusted operating profit were higher than a year ago. The Australian and New Zealand economies remained generally strong in 2004. The strength of local currencies led to some further customer plant closures but firm commodity prices for minerals and particularly for steel enabled leading customers to prosper. There was some increase in tonnage volumes but volumes overall were similar to a year ago.

Electricity prices increased in eastern Australia and more so in New Zealand. Increased costs were passed through to tonnage customers and progressively recovered in the merchant markets. At the same time, BOC's major plants in Australia achieved significant cost savings as a result of implementing a global plant optimisation programme.

During 2004 BOC outsourced the transport of its bulk products to Australia's leading transport company, while retaining control of distribution and scheduling. This change was made only after ensuring that there would be no diminution of safety standards or the quality of service to customers.

A hydrogen purification plant and bus re-fuelling facility to support BP in the Government of Western Australia's environmentally friendly fuel cell bus trial came into operation during September 2004. Three hydrogen-fuelled buses will be operating in the city of Perth. The trial is to continue for at least the next two years.

**Operating review (comparing 2004 with 2003)**

**Water services** BOC acquired Environmental Management Corporation (EMC), a US water services company in October 2002. Turnover increased modestly in 2004 but the business remained close to break-even after the amortisation of goodwill as a result of planned costs to increase business development resources.

BOC's strategy for water services is to focus on its industrial customers. Significant new business was won during 2004, including a multi-year contract for process and waste water services to a major US beef producer. Tightening regulations for proteins in effluent seem likely to create fresh demands for water treatment in the food industry.

**Industrial and Special Products (ISP)**

	<b>2004</b>	Change	Change on 2003 <sup>1</sup> (constant currency)
	<b>£ million</b>	on 2003	
Turnover	<b>1,782.3</b>	+2%	+3%
Operating profit	<b>253.9</b>	+7%	+5%
Adjusted operating profit <sup>2</sup>	<b>269.5</b>	+11%	+10%

1. A reconciliation of results for 2003 at 2003 and at 2004 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Nearly all regions delivered better results in 2004 with increased turnover in most countries and an overall improvement in operating margin. Robust economic conditions supported a further improvement in the south Pacific region and Africa delivered better results despite the handicap of the stronger currency on manufacturing and mining. There was also some improvement in the US manufacturing economy.

At the same time further progress was made in successfully integrating the businesses recently acquired in Canada and Poland.

Sales to the medical sector grew further in 2004 as a result of both gases and liquid helium sales. Heliox, a new low-density breathing mixture was introduced in the UK and in Australia. This product enables patients with obstructed airways to breathe more easily and thereby provides time to treat the underlying problems. Helium is also used to cool the coils of superconducting magnets in MRI scanners. BOC not only sells the liquid nitrogen and helium cryogenics but offers a related CryoFill service, taking responsibility for filling customers' magnets. Helium sales also increased in Taiwan, Thailand and China, where significant growth potential has been identified and where an important distributor agreement was signed with Meike. The cost of producing and purchasing helium continued to increase rapidly during 2004 but BOC was largely successful in recovering higher costs in selling prices to customers. BOC installed helium recovery systems at the University of Liverpool in the UK and at Trane in the US during 2004.

Consistent progress was made in growing refrigerant sales. The alliance with Hudson Technologies for the reclaim of contaminated refrigerants began operation in the UK during 2004 and will be applied in South Africa in 2005.

BOC's major liquefied petroleum gas (LPG) businesses in Australia and South Africa were notably successful in managing volatile input costs and sustaining margins during 2004 as LPG prices increased sharply.

Sales of industrial products increased in aggregate although some developed markets continued to reflect weak manufacturing activity. Business development was helped by upgrading the retail environment of outlets in some

major markets and by the continued introduction of safety products to the markets in the UK, Australia and South Africa.

Operating exceptional items in 2004 were for the integration of the industrial and medical gases businesses of BOC and Air Liquide in Japan that began in 2003, as well as for the restructuring of the ISP business in the US following the disposal of the packaged gas business.

**Europe** Turnover and adjusted operating profit increased further in 2004. Manufacturing activity continued to decline in the UK but BOC maintained a strong position in the market. Improved service levels enabled selling price increases to be implemented. At the same time costs were reduced through improved productivity.

Modest increases in industrial product sales were helped by rejuvenation of retail outlets in the UK. Medical product sales increased as a result of gaining additional National Health Service business and continued demand for lightweight oxygen cylinders. The range of lightweight cylinders will be expanded by introducing additional sizes during 2005.

Changes in the provision of domiciliary oxygen in England and Wales are to be implemented by the National Health Service during 2005. A single contractor will be chosen in each one of 11 regions to supply all forms of domiciliary oxygen to patients. BOC currently has a leading share of the cylinder oxygen business but is a minor supplier of oxygen concentrators.

The new business supplying helium to Oxford Magnet Technology for medical imaging devices began in 2003 and performed well throughout 2004. It was also the first full year of the refrigerant reclaim service in the UK, based on an exclusive global licence with Hudson Technologies. A range of gases for scientific applications was introduced during the year and some additional sales were generated following the launch of a mail order catalogue for gases and related products. BOC's Sureflow beverage dispense gas operation was expanded by new business for Heineken outlets in Ireland during 2004.

BOC's business in Poland was enlarged from February 2003 with the acquisition of Praxair's Polish business. 2004 was therefore the first full year of the expanded business and there were further integration benefits.

**North America** The BOC Group announced on 27 January 2004 that it had signed a letter of intent to sell its US packaged gas business to Airgas. This business had turnover of approximately US\$240 million in 2003. The disposal was completed on 30 July 2004 upon receipt of initial cash proceeds of US\$175 million.

## Operating review (comparing 2004 with 2003)

Following this transaction, the ISP business in north America consists of bulk medical gases, bulk supplies to distributors, tube trailer and liquefied helium in the US as well as the Canadian packaged gas business. In total these elements currently generate turnover of some US\$450 million a year.

The impending disposal of the US packaged gas business created a challenging business environment for a significant part of the year. US sales volumes and adjusted operating profit were lower in the period prior to the disposal.

Turnover increased in Canada principally as a result of the acquisition of Air Products Canadian gases and related products business with effect from April 2003. Cost synergies arising from the integration further boosted adjusted operating profit in 2004.

**Latin America** Turnover increased significantly and margins improved. Growth across the region was driven principally by sales of medical products supplemented by sales of BOC-branded cutting and welding equipment. Sales of packaged chemicals increased in Colombia and Venezuela.

Results improved strongly in Venezuela, despite a continuation of political unrest. BOC's associated company achieved better results in Chile but there was a sharper improvement in Argentina.

Selling price increases offset inflation in Venezuela and Chile but the trends were less favourable in Colombia during 2004. A new customer service centre was opened in Venezuela and new business systems were successfully implemented in Venezuela and Colombia during the year.

**Africa** Important sections of South African industry were depressed during 2004 because of the stronger currency. Rand exchange rates reduced the profitability of gold mining and manufacturing for export in particular. At the same time the cost of imported goods was lowered making them more competitive with those manufactured locally. However lower interest rates began to stimulate domestic consumption towards the end of the year.

Despite the more difficult market conditions, adjusted operating profit improved significantly on the basis of a modest improvement in turnover. Margins improved as a result of better productivity and operating efficiency, partly offset by increased transport costs arising from the temporary shutdown of some key supplier facilities. Sales of cutting and welding products increased in South Africa and so did both the sales volume and the turnover of liquefied petroleum gas (LPG). Turnover of special products, including refrigerants, grew particularly rapidly.

Export sales of welding products manufactured by Afrox, BOC's South African subsidiary, also increased significantly. There was a modest improvement in adjusted operating profit despite the currency disadvantage. Sales of the AfroxPac emergency oxygen kit for underground miners were substantially lower in 2004 as order intake reflected weak activity in the gold mining sector.

During 2005 the Afrox refrigerants business is projected to expand by offering a service to recover and reclaim the contents of customers' refrigeration plant. This service will be provided on-site if required and will be based on technology that is the subject of BOC's global alliance with Hudson Technologies.

A programme to renovate the Afrox retail network in South Africa with the development of a number of Gas & Gear outlets and a range of safety products is under way. In addition a range of diving gases and a fire suppression product have been launched in South Africa.

Good progress was made in growing both turnover and adjusted operating profit in the other southern African countries during 2004. A new carbon dioxide plant supported growth in Nigeria.

**Japan** The basis of accounting for BOC's business in Japan changed during 2003 as a result of a merger. Full details can be seen in the PGS section on page 38. In 2004 ISP's turnover in Japan was slightly less than the previous year but adjusted operating profit was higher through cost savings following the merger and from some asset disposals.

**South and South East Asia** These regions came under the same business unit management during 2004. In aggregate there were modest improvements in both turnover and adjusted operating profit. In Taiwan, buoyant activity in manufacturing and infrastructure development was reflected in higher turnover and adjusted operating profit. There were also sharply better results from the industrial products business in Thailand but ammonia margins were under strong competitive pressure and liquefied petroleum gas (LPG) selling prices remained subject to restrictive regulation. Hong Kong continued to be affected by the migration of manufacturing to mainland China and in Singapore shipbuilding and construction activity failed to improve in 2004. Competition intensified in the Malaysian market for industrial gases. Demand for helium was strong throughout Asia.

In south Asia, turnover increased and adjusted operating profit was further boosted by an asset disposal. Trading conditions in Bangladesh were adversely affected by a combination of political uncertainty, strikes and floods.

**South Pacific** Turnover and adjusted operating profit increased in 2004 and margins were improved by holding down costs. The economic environment remained favourable across the region. Manufacturing activity was buoyant in Australia despite a challenging environment for export-oriented manufacturers created by the stronger currency. New projects in the oil and gas sector and in mining generated increased demand for welding and safety products. During 2004 BOC secured major contracts with Western Mining to meet its requirements for safety products across Australia.

The economy also continued to grow in New Zealand but somewhat less rapidly than in Australia. There was also an improvement in the Pacific Islands, while gold mining activity and oil refining investment led to increased business in Papua New Guinea.

Major initiatives in 2004 included an agreement with the Australian CSIRO to commercialise ethanedinitrile, a gas that can be used to sterilize soil and timber, and which management believes has significant potential. The acquisition of OccCorp, an injury management provider, gives BOC entry to a largely untapped market by combining BOC's safety services and products.

**Operating review (comparing 2004 with 2003)**

A dedicated refrigerant reclaim fleet was established to help customers comply with new refrigeration regulations that make it mandatory to recover, return and safely dispose of hydrofluorocarbons. BOC's new Heliox gas mixture, which helps the treatment of patients with airway obstructions, and Inhalo, the new lightweight cylinder, were both successfully launched into the medical market.

BOC commenced an extensive redevelopment program of its Gas & Gear stores, supporting traditional industrial customers and new customers alike, giving a stronger retail position, providing better visibility, higher traffic flow, attractive merchandising and design.

The price of liquefied petroleum gas (LPG) was particularly volatile during 2004. BOC's associated company in Australia, Elgas, was notably successful in preserving sales margins in these difficult circumstances and adjusted operating profit was increased. Elgas expanded through the acquisition of a leisure gas business during the year. The potential impact of Government plans to remove an excise tax exemption for automobile gas in the period from 2008 to 2012 was softened by a subsequent decision to delay the introduction by three years and by an agreement to provide capital allowances to encourage car owners to convert their vehicles to use LPG fuel. Automobile gas is a minor part of Elgas turnover.

**BOC Edwards**

	<b>2004</b>	Change	Change
	<b>£ million</b>	on 2003	on 2003 <sup>1</sup>
			(constant
			currency)
Turnover	<b>816.5</b>	+19%	+27%
Operating profit	<b>46.8</b>	+492%	+588%
Adjusted operating profit <sup>2</sup>	<b>47.8</b>	+158%	+181%

1. A reconciliation of results for 2003 at 2003 and at 2004 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Operating exceptional items in 2004 were for the integration of the industrial and medical gases businesses of BOC and Air Liquide in Japan that began in 2003.

Conditions improved in most of BOC Edwards' key markets during 2004. Orders for semiconductor equipment began to pick up in the first quarter leading to increased sales in subsequent quarters. At the same time a major expansion of liquid crystal display (flat panel) manufacturing facilities got under way. This provided fresh business opportunities for both gases and equipment. Sales of chemical management equipment for new semiconductor fabrication plants improved only slightly and profitability continued to be affected by competitive market conditions. Demand for scientific equipment vacuum systems and for pharmaceutical packaging machines was better in 2004 but sales of vacuum systems for aerospace metallurgy applications remained at a low level.

At the beginning of 2004, high levels of capacity utilization encouraged a number of semiconductor manufacturers to add fresh capacity or upgrade existing facilities. This led to increased orders, which were reflected in higher turnover and adjusted operating profit from the second quarter onwards.

BOC Edwards was successful in winning new equipment business with the majority of semiconductor fabrication facilities for which construction began in 2004. These included several investments in Taiwan, Korea, Japan, China, Europe and the US.

New pumping and exhaust systems were introduced for semiconductor, flat panel display and other vacuum applications. A new range of iGX pumps for the semiconductor industry provides better control and monitoring capabilities and use less power than before. BOC Edwards also launched high capacity pumps of its own design and manufacture for flat panel applications. New turbomolecular and scroll pumps were designed for scientific instrumentation. Wet chemical abatement systems were introduced to expand and complement the capabilities of BOC Edwards exhaust abatement systems.

Increased production of semiconductors was reflected in better demand for electronic materials. Production of nitrogen trifluoride was expanded further in 2004 to over 100 tonnes a year. New investments in semiconductor facilities also provided opportunities for nitrogen supply contracts. BOC Edwards has become one of the leading suppliers of bulk gas to the growing semiconductor industry in China and continued to benefit from the expansion of semiconductor manufacturing in Taiwan, Japan and Singapore. New nitrogen generators were installed at several customer sites and further capacity was added to satisfy growing demand from customers within the Hsinchu science park in Taiwan.

Accelerated investment in new flat panel display production facilities led to significant orders for large capacity pumping systems in both Taiwan and Korea. Gas supply contracts were also signed with a number of display manufacturers in Taiwan and Japan. Liquid crystal display production leads to substantial demand for chamber cleaning chemicals. On-site fluorine generation equipment is now installed at a number of semiconductor and flat panel manufacturers. A full commercial-scale generator is functioning at LG Philips new sixth generation plant in Korea.

Demand for pharmaceutical freeze-drying and packaging equipment picked up in 2004 leading to better sales and adjusted operating profit. A new non-contact check-weighing machine was introduced. Nuclear magnetic resonance technology allows every package to be checked, enables packing lines to operate at higher speeds and facilitates immediate correction of any deviation from specification.

The basis of accounting for BOC's gases business in Japan changed during 2003 as a result of a merger. Full details can be seen in the PGS section on page 38. Electronic gases turnover increased significantly in 2004 as a result of the pick up in the semiconductor industry. The benefit of increased turnover on gases adjusted operating profit was amplified by synergy benefits arising from the merger.

**Operating review (comparing 2004 with 2003)**

Contracts were won in Asia and Europe furthering a strategy to expand the range of value-added services to electronic manufacturers. These include gases management, chemicals supply, support services and materials logistics. Other developments included an improved offering of gases and vacuum systems for lithography and supercritical carbon dioxide cleaning technology.

**Afrox hospitals**

	<b>2004</b>	Change	Change
	<b>£ million</b>	on 2003	on 2003 <sup>1</sup>
			(constant
			currency)
Turnover	<b>432.1</b>	+22%	+9%
Operating profit	<b>59.8</b>	+30%	+16%
Adjusted operating profit <sup>2</sup>	<b>59.8</b>	+30%	+16%

1. A reconciliation of results for 2003 at 2003 and at 2004 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Adjusted operating profit increased faster than turnover as a result of careful control of overhead costs and positive pricing trends. Hospital occupancy rates remained similar to a year ago. Acquisitions were a minor factor in the turnover increase but 2004 was the first full year of ownership for Joint Medical Holdings and the Little Company of Mary hospitals. During the year Afrox Healthcare increased its holding in the Wilgeheuwel hospital from 28 per cent to 80 per cent and closed down the Cape Anaesthetic and Brackenfield surgery centres in Cape Town. It also sold its interest in the 123 bed Jan Marais hospital in Cape Town. The Lifecare chronic care facilities and Afrox occupational health services both delivered a good performance in 2004.

The change to a new reimbursement system that began during 2003 was completed in 2004. The previous system of paying health care providers a fee for their services changed to a fixed payment for each kind of procedure as well as a per-day tariff structure.

Legislative changes in South Africa may have a limited and as yet uncertain impact on the Afrox hospitals segment. A certificate of need will be required to licence health care facilities in the future to prevent oversupply in particular areas but Afrox hospitals have been exempted for at least 20 years on the basis of current utilisation. Corporate ownership of hospital and retail pharmacies is now allowed and the vast majority of Afrox facilities have now been registered accordingly. On the other hand, corporate control of pathology services may be prohibited in the future. Afrox Healthcare has minority interests in a number of pathology facilities.

In July 2003 African Oxygen Limited (Afox) announced that it was in the process of considering its strategic options with regard to its shareholding in Afrox Healthcare Limited. On 17 November 2003, Afrox announced that it had agreed to sell its entire holding in Afrox Healthcare Limited to a consortium led by two major black economic empowerment investors. In April 2004, the South African Competition Commission advised that the transaction should be approved subject to certain conditions, which were acceptable to both the buyers and the seller. The sale remains subject to approval by the South African Competition Tribunal, at which closing hearings are currently scheduled for March 2005. In addition an application has been brought in the South African High Court by two shareholders in Afrox Healthcare Limited to have the Scheme of Arrangement, by which the disposal would be implemented, declared to have lapsed. This application, which is being opposed, is currently due to be heard in the week commencing 29 November 2004.



	<b>2004</b>	Change	Change
	<b>£ million</b>	on 2003	on 2003 <sup>1</sup> (constant currency)
Turnover	<b>293.2</b>	no change	+1%
Operating profit	<b>25.1</b>	14%	14%
Adjusted operating profit <sup>2</sup>	<b>25.1</b>	14%	14%

1. A reconciliation of results for 2003 at 2003 and at 2004 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

The comparison of turnover and adjusted operating profit between 2003 and 2004 is distorted by a non-recurrent item during 2003. In 2003 a gain of some £4.1 million arising principally from the termination of operations for the Marks & Spencer General Merchandise business was credited to adjusted operating profit. The termination of this business also eliminated some £26 million of turnover in 2004 compared with 2003. After adjusting for this item, underlying turnover grew principally as a result of increased food business for Marks & Spencer, as well as new contracts and the expansion of activity with Ocado and Carlsberg UK. On the same basis, adjusted operating profit in 2004 was at a similar level to 2003. A slowdown in the previous trend towards outsourcing logistics operations was a factor in pricing pressures in UK distribution and so were dislocations arising from recent consolidation in the industry.

During 2004 Gist became the logistics partner for Intergreen, the Dutch flower producer, transporting horticultural products between the Netherlands and the UK. This, and new business with regional produce suppliers, led to a doubling of activity at Gist's Lincolnshire depot.

Primary food distribution operations were also expanded in 2004 when Gist took on the transport operations of John Rannoch foods, one of the leading suppliers of poultry products to Marks & Spencer. Gist manages the complex supply chain for all of Marks & Spencer's chilled and ambient foods. During 2004, a major investment was made to expand a chilled food facility in Kent to meet the demands of the growing network of M&S Simply Food stores.

**OPERATING REVIEW (COMPARING 2003 WITH 2002)****Group**

Turnover including the Group share of joint ventures and associates was £4,323.2 million in 2003, up eight per cent compared with £4,017.9 million in 2002. Operating profit was £438.6 million, up three per cent compared with £425.6 million in 2002. After charging operating and non-operating exceptional items totalling £67.0 million and net interest and other financing items of £86.7 million, profit before tax was £351.9 million, up five per cent compared with £335.3 million in 2002. Earnings per share were 44.5p, up seven per cent compared with 41.4p in 2002. Excluding the exceptional items, adjusted operating profit for the year was £505.6 million, adjusted profit before tax was £418.9 million and adjusted earnings per share were 52.9p.

Comparisons with 2002 were affected by exchange rate movements. For the currencies that principally affect the Group's results, movements in the Australian dollar and the South African rand were favourable and movements in the US dollar and Japanese yen were adverse. If the results of 2002 had been translated at the rates applied to 2003, turnover would have been reduced by £39.0 million. There would have been an increase in operating profit of £0.8 million and adjusted operating profit would have been unchanged. Adjusted profit before tax would have been £5.3 million higher and adjusted earnings per share would have been 0.3p higher.

The table set out below summarises results reported both under UK GAAP and as adjusted. Results for 2002 are shown both as reported in that year and on a constant currency basis.

	2003	2002	2002 (at 2003 exchange rates) <sup>1</sup>
Turnover including share of joint ventures and associates (£ million)	4,323.2	4,017.9	3,978.9
Operating profit (£ million)	438.6	425.6	426.4
Adjusted operating profit (£ million) <sup>2</sup>	505.6	500.1	500.1
Profit before tax (£ million)	351.9	335.3	342.8
Adjusted profit before tax (£ million) <sup>2</sup>	418.9	430.0	435.3
Earnings per share	44.5p	41.4p	41.9p
Adjusted earnings per share <sup>2</sup>	52.9p	55.9p	56.2p

1. A reconciliation of turnover, operating profit and adjusted operating profit for 2002 at 2002 and at 2003 rates of exchange is shown on page 34.
2. A reconciliation of adjusted results with UK GAAP results is shown on page 35 and in the profit and loss account on page 78.

Exceptional items in 2003 amounted to a charge of £67.0 million. This comprised £43.2 million for a litigation settlement, costs of £15.5 million for completion of restructuring programmes and £8.3 million relating to the integration of the BOC and Air Liquide businesses in Japan.

Exceptional items in 2002 included restructuring charges of £47.2 million and a £21.3 million charge relating to the closure of facilities in connection with the combination of BOC Process Plants with Linde Engineering in the US. An exceptional charge of £21.2 million was made to write down the value of OSK, BOC's gases business in Japan, in advance of the then proposed merger of OSK with part of Air Liquide Japan.

Adjusted return on capital employed for the year to 30 September 2003 was 12.6 per cent. Return on capital employed for the year to 30 September 2002 was 10.9 per cent. Free cash flow (as defined on page 35) was £141.8 million in 2003. Net cash flow, after acquisitions, disposals and other investing activities, and including

exceptional cash items, was £12.6 million in 2003. A reconciliation of these measures is shown on page 35.

A first interim dividend for 2003 of 15.5p per share was paid in February 2003 and a second interim dividend of 23.5p per share was paid in August 2003. In aggregate this was a 2.6 per cent increase over the annual dividend of the previous year.

Capital expenditure by subsidiaries (including interest capitalised) was £281.2 million in 2003, compared with £354.3 million in 2002. Capital expenditure by joint ventures and associates was £81.4 million in 2003, of which the BOC share was £36.1 million. Equivalent expenditure in 2002 was £74.2 million, of which the BOC share was £34.5 million. The Group also made acquisitions of businesses of £135.5 million in 2003 and proceeds from disposals were £3.9 million. Equivalent items in 2002 were £207.3 million and £10.6 million respectively.

### Process Gas Solutions (PGS)

	2003 £ million	Change on 2002	Change on 2002 <sup>1</sup> (constant currency)
Turnover	1,242.7	+4%	+8%
Operating profit	177.1	+10%	+15%
Adjusted operating profit <sup>2</sup>	184.0	1%	+3%

1. A reconciliation of results for 2002 at 2002 and at 2003 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Increased turnover in 2003 resulted from generally firm price trends as well as revenues from acquisitions and new plants serving chemical industry customers. The additional revenues came principally from BOC's joint venture with Yangtze Petrochemical Corporation (YPC) at Nanjing, China, from a new hydrogen and carbon monoxide (HyCO) plant at Map Ta Phut, Thailand and from the acquisitions of a partial oxidation syngas plant at Clear Lake, Texas, and the US water services company, Environmental Management Corporation.

## Operating review (comparing 2003 with 2002)

Improved adjusted operating profit was also a result of operational efficiency gains. The closure of facilities in connection with the combination of BOC's Process Plants business with Linde Engineering in the US led to lower costs towards the end of 2002 and there was a full year of savings in 2003. There were also further cost reductions arising from continued progress in delivery scheduling and remote plant operation.

As in 2002, economic uncertainties constrained the authorisation of investment projects by customers during 2003. A new hydrogen and carbon monoxide (HyCO) plant serving Citgo's oil refinery at Lemont in Illinois came into production in October 2003 and a new air separation plant was then under construction in Nanjing. This will supply industrial gases to nearby chemical facilities being completed by a joint venture company established between BASF of Germany and the Chinese chemical company YPC.

Operating exceptional items in 2003 were for the completion of restructuring programmes, including those that were part of the programme announced in August 2001. Additionally, there were charges relating to the integration of the BOC and Air Liquide businesses in Japan to form Japan Air Gases.

**Europe** Turnover and adjusted operating profit increased in the UK and in Poland in 2003 but declined slightly in Ireland. A full year of revenues from the plant commissioned in January 2002 to supply hydrogen to Huntsman on Teesside and from the Teesside pipeline system acquired in July 2002 were contributors to increased turnover in the UK. Despite continued weakness in UK manufacturing, sales volumes increased in the merchant market for liquefied gases and prices were also slightly firmer. The key factors behind the increase in adjusted operating profit were lower costs in 2003 as a result of restructuring and a charge of £3.6 million in 2002 for an asset write down and debt provision after a steel customer went into receivership.

The relocation of some customers and a general decline in manufacturing activity led to lower sales volumes and adjusted operating profit in Ireland during 2003. As in the UK, the trend of selling prices remained positive and marginally ahead of inflation.

Business in Poland benefited from stable economic conditions in anticipation of joining the European Union in 2004. The acquisition of the business of Praxair Polska took effect in February 2003 and added additional air separation capacity as well as BOC's first source of carbon dioxide in the region.

Cryostar is BOC's engineering company based in France, manufacturing cryogenic pumps, expansion turbines and compressors for a variety of industrial gas applications and for marine liquefied natural gas (LNG) tankers. Turnover and adjusted operating profit increased in 2003 as a result of strong demand for industrial gas applications in China and for shipboard expansion units on LNG tankers.

**North America** Despite a small increase in turnover, adjusted operating profit in 2003 was at a similar level to 2002. Selling price trends were favourable particularly in the second half of the year and were sufficient to offset cost inflation. Sales volumes were lower as a result of general weakness in manufacturing industries and some business was lost early in 2003 as customers changed to alternative supplies. At the same time, a significant volume of new liquefied gas business was obtained, mainly in the closing months of the year.

Steel industry customers that had benefited from US tariff protection in the previous year faced renewed competitive pressure in 2003. Some customers were operating under chapter 11 creditor protection.

Carbon dioxide for beverage applications continued to be in strong demand. During 2003 BOC improved analytical capabilities to upgrade product quality assurance for its Premier Beverage carbon dioxide service to the soft drinks industry.

At the end of January 2003, BOC acquired the partial oxidation syngas plant at Clear Lake, Texas, from Celanese. Under the agreement BOC fulfils a significant proportion of the industrial gas requirements for the Celanese chemical facility at Clear Lake. The Celanese facility is located on the Houston ship canal, and includes a world scale vinyl acetate monomer plant and the world's largest acetic acid plant. These require large quantities of oxygen and nitrogen as well as carbon monoxide.

A new HyCO plant serving Citgo's oil refinery at Lemont in Illinois began production in October 2003, further expanding BOC's hydrogen business with a variety of petroleum and chemical industry customers around the world.

**Latin America** Turnover increased significantly, although growth was held back by a general strike in Venezuela in the period December 2002 to February 2003. This inevitably affected customers' requirements for industrial gases. Adjusted operating profit also increased because of better sales volumes especially in Chile and Brazil and because of selling price increases that generally exceeded local rates of inflation.

BOC's joint venture company in Mexico supplying high-pressure pure nitrogen to Pemex for pressurising its Cantarell oilfield in the Gulf of Mexico performed steadily throughout the year.

In September 2003, a new 200 tonnes-a-day air separation unit was commissioned in Santiago to supply oxygen for leaching copper ores. Another plant was under construction in Brazil to supply oxygen for CST, a steel producer.

**Africa** Both turnover and adjusted operating profit increased in 2003. Sales volumes were broadly similar but selling prices were higher and cost controls also contributed to better margins. The focus of business development was on the use of gases in mineral processes in the extraction of precious metals.

**Japan** The combination of BOC's and Air Liquide's industrial and medical gases businesses in Japan took effect from January 2003. Until then the results of OSK, BOC's gases business in Japan, were consolidated as a subsidiary. Subsequently BOC accounted for its share of turnover and profit of the merged company, Japan Air Gases, on an equity basis. This distorts the comparison of turnover and profit between 2003 and earlier years for BOC's three lines of business. On the respective bases used in each year, there was an increase in both turnover and adjusted operating profit for PGS in Japan for 2003.

## **Operating review (comparing 2003 with 2002)**

The integration process that began in 2003 made good progress. The two organisations were successfully integrated in the key areas and the number of branch offices was reduced. Cryogenic equipment manufacturing was integrated into a single location.

**North Asia** Turnover and adjusted operating profit were up significantly in 2003. Margins improved as a result of better operational efficiency coupled with some price increases.

Turnover gains were largely as a result of growth in north China but there was also growth in mainland south China, Korea and Taiwan. Turnover was down in Hong Kong as some customers relocated production to mainland China. Underlying growth of adjusted operating profit in south China was further boosted by additional profit arising from the renegotiation of a power supply contract. Results in north China benefited from the addition for a full year of the joint venture begun in May 2002 serving the petrochemical industry in Nanjing. Further liquefaction capacity was added to its existing air separation plant during 2003 to serve the local merchant market. Results also benefited from strong growth in the steel industry as a result of increasing local demand.

In 2003 construction of a new air separation plant for BOC's joint venture in Nanjing began. When completed this plant will supply gases to the BASF and Yangtze Petrochemical Company (YPC) joint venture chemical facility under construction nearby.

**South East Asia** Economic growth was generally buoyant across the region but Singapore continued to be affected by the migration of electronics and other industries to lower cost countries in Asia. The outbreak of the SARS infection also curtailed travel and affected business activity. Economic trends in Thailand, Malaysia and Indonesia were favourable.

In aggregate, both turnover and adjusted operating profit increased across the region. Margins improved as a result of operational efficiency gains. Prices were held down by competitive pressures in Malaysia and Thailand but improved in Indonesia and the Philippines. Tonnage volumes increased in Malaysia as a result of sales to the steel industry and growing demand from the electronics assembly and food-freezing industries. Turnover was also boosted by a full year contribution from Nissan Industrial Oxygen Inc (NIOI) which became fully owned by BOC's associated company in Malaysia during September 2002.

Increased turnover in Thailand was based on better underlying demand as well as increased production. A new hydrogen and carbon monoxide (HyCO) plant began production at Map Ta Phut during 2003 and carbon dioxide capacity was doubled with the addition of a new 300 tonnes-a-day plant at Rayong to serve food and beverage customers.

Underlying trends were favourable in both Indonesia and the Philippines but results in the Philippines were adversely affected by the closure of a customer's plant.

**South Asia** Economic growth in India led to better sales of liquefied gases in the merchant market and sustained demand from the steel industry. A new 225 tonnes-a-day oxygen plant was commissioned in the last quarter of 2003 for the Tata Iron and Steel Company, BOC's principal tonnage customer in the region.

**South Pacific** Turnover and adjusted operating profit were slightly higher in 2003 than in 2002 despite adverse business trends in some Australian industries. The strengthening of the Australian dollar in 2003 had a negative impact on the important minerals sector, which responded by restructuring. There was also an adverse effect on the food industry. Volumes of liquefied gas sales in the merchant market were therefore lower.

The Australian steel industry was somewhat less affected and a low cost base enabled it to remain globally competitive. Tonnage volumes increased in 2003. New business was obtained with BHP in New South Wales. In January 2003 BOC commenced supplying additional oxygen and nitrogen, following a process upgrade to BOC's Port Kembla facility.

Improved operational efficiencies helped to improve margins in the merchant market. Centralised plant operation was further extended during 2003 to the control of plants in New Zealand from an operations centre in Australia. Prices were raised in the merchant market.

**Process systems** During 2003 BOC continued to benefit from lower costs arising from the combination of its Process Plants business with Linde Engineering in the US to form the new company, Linde BOC Process Plants LLC, based in Tulsa, Oklahoma. This transaction was completed at the end of September 2002, making Linde Engineering the principal supplier of BOC's industrial gas plants worldwide with access to Linde's global technical capabilities in air separation, hydrogen production and other gas technologies.

2003 was another year of low demand for new industrial gas facilities. This was particularly so in the developed western economies and business opportunities were principally in the developing economies of the Far East.

**Water services** In October 2002, BOC acquired Environmental Management Corporation (EMC), a US water services company with the intention of using a similar business model to that of PGS in developing additional business with industrial customers.

EMC is a management company providing services for steam systems, cold and chilled water systems and wastewater treatment. Customers include small to medium sized municipalities and industrial customers, many of which are in the food manufacturing sector.

Turnover was on an increasing trend in 2003. Integration of the business was achieved smoothly but initial integration costs made the business unprofitable in 2003.

**Operating review (comparing 2003 with 2002)****Industrial and Special Products (ISP)**

	2003 £ million	Change on 2002	Change on 2002 <sub>1</sub> (constant currency)
Turnover	1,751.2	+9%	+9%
Operating profit	238.2	+4%	+3%
Adjusted operating profit <sup>2</sup>	242.7	2%	3%

1. A reconciliation of results for 2002 at 2002 and at 2003 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Good business performances in most markets were offset by a disappointing result in the US. Market conditions remained depressed in the US and in the UK but there was an overall improvement elsewhere. Trends were particularly favourable in South Africa and in the south Pacific region during the first half of 2003 but the pace of growth slowed later in the year as a result of exchange rate movements, which affected exporting industries.

BOC's helium business continued to grow globally and so did the packaged chemicals business and the sales of medical gases. Margins improved in the liquefied petroleum gas (LPG) markets as a result of more rapid selling price adjustments to reflect changing input costs. In June 2003, BOC announced an agreement to obtain half the output from a new helium extraction facility to be constructed in Qatar. Deliveries from this new source are expected to begin in July 2005 and the location will assist in satisfying fast-growing demand in Asian markets.

Operating exceptional items in 2003 were for the completion of restructuring programmes, including those that were part of the programme announced in August 2001. Additionally, there were charges relating to the integration of the BOC and Air Liquide businesses in Japan to form Japan Air Gases.

**Europe** Turnover and adjusted operating profit increased in 2003 despite weak manufacturing activity in the key markets.

BOC achieved turnover growth in the mature UK manufacturing sector by extending the range of products and services offered to its customers. Growth of adjusted operating profit was also assisted by productivity improvements, control of costs and favourable price trends. Sales to the medical sector increased because of service improvements and the introduction of new products – notably lightweight portable cylinders for emergency applications. Sales of special gases including helium also increased and a new contract to supply the needs of Oxford Magnet Technology for medical imaging devices was announced during 2003. Sales of Sureflow hospitality gases and equipment improved, as did sales of refrigerant gases.

Economic growth in Ireland slowed during 2003. Despite improved hospitality product sales, turnover was almost unchanged and adjusted operating profit was marginally lower.

Increased turnover and adjusted operating profit in Poland were principally because of the addition of the business of Praxair Polska that took effect from February 2003. The integration with BOC's existing business in Poland and the introduction of common business systems has proceeded smoothly. Price increases in Poland were adequate to recover cost inflation during 2003.

**North America** In total, sales of gases in 2003 were similar to those of 2002 but sales of welding products were depressed. Weak conditions in the manufacturing economy across north America coupled with costs related to the



implementation of a new business system in the US led to a sharp decline in adjusted operating profit.

Increased volumes of LPG and of special gases, including helium, together with modest price increases for most products were sufficient to offset lower volumes of industrial gases leading to a marginal improvement in gases turnover in the US.

Market conditions were also difficult in Canada but the acquisition of business from Air Products in Canada led to a higher turnover and adjusted operating profit.

**Latin America** There was an improvement in both turnover and adjusted operating profit across the region. This was generally based on trends that were favourable in terms of both volumes and selling prices.

Despite extended unrest and political uncertainty, there was a particularly strong performance in Venezuela. BOC's associated company based in Chile also achieved good growth. Business in Colombia was expanded during 2003 with the acquisition of an LPG business. Turnover from respiratory homecare products grew in Colombia, where a local homecare company was acquired during the year, as well as in Chile, where an acquisition was made in the previous year.

**Africa** Turnover and adjusted operating profit again increased significantly in 2003, as manufacturing activity was strong in South Africa. Although economic growth moderated later in the year as the rand strengthened, the increased international investment in manufacturing in South Africa continued to provide a firm base for sales of gases and welding products.

The mining industry also provided good business opportunities. There was a significant expansion of platinum mining and ferro-chrome was also in strong demand. Production of the AfroxPac was further increased in 2003 as demand for the product continued to accelerate. Several of the major mining companies were issuing this device to their workforce to provide an emergency oxygen supply for those working underground.

Exports of Afrox welding products started the year well but growth was later curtailed by the strengthening of the rand, which began to reduce the competitive advantage. LPG sales increased and margins improved as a result of lower input costs.

Results from other countries in Africa were somewhat mixed with good performances in Namibia and Kenya offset by weakness in the Zambian copper industry. Overall, results were not significantly different in 2003.

**Operating review (comparing 2003 with 2002)**

**Japan** The basis of accounting for BOC's business in Japan changed during 2003 as a result of a merger. Full details can be seen in the PGS section on page 44. On the respective bases used in each year, turnover and adjusted operating profit for ISP in Japan were lower in 2003.

**East Asia** Turnover increased but adjusted operating profit was marginally lower in 2003, with the full year benefit of acquisitions being reduced by the effect of industrial decline in the key market of Hong Kong and also by the increase in business overheads to support the future development of business in the region.

Two acquisitions affected business performance comparisons in 2003. Unique Gas and Petrochemicals Public Company Limited (UGP) was acquired by BOC's subsidiary in Thailand in May 2002 and BOC's associated company in Malaysia took full control of Nissan Industrial Oxygen Inc (NIOI) in September 2002. The integration of NIOI proceeded smoothly during 2003 and the business performed well. Although better than those of 2002, results from UGP were adversely affected by sharply competitive conditions in the ammonia business but LPG, which is the other main product line for UGP, improved due to partial deregulation of end consumer prices.

While competition remained strong in industrial products, especially in Thailand and Malaysia, investments in special products facilities enabled this more profitable business to be expanded. Facilities for breaking bulk and repackaging refrigerant gases had already been installed in Hong Kong, the Philippines and Malaysia and a further facility was scheduled to be built in Thailand during 2004.

**South Pacific** Although economic growth was less rapid in 2003 than it was in 2002, both turnover and adjusted operating profit improved. Increased turnover was largely a result of better prices rather than increased sales volume and firm prices were coupled with effective cost controls.

Good progress was made in developing the safety products business in 2003 with significant new business from major customers. The medical gas business also benefited from the introduction of new products. A web-based customer portal was launched enabling customers to carry out transactions as well as to track and pay their accounts over the Internet.

BOC's joint venture company, Elgas, a leading supplier of LPG in the eastern part of Australia, enjoyed a record year. Sharp increases in costs before the Iraq war were successfully recovered by rapid adjustments to selling prices.

After difficult conditions in 2002, better results were obtained from Papua New Guinea and the other Pacific islands during 2003.

**BOC Edwards**

	2003	Change	Change
	£ million	on 2002	on 2002 <sup>1</sup> (constant currency)
Turnover	684.1	1%	+4%
Operating profit	7.9	note 4a	note 4b
Adjusted operating profit <sup>2</sup>	18.5	29%	26%

1. A reconciliation of results for 2002 at 2002 and at 2003 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

4a. Compares with a loss of £1.4 million in 2002.

4b. Compares with a loss of £2.2 million in 2002.

Operating exceptional items in 2003 were for the completion of restructuring programmes, including those that were part of the programme announced in August 2001. Additionally, there were charges relating to the integration of the BOC and Air Liquide businesses in Japan to form Japan Air Gases.

The semiconductor equipment downturn that affected most of 2002 continued throughout 2003.

The second half of 2002 had benefited from some improvement in activity but this proved transient and no such upturn was repeated in 2003. Business was concentrated with those manufacturers with a specific investment strategy. This was predominantly for upgrades and expansions of existing facilities rather than new plants. Demand for general vacuum products from key customers in the chemicals, aerospace and automotive industries was also weaker in 2003. Turnover and adjusted operating profit were therefore lower.

The impact of these adverse business conditions was lessened by rationalising manufacturing facilities and by careful control of costs. Industrial vacuum and pressure products manufacturing in Philadelphia, Bolton and the Czech Republic was rationalised. Also in 2003, the size of a facility in Massachusetts was reduced to suit the lower volume of business available.

The pharmaceutical freeze-drying and packaging business suffered from delayed investment by pharmaceutical manufacturers during 2003.

Semiconductor gases turnover was essentially unchanged in 2003 as a whole, despite an improving trend in the second half. Additional volumes from new business were offset by pressure on prices as competition became more severe during the second year of the downturn. The focus was therefore on retaining market share, winning new business in Asia and on product development. Production of nitrogen trifluoride was increased and fluorine generators were under evaluation by leading semiconductor manufacturers.

The basis of accounting for BOC's business in Japan changed during 2003 as a result of a merger. Full details can be seen in the PGS section on page 44. On the respective bases used in each year, turnover and adjusted operating profit for BOC Edwards in Japan increased in 2003.

**Operating review (comparing 2003 with 2002)**

Vacuum equipment volumes worldwide were slightly better in 2003 and much of the increase was derived from pumping products for flat panel display manufacture. However, these pumps currently earn lower margins than semiconductor pumping systems. Although semiconductor equipment demand was weak in 2003, improved products were developed to strengthen BOC Edwards' position in vacuum technology. These included single axis on-tool semiconductor pumps and a range of small dry pumps for the growing scientific equipment market.

The Kachina process tool component cleaning service grew in 2003 but the chemical management business suffered from the small number of new semiconductor plants being built. Cost levels were reduced to improve financial performance.

Contracts were won in Asia and Europe furthering a strategy to expand the range of value-added services to electronic manufacturers. These include gases management, chemicals supply, support services and materials logistics. Other developments included an improved offering of gases and vacuum systems for lithography and supercritical carbon dioxide cleaning technology.

**Afrox hospitals**

	2003	Change	Change
	£ million	on 2002	on 2002 <sup>1</sup> (constant currency)
Turnover	353.4	+36%	+16%
Operating profit	46.1	+55%	+31%
Adjusted operating profit <sup>2</sup>	46.1	+55%	+31%

1. A reconciliation of results for 2002 at 2002 and at 2003 rates of exchange is shown on page 34.

2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.

3. All comments below are on a constant currency basis.

Although hospital occupancy rates increased only marginally in 2003, turnover and adjusted operating profit both increased significantly. This resulted from some minor acquisitions, positive price trends and a reduction in overhead costs. New facilities continued to be added to existing hospitals in order to widen the range of available services.

There was a significant change in the reimbursement system during 2003. Insurance companies had previously paid private health care providers such as Afrox hospitals a fee for their services but this was then changing to a risk reimbursement system. This involves a fixed payment to be made for each kind of procedure thus transferring some financial risk to the provider if complications arise.

Although acute care hospitals continued to make up the great majority of both turnover and adjusted operating profit, there were better results from the Lifecare chronic care business, from occupational health services and from the Direct Medicines pharmacy services business following restructuring to address more competitive market conditions.

**Gist**

	2003	Change	Change
	£ million	on 2002	on 2002 <sup>1</sup> (constant currency)
Turnover	291.8	+10%	+10%

Operating profit	29.2	+15%	+13%
Adjusted operating profit <sup>2</sup>	29.2	+15%	+13%

1. A reconciliation of results for 2002 at 2002 and at 2003 rates of exchange is shown on page 34.
2. A reconciliation of adjusted operating profit with operating profit is shown on page 35.
3. All comments below are on a constant currency basis.

Improved turnover reflected both new contracts and increased volumes with existing customers. The increase in adjusted operating profit was not only as a result of higher turnover but also because of a gain of some £4.1 million arising principally from the termination of operations for the Marks & Spencer General Merchandise business.

Gist continued to operate all of Marks & Spencer's chilled and ambient food distribution and services and remained its largest supply chain provider.

In 2003, a contract with Carlsberg-Tetley, a leading brewer, was expanded to manage the entire primary transport distribution business. A contract to manage the international inbound supply chain was also secured with New Look, the UK high street fashion retailer.

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**FINANCIAL REVIEW**

Net debt/equity

Net debt/capital employed

**Corporate transactions and restructuring**

The sale of BOC's packaged gas business in the US to Airgas Inc was completed on 30 July 2004. This resulted in a loss of £79.5 million on disposal of the business. In addition, £14.8 million has been charged for the cost of restructuring the footprint of the remaining business in the US. The consideration received in 2004 was £97.8 million (US\$175 million). Cash outflows related to the disposal and restructuring are expected to be approximately £38 million, of which £16.5 million was paid in 2004. Net cash proceeds are therefore expected to be approximately £60 million. In addition, Airgas Inc is to pay further consideration of up to £14 million (US\$25 million) on or about 15 November 2005 subject to certain conditions.

On 17 November 2003 the Group's South African subsidiary company African Oxygen Limited announced that it had agreed to sell its entire holding in Afrox Healthcare Limited. The sale remains subject to approval by the South African Competition Tribunal, at which closing hearings are currently scheduled for March 2005. In addition an application has been brought in the South African High Court by two shareholders in Afrox Healthcare Limited to have the Scheme of Arrangement, by which the disposal would be implemented, declared to have lapsed. This application, which is being opposed, is currently due to be heard in the week commencing 29 November 2004.

Group expenditure on acquisitions of businesses was £50.9 million (2003: £135.5 million). The main acquisition during 2004 was to increase BOC's holding in the Cantarell joint venture in Mexico. During 2003 the main acquisitions were Environmental Management Corporation, a privately held US water services company, Praxair's Polish gases business and the Canadian packaged gas and related welding equipment business of Air Products.

In 2003 there was an exceptional charge of £67.0 million. This included £23.8 million for various restructuring programmes which have been completed. It also included £43.2 million for the settlement of litigation in the US against The BOC Group Cash Balance Retirement Plan (the Plan). The settlement is being paid out of Plan assets. Further information is given in note 2b) on page 89.

**Financial indicators**

The trends of financial indicators which, taken together, are a measure of the performance and efficiency of the Group's finance and tax structures, are:

	<b>2004</b>	2003 (restated)	2002 (restated)
Interest cover (times) <sup>1</sup>	<b>6.3</b>	4.6	4.1
Adjusted interest cover (times) <sup>2</sup>	<b>6.5</b>	5.3	4.9
Net debt/equity (%)	<b>51.2</b>	73.4	75.3
Net debt/capital employed (%)	<b>29.9</b>	37.4	37.3
Average cost of net borrowings (%)	<b>6.2</b>	5.6	6.2
Group tax rate (%)	<b>24.7</b>	27.4	31.7
Adjusted Group tax rate (%) <sup>3</sup>	<b>29.0</b>	29.0	30.0

Adjusted means excluding exceptional items.

1. Interest on net debt covered by operating profit.
2. Interest on net debt covered by adjusted operating profit.
3. The adjusted tax charge expressed as a percentage of adjusted profit before tax.

The ratios are commented on below in the appropriate section.

## **Financing**

The Group has access to a range of funding. Debt finance is raised by issuing bonds, commercial paper, other obligations to investors and through borrowings from banks.

As well as medium and long-term borrowings, the Group maintains short-term borrowings, principally in the form of commercial paper and bank borrowings. The Group maintains US\$450 million (£249 million) of committed multi-currency facilities with a group of relationship banks. These facilities mature in 2008 and provide back-up for the issue of commercial paper as well as general liquidity for the Group. Additional committed facilities are maintained by the principal operating units in the Group.

Overall, net debt decreased by £405.7 million as a result of a net cash inflow of £339.2 million, a £12.4 million inflow from the issue of shares, an outflow of £4.7 million for the impact of business acquisitions and disposals and £58.8 million for the effect of exchange rate and other movements. In 2003, net debt increased by £42.5 million as a result of a net cash inflow of £12.6 million, a net £2.6 million outflow from the issue and purchase of shares, an outflow of £31.8 million for the impact of business acquisitions and disposals and £20.7 million for the effect of exchange rate movements. The increase in net cash flow in 2004 was driven predominantly by lower acquisition activity, higher distributions from joint ventures and associates, and an improvement in general business cash flows.

## Financial review

The gearing ratio (net debt including finance leases as a percentage of capital employed) was 29.9 per cent in 2004 compared with 37.4 per cent in 2003 and 37.3 per cent in 2002. The 2004 year end net debt/equity ratio was 51.2 per cent, compared with 73.4 per cent in 2003 and 75.3 per cent in 2002.

The Group has access to a diverse range of debt finance including commercial paper, public bonds and bank borrowings which, it believes, will be available to meet long-term financing needs. The Group has sufficient facilities to cover likely borrowing needs. Management anticipates that capital expenditure in 2005 will be at a higher level than in 2004 and will be covered by cash inflow from operating activities.

## Management of financial risks

The board of directors sets the treasury policies and objectives of the Group which include controls over the procedures used to manage currency, interest rate and credit risk. The approach to managing risk is set out below. This approach is expected to continue during the next financial year. On a day-to-day basis, Group treasury carries out these policies, with regular review meetings with the Group finance director. Specific and significant activities need approval from the finance committee, which includes any two directors of the company.

The Group does not undertake any trading activity in financial instruments nor does it enter into any leveraged derivative transactions.

**Currency risk** The Group faces currency risk principally on its net assets, most of which are in currencies other than sterling. Currency movements can therefore have a significant effect on the Group's balance sheet when translating these foreign currency assets into sterling. In order to reduce this effect the Group manages its borrowings, where practicable and cost effective, to hedge its foreign currency assets.

Where possible, hedging is done using direct borrowings in the same currency as the assets being hedged or through the use of other hedging methods such as currency swaps. Group borrowings are currently held in a wide range of currencies and, after swaps, 82 per cent of net debt (2003: 81 per cent) is denominated in the principal currencies affecting the Group: US dollars, Australian dollars, Japanese yen, South African rand and sterling. The aggregate of the notional principal values of currency swaps was £593.1 million (2003: £474.7 million) spread over a range of currencies. The fair value of such swaps is included in note 21 b) i) to the financial statements.

The balance sheets of overseas operations are translated into sterling at the closing rates of exchange for the year and any exchange difference is dealt with as a movement in reserves. This is explained more fully in the accounting policy note on page 83. The profit and loss accounts of overseas businesses are translated at average rates of exchange and this translation impact directly affects the profit and loss account of the Group.

The Group manages its currency flows to minimise currency transaction exchange risk and forward contracts are used as appropriate to hedge net currency flows and selected individual transactions. The Group's foreign exchange cover is mainly managed in the UK, Australia, Japan and South Africa. The UK manages the cover for exposures on net trade flows of the Group's companies in the US and certain other countries. The aggregate principal amount of forward cover outstanding at 30 September 2004 amounted to £224.4 million (2003: £173.8 million).

**Interest rate risk** At 30 September 2004, the Group's net debt position after interest rate hedging activity included a net exposure of £74.6 million (2003: £436.3 million) to floating interest rates. Based on the Group's 2004 year end level and composition of net debt, an increase in average interest rates of one per cent per annum would result in a decrease in future earnings, before tax, of £0.7 million per annum (2003: £4.4 million).

In order to manage interest rate risk the Group maintains both floating rate and fixed rate debt. At 30 September 2004, there was a 8:92 ratio (2003: 32:68) between floating and fixed rate net debt. Underlying borrowings



are arranged on both a fixed rate and a floating rate basis and, where appropriate, the Group uses interest rate swaps to vary this mix and to manage the Group's interest rate exposure.

At 30 September 2004, the aggregate of the notional principal values of swap agreements which affect the floating rate/fixed rate mix was £285.3 million (2003: £417.6 million). The fair value of such swaps is included in note 21 b) i) to the financial statements.

**Foreign exchange risk** At 30 September 2004, the Group had outstanding forward exchange contracts totalling £224.4 million (2003: £173.8 million) in respect of its actual and forecast transaction exposures. The fair value of these contracts at 30 September 2004 amounted to a gain of £7.5 million (2003: a gain of £5.8 million). A ten per cent appreciation of sterling would increase the fair value of these contracts by £11.0 million (2003: £13.7 million).

In addition to these forward contracts, the Group is exposed to foreign exchange movements on its net debt position. At 30 September 2004 net debt, after currency swaps, comprised net sterling liabilities of £104.6 million (2003: £285.3 million) and net currency liabilities of £857.8 million (2003: £1,082.8 million). Based on the Group's 2004 year end level and composition of net debt, a ten per cent appreciation of sterling would result in a reduction in the value of net currency liabilities of £78.0 million (2003: £90.5 million).

**Counterparty risk** Cash deposits and other financial instruments give rise to credit risk on the amounts due from counterparties. Credit risk is managed by limiting the aggregate amount and duration of exposure to any one counterparty depending upon its credit rating and by regular reviews of these ratings. The possibility of material loss arising in the event of non-performance by a counterparty is considered unlikely by management.

The currency and interest rate hedging profile of the Group's borrowings at 30 September 2004 is shown in note 21 to the financial statements. Further information on financial risk management is also given in note 21 to the financial statements.

## Financial review

Average cost of net borrowings<sup>1</sup>

1. Before capitalised interest

### Interest on net debt

The net charge before the Group's share of interest of joint ventures and associates was £70.5 million in 2004 (2003: £75.8 million, 2002: £78.6 million), which, after excluding interest income from loans to joint ventures and associates, represented 6.2 per cent of average net borrowings during the year. After taking into account interest capitalised and the Group's share of the net interest of joint ventures and associates, the net charge was £88.4 million. Adjusted interest cover (the number of times that the interest charge on net debt is covered by adjusted operating profit) increased to 6.5 times (2003: 5.3 times, 2002: 4.9 times).

### Net interest on pension financing items

The interest on pension scheme liabilities was £117.4 million in 2004 (2003: £110.2 million, 2002: £106.1 million). The expected return on pension scheme assets was £133.2 million in 2004 (2003: £119.6 million, 2002: £139.1 million). The increase in the expected return on pension scheme assets reflects the recovery in the value of world equity markets and the impact of the additional cash contributions made by the Group to the UK pension scheme.

### Debt maturity profile

The maturity profile of the Group's gross borrowings is as follows:

	2004		2003	
	£ million	%	£ million	%
More than five years	320.5	26.9	521.8	36.1
Three to five years	260.9	21.9	214.4	14.8
One to three years	347.1	29.2	348.5	24.1
Within one year	262.1	22.0	360.9	25.0
Total	1,190.6	100.0	1,445.6	100.0

The Group maintains US\$450 million (£249 million) of committed multi-currency facilities with a group of relationship banks. These facilities mature in 2008 and provide back-up for the issue of commercial paper as well as general liquidity for the Group. Additional committed facilities are maintained by the principal operating units in the Group.

Additional information on the Group's gross borrowings can be found in note 20. Details of the Group's share of net debt of joint ventures and associates, the majority of which is non-recourse, are given in note 13 a).

### Other contractual obligations

The maturity of other contractual obligations of the Group is as follows:

	Other creditors (excluding deferred income) £ million	Operating leases £ million	Unconditional purchase obligations £ million	Total contractual cash obligations £ million
More than five years	22.2	115.3	418.8	556.3
Three to five years	0.8	49.2	126.3	176.3
One to three years	8.5	71.0	131.3	210.8
Within one year	819.7	46.5	57.9	924.1
Total	851.2	282.0	734.3	1,867.5

See also note 25 to the financial statements for further information on operating leases and unconditional purchase obligations.

### Off-balance sheet arrangements

The Group has provided guarantees of £41.8 million to third parties at 30 September 2004 as shown in note 26 a). The guarantees include an operational performance bond in the Cantarell joint venture, a guarantee of the borrowings of a joint venture in China and other guarantees provided in the ordinary course of business. Other than disclosed, there are no off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on the Group's financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Total group tax rate

### Taxation

The tax charge for 2004 of £101.7 million is calculated in accordance with UK accounting standards, including FRS19 (deferred tax), under which full provision is made for deferred taxes.

The effective tax rate on adjusted profit in 2004 was 29 per cent (2003: 29 per cent, 2002: 30 per cent). The total tax rate in 2004 was 24.7 per cent (2003: 27.4 per cent, 2002: 31.7 per cent). The Group pays corporation tax in the UK at a rate of 30 per cent. Additional information on tax rates is shown in note 4 to the financial statements.

The Group is currently liable to pay federal tax at the rate of 35 per cent in the US. This is reduced by the existence of tax credits. In the other principal subsidiaries, the tax rate is typically between 30 per cent and 42 per cent.

## Financial review

### Contingencies

The Group monitors all contingent liabilities including matters relating to litigation and the environment via a process of consultation and evaluation which includes senior management, internal and external legal advisers and internal and external technical advisers. This process results in conclusions with respect to potential exposure and provisions are made or adjusted accordingly. Management believes that the Group has adequately provided for contingencies which are likely to become payable in the future.

### Legal proceedings

Group companies are parties to various legal proceedings, including some in which claims for damages in large amounts have been asserted.

The outcome of litigation to which Group companies are party cannot be readily foreseen, but the directors believe that such litigation should be disposed of without material adverse effect on the Group's financial condition or profitability.

**Welding fumes litigation** A US subsidiary of the Group, The BOC Group, Inc., has been named in US lawsuits alleging injury from exposure to welding fumes. Certain of these cases have been either filed in, or transferred for pre-trial purposes to, the federal district court in the Northern District of Ohio, where a multi-district litigation (MDL) proceeding has been commenced. The MDL proceeding is a vehicle for coordinating pre-trial proceedings in cases pending in different federal district courts in the US. It is currently contemplated that the MDL court will try three cases during the MDL proceeding. The first such case is currently scheduled for mid 2005. In addition to the cases in federal court, The BOC Group, Inc. is a defendant in a number of similar cases pending in state courts. These cases are in different stages of procedural development, and certain cases are scheduled for trial from time to time.

From the time Airco was purchased in 1978 until 2003 The BOC Group, Inc. had never had an adverse jury verdict returned against it in a case alleging injury from exposure to welding fumes. On 28 October 2003, a jury in Madison County, Illinois, rendered a verdict against The BOC Group, Inc. and two co-defendants. The jury awarded US\$1 million to Mr Elam, a former labourer who asserted that his idiopathic Parkinson's disease was attributable to his exposure to welding fumes over a period of years. BOC believes that the verdict is inconsistent with the decisions rendered by juries in previous cases, is not supported by the existing scientific evidence and is pursuing an appeal in the Illinois court system. On 12 May 2004 a jury in Philadelphia County, Pennsylvania, returned a verdict against The BOC Group, Inc. and one co-defendant. The jury awarded Mr Yenko, who alleged that his injury was caused by exposure to asbestos in welding rods, US\$525,000, to be divided between the defendants. BOC believes that the jury verdict is inconsistent with the evidence introduced at trial and believes that there are strong grounds for a successful post-trial motion and, if necessary, an appeal.

The BOC Group, Inc. believes that it has strong defences to the claims asserted in these various proceedings related to alleged injury from exposure to welding fumes and intends to defend vigorously such claims. Based on its experience to date, together with its current assessment of the merits of the claims being asserted and applicable insurance, BOC believes that continued defence and resolution of these proceedings will not have a material adverse effect on its financial condition or profitability and no provision has been made.

The welding electrodes business was sold in 1986 and the sale of the US packaged gas business, including the operations involved in distributing packaged gases and welding equipment, was completed in July 2004.

**Fluorogas litigation** In February 2003, the company was notified that a jury verdict in the US District Court for the Western District of Texas (the District Court) was obtained for US\$132 million against Fluorogas Limited, The BOC Group, Inc. and The BOC Group plc. The verdict arose primarily out of an alleged breach of a memorandum of

understanding by Fluorogas Limited before it was acquired by The BOC Group plc in September 2001. In March 2003, the court also awarded interest and costs against the defendants, making them jointly and severally liable for a total of US\$174 million. A bond for the full amount was posted with the District Court as part of the normal appeals process.

In August 2004, the appellate court reversed the entire judgement against the BOC entities and all but US\$170,000 in reliance damages against Fluorogas Limited. In addition, the appellate court remanded for reconsideration by the District Court an award of attorney's fees on the US\$170,000 recovery.

Fluorogas Limited was placed in administration under the Insolvency Act of 1986 pursuant to an order of an English Court. It is expected to remain in administration until the conclusion of the remand proceedings in the District Court.

**ERISA litigation** An action was filed in the US District Court for the Southern District of Illinois (the District Court) against The BOC Group Cash Balance Retirement Plan (the Plan). The plaintiffs brought this action on behalf of themselves and all others similarly affected, alleging that the Plan improperly calculated lump sum distributions from the Plan in violation of the Employee Retirement Income Security Act.

In November 2003, the parties reached an agreement to settle at US\$69 million (£43.2 million). The settlement was approved by the District Court at a fairness hearing on 12 March 2004.

### **Insurance**

Operational management is responsible for managing business risks. Several Group departments advise management on different aspects of risk and monitor results. Insurance cover is held against major catastrophes. For any such event, the Group will bear an initial cost before external cover begins.

### **Inflation**

Over the last three years, inflation has not had a material impact on the revenue or profit of the Group.

## Financial review

### Critical accounting policies

The principal accounting policies affecting the results of operations and financial condition are set out on pages 83 and 84 of the financial statements. The application of certain of these policies requires assumptions or subjective judgements by management. Management bases these on a combination of past experience and any other evidence that is relevant to the particular circumstances.

The application of these assumptions and judgements affects the reported amounts of profit during the year and the assets and liabilities at the balance sheet date. Actual results may differ from the estimates calculated using these assumptions and judgements. Management believes that the following are the critical policies where the assumptions and judgements made could have a significant impact on the consolidated financial statements.

**Tangible fixed assets** A significant part of the capital employed of the Group, particularly in the Process Gas Solutions and Industrial and Special Products lines of business, is invested in tangible fixed assets. The nature of the business demands significant capital investment to renew or increase production capacity or to enable the business to achieve greater productivity and efficiency.

It is the Group's policy to depreciate tangible fixed assets, except land, on a straight line basis over the effective lives of the assets. This ensures that there is an appropriate matching of the revenue earned with the capital costs of production and delivery of goods and services. A key element of this policy is the estimate of the effective life applied to each category of fixed assets which, in turn, determines the annual depreciation charge. In deciding the appropriate lives to be applied, management takes into account various factors including, among other things, the accumulated experience of the effective asset lives from historic business operations and an assessment of the likely impact of any changes in technology.

While Group earnings in any period would fluctuate if different asset lives were applied, in some cases the original estimated life of an asset is closely related to contractual arrangements with large customers. Some of the earnings impact of choosing a different asset life would be mitigated, as the different life may reflect different contractual arrangements with such customers. Nevertheless, variations in the effective lives could impact the earnings of the business through an increase or decrease in the depreciation charge. It is estimated that a change of one year in the effective life of all plant, machinery, vehicles and cylinders would have an impact of between £15 million and £20 million on annual Group operating profit. A change in the effective life of buildings would have only a negligible impact.

**Intangible fixed assets** In a similar manner to tangible fixed assets, management uses its judgement to determine the extent to which goodwill arising from the acquisition of a business has a value that will benefit the performance of the Group over future periods. It is the Group's policy to amortise goodwill on a straight line basis over its useful economic life. This takes into account, among other things, the maturity of the business acquired and its product and customer base. Any change in these assumptions would have an impact on the earnings of the Group.

It is estimated that a change of one year in the useful economic life of all goodwill would have an impact of approximately £1 million on annual Group operating profit.

**Retirement benefits** Results of the Group include costs relating to the provision of retirement benefits for employees. It is the directors' responsibility to set the assumptions used in determining the key elements of the costs of meeting such future obligations. The assumptions are based on actual historical experience and are set after consultation with the Group's actuaries. They include the assumptions used for regular service costs and for the financing elements related to the pension schemes' assets and liabilities. Whilst management believes that the assumptions used are appropriate, a change in the assumptions used would affect both the operating profit and net interest cost of the Group.

There are a number of elements used in the assumptions. These vary for the different countries in which the Group operates, and there may also be an inter-dependency between some of the assumptions. As a result, it would be impractical and potentially misleading to give any approximate impact on annual Group operating profit of a change in any one assumption in isolation.

**Environmental provisions** In certain parts of the business, mainly in the US, the Group has obligations to carry out environmental clean-ups at former and current production sites. Many of these obligations will not arise for a number of years, and the costs are difficult to predict accurately. Management uses its judgement and experience to provide an appropriate amount for the likely cost of such clean-ups, and the amounts, if material, are discounted to present values. Both the amount of anticipated costs, and the interest rates used to discount such costs, are subjective. The use of different assumptions would impact the earnings of the Group.

It is estimated that a change of one per cent in the interest rate used to discount such costs would have an impact of approximately £1 million on annual Group profit before tax.

**Current asset provisions** In the course of normal trading activities, management uses its judgement in establishing the net realisable value of various elements of working capital principally stocks, work-in-progress and accounts receivable. Provisions are established for obsolete or slow moving stocks, bad or doubtful debts and product warranties. Actual costs in future periods may be different from the provisions established and any such differences would affect future earnings of the Group.

The provisions are established at levels appropriate to the circumstances within individual Group business units, and not on a Group-wide systematic basis. It is therefore considered that any estimate of the impact on annual Group operating profit of any change in such provisions may not be meaningful. Nevertheless, a change of ten per cent in the level of provision for bad and doubtful debts at 30 September 2004 would have an impact of approximately £3 million on annual Group operating profit.

The areas covered by critical accounting policies under UK GAAP do not materially differ from those under US GAAP. Further details of the differences between UK and US GAAP are given in note 30 to the financial statements.

## Financial review

### Accounting

The Group's accounting policies are based on accounting policies generally accepted in the UK (UK GAAP). Two new accounting standards were issued during the year – FRS20: Share-based payment, and FRS21: Events after the balance sheet date. Both of these standards are effective for financial periods beginning on or after 1 January 2005 and therefore have not been adopted by the Group for the financial year ended 30 September 2004.

In 2004, the Group applied UITF 37: Purchases and sales of own shares, and UITF 38: Accounting for ESOP trusts. These deal mainly with the balance sheet accounting treatment for own shares and do not have any impact on Group earnings. Comparative figures have been restated accordingly (see note 31 to the financial statements). The codification on revenue recognition, issued as an application note to FRS5: Reporting the substance of transactions, had no impact on the Group's turnover.

### International Financial Reporting Standards

Under European Union legislation, all listed companies will be required to report under International Financial Reporting Standards (IFRS) for accounting periods commencing on or after 1 January 2005. The first annual report and accounts for The BOC Group prepared under IFRS will be for the year ended 30 September 2006. At that time comparative information will be restated on the same basis. Interim results for the year to 30 September 2006 will also be prepared on an IFRS basis.

In early 2004 the International Accounting Standards Board completed its work on developing and improving those standards which would be mandatory for the first year of adoption of IFRS by listed companies.

For The BOC Group, the size and scope of this project is significant and work on it began in 2003. It is overseen by a formal steering committee containing, amongst other members, the Group finance director, senior members of the finance function and representatives from all relevant parts of the Group's finance community.

The restatement of the opening balance sheet will be completed in 2005. While the exact financial impact of the changes in Group accounting policies as a result of IFRS is still being assessed and has not yet been finalised, the following key areas of difference have been identified:

- a) accounting for options and other share-based payments. This will require a charge against profit;
- b) the treatment of goodwill. Existing goodwill, and goodwill on future acquisitions, will no longer be amortised. However, amortisation will continue to be charged on other intangibles, more of which are expected to be identified in future business acquisitions. Also, future annual impairment reviews of goodwill could result in periodic charges against profit;
- c) financial instruments. Accounting for derivative financial instruments may cause some volatility of earnings, although this is not expected to be significant as the Group has few financial instruments and they are restricted to managing currency and interest rate risk.

Other areas impacted to a lesser extent include the treatment of deferred tax and intangible assets. The presentation and layout of the financial statements will also be affected. As the Group already reports its obligations for post retirement benefits under UK GAAP FRS17, there is not expected to be any significant impact as a result of adopting the equivalent international standard, IAS19 (subject to ratification of the proposed revision to IAS19).

As the impact of IFRS is finalised, issues may arise in other areas. However, from the initial assessment of IFRS as it currently stands, management believes that Group earnings and shareholders' funds are unlikely to be materially different from those reported under existing UK GAAP.

The steering committee is also managing the other change aspects of this project – for example, business systems changes, training programmes for all personnel concerned and other communication issues. Work on these aspects is proceeding according to plan. The Group's auditors have been kept informed of, and consulted on, the development of the IFRS project and the preparation of the new Group accounting policies.



## **US GAAP**

The financial statements of the Group have been prepared in accordance with UK GAAP, which differs in certain respects from US GAAP.

The US accounting information in note 30 to the financial statements gives a summary of the principal differences between the amounts determined in accordance with the Group's accounting policies (based on UK GAAP) and amounts determined in accordance with US GAAP together with the reconciliation of net profit and shareholders funds from a UK GAAP basis to a US GAAP basis and a movement in shareholders' funds on a US GAAP basis.

The net income for the year ended 30 September 2004 under US GAAP was £297.7 million (2003: £264.3 million, 2002: £255.4 million), compared with the net profit of £264.0 million in 2004 (2003: £219.1 million, 2002: £202.9 million) under UK GAAP. Shareholders' funds at 30 September 2004 under US GAAP were £1,920.1 million (2003: £1,872.5 million), compared with £1,675.3 million (2003: £1,686.7 million) under UK GAAP. The difference primarily results from the differing accounting treatment of pensions, goodwill, financial instruments, investments, fixed asset revaluations and variable interest entities.

## **Related party transactions**

During the year, interest income of £7.3 million (2003: £7.6 million, 2002: £8.3 million) was received from the Cantarell joint venture in Mexico. The Group had no other material related party transactions.

**Financial review**

Average exchange rates:

**Exchange rates**

The majority of the Group's operations are located outside the UK and operate in currencies other than sterling.

The effects of fluctuations in the relationship between the various currencies are extremely complex and variations in any particular direction may not have a consistent impact on the reported results. In 2004, sterling strengthened against two of the four principal currencies affecting the Group: by 12 per cent against the US dollar and by two per cent against the Japanese yen. Sterling weakened by six per cent against the Australian dollar and by ten per cent against the South African rand.

In 2003, sterling strengthened against the US dollar and the Japanese yen. Sterling weakened against the Australian dollar and South African rand.

In 2002, sterling strengthened against the US dollar, the Japanese yen and the South African rand. It was almost unchanged against the Australian dollar.

The rates of exchange to sterling for the currencies which have principally affected the Group's results over the last five years were:

	<b>2004</b>	2003	2002	2001	2000
<i>US dollar</i>					
At 30 September	<b>1.81</b>	1.66	1.57	1.47	1.48
Average for the year	<b>1.79</b>	1.60	1.47	1.44	1.56
Highest rate during year	<b>1.90</b>	1.69	1.58	1.50	1.67
Lowest rate during year	<b>1.66</b>	1.54	1.41	1.37	1.40
<i>Australian dollar</i>					
At 30 September	<b>2.50</b>	2.45	2.89	2.98	2.73
Average for the year	<b>2.47</b>	2.62	2.77	2.76	2.56
Highest rate during year	<b>2.68</b>	2.89	3.00	3.03	2.85
Lowest rate during year	<b>2.33</b>	2.40	2.54	2.62	2.45
<i>Japanese yen</i>					
At 30 September	<b>199.44</b>	185.60	191.45	175.09	159.77
Average for the year	<b>195.17</b>	191.01	184.34	170.04	166.03
Highest rate during year	<b>206.90</b>	199.49	193.05	181.26	178.67
Lowest rate during year	<b>180.80</b>	182.17	173.82	153.13	149.77
<i>South African rand</i>					
At 30 September	<b>11.72</b>	11.57	16.58	13.24	10.68
Average for the year	<b>11.85</b>	13.24	15.64	11.47	10.24
Highest rate during year	<b>13.33</b>	16.41	19.49	13.26	11.18
Lowest rate during year	<b>10.75</b>	11.40	13.00	10.54	9.92

The average for the year is an average of daily rates. On 18 November 2004, the latest practicable date for inclusion in this report and accounts, the rates of exchange to sterling for the principal currencies were as follows: US dollar 1.85; Australian dollar 2.38; Japanese yen 192.90; South African rand 11.18.

The highest and lowest rates of exchange for sterling against the US dollar for the last six months were:

	May	June	July	August	September	October
High	1.84	1.84	1.87	1.84	1.81	1.84
Low	1.76	1.81	1.82	1.79	1.77	1.78

### Principal operating companies

The following operating companies principally affect the amount of profit or assets of the Group:

The BOC Group Inc, a wholly-owned Delaware corporation and a subsidiary of The BOC Group Inc, a wholly-owned Nevada corporation;

BOC Limited, a wholly-owned English company;

BOC Limited, a wholly-owned Australian company;

Gist Limited, a wholly-owned English company;

Japan Air Gases Ltd, a Japanese company, in which the Group's Japanese 98 per cent owned subsidiary holds 45 per cent;

African Oxygen Limited, a South African company, in which the Group's shareholding is 56 per cent.

### Supplier payment policy

The Group applies a policy of agreeing and clearly communicating the terms of payment as part of the commercial arrangements negotiated with suppliers and then paying according to those terms. In addition the UK-based businesses have committed to the Better Payment Practice Code. A copy of the code can be obtained from the Department of Trade and Industry, DTI Publications Orderline, Admail 528, London SW1W 8YT.

For UK businesses, of amounts owing to suppliers, trade creditors represents 55 days at 30 September 2004.

### Going concern

The directors are confident, after having made appropriate enquiries, that both the company and the Group have adequate resources to continue in operation for the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing the accounts. Management believes that its current credit facilities provide sufficient working capital to meet the present requirements of its existing businesses and that the gearing ratio is appropriate given the nature of the Group's activities.

### Substantial holdings

Details of substantial holdings of Ordinary shares at 18 November 2004 are shown on page 133.

## **CORPORATE GOVERNANCE**

The BOC Group is committed to business integrity, high ethical values and professionalism in all its activities. As an essential part of this commitment, the board supports the highest standards of corporate governance.

### **Combined Code on Corporate Governance**

BOC has applied the principles contained in Section 1 of the Combined Code on Corporate Governance appended to the UK Listing Authority Listing Rules and has complied throughout the year with the provisions set out therein as they applied to the company.

In 2003 the Combined Code on Corporate Governance was revised with the new code taking effect for reporting years beginning on or after 1 November 2003. Although BOC is not required to report on how it has applied the principles of the revised code until 2005, the company has a strict policy of reviewing its corporate governance procedures and has implemented changes as considered appropriate such that at this time BOC is substantially in compliance with the provisions of the new code. The report below incorporates narrative covering those areas of the new code on which the company can report at this time.

### **US Sarbanes-Oxley Act 2002**

BOC has securities registered in the US and, as a result, is required to comply with those provisions of the Sarbanes-Oxley Act 2002 (Sarbanes-Oxley) that apply to foreign private issuers. Whilst the company already had a robust corporate governance framework in line with best practice under UK standards, the requirements of Sarbanes-Oxley were considered and adjustments made to enhance further compliance with Sarbanes-Oxley as far as it applies to BOC. The board continues to monitor the implementation of the rules to ensure continued compliance.

As recommended by the US Securities and Exchange Commission (SEC), BOC has established a disclosure committee. The committee comprises the Group finance director, Group legal director and representatives from the finance, company secretarial, treasury, investor relations, risk management and human resources functions. The committee meets regularly. It is responsible for overseeing and advising on the disclosure process for the quarterly results announcements and on the content and form of the annual report and Form 20-F. To permit the signing of the certifications required by Sarbanes-Oxley the committee makes recommendations to the chief executive, Group finance director and executive management board on the adequacy of Group disclosure controls and procedures.

### **New York Stock Exchange Corporate Governance Listing Standards**

In November 2003, the SEC approved changes to the listing standards of the New York Stock Exchange (NYSE) related to the corporate governance practices of listed companies. BOC, as a foreign private issuer with American Depositary Shares listed on the NYSE, is required to comply with certain of these rules and must disclose any significant ways in which its corporate governance practices differ from those followed by US domestic companies under the NYSE listing standards. At this time, BOC does not believe that there are any significant differences in the corporate governance practices followed by the company, as compared to those followed by US domestic companies except that the membership of the nomination committee is not composed entirely of independent non-executive directors. The membership of the nomination committee is however in line with the Combined Code on Corporate Governance, which permits membership of this committee to be composed of a majority of independent non-executive directors.

### **The board**

There are 13 members of the board namely the chairman, five executive directors and seven non-executive directors who collectively have responsibility for leadership of the company. The directors holding office at the date of this

report and their biographical details are given on pages 8 and 9. The executive directors are the chief executive, Group finance director and the three chief executives of the lines of business.

The roles of chairman and chief executive have been separate since 1994. Rob Margetts as chairman leads the board, ensuring that each director, particularly the non-executive directors, are able to make an effective contribution. He monitors, with assistance from the company secretary, the information distributed to the board to ensure that it is sufficient, accurate, timely and clear. He meets twice a year with the non-executive directors without the executive management present. Tony Isaac as chief executive maintains day-to-day executive management responsibility for the company's operations, implementing Group strategies and policies agreed by the board. The division of responsibilities between the chairman and chief executive has been agreed with the board as a whole.

During the year Rob Margetts has ceased to be governor of Imperial College, London and has also ceased to be chairman of the Government Industry Forum for the Non-Food Uses of Crops. He has recently become a member of the International Advisory Board of Teijin Ltd, a time commitment of approximately six days a year. He remains chairman of Legal & General Group plc and is also a non-executive director of Anglo American plc. During 2004, as part of a comprehensive board evaluation, the non-executive directors undertook a thorough review of the chairman's performance and considered this against the background of his other commitments. In their view the chairman has performed extremely well against all the measured criteria. He has consistently demonstrated full commitment to his responsibilities at BOC and he has always made himself available when circumstances require additional time commitment. Rob Margetts' appointment as chairman anticipates approximately one and a half days a week activities at BOC and the board is satisfied that he has both the personal commitment and available time to fulfil his responsibilities as chairman of the company. Furthermore, the board is of the view that Rob Margetts' expertise and the continuity that he brings to the post of chairman is of great benefit to BOC.

## Corporate governance

The senior independent director is Sir Christopher O'Donnell. He has responsibility for chairing meetings of the non-executive directors at which the chairman's performance is appraised. He is also available to shareholders should they have any concerns which contact through other channels has failed to resolve or for which such contact may be inappropriate.

During the year Fabiola Arredondo and Roberto Mendoza resigned as non-executive directors on 28 February 2004 and 12 May 2004 respectively. Guy Dawson was appointed as a non-executive director on 1 March 2004, with both Anne Quinn and Iain Napier appointed non-executive directors on 1 May 2004. Non-executive directors are initially appointed for a three year term after which, whilst not automatic, their appointment may be extended for a second term subject to mutual agreement and shareholder approval.

The Group has long recognised the vital role that non-executive directors play in ensuring high governance standards. BOC has for many years had a significant presence of high calibre non-executive directors bringing a wide range of experience and expertise to the BOC board. The board has determined that all the non-executive directors are independent in accordance with the definition of that term pursuant to the Combined Code on Corporate Governance and the New York Stock Exchange listing standards, including Matthew Miao who is also a non-executive director of BOC Lienhwa Industrial Gases Company Limited, a BOC joint venture in Taiwan. He is a representative of BOC's joint venture partner, Lien Hwa Industrial Corporation. Matthew Miao is the chairman of MiTAC-Synnex Group, a major electronics organisation with a turnover greater than that of BOC, and he brings considerable expertise in the electronics and semiconductor markets and an Asian business perspective to the board of BOC. The turnover of the joint venture attributable to BOC represents approximately one per cent of the Group's total turnover. The board do not consider this association or the time period with which he has been connected with the company to be of sufficient significance to BOC or Matthew Miao to compromise his independence.

The board has a formal schedule of matters reserved to it. In particular the board's main focus is on strategic and policy issues and reviewing objectives and performance. The board also has responsibility for the review and monitoring of key company policies in such areas as risk management, treasury matters and corporate social responsibility including safety, environment and the Code of Conduct. On an annual basis the board reviews the senior managers and their succession and development plans. The board has to approve all Group commitments in excess of £25 million. Presentations are made to the board on major projects and periodic reviews are given by management from each of the lines of business. The board delegates certain functions to committees. There are six board committees, details of which are given below.

The board meets six times a year, with two meetings held at major operating subsidiaries. One of the meetings is a combined board and strategy meeting lasting over a period of two days. The meetings held at operating sites provide the opportunity for the board to meet with the local management teams and presentations about the local business operations are made to the board. During 2004 the board visited the company's operations in Shanghai and also the UK headquarters of Gist.

The attendance of directors at board and principal board committee meetings during the year are detailed in the chart below:

	Board (six meetings)	Audit committee (four meetings)	Nomination committee (six meetings)	Remuneration committee (six meetings)
Rob Margetts	6	n/a	6	n/a
Tony Isaac	6	n/a	6	n/a
Fabiola Arredondo <sup>1</sup>	3	1	3	3
Julie Baddeley	6	4	6	6

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John Bevan	6	n/a	n/a	n/a
Andrew Bonfield	6	4	6	6
Guy Dawson <sup>2</sup>	3	2	3	3
René Médori	6	n/a	n/a	n/a
Roberto Mendoza <sup>3</sup>	4	3	3	3
Matthew Miao	5	2	5	4
Iain Napier <sup>4</sup>	1	1	1	1
Sir Christopher O'Donnell	5	4	5	5
Anne Quinn <sup>4</sup>	2	2	2	2
Raj Rajagopal	6	n/a	n/a	n/a
John Walsh	6	n/a	n/a	n/a

1. resigned on 28 February 2004.
2. appointed on 1 March 2004.
3. resigned on 12 May 2004.
4. appointed on 1 May 2004.

Throughout 2004 the company has continued to maintain directors' and officers' liability insurance.

There is a well established procedure enabling any director, in the furtherance of his or her duties as a BOC director, to seek independent professional advice at the company's expense.

All directors have access to the advice and services of the company secretary. The company secretary has responsibility for ensuring that the correct board procedures are followed and advises the board on all corporate governance matters. In addition the company secretary ensures that information and documentation required by the board, in particular meeting papers, are provided to the board promptly with sufficient time to enable them to prepare fully for any meeting.

## **Corporate governance**

### **Induction and professional development**

Upon joining the board, new directors are required to undertake a full induction comprising site visits, meetings with the lines of business chief executives, each member of the executive management board and also key external advisers. This is supplemented by a reference binder, which is regularly updated, including information about the board, the committees, directors' duties, procedures for dealing in the company's shares and other regulatory and governance matters.

Appropriate training and briefings are available to all directors on appointment and subsequently, as necessary, taking into account their individual qualifications and experience and any training requirements that may be identified during the annual performance review process. The company secretary monitors the availability and suitability of external courses, details of which are circulated to the board. During the year certain of the non-executive directors have attended seminars relating to their areas of responsibility. The board receives regular briefings on governance and regulatory matters affecting the Group and its market sector activity and also on litigation relating to the Group.

The non-executive directors have full access to management and both internal and external auditors, and are encouraged to stay fully abreast of the Group's business aided by site visits and meetings with senior management.

### **Performance evaluation**

BOC commenced formal review of the board, the principal board committees and the individual directors in 2002 using an internal process conducted by the chairman. In 2003 a more comprehensive review was undertaken using an external facilitator. When the results of the 2003 review were considered by the board it was decided that the process would alternate each year between internal and external reviews.

Therefore, during 2004 the chairman conducted an internal review comprising a questionnaire covering, inter alia, the role and organisation of the board, meeting arrangements, information provision and committee effectiveness. Following completion of the questionnaires the chairman met with each director to discuss their views and to give feedback on individual performance. The results of the evaluation were reported to the board and where areas for improvement have been identified, actions have been agreed.

Sir Christopher O'Donnell, as the senior independent director, led a meeting of the non-executive directors to appraise the performance of the chairman.

### **Board committees**

There are six board committees to which the board delegates specific areas of responsibility as described below. The terms of reference of each of the audit, nomination and remuneration committees are available on the company's website ([www.boc.com](http://www.boc.com)) or upon request to the company secretary.

### **Audit committee**

Members: Julie Baddeley, Andrew Bonfield, Guy Dawson, Matthew Miao, Iain Napier, Sir Christopher O'Donnell (chairman) and Anne Quinn. Secretary: Nick Deeming.

The audit committee meets four times a year, the agendas being organised around the company's financial reporting cycle. Members' attendance at meetings is detailed on page 57 and their qualifications are on pages 8 and 9. Time is set aside at one of these meetings for the committee to meet with the internal and the external auditors separately without the executive management present. The committee reviews the effectiveness of internal controls, matters raised by the internal and external auditors in their regular reports to the committee and the quarterly financial statements prior to their release, as well as the arrangements by which staff of the Group may, in confidence, raise concerns. The committee also ensures that an appropriate relationship between BOC and the external auditors is



maintained and reviews the policies and procedures in place to ensure the independence and objectivity of the audit. The work undertaken by the committee during 2004 is described in more detail in its report below.

Andrew Bonfield is considered by the board to be the audit committee financial expert. He is a non-executive director and is considered to be independent in accordance with the definition of that term pursuant to the Combined Code on Corporate Governance and the New York Stock Exchange listing standards. All other members of the committee are financially literate.

### **Audit committee report**

In 2004 the audit committee discharged its responsibilities as set out in the terms of reference and the specific matters reviewed by the committee included:

- a) interim and full year financial results and announcement statements;
- b) interim and full year report from the internal audit function of progress against the 2004 audit plan and effectiveness of internal controls;
- c) the Group's project to comply with the requirements of Section 404 of the US Sarbanes-Oxley Act. This review included the project plan, progress against the plan and matters arising in the implementation of the plan;
- d) details of the Group's project to transition to International Financial Reporting Standards from 2006;
- e) the external audit plan for 2004 performed by the Group's auditors, PricewaterhouseCoopers LLP (PwC). This review included the audit objectives, auditor independence and objectivity policies managed by PwC, partner rotation, audit scope, team, timetable deliverables and fee proposal;

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## Corporate governance

- f) the annual report disclosure items relevant to the audit committee. Included in this review were the Group's critical accounting policies, the going concern statement, the report on risk and internal controls and the risk factors statement. The audit committee also reviewed the disclosure control review procedures employed by the Group which enabled the chief executive and Group finance director to sign the Section 302 and 906 certificates pursuant to the US Sarbanes-Oxley Act;
- g) the external auditor report for 2004;
- h) the independence and objectivity of the external auditors, including a review of non-audit fees. The audit committee has reviewed and approved a policy for the provision of non-audit services by the external auditor. This policy has been in place since 2002 and defines services which can be provided by the auditor. The policy also specifies which services cannot be provided. The policy requires all non-audit services to be approved in advance by the audit committee, which has delegated this task to the chairman of the audit committee. The approval process requires full disclosure of the objectives and scope of the services to be performed and fee structure. The audit committee reviews all approved services at subsequent meetings. The auditor is permitted to perform non-audit services only if the scope of work is within the terms of the policy and there is a business benefit to the Group in these services being performed by the external auditors rather than an alternative supplier. The level of the fee spend is closely monitored to ensure independence and objectivity of the audit is maintained. Further details of actual fees paid to external auditors are given in note 2c) on page 90;
- i) the procedures by which staff can report, in confidence, any matters of a financial or non-financial nature alleging breaches of the Group's Code of Conduct. The audit committee also reviewed the procedures by which allegations are reported to senior management and the audit committee.

During this period the audit committee met with the Group's external auditors without the presence of management. The audit committee also met with the Group's head of internal audit without the presence of management. The head of internal audit has access to the chairman of the audit committee, if necessary, outside of meetings.

Regular attendees to audit committee meetings, at the invitation of the chairman of the committee, include: the chairman, chief executive, Group finance director, director of risk management, head of business assurance audit, director financial planning and control, and the external auditors.

The audit committee concludes that, based on the foregoing, it has discharged its responsibilities as set out in the terms of reference and is satisfied that auditor independence and objectivity have been maintained.

## Nomination committee

Members: Julie Baddeley, Andrew Bonfield, Guy Dawson, Tony Isaac, Rob Margetts (chairman), Matthew Miao, Iain Napier, Sir Christopher O'Donnell and Anne Quinn. Secretary: Nick Deeming.

The nomination committee meets periodically as required but at least annually. During 2004 the committee met six times. Members attendance at meetings is detailed on page 57. The committee primarily monitors the composition and balance of the board and its committees, and identifies and recommends to the board the appointment of new directors. The committee also keeps under review the board committee structure and composition and makes recommendations to the board of any changes considered necessary. Whilst the chairman of the board chairs this committee he is not permitted to chair meetings when the appointment of his successor is being considered or during discussion regarding his performance.

On an annual basis the committee carries out a review of the succession plans for the executive directors and the executive management board, the reappointment of non-executive directors upon expiry of their term of office and the proposals for re-election of directors retiring by rotation at the Annual General Meeting. Directors submit themselves for re-election at regular intervals and at least every three years in accordance with the company's Articles of Association and the Combined Code on Corporate Governance. During these deliberations consideration is given to the results of the annual board evaluation. The evaluation process is explained in more detail above.

During the year three new non-executive directors were appointed to the board. When considering the appointment of new directors the committee reviews the current balance of skills and experience on the board. A detailed specification is drawn up to include any specific knowledge or expertise that is considered of future benefit to the board and having regard to the business throughout the Group and the overall business strategy. External search agents are then used to identify suitable candidates who are short listed and then evaluated by the committee before it submits its recommendation to the board as a whole.

### **Remuneration committee**

Members: Julie Baddeley (chairman), Andrew Bonfield, Guy Dawson, Matthew Miao, Iain Napier, Sir Christopher O'Donnell and Anne Quinn. Secretary: Rob Lourey.

The remuneration committee meets six times a year. Members attendance at meetings is detailed on page 57. The committee recommends to the board the policy on executive directors' remuneration and the specific remuneration, benefits and terms of employment of each executive director. The committee's full report on directors' remuneration is set out on pages 64 to 75.

### **Pensions committee**

Members: Julie Baddeley (chairman), Guy Dawson, Rob Margetts, Tony Isaac and René Médori Secretary: Stephen Pegg, Corporate pensions director.

The pensions committee meets twice a year and oversees the review of governance and control procedures applying to all employee retirement benefit plans, and reviews and makes recommendations on the investment policies and strategies applied to the Group's retirement benefit plans.

## **Corporate governance**

### **Executive management board**

The members of the executive management board are detailed on pages 10 and 11 and are considered as the officers of the company. The executive management board is chaired by Tony Isaac. All members held office throughout the year ended 30 September 2004 except that Greg Sedgwick resigned on 31 December 2003 and Mark Nichols became a member of the executive management board on 1 January 2004. There have been no further changes up to the date of this report.

The executive management board meets regularly having primary authority for the day-to-day management of the Group's operations and policy implementation pursuant to the Group's strategy agreed by the board.

### **Investment committee**

Members: John Bevan, Tony Isaac (chairman), René Médori, Mark Nichols, Raj Rajagopal, John Walsh and representatives from the finance function.

The investment committee meets regularly and reviews and approves Group commitments up to £25 million as delegated by the board. Group commitments over £25 million are presented to the board for approval on recommendation from the committee.

### **Accountability and audit**

Statements of the respective responsibilities of the directors and auditors for these accounts are set out on pages 76 and 77.

### **Risk management and internal controls**

This statement of compliance with the Combined Code on Corporate Governance in respect of risk management and internal controls is in line with the arrangements set out by the UK Listing Authority.

The board has overall responsibility for the Group's system of risk management and internal controls.

The schedule of matters reserved to the board ensures that the directors maintain full and effective control over all significant strategic, financial, organisational and compliance issues.

**Risk management in BOC** The BOC risk management programme assists management throughout the Group to identify, assess and mitigate business risk.

The objective of risk management within BOC is to improve performance and decision making through identification, assessment and mitigation of key risks.

A dedicated central team of risk management specialists is responsible for delivering the risk management programme. During 2004 approximately 100 risk workshops or reviews have been conducted covering a broad range of matters. These include risks in strategy, risks in meeting business unit targets, risks in acquisitions or ventures and risks in major projects.

The risk management process operates on a global basis and covers the Group's key risks, lines of business, business units and corporate functions.

The output from each risk assessment is a set of prioritised risks with associated action plans. Line management retains responsibility for completion of action plans. Progress of action plans is monitored and reported.

A report on the risk management process is provided to the board twice a year. These reports include reviews of key strategic risks to the Group as well as the individual lines of business and identifies the status of action plans against key risks.

**Internal controls in BOC** The directors have delegated to executive management the establishment and implementation of a system of internal controls appropriate to the various business environments in which it operates. The Group operates under a system of controls that has been developed and refined over time to meet its current and future needs and the risks and opportunities to which it is exposed. These controls, which are communicated through various operating and procedural manuals and processes, include but are not limited to:

- the definition of the organisational structure and the appropriate delegation of authorities to operational management;
- procedures for the review and authorisation of capital investments through the investment committee including post-acquisition reviews and appraisals;
- strategic planning and the related annual planning process including the ongoing review by the board of the Group's strategies;
- the establishment of individual business unit annual performance targets and the quarterly business review of actual performance;
- the monthly financial reporting and review of financial results and other operating statistics such as the health and safety reports as well as the Group's published quarterly financial statements, which are based on a standardised reporting process;
- accounting and financial reporting policies to ensure the consistency, integrity and accuracy of the Group's accounting records;
- specific treasury policies and objectives and the ongoing reporting and review of all significant transactions and financing operations.

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## **Corporate governance**

The internal control system is monitored and supported by an internal audit function that operates on a global basis and reports its results on the Group's operations to management and the audit committee. The work of the internal auditors is focused on the areas of greatest risk to the Group determined on the basis of a risk management approach to audit.

There have been regular reviews by the audit committee of the board of the effectiveness of the Group's overall internal control processes throughout the year.

During 2004 the Group has developed and progressed its plan to meet the requirements of Section 404 of the US Sarbanes-Oxley Act which is a requirement for BOC with effect from 2005. The internal audit function has played an important role in developing and implementing the plan to identify, document and test key controls over financial reporting.

The directors therefore believe that the Group's system of risk management and internal controls provides reasonable but not absolute assurance that assets are safeguarded, transactions are authorised and recorded properly and that material errors and irregularities are either prevented or would be detected within a timely period.

Having reviewed its effectiveness, the directors are not aware of anything in the Group's system of internal controls during the period covered by this report and accounts which could render them ineffective.

There were no changes in the Group's internal controls over financial reporting that occurred in the year ended 30 September 2004 that have materially affected, or are reasonably likely to affect, the Group's internal control over financial reporting.

## **Disclosure controls and procedures**

The chief executive officer and Group finance director, based on the evaluation of the effectiveness of the Group's disclosure controls and procedures as of the end of the period covered by this annual report and accounts, have concluded that, as of such date, the Group's disclosure controls and procedures were effective.

## **Going concern**

The directors' report on going concern is included in the financial review on page 55.

## **Communications with shareholders**

The board considers communications with shareholders, whether institutional investors, private or employee shareholders, to be extremely important. A variety of communication mechanisms are used by the company. Financial results are published quarterly, and half year and annual reviews are sent to all shareholders. Copies of the full annual report are available by election or on request. The company's website ([www.boc.com](http://www.boc.com)) provides financial and other business information about The BOC Group. It contains an archive of past announcements and annual reports, share price information and a calendar of events as well as BOC's social responsibility policies, including the company's Code of Conduct. There are also facilities in place to enable shareholders to receive communications from the company in electronic form rather than by mail and for shareholders to provide their proxy votes for the Annual General Meeting by electronic means.

The Annual General Meeting provides an opportunity for shareholders to question directors about the company's activities and prospects. The chairmen of each of the principal board committees are normally present. During the year responses are given to letters received from shareholders on a variety of subjects.

There is a programme of regular dialogue with major institutional shareholders and fund managers and summaries of these discussions and meetings are provided to the board. Periodically the board receives presentations from external advisers on investor perceptions. In addition the board receives copies of most analysts' and brokers' reports

issued on the company. These summaries and reports enable the directors to gain an understanding of the views and opinions of those with an interest in the company.

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## Corporate governance

### Annual General Meeting

The Annual General Meeting will be held at the Institution of Electrical Engineers (Lecture Theatre), Savoy Place, London WC2R 0BL on Friday 14 January 2005 commencing at 11.00 am. The Notice of the Annual General Meeting, which includes explanations of all resolutions, is contained in a separate circular which is being sent to all shareholders more than 20 working days before the meeting.

Resolutions will seek approval to the following:

- a) receipt of the report and accounts;
- b) the dividend policy;
- c) reappointment of Guy Dawson, Anne Quinn, Iain Napier, Tony Isaac, Rob Margetts and Raj Rajagopal as directors;
- d) reappointment of PricewaterhouseCoopers LLP as auditors and granting authority to the directors to fix their remuneration;
- e) approval of the directors' remuneration report;
- f) the introduction of a new all employee Savings Related Share Option Scheme;
- g) the establishment of a Share Matching Plan;
- h) an amendment to The BOC Group Long-Term Incentive Plan;
- i) renewal of the authority for the directors to allot shares;
- j) renewal of the authority for the directors to allot shares for cash other than to existing shareholders in proportion to their holdings; and
- k) granting of general authority for the company to purchase its own shares up to a maximum of ten per cent of issued share capital. No purchases were made following last year's authority.

### Corporate social investment

BOC is committed to being a positive contributor to the communities in which it operates. This includes: operating safely and environmentally; enhancing the wellbeing of local economies by providing employment on the bases of equal opportunities and merit; and playing a part in supporting community activities.

BOC's social investment programme has five key themes:

- a) to focus on projects to improve environmental stewardship;
- b) to support educational programmes in selected areas;
- c) to devolve the choices of charitable donations to the businesses and employees through matched giving and local volunteering and donations schemes;
- d) to encourage the organisation's involvement in selected social programmes in local communities around the world; and
- e) to develop further BOC's global diversity programmes.

### Investing in education

BOC's Inspiring Gases education programme made significant progress with the development of a series of educational aids and implementation of a UK-wide network of BOC employee science ambassadors, who offer schools and colleges presentations on the uses of industrial gases. There is also an Inspiring Gases website at [www.boc.com/education](http://www.boc.com/education).

Several BOC businesses initiated or strengthened their educational contributions. In southern Africa, BOC companies supported education and training with external and employee bursaries, grants, in-house vocational courses and incidental donations as well as continued support for a welding school and the Afrox Healthcare College of Learning. In Thailand, the business supported several educational establishments with equipment and bursaries for



employee dependants.

Where appropriate, BOC continues to play an active part in local communities by harnessing its educational capabilities through school tours, lessons in the properties of gases, technical support and academic research. It also funds programmes and events such as the BOC Gases Challenge, which encourages UK secondary school students to develop chemical engineering ideas, sponsorship of the UK's Council for Industry and Higher Education, the annual Institute of Chemical Engineers' environment award, and the Salters' Festivals of Chemistry for the propagation of science amongst the young. The Salters' festivals involved 500 schools and took place at universities across the UK and Ireland.

### **Supporting the environment**

The Group's environmental flagship remains the UK-based BOC Foundation for the Environment, which was established with an initial injection of £1 million in 1990. The Foundation has supported over 130 projects. This year, the Group contributed £310,000 to the Foundation and saw eight new initiatives come on stream. Since the Foundation's inception BOC has donated £3.9 million. Combined funding from BOC and its co-sponsoring partners now exceeds £12 million. The Foundation concentrates on projects that improve air and water quality.

BOC made a number of other positive contributions to other environmental projects including the BOC New Zealand community environmental grants programme and a scheme, 'Where There's Water', which provides funding to help communities maintain, protect and improve their water resources.

## Corporate governance

### Charitable donations and community involvement

BOC operates a wide-ranging programme of sponsorships and charitable donations, directing resources at areas where the organisation feels it can make a difference or where employees have a direct involvement. In 2004, BOC made charitable donations totalling £840,000 including £288,000 to UK-registered charities through direct donations from the Group and matched giving. As in previous years, no political donations were made in the European Union.

BOC employees have continued to involve themselves in charitable fundraising and voluntary support. Matched giving schemes have been operating in the UK, the Americas and the south Pacific for some time. For example, BOC has funded a matched giving scheme in the UK since 1987, doubling the money donated by employees to registered charities. To make it easier to give to charity a new internal website enables UK employees to access the necessary matched giving information and forms. The schemes again proved their worth as a way of aligning corporate funding with the personal generosity of BOC employees. In the course of 2004, BOC in the UK donated £160,000 (included in the UK total above) through the Charities Aid Foundation to match employee beneficence.

In addition to the numerous causes supported through matched giving, BOC also supported a number of Group causes, including the Multiple Sclerosis Society, Royal British Legion, St John's Ambulance and Macmillan Cancer Relief.

BOC ran the third year of its BOC Emerging Artist Award to encourage and support a committed UK-based artist for a year. The 2004 award, worth £20,000, was won by Mauro Bonacina, a graduate of Goldsmiths College, University of London. Six other artists were also awarded £1,000 each as runners-up.

Outside the UK, local BOC businesses develop their own community programmes, each business being responsible for its own project selection and funding within broad guidelines set by the organisation. This devolved approach has resulted in the funding of a rich variety of programmes that are truly relevant to the communities in which BOC companies operate.

In the US, through a combination of financial support and many hours of volunteer involvement, BOC and its employees continued to assist the United Way charitable appeal, helping to make a difference in many deprived sectors of the community. BOC in the US also pursued a number of other projects including support for local arts and educational causes.

In the south Pacific, the business matches employee fundraising for charities selected by staff. In New Zealand, for example, employees selected a range of charitable causes to support. In Australia, employees chose to fundraise for cancer research, education and patient support. BOC in Australia continues a long-established relationship with the Malcolm Sargent Cancer Fund for Children. BOC employees support this cause with financial contributions and employee volunteering and fundraising activities.

In South Africa, BOC's subsidiary Afrox and its staff continued to support the company's community involvement process (CIP), which included the management of 122 projects to improve the lives of disadvantaged young people. Once more, the highlight of the year was Bumbanani (meaning 'let's build together') Day when 15,600 children attended events hosted by BOC staff.

In addition, Afrox hospitals engage in a wide range of health care and safety initiatives, including selected sponsorship, supporting people in their recuperation and rehabilitation after surgery and treatment. Some Afrox hospitals have a special outreach service in the form of rape crisis centres and AIDS/HIV clinics. Medical examinations are conducted in a non-threatening environment with the emphasis placed on maintaining the dignity of the victim. Preventive medication and antiretroviral drugs are given against sexually transmitted diseases.

BOC and its employees have been active in many other markets. BOC in Pakistan continued to provide support to community organisations dealing with poverty alleviation, education and health care. Support continued for: the Layton Rehmatulla Benevolent Trust, an organisation dedicated to providing free eye care; the Marie Adelaide Leprosy Centre; the Shaukat Khanum Memorial Cancer Hospital, the first institution in Pakistan dedicated to cancer treatment; and the Aga Khan Medical Hospital and Foundation. BOC was one of the founding contributors to the Aga Khan Foundation which runs a world class university hospital affiliated to the Harvard Medical School. BOC in China

continued a support programme to facilitate screened blood donations to local hospitals. In Thailand, BOC sponsored a sports programme helping to discourage drug use. In Malaysia, BOC supported the National Cancer Society, culminating in a sponsored balloon race to raise awareness in the country. The event in Kuala Lumpur was officiated by Her Royal Highness the Queen of Malaysia.

In Chile, BOC supported the Catholic University of Chile with sponsorship of its engineering school and departments of mining investigations, environmental management and teaching through the Internet. In Venezuela, BOC donated funds and helium balloons to schools and orphanages and breathing oxygen to local fire stations. In Curaçao, the organisation channels support through the local Rotary Club and contributed to various youth education and care for the elderly projects. In India, BOC made a number of contributions across a range of poverty alleviation and community welfare initiatives.

The report of the directors has been approved by the board and signed on its behalf by:

**Nick Deeming** Company Secretary

22 November 2004

## REPORT ON REMUNERATION

### The remuneration committee

The remuneration committee comprises all the independent non-executive directors namely Julie Baddeley (chairman), Andrew Bonfield, Guy Dawson (appointed 1 March 2004), Matthew Miao, Iain Napier (appointed 1 May 2004), Sir Christopher O'Donnell and Anne Quinn (appointed 1 May 2004). Whilst neither the Group chairman nor the chief executive are members of the remuneration committee they both attend the meetings by invitation but are not present when their personal remuneration is discussed and reviewed. The human resources director acts as secretary to the committee and provides it with information and data from national and international surveys. He is assisted by the Group compensation and benefits director. In addition the remuneration committee has appointed Towers Perrin to advise on the remuneration arrangements for senior executives. Towers Perrin also provided advice on the design of the proposed share matching plan.

The remuneration committee sets the overall remuneration policy of the Group and makes recommendations to the board on the framework of executive remuneration. It meets six times a year.

Individual member attendance at the meetings is shown on page 57. The terms of reference are reviewed annually to ensure that they conform with best practice. Specifically, the remuneration committee determines, on behalf of the board, the detailed terms of service of the executive directors and other members of the executive management team including basic salary, performance related bonus arrangements, benefits in kind, long-term incentives and pension benefits. The remuneration committee also reviews the remuneration of the chairman, following a recommendation from the chief executive and the senior independent director. The board as a whole determines the non-executive directors' fees.

Current expected value (chart 1)

### Remuneration policy

BOC's remuneration policy for executive directors and other executive management is designed to attract and retain executives of the highest calibre so that the Group is managed successfully to the benefit of its stakeholders. In setting remuneration levels the remuneration committee takes into account the remuneration practices found in other UK listed companies of similar size, internationality and complexity. The policy is to pay salaries and total remuneration around mid-market levels for on target performance and to provide the opportunity, via annual and long-term incentives, for executives to be rewarded at the 75th percentile if this is justified by the achievement of top of the range performance goals. It is the view of the remuneration committee that performance-related remuneration should form a substantial element of total remuneration. Based on assumptions about expected values for awards from the Long-Term Incentive Plan (LTIP) and Executive Share Option Scheme (ESOS), the proportion of performance-related remuneration to fixed remuneration (excluding pensions and benefits in kind) for current arrangements is approximately 60 per cent (see chart 1).

### Remuneration components

**Basic salary** Salaries for executive directors and executive management board members are based on median market rates drawn from market data provided by Towers Perrin and take account of an executive's experience,

responsibilities and performance. Performance is assessed both from an individual and business perspective. Executive salaries are reviewed annually by the remuneration committee. Remuneration for those executives of businesses outside the UK is denominated in the local currency.

**Benefits in kind** Benefits in kind comprise company car benefits and membership of BOC's healthcare insurance scheme. Where appropriate directors on international assignment receive overseas allowances such as housing and children's education fees. These allowances are on similar terms to those applying to other employees on the international programme. Such benefits are in line with those offered by peer group companies. Benefits in kind do not form part of pensionable earnings.

**Variable compensation plan (VCP)** The executive directors and senior management participate in the variable compensation bonus plan. The plan focuses on annual objectives and links individual performance with business plans. The financial targets for the executive directors and other executive management board members are set on an annual basis by the remuneration committee and performance against these targets is reviewed by the remuneration committee on a six monthly basis. The remuneration committee considers that a six monthly review acts as a significant incentive and is conducive to sustaining performance throughout the year. The financial targets are based equally on adjusted earnings per share (EPS) and adjusted return on capital employed (ROCE) at Group level. Adjusted means excluding exceptional items. Bonuses are assessed two-thirds on these financial targets with the remaining third based on personal objectives. These are based on BOC's strategic priorities and include safety, growth, people and change management and productivity. Performance is measured against key performance indicators determined during formal appraisals. There is a threshold performance level below which no bonus is paid. For 2004 the financial targets set by the remuneration committee were EPS 56.2p and ROCE 13.3 per cent and the achievement against these targets was EPS 63.2p and ROCE 15.4 per cent. The remuneration committee agreed that the maximum bonus payable would be 100 per cent of salary.

The bonuses for the executive directors and other members of the executive management board are paid half yearly following the remuneration committee review. Details of the payments to directors are included in the directors remuneration for the year on page 70.

## Report on remuneration

### Current long-term incentive arrangements

**Long-Term Incentive Plan (LTIP)** Executive directors, members of the executive management board and a number of other key executives selected from the company's global operations participate in the LTIP. The remuneration committee has the discretion to grant awards up to a maximum of two times salary. The award made in February 2004 to the chief executive was based on 1.9 times salary and for other board directors 1.5 times salary. There are three performance conditions: total shareholder return (TSR), adjusted earnings per share (EPS) and adjusted return on capital employed (ROCE). Up to one third of the award could vest in respect of each performance condition.

The TSR performance condition compares BOC's TSR performance with two separate comparator groups, a UK comparator group comprising 31 industrial and manufacturing companies and a global industrial gases group of six leading companies as follows:

#### UK group

Aggregate Industries	BPB	Invensys	Scottish & Southern Energy
AMEC	Centrica	Johnson Matthey	Scottish Power
Anglo American	Corus Group	Kelda Group	Severn Trent
AWG	FKI	National Grid Transco	Shell Transport & Trading
BAE Systems	Hanson	Pilkington	Smiths Group
BG Group	IMI	Rio Tinto	Tomkins
BHP Billiton	ICI	RMC Group	United Utilities
BP	International Power	Rolls-Royce	

#### Global gases group

Airgas	(US S&P 500 Index)
Air Liquide	(France CAC 40 Index)
Air Products & Chemicals	(US S&P 500 Index)
Linde	(Germany DAX 30 Index)
Nippon Sanso	(Japan NIKKEI 225 Index)
Praxair	(US S&P 500 Index)
The BOC Group	(UK FTSE100 Index)

When determining BOC's performance relative to the global gases group, the TSR for BOC and the comparator companies will be adjusted (adjusted TSR) so that it reflects the excess (or shortfall) in returns relative to the local stockmarket index where each company has its primary listing. The nationality and the local stockmarket index that will be used to calculate the adjusted TSR for each company is shown in the parentheses.

For the awards made in February 2004 which will vest in February 2007 the target set by the remuneration committee is such that if the company's TSR position measured over a three year period is median in respect of both comparator groups, then 40 per cent of the shares in respect of the TSR part of the award will vest. If the company's

TSR position is upper quartile all of the shares in respect of the TSR part of the award will vest. If the TSR performance is between the median and upper quartile a proportion of between 40 per cent and all of the shares in respect of the TSR part of the award will vest. If the company's TSR position is below the median for both comparator groups the TSR part of the award will lapse. The same TSR performance criteria was used for the awards made in February 2003.

The adjusted EPS performance condition is based on the company's EPS relative to three year targets on a sliding performance scale. For the award made in February 2004 which will vest in February 2007 the target set by the remuneration committee is 60.3p at the end of the three year performance period for minimum vesting. If this is achieved 40 per cent of the shares in respect of the EPS part of the award will vest. All of the shares in respect of the EPS part of the award will vest if the company achieves 69.3p at the end of the three year performance period. If the EPS performance is between 60.3p and 69.3p a proportion of between 40 per cent and all of the shares in respect of the EPS part of the award will vest. If EPS is less than 60.3p over the three year period the EPS part of the award will lapse. The EPS targets for the award made in February 2003 were 64.75p for minimum vesting and 74.45p for full vesting.

The adjusted ROCE performance condition is based on the company's ROCE relative to three year targets on a sliding performance scale. The minimum target set by the remuneration committee for the award made in February 2004 which will vest in February 2007 is 13.5 per cent at the end of the three year performance period. If this is achieved 40 per cent of the shares in respect of the ROCE part of the award will vest. All of the shares in respect of the ROCE part of the award will vest if the company achieves a ROCE of 15 per cent. If the ROCE performance is between 13.5 per cent and 15 per cent a proportion of between 40 per cent and all of the shares in respect of the ROCE part of the award will vest. If the ROCE is less than 13.5 per cent the ROCE part of the award will lapse. The ROCE targets for the award made in February 2003 were 13.0 per cent for minimum vesting and 14.5 per cent for full vesting.

In setting three performance conditions for the LTIP award, the remuneration committee took the view that these were the most important measures that drive or measure sustainable improvements in shareholder value: the TSR performance condition measures comparative performance while EPS and ROCE reflect a core part of the company's business strategy, which is to improve both earnings growth and capital efficiency.

## Report on remuneration

### Current measures and their weights for variable incentives using on target VCP awards and the expected values of long-term incentives (chart 2)

- 1 Personal 15%
- 2 TSR 16%
- 3 EPS 30%
- 4 ROCE 39%

**Executive Share Option Scheme 2003 (ESOS 2003)** Executive directors, members of the executive management board and other selected middle and senior management throughout the company's global operations currently participate in the ESOS 2003. The remuneration committee has the discretion to grant awards up to a maximum of two times salary. The awards made in November 2003 to the chief executive and other members of the board were based on one times salary. The performance condition set for the ESOS 2003 by the remuneration committee is that the growth in the adjusted EPS over a three year performance period must be equal to or greater than the growth in the UK retail prices index (RPI) plus three per cent per annum over the three year performance period. The performance is assessed on the company's published results. If the performance condition is satisfied at the end of the performance period then the awards would be exercisable in full. In line with current corporate governance best practice there is no rolling re-testing of performance. In the event that the performance condition is not satisfied over the original three year period then the remuneration committee has the discretion to re-test performance after five years, but only where the remuneration committee believes the extension to be a fair and reasonable basis for assessing the sustained underlying performance of the company. The remuneration committee considers this performance condition to be a challenging performance hurdle when compared to the company's adjusted EPS compound annual growth rate before exceptional items over the last ten years of around four per cent.

Awards under the LTIP and ESOS 2003 may be satisfied in cash or other assets, for example, where it is necessary for legal or tax reasons. The amount to be paid will, in the case of share options, be equal to the participant's gain on the exercise of the share option. Also, the remuneration committee may decide, prior to grant, that an award shall be expressed to be a right to acquire a cash sum rather than shares. This type of award, known as a phantom award, will normally only be granted to participants in jurisdictions where, because of local security laws or exchange control



provisions, it is difficult to issue or transfer shares to employees. The LTIP and ESOS 2003 awards may be satisfied by using existing shares purchased in the market through The BOC Group plc Employee Share Trust or by issuing new shares.

Awards under the LTIP and ESOS 2003 are not pensionable.

The current performance measures as a percentage of salary for on target performance are shown in chart 2.

**Savings Related Share Option Schemes** These are operated in the UK, Australia, New Zealand and Ireland and are open to all employees including executive directors with one year's service or more. The UK scheme is approved by the Inland Revenue. The current schemes are due to expire in 2005 and a proposal to adopt new schemes is to be put to shareholders at the Annual General Meeting in January 2005.

### **TSR performance**

The graph to the left has been included to meet the requirement set out in the Directors' Remuneration Report Regulations 2002. It shows BOC's TSR performance, assuming dividends are reinvested, compared with all FTSE100 companies. This has been chosen because it provides a basis for comparison against companies in a relevant, broad based equity index of which BOC is a constituent member. The remuneration committee decided that other comparator groups were more appropriate as performance measurement for the LTIP. A graph showing BOC's TSR performance compared with the six major gases companies relative to respective local indices, which is one of the comparator groups chosen for the LTIP, is shown in the chairman's statement on page 4. The October 1999 position reflects the premium arising from the pre-conditional cash offer of £14.60 per share made jointly by Air Liquide and Air Products.

### **Former long-term incentive arrangements**

**Executive Share Option Scheme 1995** The last grant of options to the executive directors and members of the executive management board took place in February 2002 and the last award to other Group employees took place in December 2002. No further awards will be made under this scheme. The options vest when the company's adjusted EPS growth is equal to, or exceeds, the growth in the retail prices index (RPI) by three per cent per annum over any three year performance period.

**Senior Executive Share Option Scheme** The last grant under this scheme took place in November 1994. In line with market practice at the time when this scheme was introduced the vesting of these awards was not subject to performance conditions.

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## Report on remuneration

### Retirement benefits

Pension arrangements for executive directors are in line with those of comparable executives in the countries in which the directors are located.

In the UK, the BOC senior executive pension scheme is a funded, tax-approved, defined benefit pension arrangement. Where necessary, the director's pensionable pay is limited by the earnings cap provisions of the Finance Act 1989. In such cases, the company pays the director a salary supplement on earnings above the earnings cap to reflect the loss of pension coverage. This supplement is recorded in the director's emoluments and is not taken into account in calculating bonuses or any other form of remuneration.

BOC closed its UK defined benefit pension arrangements to all new employees on 30 June 2003. Pension arrangements for new employees are provided under a defined contribution Retirement Savings Plan. The company makes contributions to the plan equal to two times the employee's core contributions which can be three, four or five per cent of salary.

In the US, the Cash Balance Retirement Plan is a funded, tax-qualified, defined benefit arrangement.

In the US, the BOC Top-Hat Pension Plan is an un-funded, non-tax-qualified, defined benefit arrangement which tops up the benefits provided under the Cash Balance Retirement Plan.

In Australia, the BOC Gases Superannuation Fund is a funded, defined contribution arrangement underpinned by a defined benefit guarantee for long-serving employees who were members under a prior benefit structure.

Details of directors' individual remuneration, share options, LTIP awards and share holdings are given on pages 70 to 75.

### Outside appointments

The remuneration committee's view is that non-executive directorships are a significant benefit in broadening executives' experience. Any such appointments are subject to review by the nominations committee and the approval of the board.

### Remuneration proposals

During the year the remuneration committee reviewed the performance-related elements of the executive remuneration package and decided that it was necessary to make a number of changes. In considering the current package and possible changes, the remuneration committee was concerned more with the effectiveness of some of the arrangements rather than their level. As stated the policy is to pay salaries and total remuneration around mid-market levels for on target performance and to provide the opportunity, via annual and long-term incentives, to reward executives at the 75th percentile if this is justified by the achievement of stretching performance goals. There is no intention to change this policy. The proposed changes are intended to make the reward package more effective. It will increase the expected value of the total package for the achievement of stretching performance goals. The proposed changes also enhance the retention value of our remuneration arrangements. The remuneration committee believes that the annual bonus plan (VCP) and the LTIP are effective and do focus attention on the main drivers of BOC's performance, particularly ROCE and earnings growth. There is also alignment with shareholder interests via the TSR element of the LTIP and the fact that awards under the LTIP are delivered in shares. However, the remuneration committee has become concerned about the efficiency and effectiveness of the Executive Share Option Scheme. Being totally dependent upon stockmarket movements, share options can generate a range of rewards from large to zero with variable motivational or retention value. The remuneration committee is also concerned that the dilution impact of options is inefficient from a shareholder standpoint.

For the reasons outlined above the remuneration committee proposes:

to cease making option awards under the Executive Share Option Scheme (ESOS) to the executive directors and other executives covered by the VCP. However, the ESOS will be kept in place for the time being for employees below this level until an alternative scheme can be developed in the near future. The facility will also be kept to make option awards to executives who are covered by VCP on an exceptional basis, for example as part of a hiring package. There is however no intention to make any further awards to existing executive directors;

to increase the target and maximum value of the VCP to 110 per cent and 160 per cent respectively of salary and at the same time introduce a deferred, share-matching plan, compulsorily deferring one-third of the VCP bonus (see details below). The current target value of the VCP is 73.4 per cent and the plan is capped at 100 per cent;

to seek approval to increase the maximum award levels to be made under the LTIP from 200 per cent to 250 per cent of salary. The remuneration committee's purpose in seeking approval for a higher maximum is simply to give flexibility to remain fully competitive in the event that a higher level of award is required for an appointment to an executive role. In the immediate term, however, this change would have little practical impact as the intention next year is simply to increase the chief executive's conditional share award from 1.9 times salary to 2.0 times and to make no increase to the 1.5 times salary award received by other directors last year.

## Report on remuneration

### Current expected value (chart 3)

1 Fixed 38% 2 Annual variable 27% 3 Long-term incentives 35%

### Proposed expected value (chart 4)

1 Fixed 33% 2 Annual variable 24% 3 Long-term incentives 43%

### Current measures and their weights for variable incentives using on target VCP awards and the expected values of long-term incentives (chart 5)

1 Personal 15% 2 TSR 16% 3 EPS 30% 4 ROCE 39%

### Proposed measures and their weights for variable incentives using on target VCP awards and the expected values of long-term incentives (chart 6)

1 Personal 18% 2 TSR 14% 3 EPS 32% 4 ROCE 36%

## Share Matching Plan

The main features of the proposed Share Matching Plan are as follows:

at the same time that the VCP opportunity is increased, one-third of any VCP award (an amount equivalent to the increase) will be compulsorily applied to the acquisition of BOC shares;

the executives will become entitled to these shares only if they are still in service with BOC three years after the award is made;

executives will then receive an additional number of shares equal to the value of dividends paid during the deferral period on these shares;

executives may also receive a matching share award of up to 100 per cent of the number of shares originally allotted. The percentage award will depend on BOC's performance over the deferral period. Adjusted EPS will account for 75 per cent of the performance weighting with TSR accounting for the remaining 25 per cent;

the adjusted EPS performance condition is based upon the company's EPS relative to three year targets. These targets will be on a sliding scale, where a five per cent per annum growth rate over three years is required for the minimum award of 25 per cent of that portion. The maximum award will be achieved if EPS growth is 12 per cent per annum over the three year period;

the TSR performance condition compares BOC's TSR performance against the same UK comparator group as used for the LTIP. Awards will vest for this portion where BOC's TSR position is at median, measured over three years.

At this point 25 per cent of this portion of the award will vest. A maximum award of 25 per cent overall will vest if the company is ranked at or above the upper quartile.

As previously stated, it is the view of the remuneration committee that performance-related remuneration should form a substantial element of total remuneration. The effect of these proposals would lead to a shift in the balance of variable performance-related remuneration to fixed remuneration (see charts 3 and 4).

The weightings for the performance measures as a percentage of salary for on target performance would also change (see charts 5 and 6).

## Non-executive directors

Non-executive directors are initially appointed for a three year term after which, whilst not automatic, their appointment may be extended for a second term subject to mutual agreement and shareholder approval. The fees are set at a level which will attract individuals with the necessary experience and ability to make a significant contribution to The BOC Group's affairs and are benchmarked with those fees paid by other UK listed companies. The basic fees

for the non-executive directors are £40,000 per annum, £10,000 of which, less tax, is invested in BOC shares. In addition, the fees for chairing a committee are £10,000 per annum, £5,000 of which, less tax, is invested in BOC shares. The fees were last reviewed in November 2003. The next review will be in November 2005. The fee for Rob Margetts, company chairman, which was set at £225,000 in 2001 will be increased to £260,000.

The non-executive directors do not have contracts of service nor do they participate in the Group's variable compensation arrangements, its long-term incentive arrangements or its pension arrangements, nor do they receive any benefits in kind.

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## Report on remuneration

### Service contracts

The company's policy is for all executive directors to have contracts of employment that terminate on the attainment of retirement age. In order to mitigate its liability on early termination, the company's policy is that it should be able to terminate such contracts on no more than 12 months' notice, and that payments on termination are restricted to the value of salary, car benefit and bonus entitlement (calculated on the basis of the average of actual payments over the preceding two years) for the unexpired portion of the notice period. Pension provisions on termination are detailed in the individual service contracts below.

**Individual service contracts** Mr Bevan has a contract dated 5 December 2002 that can be terminated by the company on 12 months' notice. In the event of early termination, the contract provides for the payment of compensation based on the value of salary, car benefit and bonus entitlement (calculated on the basis of the average of actual payments over the preceding two years) for the unexpired portion of the notice period. Mr Bevan would also be entitled to his deferred pension, with the unexpired portion of the notice period being added to his pensionable service in the calculation of his pension entitlement.

Mr Isaac has a contract dated 19 November 2002, varied by letter dated 1 June 2004, which expires upon the conclusion of the Annual General Meeting in 2007 subject to possible extension by mutual agreement. The contract can be terminated by the company on 12 months' notice. In the event of early termination, the contract provides for the payment of compensation based on the value of salary, car benefit and bonus entitlement (calculated on the basis of the average of actual payments over the preceding two years) for the unexpired portion of the notice period. Mr Isaac would also be entitled to a contribution to his funded unapproved retirement benefit scheme amounting to the sum of 40 per cent of his pay above the pension cap imposed by the Finance Act 1989 and 58.33 per cent (50 per cent prior to 6 April 2003) of his pay up to the cap for the unexpired portion of his notice period.

Mr Médori has a contract dated 19 November 2002 that can be terminated by the company on 12 months' notice. In the event of early termination, the contract provides for the payment of compensation based on the value of salary, car benefit and bonus entitlement (calculated on the basis of the average of actual payments over the preceding two years) for the unexpired portion of the notice period. Mr Médori would also be entitled (a) to have his deferred pension from the UK senior executive pension scheme paid without actuarial reduction from age 55; and (b) to an immediate payment representing the discounted value of the difference in the capital values of a pension calculated as in (a) and a pension calculated as in (a) but with the addition of the unexpired portion of his notice period in the calculation of pensionable service.

Dr Rajagopal has a contract dated 1 May 1999, amended 22 November 2002, that can be terminated by the company on 12 months' notice. In the event of early termination, the contract provides for the payment of compensation based on the value of salary, car benefit and bonus entitlement (calculated on the basis of the average of actual payments over the preceding two years) for the unexpired portion of the notice period. Dr Rajagopal would also be entitled to have his deferred pension from the UK senior executive pension scheme (a) calculated with the inclusion of the unexpired portion of his notice period in the calculation of pensionable service; and (b) paid without actuarial reduction from age 55.

Mr Walsh has a contract dated 21 November 2002 that can be terminated by the company on 12 months' notice. In the event of early termination, the contract provides for the payment of compensation based on the value of salary, car benefit and bonus entitlement (calculated on the basis of the average of actual payments over the preceding two years) for the unexpired portion of the notice period. Additionally, the unexpired portion of Mr Walsh's notice period would be added to his pensionable service in the calculation of his pension entitlement from the US Top-Hat Pension Plan.

All the above contracts can be terminated by the individual director on six months' notice.

**Shareholding guidelines**

The remuneration committee encourages the executive management group to grow personal shareholding in the business over time. It is anticipated that each executive would build towards a shareholding of one times salary. The remuneration committee believes that the vehicle of the long-term incentive arrangements will facilitate the building of such a shareholding over a period of time.

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**Report on remuneration****Directors' emoluments and compensation**

	<b>2004</b>	2003
<b>Charged against profit in the year</b>	<b>£ 000</b>	£ 000
Salaries and benefits	<b>2,853</b>	2,578
Annual bonuses payable for the year	<b>2,055</b>	1,038
Fees to non-executive directors	<b>499</b>	423
	<b>5,407</b>	4,039
Company pension contributions to money purchase plans	<b>283</b>	279
Company pension contributions to lump sum benefit plans	<b>145</b>	196
Provision for share incentive schemes <sup>1</sup>	<b>1,011</b>	387
Payments to former directors and their dependants <sup>2</sup>	<b>31</b>	2,160
	<b>6,877</b>	7,061

	<b>Year ended 30 September 2004</b>				2003
	<b>Basic salary/fees</b>	<b>Allowances and benefits<sup>3</sup></b>	<b>Bonus payable</b>	<b>Total remuneration</b>	Total remuneration
<b>Individual remuneration</b>	<b>£ 000</b>	<b>£ 000</b>	<b>£ 000</b>	<b>£ 000</b>	£ 000
<i>Chairman</i>					
R J Margetts	<b>225</b>			<b>225</b>	225
<i>Executive directors</i>					
J A Bevan	<b>323</b>	<b>214</b>	<b>323</b>	<b>860</b>	496
A E Isaac <sup>4</sup>	<b>686</b>	<b>136</b>	<b>686</b>	<b>1,508</b>	1,143
R Médori <sup>5</sup>	<b>360</b>	<b>288</b>	<b>360</b>	<b>1,008</b>	810
Dr K Rajagopal	<b>343</b>	<b>16</b>	<b>343</b>	<b>702</b>	526
J L Walsh	<b>343</b>	<b>144</b>	<b>343</b>	<b>830</b>	641
<i>Non-executive directors</i>					
J M Baddeley	<b>49</b>			<b>49</b>	43
A R J Bonfield	<b>39</b>			<b>39</b>	7
G N Dawson <sup>6</sup>	<b>23</b>			<b>23</b>	
M F C Miao	<b>39</b>			<b>39</b>	35
I J G Napier <sup>6</sup>	<b>17</b>			<b>17</b>	
Sir Christopher O' Donnell	<b>49</b>			<b>49</b>	43
A C Quinn <sup>6</sup>	<b>17</b>			<b>17</b>	
<i>Directors retiring in the year</i>					
F R Arredondo <sup>8</sup>	<b>17</b>			<b>17</b>	35
R G Mendoza <sup>8</sup>	<b>24</b>			<b>24</b>	35
<b>Total</b>	<b>2,554</b>	<b>798</b>	<b>2,055</b>	<b>5,407</b>	4,039

1. This represents the amount charged to operating profit for those elements of the various share incentive schemes relating to directors.



2. Of the amount recognised in 2003, £2,089,000 relates to Mr Grant, who resigned from the board on 31 December 2002.
3. Includes overseas and relocation expenses.
4. Mr Isaac was the highest paid director in 2004.
5. The allowances and benefits of Mr Médori include a salary supplement of £103,600 (2003: £97,700) in respect of the pensions earnings cap.
6. Mr Dawson was appointed to the board on 1 March 2004 and Mr Napier and Ms Quinn were both appointed to the board on 1 May 2004. The remuneration above is the total remuneration earned since their appointment.
7. Fees in respect of Sir Christopher O Donnell are paid to Smith & Nephew plc.
8. Mrs Arredondo resigned from the board on 28 February 2004 and Mr Mendoza resigned from the board on 12 May 2004. The remuneration above, is the total remuneration earned to their date of resignation.
9. The aggregate remuneration charged against profits for directors and members of the executive management board in the year was £10.0 million. Remuneration of members of the executive management board other than directors is given on page 71.

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**Report on remuneration**

**Executive officers** The aggregate remuneration of members of the executive management board, other than directors, for services in all capacities during 2004 was as follows:

	<b>2004</b>
	<b>£'000</b>
Charged against profit in the year	
Salaries, allowances and benefits	<b>1,508</b>
Annual bonuses payable for the year	<b>1,126</b>
Provision for share incentive schemes <sup>1</sup>	<b>454</b>
Company pension contributions	<b>58</b>
	<b>3,146</b>

1. This represents the amount charged to operating profit for those elements of the various share incentive schemes relating to executive officers.

**Directors share interests at 30 September 2004** The directors of the company and their families had the following beneficial interests in the company's securities and rights under the share incentive schemes:

	<b>At 30 September 2004</b>			At 1 October 2003 (or at date of appointment if later)		
	<b>Ordinary shares</b>	<b>Share options</b>	<b>Long-term incentive plan awards</b>	Ordinary shares	Share options	Long-term incentive plan awards
J M Baddeley	2,268			1,254		
J A Bevan	17,108	307,107	95,490	16,070	269,993	38,659
A R J Bonfield	1,175			500		
G N Dawson	892					
A E Isaac	8,057	1,129,824	279,387	5,700	1,096,535	127,867
R J Margetts	34,000			17,000		
R Médori	16,772	442,496	107,312	16,772	435,253	44,652
M F C Miao	3,447			2,772		
I J G Napier	779					
Sir Christopher O'Donnell	2,274			2,179		
A C Quinn	779					
Dr K Rajagopal	21,816	549,765	102,432	14,416	526,589	42,622
J L Walsh	22,175	477,412	102,432	13,175	452,089	42,622
<i>Directors retiring in the year</i>						
F R Arredondo				991		
R G Mendoza	11,232			10,763		

There has been no change in the interest of any of the directors between 1 October 2004 and 18 November 2004.

No director had a non-beneficial interest at 30 September 2004 or between 1 October 2004 and 18 November 2004. Options are granted over Ordinary shares of 25p each under senior executive and general employee share option schemes.

Apart from the above and service agreements, no director has had any material interest in any contract with the company or its subsidiaries requiring disclosure under the Companies Act 1985.

At 30 September 2004, members of the executive management board, other than directors, had the following aggregate beneficial interests in the company's securities: 28,881 Ordinary shares; 1,327,525 share options and 315,899 long-term incentive plan awards. The cumulative shareholdings of the company's directors and members of the executive management board represent less than one per cent of the company's outstanding Ordinary shares.

**Report on remuneration****Directors share interests movements during the year***Share options*

	At			At	Exercise	Opening	Earliest	Latest		
	1 October	Granted	Exercised	Lapsed	September	price	at date	exercise	exercise	Notes
	2003				2004	pence	of	date	date	
							exercise			
							price			
							pence			
J A Bevan										
	6,000				6,000	722		10/02/98	10/02/05	c.
	10,000				10,000	919		14/02/99	14/02/06	c.
	10,000				10,000	980		21/02/00	21/02/07	c.
	10,000				10,000	914		11/02/01	11/02/08	c.
	30,000				30,000	894		18/11/01	18/11/08	c.
	45,000				45,000	937		26/05/03	26/05/10	
	301			301		870		01/07/03	31/12/03	a. b.
	35,000				35,000	993		07/02/04	07/02/11	
	619		619			766	921	01/04/04	30/09/04	a. b.
	419		419			894	921	01/04/04	30/09/04	a. b.
	55,000				55,000	1016		06/02/05	06/02/12	
	67,654				67,654	776		06/02/06	06/02/13	
		36,574			36,574	820		14/11/06	14/11/13	
		1,879			1,879	795		01/04/09	30/09/09	a.
	269,993	38,453	1,038	301	307,107					
A E Isaac										
	45,000		45,000			716	923	16/11/98	16/11/04	b.
	50,000				50,000	722		10/02/98	10/02/05	c.
	50,000				50,000	919		14/02/99	14/02/06	c.
	2,357		2,357			827	827	01/05/03	31/10/03	a. b.
	50,000				50,000	980		21/02/00	21/02/07	c.
	50,000				50,000	914		11/02/01	11/02/08	c.
	50,000				50,000	851		10/02/02	10/02/09	c.
	250,000				250,000	937		26/05/03	26/05/10	
	200,000				200,000	993		07/02/04	07/02/11	
	200,000				200,000	1016		06/02/05	06/02/12	
	149,178				149,178	776		06/02/06	06/02/13	
		80,646			80,646	820		14/11/06	14/11/13	
	1,096,535	80,646	47,357		1,129,824					
R Médori										
	20,000		20,000			677	827	11/02/98	11/02/04	b.

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15,000		15,000		722	927	10/02/98	10/02/05	c.
15,000			15,000	919		14/02/99	14/02/06	c.
15,000			15,000	980		21/02/00	21/02/07	c.
30,000			30,000	914		11/02/01	11/02/08	c.
30,000			30,000	851		10/02/02	10/02/09	c.
100,000			100,000	937		26/05/03	26/05/10	
2,112			2,112	870		01/08/07	31/01/08	a. b.
50,000			50,000	993		07/02/04	07/02/11	
80,000			80,000	1016		06/02/05	06/02/12	
78,141			78,141	776		06/02/06	06/02/13	
	42,243		42,243	820		14/11/06	14/11/13	
435,253	42,243	35,000	442,496					

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**Report on remuneration**

	At 1 October 2003	Granted	Exercised	Lapsed	At 30 September 2004	Exercise price pence	Opening market price at date of exercise pence	Earliest exercise date	Latest exercise date	Notes
<b>Dr K Rajagopal</b>										
	15,000		15,000			677	871	11/02/98	11/02/04	b.
	25,000				25,000	722		10/02/98	10/02/05	c.
	35,000				35,000	919		14/02/99	14/02/06	c.
	471			471		827		01/05/03	31/10/03	a. b.
	20,000				20,000	848		14/08/99	14/08/06	c.
	35,000				35,000	980		21/02/00	21/02/07	c.
	50,000				50,000	914		11/02/01	11/02/08	c.
	1,676			1,676		823		01/05/02	31/10/03	a. b.
	50,000				50,000	851		10/02/02	10/02/09	c.
	87,500				87,500	937		26/05/03	26/05/10	
	50,000				50,000	993		07/02/04	07/02/11	
	80,000				80,000	1016		06/02/05	06/02/12	
	74,589				74,589	776		06/02/06	06/02/13	
	2,353				2,353	698		01/05/08	31/10/08	a. b.
	40,323				40,323	820		14/11/06	14/11/13	
	526,589	40,323	15,000	2,147	549,765					
<b>J L Walsh</b>										
	15,000		15,000			677	839	11/02/98	11/02/04	b.
	10,000				10,000	722		10/02/98	10/02/05	c.
	10,000				10,000	919		14/02/99	14/02/06	c.
	12,500				12,500	980		21/02/00	21/02/07	c.
	30,000				30,000	914		11/02/01	11/02/08	c.
	70,000				70,000	851		10/02/02	10/02/09	c.
	100,000				100,000	937		26/05/03	26/05/10	
	50,000				50,000	993		07/02/04	07/02/11	
	80,000				80,000	1016		06/02/05	06/02/12	
	74,589				74,589	776		06/02/06	06/02/13	
	40,323				40,323	820		14/11/06	14/11/13	
	452,089	40,323	15,000		477,412					

- a. Options granted under the Savings Related Share Option scheme. All other options shown above are granted under the executive share option schemes.
- b. Options with no performance conditions attached. All other options shown above have performance related conditions attached to them. These conditions are described on pages 65 and 66.

c. The performance conditions attaching to these options have been satisfied.

The total gains made by directors on options exercised during the year were £208,400 (2003: £1,500).

At 30 September 2004, there were 1,905,000 options outstanding where the exercise price exceeded the market price of 884p. During the year, the share price ranged from a high of 949p to a low of 791.5p.

**Report on remuneration****Long-Term Incentive Plan - movements during the year**

	At		At		Performance period	Earliest exercise date	Latest exercise date
	1 October	Granted	September	30			
J A Bevan	2003		2004		01/10/02	06/02/06	06/02/13
	38,659		38,659		30/09/05	04/02/07	
		56,831	56,831		01/10/03	30/09/06	04/02/14
	38,659	56,831	95,490				
A E Isaac	127,867		127,867		01/10/02	06/02/06	06/02/13
		151,520	151,520		30/09/05	04/02/07	
					01/10/03	30/09/06	04/02/14
	127,867	151,520	279,387				
R Médori	44,652		44,652		01/10/02	06/02/06	06/02/13
		62,660	62,660		30/09/05	04/02/07	
					01/10/03	30/09/06	04/02/14
	44,652	62,660	107,312				
Dr K Rajagopal	42,622		42,622		01/10/02	06/02/06	06/02/13
		59,810	59,810		30/09/05	04/02/07	
					01/10/03	30/09/06	04/02/14
	42,622	59,810	102,432				
J L Walsh	42,622		42,622		01/10/02	06/02/06	06/02/13
		59,810	59,810		30/09/05	04/02/07	
					01/10/03	30/09/06	04/02/14
	42,622	59,810	102,432				

The performance conditions attaching to the above awards are shown on page 65. Awards take the form of nil cost options.

**Pensions**

The pension arrangements for each individual director are as follows:

Mr Bevan's pension is provided under the Australian superannuation fund. On retirement at age 60 he will be entitled to the accumulated value of his defined contribution fund subject to that not being less than the guaranteed lump sum of approximately six times his final 12 months' salary.

Mr Isaac's pension is being funded in the UK through a combination of a tax-approved personal pension plan and a funded unapproved retirement benefit scheme.

Mr Médori's pension benefits are funded under the UK senior executive pension scheme on earnings up to the earnings cap imposed by the Finance Act 1989. On retirement at age 60, he will be entitled to a pension of 57.5 per cent of capped earnings. In addition, he has a vested deferred benefit, under the US Cash Balance Retirement Plan, which he will be entitled to take as a lump sum on retirement at age 60. Mr Médori also receives a salary supplement



on earnings above the earnings cap to reflect the loss of pension coverage.

Dr Rajagopal's pension benefits are funded under the UK senior executive pension scheme. On retirement at age 60, he will be entitled to a pension of two-thirds of his final 12 months' salary.

Mr Walsh's pension is provided under the US Cash Balance Retirement Plan and the US Top-Hat Pension Plan, which, in combination, entitle Mr Walsh to a lump sum benefit on retirement at age 62 equivalent to a pension of approximately 66 per cent of final base salary. In accordance with local competitive practices existing in his country of operation prior to his appointment as a director, Mr Walsh's bonus is pensionable.

Further details of the pension plans for executive directors are given below.

### Defined benefit plans

	Deferred benefit at 30 September 2004 £'000	Increase in deferred benefit in year £'000	Transfer value at 1 October 2003 £'000	Transfer value at 30 September 2004 £'000	Change in transfer value less member's contributions £'000	Increase in deferred benefit (net of inflation) £'000	Transfer value of increase in deferred benefit (net of inflation) £'000
<i>Annual pension</i>							
R Médori	15	4	100	147	41	3	33
Dr K Rajagopal	165	15	1,667	2,002	317	10	127
<i>Lump sum benefit<sup>1</sup></i>							
J A Bevan	1,162	60	1,102	1,162	60	29	29
R Médori	165	21	144	165	21	16	16
J L Walsh	512	124	388	512	124	112	112

1. All amounts have been retranslated at the exchange rate prevailing at 30 September 2004. All transfer values have been calculated in accordance with Actuarial Guidance Note GN11.

**Report on remuneration**

**Money purchase plans** The company made contributions in the year to money purchase plans in respect of the following directors:

	<b>2004</b>	2003
	<b>£'000</b>	£'000
A E Isaac	<b>270</b>	252
J L Walsh	<b>13</b>	13
<i>Former director</i>		
R S Grant		14
	<b>283</b>	279

**Excess retirement benefits**

No person who has served as a director at any time during the financial year has received retirement benefits in excess of those to which he or she was entitled on the date that the benefits first became payable.

**Sums paid to third parties**

Except for fees paid to Smith & Nephew plc for the services of Sir Christopher O'Donnell as noted on page 70, no consideration was paid to or receivable by any third party in respect of any person who served as a director during the financial year.

**Auditable part of the report on remuneration**

The following sections and tables constitute the auditable part of the report on remuneration, as defined in Part 3, Schedule 7A of the Companies Act 1985:

- a) sections relating to Long-Term Incentive Plan , Executive Share Option Scheme 2003 , Pensions , Excess retirement benefits and Sums paid to third parties ;
- b) tables headed Individual remuneration , Directors' share interests at 30 September 2004 , Directors' share interests movements during the year , Long-Term Incentive Plan movements during the year , Defined benefits plans and Money purchase plans .

The report on remuneration has been approved by the board and signed on its behalf by:

**Julie Baddeley** Remuneration committee chairman

22 November 2004



## **RESPONSIBILITY OF THE DIRECTORS**

For preparation of the financial statements

Company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the company and of the Group at the end of the year and of the profit or loss for the year. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company and the Group will continue in business.

The directors confirm that the financial statements comply with the above requirements.

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the company and the Group and enable them to ensure that the financial statements comply with the Companies Act 1985. The directors also have general responsibility for taking reasonable steps to safeguard the assets of the company and the Group and to prevent and detect fraud and other irregularities.

A copy of the financial statements of the company is placed on the website of The BOC Group plc. The directors are responsible for the maintenance and integrity of statutory and audited information on the company's website. Information published on the Internet is accessible in many countries with different legal requirements. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

## **REPORT BY THE INDEPENDENT AUDITORS**

To the members of The BOC Group plc

### **Independent auditors' report to the members of The BOC Group plc**

We have audited the financial statements which comprise the Group profit and loss account, the Group balance sheet, the Group cash flow statement, the total recognised gains and losses, the movement in shareholders' funds, the balance sheet of The BOC Group plc, Group undertakings, accounting policies and the related notes. We have also audited the disclosures required by Part 3 of Schedule 7A to the Companies Act 1985 contained in the report on remuneration (the auditable part).

### **Respective responsibilities of directors and auditors**

The directors' responsibilities for preparing the Annual Report and the financial statements in accordance with applicable United Kingdom law and accounting standards are set out in the statement of directors' responsibilities. The directors are also responsible for preparing the report on remuneration.

Our responsibility is to audit the financial statements and the auditable part of the report on remuneration in accordance with relevant legal and regulatory requirements and United Kingdom Auditing Standards issued by the Auditing Practices Board. This report, including the opinion, has been prepared for and only for the company's members as a body in accordance with Section 235 of the Companies Act 1985 and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

We report to you our opinion as to whether the financial statements give a true and fair view and whether the financial statements and the auditable part of the report on remuneration have been properly prepared in accordance with the Companies Act 1985. We also report to you if, in our opinion, the report of the directors is not consistent with the financial statements, if the company has not kept proper accounting records, if we have not received all the information and explanations we require for our audit, or if information specified by law regarding directors' remuneration and transactions is not disclosed.

We read the other information contained in the Annual Report and consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the financial statements. The other information comprises only the financial highlights, chairman's statement, chief executive's review, board of directors, executive management board, Group five year record, Group profile, employees, social, environmental and ethical performance, research and development and information technology, risk factors, operating review, financial review, the unaudited part of the report on remuneration, responsibility of the directors, dividends, nature of trading market, analysis of shareholdings, taxation, financial calendar, key contacts information, cross reference to Form 20-F and glossary of terms.

We review whether the corporate governance statement reflects the company's compliance with the seven provisions of the Combined Code issued in June 1998 specified for our review by the Listing Rules of the Financial Services Authority, and we report if it does not. We are not required to consider whether the board's statements on internal control cover all risks and controls, or to form an opinion on the effectiveness of the company's or Group's corporate governance procedures or its risk and control procedures.

### **Basis of audit opinion**

We conducted our audit in accordance with Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements and the auditable part of the report on remuneration. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the financial statements, and of whether the

accounting policies are appropriate to the company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements and the auditable part of the report on remuneration are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

### **Opinion**

In our opinion the financial statements give a true and fair view of the state of affairs of the company and the Group at 30 September 2004 and of the profit and cash flows of the Group for the year then ended; the financial statements have been properly prepared in accordance with the Companies Act 1985; and those parts of the report on remuneration required by Part 3 of Schedule 7A to the Companies Act 1985 have been properly prepared in accordance with the Companies Act 1985.

### **PricewaterhouseCoopers LLP**

Chartered Accountants and Registered Auditors

London, England

22 November 2004

**GROUP PROFIT AND LOSS ACCOUNT**

Years ended 30 September

	Notes	2004		2003		2002				
		Before exceptional items	After exceptional items	Before exceptional items	After exceptional items	Before exceptional items	After exceptional items			
		£ million	£ million	£ million	£ million	£ million	£ million			
<b>Turnover, including share of joint ventures and associates</b>	1	<b>4,599.3</b>	<b>4,599.3</b>	4,323.2	4,323.2	4,017.9	4,017.9			
<i>Less: Share of turnover of joint ventures</i>		<b>647.0</b>	<b>647.0</b>	544.3	544.3	324.1	324.1			
<i>Share of turnover of associates</i>		<b>66.9</b>	<b>66.9</b>	60.6	60.6	36.1	36.1			
Turnover of subsidiary undertakings		<b>3,885.4</b>	<b>3,885.4</b>	3,718.3	3,718.3	3,657.7	3,657.7			
Cost of sales	2(a)	<b>(2,181.7)</b>	<b>(2,181.7)</b>	(2,136.2)	(2,137.9)	(2,089.7)	(2,104.8)			
Gross profit		<b>1,703.7</b>	<b>1,703.7</b>	1,582.1	1,580.4	1,568.0	1,552.9			
Net operating expenses	2(a)	<b>(1,239.3)</b>	<b>(14.8)</b>	<b>(1,254.1)</b>	(1,174.7)	(58.5)	(1,233.2)	(1,142.4)	(58.9)	(1,201.3)
<b>Operating profit of subsidiary undertakings</b>		<b>464.4</b>	<b>(14.8)</b>	<b>449.6</b>	407.4	(60.2)	347.2	425.6	(74.0)	351.6
<i>Share of operating profit of joint ventures</i>		<b>99.4</b>	<b>(2.6)</b>	<b>96.8</b>	86.8	(6.8)	80.0	63.8	(0.5)	63.3
<i>Share of operating profit of associates</i>		<b>13.1</b>		<b>13.1</b>	11.4		11.4	10.7		10.7
<b>Total operating profit including share of joint ventures and associates</b>	1	<b>576.9</b>	<b>(17.4)</b>	<b>559.5</b>	505.6	(67.0)	438.6	500.1	(74.5)	425.6
<i>Loss on termination/disposal of businesses continuing operations</i>	2(b)		<b>(79.5)</b>	<b>(79.5)</b>					(20.2)	(20.2)

Profit on disposal of fixed assets continuing operations	2(b)		<b>4.9</b>	<b>4.9</b>						
Profit on ordinary activities before interest		<b>576.9</b>	<b>(92.0)</b>	<b>484.9</b>	505.6	(67.0)	438.6	500.1	(94.7)	405.4
Interest on net debt	3	<b>(88.4)</b>		<b>(88.4)</b>	(96.1)		(96.1)	(103.1)		(103.1)
Interest on pension scheme liabilities	8(a)	<b>(117.4)</b>		<b>(117.4)</b>	(110.2)		(110.2)	(106.1)		(106.1)
Expected return on pension scheme assets	8(a)	<b>133.2</b>		<b>133.2</b>	119.6		119.6	139.1		139.1
Other net financing income		<b>15.8</b>		<b>15.8</b>	9.4		9.4	33.0		33.0
<b>Profit on ordinary activities before tax</b>		<b>504.3</b>	<b>(92.0)</b>	<b>412.3</b>	418.9	(67.0)	351.9	430.0	(94.7)	335.3
Tax on profit on ordinary activities	4(a)	<b>(146.2)</b>	<b>44.5</b>	<b>(101.7)</b>	(121.4)	25.0	(96.4)	(129.0)	22.8	(106.2)
Profit on ordinary activities after tax		<b>358.1</b>	<b>(47.5)</b>	<b>310.6</b>	297.5	(42.0)	255.5	301.0	(71.9)	229.1
Minority interests equity		<b>(46.6)</b>		<b>(46.6)</b>	(36.8)	0.4	(36.4)	(26.7)	0.5	(26.2)
<b>Profit for the financial year</b>		<b>311.5</b>	<b>(47.5)</b>	<b>264.0</b>	260.7	(41.6)	219.1	274.3	(71.4)	202.9
Dividends	9	<b>(197.3)</b>		<b>(197.3)</b>	(192.1)		(192.1)	(186.6)		(186.6)
Retained profit for the financial year		<b>114.2</b>	<b>(47.5)</b>	<b>66.7</b>	68.6	(41.6)	27.0	87.7	(71.4)	16.3
<b>Earnings per 25p Ordinary share</b>	10									
basic		<b>63.2p</b>	<b>(9.7)p</b>	<b>53.5p</b>	52.9p	(8.4)p	44.5p	55.9p	(14.5)p	41.4p
diluted		<b>63.1p</b>	<b>(9.6)p</b>	<b>53.5p</b>	52.9p	(8.4)p	44.5p	55.7p	(14.5)p	41.2p

All turnover and operating profit arose from continuing operations.  
Acquisitions in 2004 were not material.



**GROUP BALANCE SHEET**

At 30 September

	Notes	2004 £ million	2003 (restated) £ million
<b>Fixed assets</b>			
Intangible assets	11	174.9	206.1
Tangible assets	12	2,618.4	2,913.4
Investment in joint ventures			
share of gross assets		996.1	870.3
share of gross liabilities		(737.4)	(468.0)
		258.7	402.3
loans to joint ventures		199.3	103.0
Investment in associates			
share of net assets		52.4	59.6
loans to associates		3.3	4.9
Other investments		34.5	38.8
Investments	13	548.2	608.6
		3,341.5	3,728.1
<b>Current assets</b>			
Stocks	14	284.4	284.2
Debtors falling due within one year	15(a)	705.6	697.8
Debtors falling due after more than one year	15(b)	16.3	23.6
Investments	16	20.8	21.8
Cash at bank and in hand	17	228.2	77.5
		1,255.3	1,104.9
<b>Creditors: amounts falling due within one year</b>			
Borrowings and finance leases	18(a)	(262.1)	(360.9)
Other creditors	18(b)	(872.6)	(807.3)
		(1,134.7)	(1,168.2)
<b>Net current assets/(liabilities)</b>		<b>120.6</b>	<b>(63.3)</b>
<b>Total assets less current liabilities</b>		<b>3,462.1</b>	<b>3,664.8</b>
<b>Creditors: amounts falling due after more than one year</b>			
Borrowings and finance leases	19(a)	(928.5)	(1,084.7)
Other creditors	19(b)	(34.7)	(48.4)

		<b>(963.2)</b>	(1,133.1)
<b>Provisions for liabilities and charges</b>			
Deferred tax	22	<b>(253.0)</b>	(279.2)
Other	22	<b>(92.2)</b>	(97.4)
<b>Total provisions for liabilities and charges</b>		<b>(345.2)</b>	(376.6)
<b>Total net assets excluding pension assets and liabilities</b>		<b>2,153.7</b>	2,155.1
Pension assets	8(a)	<b>68.9</b>	50.7
Pension liabilities	8(a)	<b>(344.5)</b>	(341.8)
<b>Total net assets including pension assets and liabilities</b>		<b>1,878.1</b>	1,864.0
<b>Capital and reserves</b>			
Equity called up share capital	23	<b>124.7</b>	124.4
Share premium account	24(a)	<b>374.9</b>	366.0
Revaluation reserves	24(a)	<b>30.1</b>	30.8
Profit and loss account	24(a)	<b>1,181.5</b>	1,199.1
Pensions reserves	24(a)	<b>(253.6)</b>	(291.1)
Joint ventures reserves	24(a)	<b>238.0</b>	273.3
Associates reserves	24(a)	<b>26.0</b>	33.0
Own shares	24(a)	<b>(46.3)</b>	(48.8)
<b>Equity shareholders funds</b>		<b>1,675.3</b>	1,686.7
Minority shareholders equity interests		<b>202.8</b>	177.3
<b>Total capital and reserves</b>		<b>1,878.1</b>	1,864.0

The financial statements were approved by the board of directors on 22 November 2004 and are signed on its behalf by:

**A E Isaac** Director **R Médori** Director

**GROUP CASH FLOW STATEMENT**

Years ended 30 September

		<b>2004</b>	2003	2002
	Notes	<b>£ million</b>	(restated) £ million	(restated) £ million
<b>Net cash inflow from operating activities</b>	27(a)	<b>758.5</b>	700.1	759.3
<b>Dividends from joint ventures and associates</b>				
Dividends from joint ventures		<b>69.0</b>	31.7	30.5
Dividends from associates		<b>10.1</b>	3.3	3.4
<b>Dividends from joint ventures and associates</b>		<b>79.1</b>	35.0	33.9
<b>Returns on investments and servicing of finance</b>				
Interest paid		<b>(83.3)</b>	(94.4)	(89.6)
Interest received		<b>13.9</b>	16.6	18.5
Dividends paid to minorities in subsidiaries		<b>(19.3)</b>	(12.4)	(13.9)
Interest element of finance lease rental payments		<b>(2.5)</b>	(4.2)	(5.7)
<b>Returns on investments and servicing of finance</b>		<b>(91.2)</b>	(94.4)	(90.7)
<b>Tax paid</b>		<b>(98.2)</b>	(90.7)	(96.2)
<b>Capital expenditure and financial investment</b>				
Purchases of tangible fixed assets		<b>(244.6)</b>	(281.4)	(352.1)
Sales of tangible fixed assets		<b>39.7</b>	37.0	31.6
Purchases of intangible fixed assets		<b>(0.2)</b>	(1.2)	(0.1)
Net (purchases)/sales of current asset investments		<b>(0.9)</b>	16.6	4.3
Purchases of trade and other investments		<b>(3.8)</b>	(3.3)	(19.7)
Sales of trade and other investments		<b>5.6</b>	5.3	0.9
<b>Capital expenditure and financial investment</b>		<b>(204.2)</b>	(227.0)	(335.1)
<b>Acquisitions and disposals</b>				
Acquisitions of businesses	28(a)	<b>(50.9)</b>	(135.5)	(207.3)
Net cash/(overdrafts) acquired with subsidiaries		<b>2.8</b>		(7.4)
Disposals of businesses	28(a)	<b>98.3</b>	3.9	10.6
Net cash disposed of with subsidiaries			(0.1)	
Receipts from capital restructuring of joint ventures <sup>1</sup>		<b>53.0</b>		
Investments in joint ventures		<b>(12.9)</b>		(12.6)
Divestments/repayments from joint ventures			12.4	
Investments in associates		<b>(3.9)</b>	(8.4)	(0.5)
Divestments/repayments from associates		<b>6.1</b>	9.4	1.7
<b>Acquisitions and disposals</b>		<b>92.5</b>	(118.3)	(215.5)

<b>Equity dividends paid</b>		<b>(197.3)</b>	(192.1)	(186.6)
<b>Net cash inflow/(outflow) before use of liquid resources and financing</b>		<b>339.2</b>	12.6	(130.9)
<b>Management of liquid resources</b>				
Net (purchases)/sales of short-term investments		<b>(20.8)</b>	16.2	52.6
<b>Financing</b>				
Issue of shares		<b>12.4</b>	(2.6)	35.6
(Decrease)/increase in debt	27(d)	<b>(180.7)</b>	(128.7)	64.1
<b>Net cash (outflow)/inflow from financing</b>		<b>(168.3)</b>	(131.3)	99.7
<b>Increase/(decrease) in cash</b>		<b>150.1</b>	(102.5)	21.4

1. Receipts from capital restructuring of joint ventures relates to an amount received in September 2004 from Japan Air Gases Ltd. This has no impact on BOC's effective shareholding.

A reconciliation of the movement in cash to the movement in net debt in the year is given in note 27(b).

Liquid resources are defined as short-term deposits.

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**TOTAL RECOGNISED GAINS AND LOSSES**

Years ended 30 September

	Notes	2004 £ million	2003 £ million	2002 £ million
Parent <sup>1</sup>	24(b)	11.4	218.6	26.2
Subsidiary undertakings		269.8	(0.4)	170.1
Joint ventures		(13.1)	(0.2)	4.5
Associates		(4.1)	1.1	2.1
<b>Profit for the financial year</b>		<b>264.0</b>	219.1	202.9
Actuarial loss recognised on the pension schemes		(2.2)	(17.5)	(431.2)
Movement on deferred tax relating to actuarial loss on pensions		(8.1)	2.0	134.0
Movement on current tax relating to actuarial loss on pensions		3.2		
Unrealised loss on write-down of revaluation reserve				(11.5)
Unrealised profit on disposal of a subsidiary			8.2	
Exchange translation effect on:				
results for the year of subsidiaries		0.2	8.0	(5.2)
results for the year of joint ventures		(0.7)	0.2	(2.6)
results for the year of associates		(0.1)	(0.2)	(0.3)
foreign currency net investments in subsidiaries		(76.1)	15.3	(114.6)
foreign currency net investments in joint ventures		(21.5)	9.6	(11.9)
foreign currency net investments in associates		(2.8)	(1.4)	(1.7)
<b>Total recognised gains and losses for the financial year</b>	24(a)	<b>155.9</b>	243.3	(242.1)

1. In accordance with the concession granted under the Companies Act 1985, the profit and loss account of The BOC Group plc has not been presented separately in these financial statements.
2. There were no material differences between reported profits and losses and historical cost profits and losses on ordinary activities before tax for 2004, 2003 and 2002.
3. Profit attributable to the parent company includes dividends received from subsidiaries, joint ventures and associates, often through intermediate holding companies. These dividends may include the distribution of earnings of previous periods. As a result, the relationship of profit between parent, subsidiaries, joint ventures and associates may show fluctuations from year to year.
4. Excluding the amounts recognised above, a current tax release of £6.7 million (2003: £9.7 million, 2002: £(13.5) million charge) has been recognised directly in the Group reserves.

**MOVEMENT IN SHAREHOLDERS FUNDS**

Years ended 30 September

Notes	2004	2003 (restated)	2002 (restated)
		£ million	£ million

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	<b>£</b>		
	<b>million</b>		
Profit for the financial year	<b>264.0</b>	219.1	202.9
Dividends	<b>(197.3)</b>	(192.1)	(186.6)
	<b>66.7</b>	27.0	16.3
Other recognised gains and losses	<b>(108.1)</b>	24.2	(445.0)
Reversal of goodwill in total recognised gains and losses on disposal of subsidiaries	<b>15.3</b>	(4.2)	
Shares issued	<b>8.7</b>	3.7	24.6
Consideration paid for the purchase of own shares held in an ESOP trust		(7.5)	
Consideration received for the sale of own shares held in an ESOP trust	<b>2.5</b>	1.2	17.0
Credit in respect of employee share schemes	<b>3.5</b>	0.7	2.0
<b>Net (decrease)/increase in shareholders funds for the financial year</b>	<b>(11.4)</b>	45.1	(385.1)
Shareholders funds at 1 October previously reported	<b>1,734.8</b>	1,684.1	2,086.2
Prior year adjustment	31 <b>(48.1)</b>	(42.5)	(59.5)
Shareholders funds at 1 October restated	<b>1,686.7</b>	1,641.6	2,026.7
Shareholders funds at 30 September	<b>1,675.3</b>	1,686.7	1,641.6

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**BALANCE SHEET OF THE BOC GROUP plc**

At 30 September

	Notes	2004 £ million	2003 (restated) £ million
<b>Fixed assets</b>			
Tangible assets	12(e)	11.3	15.7
Investments	13(d)	2,982.6	3,058.0
		<b>2,993.9</b>	3,073.7
<b>Current assets</b>			
Debtors falling due within one year	15(a)	320.4	694.4
Cash at bank and in hand	17	80.8	
		<b>401.2</b>	694.4
<b>Creditors: amounts falling due within one year</b>			
Borrowings and finance leases	18(a)	(252.1)	(303.6)
Other creditors	18(b)	(1,004.1)	(1,049.9)
		<b>(1,256.2)</b>	(1,353.5)
<b>Net current liabilities</b>		<b>(855.0)</b>	(659.1)
<b>Total assets less current liabilities</b>		<b>2,138.9</b>	2,414.6
<b>Creditors: amounts falling due after more than one year</b>			
Borrowings and finance leases	19(a)	(674.5)	(766.6)
Other creditors	19(b)	(3.2)	(10.4)
		<b>(677.7)</b>	(777.0)
<b>Total net assets</b>		<b>1,461.2</b>	1,637.6
<b>Capital and reserves</b>			
Equity called up share capital	23	124.7	124.4
Share premium account	24(b)	374.9	366.0
Other reserves	24(b)	336.4	336.4
Profit and loss account	24(b)	671.0	854.0
Own shares	24(b)	(45.8)	(43.2)
<b>Total capital and reserves</b>		<b>1,461.2</b>	1,637.6

The financial statements were approved by the board of directors on 22 November 2004 and are signed on its behalf by:

**A E Isaac** Director **R Médori** Director

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## ACCOUNTING POLICIES

### General

**Basis of preparation** These financial statements are based on the historical cost accounting convention in accordance with the Companies Act 1985 and comply with all applicable UK accounting standards.

UK accounting standards differ in certain respects from those generally accepted in the US and the major effects of these differences in the determination of net income and shareholders' funds are shown in note 30 to the financial statements. Disclosure requirements of both the UK and US are incorporated throughout the notes to these financial statements.

**Basis of consolidation** The Group accounts include the accounts of the parent undertaking and of all subsidiaries, joint ventures and associates.

The results of businesses acquired during the year are included from the effective date of acquisition. The results of businesses disposed of during the year are included up to the date of relinquishing control. Material, separately identifiable business segments disposed of are analysed as discontinued operations and prior years' analyses are restated to reflect those businesses as discontinued.

**Accounting policies** These accounts have been prepared on an accounting basis consistent with that applied in the financial year ended 30 September 2003, except for changes arising from the application of UITF37: Purchases and sales of own shares, and UITF38: Accounting for ESOP trusts. These deal mainly with the balance sheet accounting treatment for own shares and do not have an impact on Group earnings. Comparative figures have been restated accordingly. The impact is explained further in note 31 to the financial statements.

**Exchange** Profit and loss and other period statements of the Group's overseas operations are translated at average rates of exchange for the financial year. Assets and liabilities denominated in foreign currencies are translated at the rates of exchange ruling at the financial year end. Assets or liabilities swapped into other currencies are accounted for in those currencies. Exchange differences are dealt with as a movement in reserves where they arise from:

- i) the translation of the opening net assets of overseas operations;
- ii) the retranslation of retained earnings of overseas operations from average to closing rates of exchange; and
- iii) the translation or conversion of foreign currency borrowings taken to hedge overseas assets.

All other exchange differences are taken to the profit and loss account. The principal exchange rates affecting the Group are shown in the financial review on page 55.

### Revenue recognition

Turnover is based on the invoiced value of the sale of goods and services, and includes the sales value of long-term contracts appropriate to the state of completion. It excludes sales between Group undertakings, VAT and similar sales-based taxes. Turnover for goods and services is recognised when the significant risks and rewards of ownership are transferred to the customer. This is determined to be when delivery has occurred, title of the goods has passed to the purchaser, and where the price is fixed or determinable and reflects the commercial substance of the transaction. Sales returns are not a significant business issue in the industries in which the Group operates.

Profit on long-term contracts is recognised on a percentage of completion basis. Provision is made for all losses incurred together with any foreseeable future losses.

### Retirement benefits

Retirement benefits are accounted for under FRS17.

For defined benefit schemes the regular service cost of providing retirement benefits to employees during the year is charged to operating profit in the year. The full cost of providing amendments to benefits in respect of past service is also charged to operating profit in the year.

A credit representing the expected return on the assets of the retirement benefit schemes during the year is included within other net financing income. This is based on the market value of the assets of the schemes at the start of the financial year.

A charge representing the expected increase in the liabilities of the retirement benefit schemes during the year is included within other net financing income. This arises from the liabilities of the schemes being one year closer to payment.

Differences between actual and expected returns on assets during the year are recognised in the statement of total recognised gains and losses in the year, together with differences arising from changes in assumptions.

For defined contribution schemes the cost of providing benefits is charged to operating profit as incurred.

### **Research and development**

Revenue expenditure on research and development is written off when incurred.

### **Operating leases**

The cost of operating leases is written off on the straight line basis over the period of the lease.

### **Intangible fixed assets**

**Goodwill** Goodwill arising on the acquisition of a business, being the excess of the fair value of the purchase price over the fair value of the net assets acquired, is capitalised and amortised on a straight line basis over its useful economic life, generally up to a maximum period of 20 years. An impairment review is carried out at the end of the first full financial year following acquisition. Any impairment in the value of goodwill, calculated by discounting estimated future cash flows, is dealt with in the profit and loss account in the period in which it arises. Negative goodwill, being the excess of the fair value of the net assets acquired over the fair value of the purchase price, is capitalised and amortised on a straight line basis, generally over a period equivalent to the realisation of the non-monetary assets acquired.

Goodwill, both positive and negative, arising on acquisitions before 30 September 1998 was taken to reserves and has not been reinstated on the balance sheet. This is in line with the relevant accounting standard on goodwill, FRS10. This goodwill will remain in reserves until such time as it becomes impaired or the business or businesses to which it relates are disposed of, at which time it will be taken to the profit and loss account or statement of total recognised gains and losses where appropriate.

**Intangibles** Other material intangible assets acquired, such as patents and trademarks, are capitalised and written off on the straight line basis over their effective economic lives.

## Accounting policies

### Tangible fixed assets

Tangible fixed assets are stated at cost less accumulated depreciation. No depreciation is charged on freehold land or construction in progress. Depreciation is charged on all other fixed assets on the straight line basis over the effective lives. Straight line depreciation rates vary according to the class of asset, but are typically:

	Per annum
Freehold property	2% 4%
Leasehold property (or at higher rates based on the life of the lease)	2% 4%
Plant and machinery	3% 10%
Cylinders	4% 10%
Motor vehicles	7% 20%
Computer hardware and major software	15% 25%

Until 30 September 1999, land and buildings were revalued periodically. Following the adoption of FRS15, land and buildings are no longer revalued. At 1 October 1999, the net book value of assets previously revalued is regarded as the historical cost.

Interest costs on major fixed asset additions are capitalised during the construction period and written off as part of the total cost.

Where finance leases have been entered into, the capital element of the obligations to the lessor are shown as part of borrowings and the rights in the corresponding assets are treated in the same way as owned fixed assets.

Any impairment in the value of fixed assets, calculated by comparing the carrying value against the higher of the net realisable value or value in use, is dealt with in the profit and loss account in the period in which it arises.

### Investments

Investments which are held for the long term and in which the Group has a participating interest and exercises joint control with one or more other parties are treated as joint ventures and accounted for on the gross equity method. Investments which are held for the long term and in which the Group has a participating interest and exercises significant influence are treated as associates and accounted for on the equity method. In both cases, the Group's share of the results of the investment is included in the profit and loss account, and the Group's share of the net assets is included in investments in the balance sheet. Other investments are shown on the balance sheet at cost less any provision for impairment.

### Stocks

Stocks and work in progress are valued at the lower of cost and net realisable value. Cost where appropriate includes a proportion of overhead expenses. Work in progress is stated at cost less progress payments received or receivable. Cost is arrived at principally on the average and first-in, first-out (FIFO) basis. The amount of long-term contracts, net of amounts transferred to cost of sales and after deducting foreseeable losses and payments on account, is included in stocks as long-term contract amounts.

### Deferred tax

The Group provides for deferred tax assets and liabilities arising from timing differences between the recognition of gains and losses in the financial statements and their recognition for tax purposes. Deferred tax assets are only recognised where it is more likely than not that they will be recovered. Deferred tax assets and liabilities are not discounted.

### **Provisions**

Provisions are made when an obligation exists for a future liability in respect of a past event and where the amount of the obligation can be reliably estimated. Restructuring provisions are made for direct expenditures of a business reorganisation where the plans are sufficiently detailed and well advanced, and where appropriate communication to those affected has been undertaken at the balance sheet date.

### **Financial instruments**

The Group uses financial instruments, including interest rate and currency swaps, to raise finance for its operations and to manage the risks arising from those operations. All transactions are undertaken only to manage interest and currency risk associated with the Group's underlying business activities and the financing of those activities. The Group does not undertake any trading activity in financial instruments.

**Foreign exchange transaction exposures** The Group generally hedges actual and forecast foreign exchange exposures up to two years ahead. Forward contracts are used to hedge the forecast exposure and any gains or losses resulting from changes in exchange rates on contracts designated as hedges of forecast foreign exchange are deferred until the financial period in which they are realised. If the contract ceases to be a hedge, any gains and losses are recognised through the profit and loss account.

**Balance sheet translation exposures** A large proportion of the Group's net assets are denominated in currencies other than sterling. Where practicable and cost effective the Group hedges these balance sheet translation exposures by borrowing in relevant currencies and markets and by the use of currency swaps. Currency swaps are used only as balance sheet hedging instruments, and the Group does not hedge the currency translation of its profit and loss account. Exchange gains and losses arising on the notional principal of these currency swaps during their life and at termination or maturity are dealt with as a movement in reserves. If the swap ceases to be a hedge of the underlying transaction, any gains or losses are recognised in the profit and loss account.

**Interest rate risk exposures** The Group hedges its exposure to movements in interest rates associated with its borrowings primarily by means of interest rate swaps and forward rate agreements. Interest payments and receipts on these agreements are included with net interest payable. They are not revalued to fair value and shown on the Group balance sheet at the balance sheet date.

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## NOTES TO THE FINANCIAL STATEMENTS

### 1. Segmental information

#### a) Turnover (including share of joint ventures and associates)

	Continuing operations					Total Group by origin	Total Group by destination
	Process Gas Solutions	Industrial and Special Products	BOC	Afrox hospitals	Gist		
	£ million	£ million	£ million	£ million	£ million	£ million	£ million
<i>2004</i>							
Europe	292.8	449.1	189.5		293.2	1,224.6	1,162.7
Americas	523.4	422.6	272.3			1,218.3	1,171.6
Africa	36.1	230.8		432.1		699.0	699.4
Asia/Pacific	422.9	679.8	354.7			1,457.4	1,565.6
Turnover	1,275.2	1,782.3	816.5	432.1	293.2	4,599.3	4,599.3
<i>2003</i>							
Europe	278.3	430.0	154.3		291.8	1,154.4	1,137.4
Americas	517.5	461.7	259.6			1,238.8	1,191.5
Africa	30.8	201.3		353.4		585.5	588.0
Asia/Pacific	416.1	658.2	270.2			1,344.5	1,406.3
Turnover	1,242.7	1,751.2	684.1	353.4	291.8	4,323.2	4,323.2
<i>2002</i>							
Europe	257.1	399.3	150.0		263.2	1,069.6	1,055.3
Americas	528.1	464.8	298.9			1,291.8	1,240.1
Africa	23.6	158.4		259.0		441.0	443.3
Asia/Pacific	391.8	582.8	239.3		1.6	1,215.5	1,279.2
Turnover	1,200.6	1,605.3	688.2	259.0	264.8	4,017.9	4,017.9

Inter segment turnover is not material.

#### b) Business analysis

Continuing operations  
Industrial

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	Process Gas Solutions £ million	and Special Products £ million	BOC Edwards £ million	Afrox hospitals £ million	Gist £ million	Corporate £ million	Total Group £ million
<i>2004</i>							
Total operating profit before exceptional items <sup>1</sup>	<b>190.3</b>	<b>269.5</b>	<b>47.8</b>	<b>59.8</b>	<b>25.1</b>	<b>(15.6)</b>	<b>576.9</b>
Operating exceptional items <sup>1</sup>	<b>(0.8)</b>	<b>(15.6)</b>	<b>(1.0)</b>				<b>(17.4)</b>
Operating profit	<b>189.5</b>	<b>253.9</b>	<b>46.8</b>	<b>59.8</b>	<b>25.1</b>	<b>(15.6)</b>	<b>559.5</b>
Loss on disposal of business		<b>(79.5)</b>					<b>(79.5)</b>
Profit on disposal of fixed assets	<b>4.9</b>						<b>4.9</b>
Capital employed <sup>2</sup>	<b>1,625.2</b>	<b>943.9</b>	<b>548.1</b>	<b>162.5</b>	<b>6.9</b>	<b>(66.2)</b>	<b>3,220.4</b>
Capital expenditure <sup>3</sup>	<b>100.1</b>	<b>99.4</b>	<b>30.1</b>	<b>17.5</b>	<b>9.0</b>		<b>256.1</b>
Depreciation and amortisation <sup>3</sup>	<b>156.0</b>	<b>101.5</b>	<b>40.1</b>	<b>12.3</b>	<b>12.9</b>	<b>1.2</b>	<b>324.0</b>
<i>2003 (restated)</i>							
Total operating profit before exceptional items <sup>1</sup>	184.0	242.7	18.5	46.1	29.2	(14.9)	505.6
Operating exceptional items <sup>1</sup>	(6.9)	(4.5)	(10.6)			(45.0)	(67.0)
Operating profit	177.1	238.2	7.9	46.1	29.2	(59.9)	438.6
Capital employed <sup>2</sup>	1,822.9	1,158.1	596.1	167.2	0.8	(88.0)	3,657.1
Capital expenditure <sup>3</sup>	93.1	105.2	37.6	17.8	22.3	5.2	281.2
Depreciation and amortisation <sup>3</sup>	165.8	101.2	39.1	9.8	15.8	1.7	333.4
<i>2002 (restated)</i>							
Total operating profit before exceptional items <sup>1</sup>	185.2	248.0	26.1	29.7	25.5	(14.4)	500.1
Operating exceptional items <sup>1</sup>	(24.0)	(18.7)	(27.5)			(4.3)	(74.5)
Operating profit	161.2	229.3	(1.4)	29.7	25.5	(18.7)	425.6
(Loss)/profit on termination/disposal of businesses <sup>1</sup>	(21.3)		1.1				(20.2)
Capital employed <sup>2</sup>	1,831.3	1,058.1	595.3	105.0	22.8	(61.9)	3,550.6
Capital expenditure <sup>3</sup>	157.3	123.6	42.0	9.2	19.0	3.2	354.3
Depreciation and amortisation <sup>3</sup>	167.7	96.8	41.1	7.2	16.1	2.0	330.9

1. Including share of joint ventures and associates.

2. Capital employed comprises the capital and reserves of the Group, its long-term liabilities and all current borrowings net of cash and deposits.

3. Subsidiary undertakings only.

4. Net interest and net borrowings are managed centrally and are not directly attributable to individual business segments or regions.



## Notes to the financial statements

### 1. Segmental information continued

#### c) Regional analysis

	Europe £ million	Americas £ million	Africa £ million	Asia/Pacific £ million	Total Group £ million
<i>2004</i>					
Total operating profit before exceptional items <sup>1</sup>	<b>155.4</b>	<b>77.4</b>	<b>108.9</b>	<b>235.2</b>	<b>576.9</b>
Operating exceptional items <sup>1</sup>		<b>(14.8)</b>		<b>(2.6)</b>	<b>(17.4)</b>
Operating profit	<b>155.4</b>	<b>62.6</b>	<b>108.9</b>	<b>232.6</b>	<b>559.5</b>
Loss on disposal of business		<b>(79.5)</b>			<b>(79.5)</b>
Profit on disposal of fixed assets	<b>4.9</b>				<b>4.9</b>
Capital employed <sup>2</sup>	<b>796.6</b>	<b>992.9</b>	<b>335.4</b>	<b>1,095.5</b>	<b>3,220.4</b>
Capital expenditure <sup>3</sup>	<b>72.3</b>	<b>71.8</b>	<b>44.2</b>	<b>67.8</b>	<b>256.1</b>
<i>2003 (restated)</i>					
Total operating profit before exceptional items <sup>1</sup>	144.3	91.8	85.0	184.5	505.6
Operating exceptional items <sup>1</sup>	(7.3)	(49.1)		(10.6)	(67.0)
Operating profit	137.0	42.7	85.0	173.9	438.6
Capital employed <sup>2</sup>	866.2	1,225.0	321.5	1,244.4	3,657.1
Capital expenditure <sup>3</sup>	102.7	79.1	36.7	62.7	281.2
<i>2002 (restated)</i>					
Total operating profit before exceptional items <sup>1</sup>	155.2	121.3	56.7	166.9	500.1
Operating exceptional items <sup>1</sup>	(38.4)	(8.1)	(0.4)	(27.6)	(74.5)
Operating profit	116.8	113.2	56.3	139.3	425.6
(Loss)/profit on termination/disposal of businesses <sup>1</sup>	(1.5)	(18.7)			(20.2)
Capital employed <sup>2</sup>	907.4	1,241.3	221.2	1,180.7	3,550.6
Capital expenditure <sup>3</sup>	121.4	134.7	25.6	72.6	354.3

1. Including share of joint ventures and associates.
2. Capital employed comprises the capital and reserves of the Group, its long-term liabilities and all current borrowings net of cash and deposits.
3. Subsidiary undertakings only.
4. Net interest and net borrowings are managed centrally and are not directly attributable to individual business segments or regions.

#### d) Joint ventures and associates - business analysis

Joint ventures		Associates
Industrial	Industrial	



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	Process Gas Solutions £ million	and Special Products £ million	BOC Edward £ million	Process Gas Solutions £ million	and Special Product £ million	BOC Edward £ million	Afrox hospitals £ million
<i>2004</i>							
Turnover <sup>1</sup>	<b>230.0</b>	<b>238.9</b>	<b>178.1</b>	<b>36.3</b>	<b>7.7</b>	<b>5.5</b>	<b>17.4</b>
Operating profit before exceptional items <sup>1</sup>	<b>40.8</b>	<b>30.4</b>	<b>28.2</b>	<b>6.3</b>	<b>0.7</b>	<b>1.4</b>	<b>4.7</b>
Operating exceptional items <sup>1</sup>	<b>(0.8)</b>	<b>(0.8)</b>	<b>(1.0)</b>				-
Operating profit	<b>40.0</b>	<b>29.6</b>	<b>27.2</b>	<b>6.3</b>	<b>0.7</b>	<b>1.4</b>	<b>4.7</b>
Capital employed <sup>2</sup>	<b>89.5</b>	<b>69.3</b>	<b>99.9</b>	<b>35.3</b>	<b>4.9</b>	<b>2.5</b>	<b>9.7</b>
Capital expenditure	<b>58.5</b>	<b>15.5</b>	<b>30.1</b>	<b>2.1</b>	<b>2.7</b>	<b>0.1</b>	-
Group share	<b>25.7</b>	<b>7.4</b>	<b>14.8</b>	<b>0.6</b>	<b>0.7</b>		-
Other partners	<b>32.8</b>	<b>8.1</b>	<b>15.3</b>	<b>1.5</b>	<b>2.0</b>	<b>0.1</b>	-
Depreciation and amortisation <sup>1</sup>	<b>27.0</b>	<b>10.2</b>	<b>10.1</b>	<b>2.7</b>	<b>0.5</b>	<b>0.1</b>	<b>1.0</b>
<i>2003</i>							
Turnover <sup>1</sup>	191.9	221.6	130.8	30.9	8.6	5.7	15.4
Operating profit before exceptional items <sup>1</sup>	39.0	25.6	22.2	5.8	0.7	1.4	3.5
Operating exceptional items <sup>1</sup>	(2.5)	(1.8)	(2.5)				
Operating profit	36.5	23.8	19.7	5.8	0.7	1.4	3.5
Capital employed <sup>2</sup>	183.8	108.2	118.0	40.8	7.2	3.3	8.3
Capital expenditure	40.7	10.5	20.7	8.0	1.1	0.4	
Group share	17.7	5.1	10.3	2.5	0.3	0.2	
Other partners	23.0	5.4	10.4	5.5	0.8	0.2	
Depreciation and amortisation <sup>1</sup>	28.0	10.1	9.6	5.4	1.2	0.6	0.7

1. Group share.

2. Capital employed comprises the Group's share of the net assets of joint ventures or associates.

3. The decrease in capital employed of joint ventures in 2004 is principally due to the acquisition of an additional 30 per cent ownership interest in the Cantarell joint venture (see note 28a)).

4. The increase in joint ventures in 2003 is principally due to the formation of the Japan Air Gases business in January 2003. Prior to that all of BOC's turnover in Japan was reported by subsidiary companies.

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## Notes to the financial statements

## 1. Segmental information continued

	Joint ventures				Associates		
	Process Gas Solutions £ million	Industrial and Special Products £ million	BOC Edwards £ million	Process Gas Solutions £ million	Industrial and Special Products £ million	BOC Edwards £ million	Afrox hospitals £ million
<i>2002</i>							
Turnover <sup>1</sup>	119.9	142.7	61.5	10.6	7.9	7.1	10.5
Operating profit before exceptional items <sup>1</sup>	30.9	20.8	12.1	5.0	1.9	1.7	2.1
Operating exceptional items <sup>1</sup>	(0.4)	(0.1)					
Operating profit	30.5	20.7	12.1	5.0	1.9	1.7	2.1
Capital employed <sup>2</sup>	93.6	63.8	48.1	40.1	11.9	2.1	3.4
Capital expenditure	46.5	7.5	8.0	8.3	1.8	1.5	0.6
Group share	23.0	3.7	4.0	2.6	0.6	0.4	0.2
Other partners	23.5	3.8	4.0	5.7	1.2	1.1	0.4
Depreciation and amortisation <sup>1</sup>	20.9	8.2	6.1	2.9	0.7	0.1	0.2

1. Group share.

2. Capital employed comprises the Group's share of the net assets of joint ventures or associates.

## e) Joint ventures and associates regional analysis

	Joint ventures		Associates		
	Americas £ million	Asia/Pacific £ million	Americas £ million	Africa £ million	Asia/Pacific £ million
<i>2004</i>					
Turnover <sup>1</sup>	<b>87.6</b>	<b>559.4</b>	<b>26.5</b>	<b>17.4</b>	<b>23.0</b>
Operating profit before exceptional items <sup>1</sup>	<b>17.2</b>	<b>82.2</b>	<b>1.1</b>	<b>4.7</b>	<b>7.3</b>
Operating exceptional items <sup>1</sup>		<b>(2.6)</b>			
Operating profit	<b>17.2</b>	<b>79.6</b>	<b>1.1</b>	<b>4.7</b>	<b>7.3</b>
Capital employed <sup>2</sup>	<b>(30.0)</b>	<b>288.7</b>	<b>12.5</b>	<b>9.7</b>	<b>30.2</b>
Capital expenditure	<b>6.0</b>	<b>98.1</b>	<b>0.1</b>		<b>4.8</b>
Group share	<b>2.4</b>	<b>45.5</b>			<b>1.3</b>

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Other partners	<b>3.6</b>	<b>52.6</b>	<b>0.1</b>		<b>3.5</b>
<i>2003</i>					
Turnover <sup>1</sup>	68.0	476.3	19.1	15.4	26.1
Operating profit before exceptional items <sup>1</sup>	19.1	67.7	(0.7)	3.5	8.6
Operating exceptional items <sup>1</sup>		(6.8)			
Operating profit	19.1	60.9	(0.7)	3.5	8.6
Capital employed <sup>2</sup>	26.5	383.5	13.1	8.3	38.2
Capital expenditure	13.8	58.1	6.0		3.5
Group share	5.4	27.7	1.8		1.2
Other partners	8.4	30.4	4.2		2.3
<i>2002</i>					
Turnover <sup>1</sup>	85.4	238.7		10.5	25.6
Operating profit before exceptional items <sup>1</sup>	21.9	41.9		2.1	8.6
Operating exceptional items <sup>1</sup>		(0.5)			
Operating profit	21.9	41.4		2.1	8.6
Capital employed <sup>2</sup>	25.2	180.3	13.7	3.4	40.4
Capital expenditure	3.4	58.6	5.5	0.6	6.1
Group share	1.4	29.3	1.7	0.2	1.9
Other partners	2.0	29.3	3.8	0.4	4.2

1. Group share.
2. Capital employed comprises the Group's share of the net assets of joint ventures or associates.
3. The decrease in capital employed of joint ventures in 2004 is principally due to the acquisition of an additional 30 per cent ownership interest in the Cantarell joint venture (see note 28a)).
4. The increase in joint ventures in 2003 is principally due to the formation of the Japan Air Gases business in January 2003. Prior to that all of BOC's turnover in Japan was reported by subsidiary companies.

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**Notes to the financial statements****1. Segmental information** continued**f) Significant country analysis**

	<b>2004</b>	2003	UK 2002	<b>2004</b>	2003	US 2002
	<b>£ million</b>	£ million	£ million	<b>£ million</b>	£ million	£ million
Turnover <sup>1</sup>	<b>973.9</b>	914.3	868.7	<b>959.7</b>	1,013.5	1,065.6
Total operating profit before exceptional items <sup>1</sup>	<b>112.9</b>	110.4	115.2	<b>21.5</b>	31.3	50.5
Operating exceptional items <sup>1</sup>		(5.0)	(36.5)	<b>(14.8)</b>	(48.9)	(25.7)
Operating profit	<b>112.9</b>	105.4	78.7	<b>6.7</b>	(17.6)	24.8
Loss on disposal of business				<b>(79.5)</b>		
Profit on disposal of fixed assets	<b>4.9</b>					
Capital employed <sup>2</sup> (restated)	<b>575.8</b>	629.5	696.9	<b>820.7</b>	1,039.5	1,088.9
Capital expenditure <sup>3</sup>	<b>60.7</b>	92.4	110.0	<b>56.2</b>	71.0	124.8

1. Including share of joint ventures and associates.
2. Capital employed comprises the capital and reserves of the Group, its long-term liabilities and all current borrowings net of cash and deposits.
3. Subsidiary undertakings only.

**2. Profit and loss****a) Analysis of costs**

<i>i) Expense category</i>	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Cost of sales	<b>(2,181.7)</b>	(2,137.9)	(2,104.8)
Distribution costs	<b>(317.7)</b>	(321.7)	(344.1)
Administrative expenses <sup>1</sup>	<b>(936.6)</b>	(913.2)	(861.4)
Income from other fixed asset investments	<b>0.2</b>	1.7	4.2
Net operating expenses	<b>(1,254.1)</b>	(1,233.2)	(1,201.3)

	<b>Continuing operations before exceptional items £ million</b>	<b>Exceptional items<sup>2</sup> £ million</b>	<b>Total £ million</b>
<i>ii) 2004 analysis</i>			
Cost of sales	(2,181.7)		(2,181.7)
Distribution costs	(317.7)		(317.7)
Administrative expenses <sup>1</sup>	(921.8)	(14.8)	(936.6)
Income from other fixed asset investments	0.2		0.2
Net operating expenses	(1,239.3)	(14.8)	(1,254.1)
<i>iii) 2003 analysis</i>			
Cost of sales	(2,136.2)	(1.7)	(2,137.9)
Distribution costs	(318.6)	(3.1)	(321.7)
Administrative expenses <sup>1</sup>	(857.8)	(55.4)	(913.2)
Income from other fixed asset investments	1.7		1.7
Net operating expenses	(1,174.7)	(58.5)	(1,233.2)
<i>iv) 2002 analysis</i>			
Cost of sales	(2,089.7)	(15.1)	(2,104.8)
Distribution costs	(341.9)	(2.2)	(344.1)
Administrative expenses <sup>1</sup>	(804.7)	(56.7)	(861.4)
Income from other fixed asset investments	4.2		4.2
Net operating expenses	(1,142.4)	(58.9)	(1,201.3)

1. Included in total administrative expenses is research and development expenditure of £41.6 million (2003: £39.9 million, 2002: £47.0 million).

2. All exceptional items arose in continuing operations.

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**Notes to the financial statements****2. Profit and loss continued****b) Exceptional items analysis**

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
<i>Charged in arriving at operating profit</i>			
Restructuring costs	<b>(17.4)</b>	(23.8)	(47.2)
Litigation settlement		(43.2)	
Write-down of assets			(21.2)
Costs of proposed takeover			(6.1)
<b>Total operating exceptional items</b>	<b>(17.4)</b>	(67.0)	(74.5)

*i) Restructuring costs*

Following the sale of the packaged gas business in the US, costs of £14.8 million have been incurred to restructure the footprint of the remaining business in the US. This covers the severance and other costs of restructuring those functions which are shared by BOC's businesses in the US. Restructuring costs also include a charge of £2.6 million (2003: £8.3 million, 2002: £nil) relating to the integration of BOC's gases business and part of the Air Liquide business in Japan to form Japan Air Gases.

The restructuring costs in 2003 and 2002 related to various programmes including programmes under the business initiative announced in August 2001. The major programmes covered investments in information management systems, the restructuring of BOC Edwards' manufacturing capacity and restructuring to deliver operational efficiencies in Process Gas Solutions and Industrial and Special Products. These programmes have been completed.

Cash flow from operating activities includes an outflow of £11.9 million in 2004 (2003: £28.3 million, 2002: £48.0 million) in respect of the various restructuring programmes.

*ii) Litigation settlement*

An action was filed in the US against The BOC Group Cash Balance Retirement Plan (the Plan). It was alleged that the Plan improperly calculated lump sum distributions from the Plan in violation of the Employee Retirement Income Security Act. In November 2003, the parties reached an agreement to settle at US\$69 million (£43.2 million). The settlement was approved by the court in March 2004. The full amount was provided in 2003 as an exceptional item. The settlement is being paid out of Plan assets.

*iii) Write-down of assets*

The write-down in 2002 related to the merger of BOC's gases business and part of the Air Liquide business in Japan to form Japan Air Gases. The net assets of OSK (the existing BOC gases business in Japan) were reduced to an appropriate amount based on valuations performed ahead of the merger.

*iv) Costs of proposed takeover*

No costs were incurred in 2004 or 2003. The final costs associated with the pre-conditional offer for the Group were incurred in 2002 in respect of share options and other costs related to the retention of key employees.

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
<i>(Charged)/credited after operating profit</i>			
Loss on disposal of business continuing operations	<b>(79.5)</b>		
Profit on disposal of fixed assets continuing operations	<b>4.9</b>		
Profit on disposal of businesses continuing operations			1.1
Closure of business continuing operations			(21.3)
Total non-operating exceptional items	<b>(74.6)</b>		(20.2)

*v) Disposal of businesses*

The sale of the packaged gas business in the US was completed on 30 July 2004. The loss on disposal of £79.5 million includes the write-off of the assets associated with the business, severance and other disposal costs. It also includes a goodwill write-off of £19.9 million, of which £15.3 million had been written off to reserves in the years up to, and including, 1998 in accordance with prevailing UK GAAP at that time.

In 2002 BOC Edwards sold its US glass coating business, resulting in a profit on disposal of £1.1 million.

*vi) Profit on disposal of fixed assets*

The sale of property in the UK in 2004 resulted in a profit of £4.9 million, which has been accounted for as an exceptional item.

*vii) Closure of business*

In 2002 BOC merged its Process Plants business with Linde Engineering in the US to form a new company, Linde BOC Process Plants LLC. Total costs were £21.3 million, which covered severance, the write-down of assets and other costs of winding down the business.

**Notes to the financial statements****2. Profit and loss continued****c) Fees to auditors**

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Audit fees (Parent: £0.4 million, 2003: £0.3 million, 2002: £0.3 million)	<b>2.5</b>	2.0	1.9
<i>Non-audit fees</i>			
Tax services	<b>1.1</b>	1.6	2.5
Audit related services	<b>0.9</b>	0.5	0.8
Other services (principally expatriate tax and administration services)	<b>1.1</b>	1.4	1.8
Total non-audit fees	<b>3.1</b>	3.5	5.1
Total fees paid to auditors	<b>5.6</b>	5.5	7.0

The increase in audit fees includes an adverse currency impact and agreed extension of the scope of the audit in part following acquisitions and disposals. Tax services includes corporate tax compliance, tax planning and advice. Audit related services have increased due to work associated with implementation of the US Sarbanes-Oxley Act 2002 Section 404 which is treated as a non-audit service in 2004. The expatriate administration contract was signed in June 2001 for a five year period following a competitive tender process. Further details of BOC's policy on the use of external auditors for non-audit services is given in the audit committee report on page 59.

**3. Interest on net debt**

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Interest payable on borrowings totally repayable within five years	<b>55.9</b>	48.0	47.5
Interest payable on all other borrowings	<b>35.9</b>	46.5	55.7
Interest payable and similar charges	<b>91.8</b>	94.5	103.2
Interest capitalised	<b>(0.1)</b>	(0.8)	(2.0)
Interest payable (net of interest capitalised)	<b>91.7</b>	93.7	101.2
Interest receivable and similar income	<b>(21.2)</b>	(17.9)	(22.6)
Interest (net)	<b>70.5</b>	75.8	78.6
Share of interest of joint ventures (net)	<b>17.0</b>	19.3	23.2
Share of interest of associates (net)	<b>0.9</b>	1.0	1.3
Total interest on net debt	<b>88.4</b>	96.1	103.1



Interest payable on finance leases	<b>1.7</b>	3.5	5.3
Interest payable on borrowings repayable by installments	<b>10.0</b>	14.1	19.5

Share of interest of joint ventures and associates is after deducting interest capitalised of £0.5 million (2003: £0.1 million, 2002: £nil).

#### 4. Tax

##### a) Tax on profit on ordinary activities

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
<b>Current tax:</b>			
<i>Payable in the UK</i>			
Corporation tax at 30% (2003: 30%, 2002: 30%)	<b>79.8</b>	85.7	51.7
Double tax relief	<b>(52.9)</b>	(57.5)	(19.7)
	<b>26.9</b>	28.2	32.0
<i>Payable overseas</i>			
US Federal tax at 35% (2003: 35%, 2002: 35%)	<b>0.1</b>	0.2	(1.0)
State and local taxes	<b>0.1</b>	(0.3)	0.6
Australia at 30% (2003: 30%, 2002: 30%)	<b>23.2</b>	16.4	14.6
South Africa at 30% (2003: 30%, 2002: 30%)	<b>35.5</b>	26.0	18.0
Japan at 42% (2003: 42%, 2002: 42%)	<b>14.1</b>	11.3	8.3
Other countries	<b>14.3</b>	35.6	30.9
	<b>87.3</b>	89.2	71.4
Total current tax	<b>114.2</b>	117.4	103.4
<b>Deferred tax:</b>			
Origination and reversal of timing differences	<b>(12.4)</b>	(20.9)	3.4
Effect of change in tax rate on opening liability	<b>(0.1)</b>	(0.1)	(0.6)
Total deferred tax <sup>1</sup>	<b>(12.5)</b>	(21.0)	2.8
Tax on profit on ordinary activities	<b>101.7</b>	96.4	106.2

## Notes to the financial statements

## 4. Tax continued

	2004 £ million	2003 £ million	2002 £ million
<i>Analysis of charge in the year by entity type</i>			
Subsidiary undertakings	75.9	77.9	100.3
Share of joint ventures	23.5	16.0	3.6
Share of associates	2.3	2.5	2.3
<b>Tax on profit on ordinary activities</b>	<b>101.7</b>	96.4	106.2

1. The deferred tax includes a credit of £13.5 million (2003: £18.5 million credit, 2002: £9.5 million charge) relating to subsidiary undertakings. The balance relates to the Group's share of joint ventures and associates. The tax charge includes a credit of £18.9 million for operating exceptional items (2003: £25.0 million, 2002: £15.3 million) and a credit of £25.6 million for non-operating exceptional items (2003: £nil, 2002: £7.5 million). The credit in respect of operating exceptional items includes a credit of £12.5 million relating to prior year exceptional items. The effective rate of tax on adjusted profit was 29.0 per cent (2003: 29.0 per cent, 2002: 30.0 per cent). The total rate of tax was 24.7 per cent (2003: 27.4 per cent, 2002: 31.7 per cent).

## b) Deferred tax

	2004 £ million	2003 £ million	2002 £ million
<i>i) Deferred tax UK GAAP</i>			
<i>Analysis</i>			
Arising from accelerated depreciation allowances	312.2	346.5	362.1
Other timing differences	(34.2)	(43.7)	(53.5)
Tax losses and other credits available	(30.8)	(30.2)	(24.7)
	<b>247.2</b>	272.6	283.9
<i>Movement during the year<sup>1</sup></i>			
At 1 October 2003	272.6	283.9	285.9
Exchange adjustment	(3.8)	5.7	(8.6)
Arising during the year	(13.5)	(18.5)	9.5
Transfers (to)/from current tax	(0.2)	(1.0)	0.8
Acquisitions/(disposals) of businesses		(18.7)	
Other movements	(7.9)	21.2	(3.7)
At 30 September 2004	<b>247.2</b>	272.6	283.9

1. Subsidiary undertakings only.

The balance at 30 September 2004 is shown in:

Provisions for liabilities and charges (note 22)	<b>253.0</b>	279.2	291.8
<i>Less: Debtors falling due after more than one year (note 15 b))</i>	<b>5.8</b>	6.6	7.9
	<b>247.2</b>	272.6	283.9

*ii) Deferred tax US GAAP*

For US GAAP reporting, the Group follows SFAS109, Accounting for Income Taxes, in respect of deferred taxation. SFAS109 requires deferred tax to be fully provided on all temporary differences.

The table below provides a reconciliation of deferred taxes from a UK GAAP basis to a US GAAP basis at 30 September 2004.

	UK GAAP £ million	Adjustments to US GAAP £ million	US GAAP £ million
Accelerated capital allowances	312.2		312.2
Other temporary differences	(34.2)	(10.2)	(44.4)
Tax losses and other credits available	(30.8)		(30.8)
	<b>247.2</b>	<b>(10.2)</b>	<b>237.0</b>

- The UK deferred tax balance of £247.2 million does not include the deferred tax asset of £106.4 million relating to the Group's net pension liabilities. As required by the applicable UK GAAP accounting standard, FRS17, this asset is set against the relevant retirement benefit liability to show the net position (see note 8 a)). If it was included above, it would be wholly reversed in the adjustments to US GAAP.

	US GAAP £ million
<i>Movement during the year</i>	
At 1 October 2003	223.0
Exchange adjustment	(6.3)
Arising during the year	1.3
Transfers to current tax	(0.2)
Acquisitions/(disposals) of businesses	
Other movements <sup>2</sup>	19.2
At 30 September 2004	<b>237.0</b>

- This mainly relates to the deferred tax on an additional minimum pension liability under US GAAP. See note 8 c) and 30 e).

**Notes to the financial statements****4. Tax continued**

The components of deferred tax assets/(liabilities) at 30 September 2004 were:

	<b>2004</b>	2003
	<b>£ million</b>	£ million
<i>Long-term</i>		
Asset	<b>153.6</b>	188.0
Liability	<b>(383.9)</b>	(431.8)
Net liability	<b>(230.3)</b>	(243.8)
<i>Short-term</i>		
Asset	<b>19.1</b>	25.8
Liability	<b>(25.8)</b>	(5.0)
Net (liability)/asset	<b>(6.7)</b>	20.8
Total deferred tax assets	<b>172.7</b>	213.8
Total deferred tax liabilities	<b>(409.7)</b>	(436.8)
	<b>(237.0)</b>	(223.0)

**c) Factors affecting the current and total tax charge for the period**

The table set out below provides a reconciliation between the UK corporation tax rate and the Group's total tax rate, and between the UK corporation tax rate and the effective tax rate on adjusted profit, computed by taking the various elements of the tax reconciliation as a percentage of the profit before tax and the adjusted profit before tax.

	Reconciliation of total tax rate			Reconciliation of effective tax rate on adjusted profit		
	<b>2004</b>	2003	2002	<b>2004</b>	2003	2002
	<b>%</b>	%	%	<b>%</b>	%	%
UK corporation tax rate	<b>30.0</b>	30.0	30.0	<b>30.0</b>	30.0	30.0
Difference in tax rates of overseas subsidiaries, joint ventures and associates	<b>1.1</b>	0.5	0.6	<b>0.9</b>	0.4	0.5
Excess of tax depreciation over book depreciation	<b>(2.5)</b>	(3.3)	(5.2)	<b>(2.1)</b>	(2.8)	(3.9)
Other timing differences	<b>(0.9)</b>	2.1	3.5	<b>(0.7)</b>	1.8	2.7
State and local taxes	<b>0.2</b>	0.3	0.6	<b>0.2</b>	0.3	0.5
		0.9	(1.4)		0.7	(1.1)

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Net creation/(utilisation) of losses						
Investment tax credits		(0.1)	(3.0)		(0.1)	(2.4)
Prior year tax	<b>(3.0)</b>	(0.1)	1.2	<b>(2.4)</b>		0.9
Tax effect of exceptional items	<b>3.6</b>	4.4	4.4			
Permanent items and other items with less than a 5% net effect	<b>(0.8)</b>	(1.3)	0.1	<b>(0.7)</b>	(1.1)	0.1
Current total tax rate/effective tax rate	<b>27.7</b>	33.4	30.8	<b>25.2</b>	29.2	27.3
Deferred tax timing differences	<b>(3.0)</b>	(6.0)	0.9	<b>3.8</b>	(0.2)	2.7
Total tax rate/effective tax rate	<b>24.7</b>	27.4	31.7	<b>29.0</b>	29.0	30.0

Profit on ordinary activities before tax, as shown in the consolidated profit and loss account, is analysed over its component parts as follows:

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
UK	<b>83.7</b>	67.0	66.6
Overseas	<b>328.6</b>	284.9	268.7
	<b>412.3</b>	351.9	335.3

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**Notes to the financial statements****4. Tax continued****d) Factors that may affect future tax charges**

The total charge in future periods will be affected by any changes to the corporation tax rates in force in the countries in which the Group operates. The current tax charges will also be affected by changes in the excess of tax depreciation over book depreciation and the use of tax credits.

**e) Unused tax credits**

On a consolidated basis, the Group has net operating loss carryforwards of £57.0 million. If not offset against taxable income, these losses will expire as follows:

Year	Net operating loss £ million
2005	0.9
2006	
2007	
2008	
2009	
Thereafter, or no expiry date	56.1

For US Federal tax purposes, the Group has investment tax credits and general business tax credits to carry forward of approximately £10.3 million, which are available to reduce income taxes otherwise payable. These do not expire until 2006 or thereafter.

In addition, the Group has alternative minimum tax credits for US Federal income tax purposes of approximately £22.7 million which can be carried forward to reduce regular tax liabilities of future years. There is no expiration date on these credits.

Investment tax credits are accounted for by the flow-through method whereby they reduce income taxes currently payable and the provision for income taxes in the period in which the assets giving rise to such credits are placed in service. Deferred tax assets, subject to the need for a valuation allowance, are recognised to the extent that the investment tax credits are not currently utilised.

**5. Directors**

Directors' remuneration and interests are given in the report on remuneration on pages 64 to 75.

**6. Employee numbers****a) Subsidiaries**

	2004		2003
Year end	Average	Year end	Average

*i) Employees by business*

Process Gas Solutions	<b>5,836</b>	<b>5,631</b>	5,730	5,837
Industrial and Special Products	<b>13,874</b>	<b>14,895</b>	15,267	15,142
BOC Edwards	<b>4,911</b>	<b>4,823</b>	4,790	4,931
Afrox hospitals	<b>13,392</b>	<b>13,654</b>	13,694	13,804
Gist	<b>4,961</b>	<b>4,852</b>	4,613	5,343
Corporate	<b>409</b>	<b>405</b>	413	405
	<b>43,383</b>	<b>44,260</b>	44,507	45,462

*ii) Employees by region*

Europe	<b>12,712</b>	<b>12,504</b>	12,353	13,101
Americas	<b>6,283</b>	<b>7,140</b>	7,451	7,411
Africa	<b>16,790</b>	<b>17,073</b>	17,138	17,178
Asia/Pacific	<b>7,598</b>	<b>7,543</b>	7,565	7,772
	<b>43,383</b>	<b>44,260</b>	44,507	45,462

**b) Joint ventures and associates**

Joint ventures	<b>6,094</b>	<b>5,993</b>	6,064	5,626
Associates	<b>906</b>	<b>885</b>	878	877
	<b>7,000</b>	<b>6,878</b>	6,942	6,503

**c) Employment costs**

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Wages and salaries	<b>855.2</b>	844.7	813.9
Social security costs	<b>79.6</b>	77.7	77.7
Other pension costs	<b>80.8</b>	115.4	66.3
	<b>1,015.6</b>	1,037.8	957.9

Other pension costs includes an exceptional credit of £4.4 million (2003: £43.2 million charge, 2002: £nil). See also notes 2 b) and 8 a).

## Notes to the financial statements

## 7. Options and incentive schemes

## a) Policy

Executive options that are granted at the market price of the company's shares at the time of the grant do not attract a compensation expense under UK GAAP. For those executive options, including the Long-Term Incentive Plan, that are granted at a discount to the market price of the company's shares at the time of the grant, the compensation expense is charged to the profit and loss account over the life of the option. The Group takes advantage of the exemption granted under UITF17 (revised 2003), Employee Share Schemes, whereby no compensation expense need be recorded for employee schemes that are granted at a discount.

## b) Summary of movements

BOC operates share option schemes for both executives and employees. The features of these are given in the report on remuneration on pages 65 and 66 and the employees report on page 24.

	Employee options			Executive options			Long-term Executive share incentive plan <sup>1</sup>	award plan <sup>1</sup>
	Number of shares million	Range of option prices	Weighted average option price	Number of shares million	Range of option prices	Weighted average option price	Number of shares million	Number of shares million
<i>Outstanding at 1 October 2001</i>	5.7	610p-894p	835p	21.7	627p-1119p	914p		0.7
Granted	1.2	914p	914p	5.5	1016p-1079p	1016p		
Exercised	(1.0)	610p-914p	787p	(3.1)	627p-980p	868p		(0.7)
Lapsed	(0.5)	610p-914p	857p	(0.6)	742p-1119p	957p		
<i>Outstanding at 30 September 2002</i>	5.4	650p-914p	855p	23.5	677p-1119p	943p		
Granted	2.3	698p	698p	4.9	776p-873p	837p	1.2	
Exercised	(0.3)	650p-914p	826p	(0.4)	677p-851p	751p		
Lapsed	(1.1)	650p-914p	868p	(1.6)	677p-1016p	937p		
<i>Outstanding at 30 September 2003</i>	6.3	698p-914p	801p	26.4	677p-1119p	926p	1.2	
Granted	1.2	795p	795p	2.9	820p-896p	820p	1.4	
Exercised	(0.7)	698p-914p	811p	(0.7)	677p-919p	749p		
Lapsed	(1.2)	698p-914p	821p	(2.0)	677p-1119p	940p	(0.1)	
<i>Outstanding at 30 September 2004</i>	<b>5.6</b>	<b>698p-914p</b>	<b>794p</b>	<b>26.6</b>	<b>722p-1079p</b>	<b>919p</b>	<b>2.5</b>	



<i>Number of participants at 30 September 2004</i>	<b>5,700</b>		<b>1,173</b>		<b>81</b>
<i>Options exercisable:</i>					
At 30 September 2004	<b>0.2</b>	<b>766p-894p</b>	<b>875p</b>	<b>6.3</b>	<b>722p-980p</b>
At 30 September 2003				7.5	677p-1119p
<i>Fair value of options granted during:</i>					
Year ended 30 September 2004	<b>205p</b>		<b>175p</b>		<b>705p</b>
Year ended 30 September 2003	174p		177p		609p

1. The long-term incentive and executive share award plans were granted at an option price of £nil. The weighted average fair value of options granted during the year was calculated using the Black-Scholes option pricing model. Details of the assumptions used are given in note 30 g).

### c) Analysis of options outstanding

	Employee options			Executive options			Long-term incentive plan <sup>1</sup>	
	Number of options thousand	Weighted average option price	Normal exercisable date	Number of options thousand	Weighted average option price	Normal exercisable date	Number of awards thousand	Normal exercisable date
<i>Outstanding at 30 September 2004</i>								
Date of grant								
1995				432	722p	1998-2005		
1996				886	916p	1999-2006		
1997	63	882p	2004-2005	1,004	980p	2000-2007		
1998	293	823p	2005-2006	1,700	915p	2001-2008		
1999	276	766p	2004-2007	2,239	860p	2002-2009		
2000	588	870p	2005-2008	4,564	937p	2003-2010		
2001	578	894p	2004-2009	3,630	994p	2004-2011		
2002	650	914p	2005-2010	4,759	1016p	2005-2012		
2003	1,980	698p	2006-2011	4,606	836p	2006-2013	1,173	2006-2013
2004	1,133	795p	2007-2012	2,825	820p	2007-2014	1,353	2007-2014
	5,561			26,645			2,526	

1. The long-term incentive plan was granted at an option price of £nil.

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## Notes to the financial statements

### 8. Pensions and other retirement benefits

#### a) UK GAAP Group

The Group operates a number of pension schemes throughout the world. The larger schemes are self-administered and the schemes' assets are held independently of the Group's finances. Pension costs are assessed in accordance with the advice of independent, professionally qualified actuaries.

Contributions to funded defined benefit schemes are based on advice from independent actuaries using actuarial methods, the objective of which is to provide adequate funds to meet pension obligations as they fall due. For the two largest schemes, in the UK and US, the dates of the latest actuarial reviews are 31 March 2002 and 1 January 2003 respectively.

In South Africa, under the Pension Funds Second Amendment Act 2001, surpluses in pension funds have to be used in a manner specified in Regulations to the Act to improve current and former members' benefits before the employer can obtain any benefit from the surpluses. Consequently, it is considered unlikely that the company will obtain any benefit from the surpluses in the South African schemes. Therefore, in accordance with FRS17, the surpluses at 30 September 2004 have been written off in the statement of total recognised gains and losses.

In Europe, company contributions to the main scheme in respect of current service are currently payable at a rate of 13.8 per cent of payroll. In the year ended 30 September 2004 the company made additional contributions of £30 million to this scheme in order to reduce the funding valuation deficit. For the year to 30 September 2005, it is expected that additional contributions of £31 million will be made to this scheme, subject to review following the next triennial funding valuation at 31 March 2005.

In the Americas, company contributions to the main pension plan remain suspended as the plan continues to be in surplus.

In Africa, company contributions were payable at rates ranging from 14 per cent to 21 per cent and are expected to remain at that level for the year to 30 September 2005.

In Asia/Pacific, company contributions to the main scheme were payable at rates ranging from 11 per cent to 17 per cent and are expected to remain at that level for the year to 30 September 2005.

Some of the defined benefit schemes, including the UK scheme, are closed to new members. It is therefore expected that under the projected unit method prescribed by FRS17 the current service cost will increase as the members of the schemes approach retirement.

The most recent actuarial funding valuations have been updated by independent qualified actuaries, in order to assess the liabilities of the schemes at 30 September 2004 for the purposes of FRS17. Scheme assets are stated at their market value at 30 September 2004.

<i>Main assumptions for FRS17 purposes</i>	Europe	Americas	Africa	Asia/Pacific
Date of latest actuarial funding valuation	31 Mar 02	1 Jan 03	30 Jun 03	31 Dec 03
<i>2004</i>				
Rate of increase in salaries	4.4%	3.8%	7.5%	3.6%
Rate of increase in pensions in payment	2.9%		5.3%	2.4%
Discount rate	5.5%	5.7%	10.0%	6.1%
Inflation	2.9%	2.5%	5.5%	2.5%
<i>2003</i>				
Rate of increase in salaries	4.1%	3.75%	7.5%	3.5%
Rate of increase in pensions in payment	2.6%		4.8%	2.5%
Discount rate	5.3%	5.9%	10.0%	6.2%

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Inflation	2.6%	2.5%	5.0%	2.5%
<i>2002</i>				
Rate of increase in salaries	3.9%	3.75%	9.5%	3.5%
Rate of increase in pensions in payment	2.4%		6.8%	2.5%
Discount rate	5.5%	6.5%	12.0%	6.1%
Inflation	2.4%	2.5%	7.0%	2.5%

The assumptions used for the US health care benefits for FRS17 purposes are a discount rate of 5.7 per cent (2003: 5.9 per cent, 2002: 6.5 per cent) and an ultimate health care cost trend rate of 4.5 per cent (2003: 4.5 per cent, 2002: 4.5 per cent).

Contributions to non defined benefit schemes in the year were £15.6 million (2003: £12.0 million, 2002: £9.6 million) and are included in note 6 c).

**Notes to the financial statements****8. Pensions and other retirement benefits continued**

The assets in the schemes and the expected rates of return were:

	Equities	Bonds	Other	Total
<i>Long-term rate of return expected at 30 September 2004</i>				
Europe	<b>8.5%</b>	<b>5.1%</b>	<b>7.5%</b>	
Americas	<b>9.5%</b>	<b>3.2%</b>	<b>3.5%</b>	
Africa	<b>13.5%</b>	<b>10.0%</b>	<b>9.0%</b>	
Asia/Pacific	<b>8.1%</b>	<b>4.6%</b>	<b>5.0%</b>	
<i>Value at 30 September 2004 (£ million)</i>				
Europe	<b>870.3</b>	<b>260.5</b>	<b>106.9</b>	<b>1,237.7</b>
Americas	<b>292.7</b>	<b>76.1</b>	<b>0.3</b>	<b>369.1</b>
Africa	<b>93.8</b>	<b>17.5</b>	<b>6.9</b>	<b>118.2</b>
Asia/Pacific	<b>116.7</b>	<b>15.6</b>	<b>37.1</b>	<b>169.4</b>
Total	<b>1,373.5</b>	<b>369.7</b>	<b>151.2</b>	<b>1,894.4</b>
<i>Long-term rate of return expected at 30 September 2003</i>				
Europe	8.5%	5.0%	6.4%	
Americas	9.5%	4.1%		
Africa	13.0%	10.0%	8.1%	
Asia/Pacific	8.5%	4.8%	5.2%	
<i>Value at 30 September 2003 (£ million)</i>				
Europe	793.9	216.1	62.3	1,072.3
Americas	307.0	66.2		373.2
Africa	73.6	16.8	7.9	98.3
Asia/Pacific	105.6	15.1	25.2	145.9
Total	1,280.1	314.2	95.4	1,689.7
<i>Long-term rate of return expected at 30 September 2002</i>				
Europe	8.5%	4.9%	4.0%	
Americas	9.5%	6.0%		
Africa	14.0%	12.0%	8.5%	
Asia/Pacific	7.7%	4.7%	5.7%	
<i>Value at 30 September 2002 (£ million)</i>				
Europe	686.2	235.0	18.8	940.0
Americas	289.2	51.0		340.2
Africa	49.6	15.3	5.4	70.3
Asia/Pacific	89.8	16.3	16.7	122.8
Total	1,114.8	317.6	40.9	1,473.3

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**Notes to the financial statements****8. Pensions and other retirement benefits** continued

The following amounts at 30 September 2004 were measured in accordance with the requirements of FRS17:

	Europe £ million	Americas pensions £ million	Americas health care £ million	Africa £ million	Asia/Pacific £ million	Total £ million
<i>2004</i>						
Total market value of assets	<b>1,237.7</b>	<b>369.1</b>		<b>118.2</b>	<b>169.4</b>	<b>1,894.4</b>
Present value of scheme liabilities	<b>(1,682.0)</b>	<b>(266.0)</b>	<b>(46.4)</b>	<b>(91.8)</b>	<b>(163.8)</b>	<b>(2,250.0)</b>
Irrecoverable surplus				<b>(26.4)</b>		<b>(26.4)</b>
(Deficit)/surplus in the scheme	<b>(444.3)</b>	<b>103.1</b>	<b>(46.4)</b>		<b>5.6</b>	<b>(382.0)</b>
Related deferred tax asset/(liability)	<b>130.4</b>	<b>(41.0)</b>	<b>18.3</b>		<b>(1.3)</b>	<b>106.4</b>
Net pension (liabilities)/assets <sup>1</sup>	<b>(313.9)</b>	<b>62.1</b>	<b>(28.1)</b>		<b>4.3</b>	<b>(275.6)</b>
<i>2003</i>						
Total market value of assets	1,072.3	373.2		98.3	145.9	1,689.7
Present value of scheme liabilities	(1,516.9)	(294.0)	(50.5)	(92.5)	(142.1)	(2,096.0)
Irrecoverable surplus				(5.8)		(5.8)
(Deficit)/surplus in the scheme	(444.6)	79.2	(50.5)		3.8	(412.1)
Related deferred tax asset/(liability)	133.4	(31.2)	19.9		(1.1)	121.0
Net pension (liabilities)/assets <sup>1</sup>	(311.2)	48.0	(30.6)		2.7	(291.1)
<i>2002</i>						
Total market value of assets	940.0	340.2		70.3	122.8	1,473.3
Present value of scheme liabilities	(1,331.6)	(250.4)	(50.1)	(59.3)	(134.0)	(1,825.4)
Irrecoverable surplus				(11.0)		(11.0)
(Deficit)/surplus in the scheme	(391.6)	89.8	(50.1)		(11.2)	(363.1)

Related deferred tax asset/(liability)	117.5	(35.5)	19.8	4.6	106.4
Net pension (liabilities)/assets <sup>1</sup>	(274.1)	54.3	(30.3)	(6.6)	(256.7)

1. Included in the net pension (liabilities)/assets are assets of £68.9 million (2003: £50.7 million, 2002: £54.3 million) and liabilities of £344.5 million (2003: £341.8 million, 2002: £311.0 million). In addition to deferred tax on pension assets and liabilities, a further £22.0 million of current tax relating to pension assets and liabilities is included within Creditors: amounts falling due within one year. Of this, £3.2 million has been accounted for in the total recognised gains and losses and £18.8 million has been included in the profit and loss account. There were no equivalent current tax items in 2003 or 2002.

	Europe £ million	Americas pensions £ million	Americas health care £ million	Africa £ million	Asia/Pacific £ million	Total £ million
<i>Analysis of the amount charged to operating profit</i>						
<i>Year to 30 September 2004</i>						
Current service cost	(47.4)	(10.1)	(1.5)	(2.4)	(7.7)	(69.1)
Past service cost	(0.5)					(0.5)
Curtailements/settlements <sup>2</sup>		1.6	2.8			4.4
<b>Total operating charge</b>	<b>(47.9)</b>	<b>(8.5)</b>	<b>1.3</b>	<b>(2.4)</b>	<b>(7.7)</b>	<b>(65.2)</b>
<i>Year to 30 September 2003</i>						
Current service cost	(39.4)	(12.3)	(1.6)	(2.1)	(7.9)	(63.3)
Past service cost <sup>3</sup>	(0.4)	(43.2)				(43.6)
Curtailements/settlements	3.5					3.5
<b>Total operating charge</b>	<b>(36.3)</b>	<b>(55.5)</b>	<b>(1.6)</b>	<b>(2.1)</b>	<b>(7.9)</b>	<b>(103.4)</b>
<i>Year to 30 September 2002</i>						
Current service cost	(33.5)	(12.8)	(1.6)	(1.7)	(7.2)	(56.8)
Past service cost <sup>3</sup>	(0.6)	0.7				0.1
<b>Total operating charge</b>	<b>(34.1)</b>	<b>(12.1)</b>	<b>(1.6)</b>	<b>(1.7)</b>	<b>(7.2)</b>	<b>(56.7)</b>

2. The curtailment gains in Americas pensions and Americas health care in 2004 relate to the sale of the US packaged gas business and were accounted for as exceptional items (see note 2b)).
3. The past service cost amounts in Americas pensions in 2003 were accounted for as exceptional items (see note 2 b)). Two amendments were made to the US pension plan in 2002 relating to the allocation of the interest credit to plan members, both retrospectively and in the future. The net impact of the amendments was a £0.7 million credit against past service cost in the year.

## Notes to the financial statements

## 8. Pensions and other retirement benefits continued

	Europe £ million	Americas pensions £ million	Americas health care £ million	Africa £ million	Asia/Pacific £ million	Total £ million
<i>Analysis of the amount included in other net financing income</i>						
<i>Year to 30 September 2004</i>						
Expected return on pension scheme assets <sup>4</sup>	83.1	28.1		11.2	10.7	133.1
Interest on pension scheme liabilities <sup>4</sup>	(80.4)	(15.4)	(2.6)	(8.9)	(9.7)	(117.0)
Net interest on FRS17 pension schemes	2.7	12.7	(2.6)	2.3	1.0	16.1
<i>Year to 30 September 2003</i>						
Expected return on pension scheme assets <sup>4</sup>	70.2	29.1		10.8	9.4	119.5
Interest on pension scheme liabilities <sup>4</sup>	(72.9)	(15.8)	(3.1)	(8.8)	(9.2)	(109.8)
Net interest on FRS17 pension schemes	(2.7)	13.3	(3.1)	2.0	0.2	9.7
<i>Year to 30 September 2002</i>						
Expected return on pension scheme assets	87.4	36.2		7.2	8.3	139.1
Interest on pension scheme liabilities	(71.1)	(18.6)	(3.7)	(5.6)	(7.1)	(106.1)
Net interest on FRS17 pension schemes	16.3	17.6	(3.7)	1.6	1.2	33.0

4. The profit and loss account includes amounts relating to joint ventures and associates of £0.1 million and £(0.4) million in respect of expected return on pension scheme assets and interest on pension scheme liabilities respectively (2003: £0.1 million and £(0.4) million). There were no corresponding amounts for joint ventures and associates in 2002.

	Europe £ million	Americas pensions £ million	Americas health care £ million	Africa £ million	Asia/Pacific £ million	Total £ million
<i>Analysis of the amount recognised in the statement</i>						
<i>of total recognised gains and losses</i>						
<i>Year to 30 September 2004</i>						
Actual return less expected return on pension scheme assets	31.9	17.6		12.5	14.2	76.2
Experience gains and losses arising on the scheme liabilities	(28.6)	12.5	0.2		(14.2)	(30.1)
Changes in assumptions underlying the present value of the scheme liabilities	(29.4)	(3.3)	(2.0)	5.9		(28.8)
Irrecoverable surplus				(20.6)		(20.6)



Actuarial (loss)/gain recognised in the statement of total recognised gains and losses <sup>5</sup>	<b>(26.1)</b>	<b>26.8</b>	<b>(1.8)</b>	<b>(2.2)</b>		<b>(3.3)</b>
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*Year to 30 September 2003*

Actual return less expected return on pension scheme assets	73.7	44.2		(10.8)	4.7	111.8
Experience gains and losses arising on the scheme liabilities	8.3	(1.7)	0.1	0.1	(2.6)	4.2
Changes in assumptions underlying the present value of the scheme liabilities	(134.8)	(6.3)	(2.0)			(143.1)
Irrecoverable surplus				8.7		8.7

Actuarial (loss)/gain recognised in the statement of total recognised gains and losses <sup>5</sup>	(52.8)	36.2	(1.9)	(2.0)	2.1	(18.4)
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*Year to 30 September 2002*

Actual return less expected return on pension scheme assets	(246.4)	(71.6)		3.0	(13.6)	(328.6)
Experience gains and losses arising on the scheme liabilities	(9.7)	6.7	5.8	(3.9)	(1.3)	(2.4)
Changes in assumptions underlying the present value of the scheme liabilities	(91.7)	(2.2)	(5.9)		5.5	(94.3)
Irrecoverable surplus				(11.6)		(11.6)

Actuarial (loss) recognised in the statement of total recognised gains and losses <sup>5</sup>	(347.8)	(67.1)	(0.1)	(12.5)	(9.4)	(436.9)
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5. Included in the actuarial (loss)/gain for the year is £(1.1) million in respect of minority interests (2003: £(0.9) million, 2002: £(5.7) million).

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## Notes to the financial statements

## 8. Pensions and other retirement benefits continued

	Europe	Americas pensions	Americas health care	Africa	Asia/Pacific	Total
<i>History of experience gains and losses</i>						
<i>Year to 30 September 2004</i>						
<i>Difference between the expected and actual return on scheme assets</i>						
Amount (£ million)	<b>31.9</b>	<b>17.6</b>		<b>12.5</b>	<b>14.2</b>	<b>76.2</b>
Percentage of scheme assets	<b>2.6%</b>	<b>4.8%</b>		<b>10.6%</b>	<b>8.4%</b>	<b>4.0%</b>
<i>Experience gains and losses on scheme liabilities</i>						
Amount (£ million)	<b>(28.6)</b>	<b>12.5</b>	<b>0.2</b>		<b>(14.2)</b>	<b>(30.1)</b>
Percentage of the present value of scheme liabilities	<b>(1.7%)</b>	<b>4.7%</b>	<b>0.4%</b>		<b>(8.7%)</b>	<b>(1.3%)</b>
<i>Total amount recognised in the statement of total recognised gains and losses</i>						
Amount (£ million)	<b>(26.1)</b>	<b>26.8</b>	<b>(1.8)</b>	<b>(2.2)</b>		<b>(3.3)</b>
Percentage of the present value of scheme liabilities	<b>(1.6%)</b>	<b>10.0%</b>	<b>(3.9%)</b>	<b>(2.4%)</b>		<b>(0.1%)</b>
<i>Year to 30 September 2003</i>						
<i>Difference between the expected and actual return on scheme assets</i>						
Amount (£ million)	73.7	44.2		(10.8)	4.7	111.8
Percentage of scheme assets	6.9%	11.8%		(11.0%)	3.2%	6.6%
<i>Experience gains and losses on scheme liabilities</i>						
Amount (£ million)	8.3	(1.7)	0.1	0.1	(2.6)	4.2
Percentage of the present value of scheme liabilities	0.5%	(0.6%)	0.2%	0.1%	(1.8%)	0.2%
<i>Total amount recognised in the statement of total recognised gains and losses</i>						
Amount (£ million)	(52.8)	36.2	(1.9)	(2.0)	2.1	(18.4)
Percentage of the present value of scheme liabilities	(3.5%)	12.3%	(3.8%)	(2.2%)	1.5%	(0.9%)
<i>Year to 30 September 2002</i>						
<i>Difference between the expected and actual return on scheme assets</i>						
Amount (£ million)	(246.4)	(71.6)		3.0	(13.6)	(328.6)
Percentage of scheme assets	(26.2%)	(21.0%)		4.3%	(11.1%)	(22.3%)

*Experience gains and losses on scheme liabilities*

Amount (£ million)	(9.7)	6.7	5.8	(3.9)	(1.3)	(2.4)
Percentage of the present value of scheme liabilities	(0.7%)	2.7%	11.6%	(6.6%)	(1.0%)	(0.1%)

*Total amount recognised in the statement of total recognised gains and losses*

Amount (£ million)	(347.8)	(67.1)	(0.1)	(12.5)	(9.4)	(436.9)
Percentage of the present value of scheme liabilities	(26.1%)	(26.8%)	(0.2%)	(21.1%)	(7.0%)	(23.9%)

*Year to 30 September 2001**Difference between the expected and actual return on scheme assets*

Amount (£ million)	(346.2)	(156.4)		(11.9)	(13.3)	(527.8)
Percentage of scheme assets	(30.3%)	(37.6%)		(15.0%)	(10.4%)	(29.9%)

*Experience gains and losses on scheme liabilities*

Amount (£ million)	(7.6)	(0.9)	(6.9)	(0.3)	10.7	(5.0)
Percentage of the present value of scheme liabilities	(0.6%)	(0.3%)	(13.3%)	(0.4%)	8.2%	(0.3%)

*Total amount recognised in the statement of total recognised gains and losses*

Amount (£ million)	(289.8)	(157.3)	(6.9)	(15.1)	(2.6)	(471.7)
Percentage of the present value of scheme liabilities	(24.7%)	(60.9%)	(13.3%)	(22.7%)	(2.0%)	(28.1%)

*Year to 30 September 2000**Difference between the expected and actual return on scheme assets*

Amount (£ million)	109.0	57.2		8.5	9.0	183.7
Percentage of scheme assets	7.6%	10.6%		8.3%	6.0%	8.3%

*Experience gains and losses on scheme liabilities*

Amount (£ million)	22.2	(30.9)	(17.8)	3.9	(11.8)	(34.4)
Percentage of the present value of scheme liabilities	1.9%	(13.3%)	(40.7%)	5.5%	(8.0%)	(2.1%)

*Total amount recognised in the statement of total recognised gains and losses*

Amount (£ million)	98.8	26.3	(14.8)	12.4	(2.8)	119.9
Percentage of the present value of scheme liabilities	8.5%	11.3%	(33.9%)	17.5%	(1.9%)	7.2%

## Notes to the financial statements

## 8. Pensions and other retirement benefits continued

	Europe	Americas pensions	Americas health care	Africa	Asia/Pacific	Total
<i>Movement in (deficit)/surplus during the year</i>	£ million	£ million	£ million	£ million	£ million	£ million
<i>Year to 30 September 2004</i>						
(Deficit)/surplus in scheme at 1 October	(444.6)	79.2	(50.5)		3.8	(412.1)
Movement in the year:						
Current service cost	(47.4)	(10.1)	(1.5)	(2.4)	(7.7)	(69.1)
Past service cost	(0.5)					(0.5)
Curtailments/settlements		1.6	2.8			4.4
Contributions	71.6		2.9	2.3	8.7	85.5
Disposals of businesses						
Other finance income	2.7	12.7	(2.6)	2.3	1.0	16.1
Actuarial (loss)/gain	(26.1)	26.8	(1.8)	(2.2)		(3.3)
Exchange adjustment		(7.1)	4.3		(0.2)	(3.0)
(Deficit)/surplus in scheme at 30 September	(444.3)	103.1	(46.4)		5.6	(382.0)
<i>Year to 30 September 2003</i>						
(Deficit)/surplus in scheme at 1 October	(391.6)	89.8	(50.1)		(11.2)	(363.1)
Movement in the year:						
Current service cost	(39.4)	(12.3)	(1.6)	(2.1)	(7.9)	(63.3)
Past service cost	(0.4)	(43.2)				(43.6)
Curtailments/settlements	3.5					3.5
Contributions	38.8		3.5	2.1	10.2	54.6
Disposals of businesses					10.4	10.4
Other finance income	(2.7)	13.3	(3.1)	2.0	0.2	9.7
Actuarial (loss)/gain	(52.8)	36.2	(1.9)	(2.0)	2.1	(18.4)
Exchange adjustment		(4.6)	2.7			(1.9)
(Deficit)/surplus in scheme at 30 September	(444.6)	79.2	(50.5)		3.8	(412.1)

## b) UK GAAP parent company

The company accounts for pension costs in accordance with FRS17 on retirement benefits. In accordance with the standard, the company treats contributions to defined benefit schemes as if they were contributions to a defined contribution plan. This is because the underlying assets and liabilities of the defined benefit schemes cover a number of the Group's UK undertakings and cannot readily be split between each undertaking on a consistent and reliable basis.

The pension cost recognised in the company's accounts is the total of company contributions payable to Group UK pension schemes in the year.

The assets of all Group UK pension schemes are held independently of the Group's finances. The largest schemes are self-administered.

### c) US GAAP

For the purposes of US GAAP, the pension costs of the largest schemes have been reclassified in the following tables in accordance with the requirement of SFAS132. The changes in projected benefit obligation, plan assets and details of the funded status of these retirement plans, together with the changes in the accumulated other post-retirement benefit obligations of the Group's US business, are given below. The measurement date for UK and US pension plans is 30 June and the measurement date for the Australian and South African plans is 30 September. The difference between the UK and US GAAP information disclosed in note 8a) and c) is included in note 30.

Investment strategy for the schemes is generally set by their respective trustee or fiduciary, after taking advice from their investment advisers, and in consultation with the company. The strategy reflects the funding position of the schemes, and a careful assessment of the risks inherent over the long term in various asset classes. The assets of the schemes are diversified by asset class, by investment manager and by geography, in order to reduce risk. Strategy is reviewed periodically.

At 30 June 2004 the measurement date for SFAS132 reporting, the target asset allocation and actual asset allocation of the main UK scheme was:

	<b>Target</b>	<b>2004 Actual</b>	2003 Actual
Equity securities	<b>70.0%</b>	<b>71.9%</b>	73.0%
Debt securities	<b>20.0%</b>	<b>19.2%</b>	20.5%
Real estate	<b>10.0%</b>	<b>7.8%</b>	5.0%
Cash	<b>0.0%</b>	<b>1.1%</b>	1.5%

In the US, the fiduciary invests in short-term bonds to broadly cash match the liabilities that are expected to fall due within three years. The balance of the plan's assets are currently invested in equities. Following this policy, the actual asset allocations of the plan at 30 June 2004 was as follows:

	<b>2004</b>	2003
Equity securities	<b>77.5%</b>	87.4%
Debt securities	<b>22.5%</b>	12.6%

The company establishes the long-term expected rate of return on the schemes' assets by developing a long-term rate of return assumption for each asset class, taking into account such factors as the market yield on bond investments of appropriate duration, and the expected risk premium for other asset classes, based on long-term historical trends. A single, long-term return assumption is then calculated as a weighted average return, based on the expected returns for each asset class.

## Notes to the financial statements

## 8. Pensions and other retirement benefits continued

	Pension benefits		Other benefits <sup>1</sup>	
	2004 £ million	2003 £ million	2004 £ million	2003 £ million
<i>Change in benefit obligation</i>				
Projected benefit obligation at 1 October 2003	2,089.3	1,695.9	50.5	50.1
Exchange adjustment	(28.4)	31.3	(4.2)	(2.8)
Service cost	67.4	53.0	1.7	1.8
Interest cost	114.0	108.7	2.6	3.1
Plan participants' contributions	13.5	13.9		
Actuarial (gains)/losses	6.6	242.9	1.7	1.8
Benefits paid	(93.6)	(96.1)	(2.9)	(3.5)
Other (income) less expenses	(0.2)	(0.4)		
Curtailments, settlements, termination benefits	(1.0)	(3.1)	(3.1)	
Plan amendments		43.2		
Projected benefit obligation at 30 September 2004	2,167.6	2,089.3	46.3	50.5
<i>Change in fair value of assets</i>				
Fair value of assets at 1 October 2003	1,640.5	1,706.0		
Exchange adjustment	(34.8)	29.5		
Actual return on plan assets	279.5	(57.1)		
Employer contributions	72.2	44.7		
Plan participants' contributions	13.5	13.9		
Other income less (expenses)	(0.2)	(0.4)		
Benefits paid	(93.6)	(96.1)		
Fair value of assets at 30 September 2004	1,877.1	1,640.5		
<i>Funded status and unrecognised (gains)/losses</i>				
Funded status	(290.5)	(448.8)	(46.3)	(50.5)
Unrecognised net transition asset	(10.8)	(14.3)		
Unrecognised prior service cost/(credit)	13.2	19.5	(1.7)	(2.8)
Unrecognised net loss	535.8	669.6	7.7	10.2
Adjustment for post measurement date contributions	17.2	9.5		
Prepaid/(accrued) pension cost	264.9	235.5	(40.3)	(43.1)
<i>Amounts recognised in the statement of financial position consist of:</i>				
Prepaid benefit cost	165.2	165.0		
Accrued benefit liability	(263.4)	(383.6)		
Intangible asset	5.4	6.9		
Accumulated other comprehensive income	357.7	447.2		
Prepaid pension cost	264.9	235.5		

1. Other benefits relate to post retirement medical benefits.

The weighted-average asset allocation, by asset category, for the pension plans are as follows:

	Europe	Americas	Africa	Asia/Pacific
<i>At 30 September 2004</i>				
Equity securities	<b>70.3%</b>	<b>79.3%</b>	<b>79.4%</b>	<b>68.9%</b>
Debt securities	<b>21.1%</b>	<b>20.6%</b>	<b>14.8%</b>	<b>9.2%</b>
Real estate	<b>8.6%</b>		<b>1.0%</b>	<b>7.2%</b>
Other		<b>0.1%</b>	<b>4.8%</b>	<b>14.7%</b>
<i>At 30 September 2003</i>				
Equity securities	74.0%	82.3%	74.8%	72.3%
Debt securities	20.2%	17.7%	17.1%	10.4%
Real estate	5.1%		0.3%	7.5%
Other	0.7%		7.8%	9.8%

The accumulated benefit obligation for all pension plans totalled £1,962.2 million (2003: £1,848.5 million).

The fair value of plan assets exceeds the accumulated benefit obligation for all plans except the UK plans, where the accumulated benefit obligation, projected benefit obligation and fair value of plan assets were £1,460.6 million, £1,602.8 million and £1,180.0 million respectively (2003: £1,305.1 million, £1,560.6 million and £1,037.3 million).

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**Notes to the financial statements****8. Pensions and other retirement benefits** continued

The weighted-average assumptions used to determine the benefit obligation are as follows:

	Europe	Americas	Africa	Asia/Pacific
<i>At 30 September 2004</i>				
Discount rate	<b>5.75%</b>	<b>6.1%</b>	<b>10.0%</b>	<b>6.1%</b>
Expected return on all plan assets	<b>7.75%</b>	<b>8.0%</b>	<b>12.0%</b>	<b>7.1%</b>
Rate of compensation increase	<b>4.5%</b>	<b>3.75%</b>	<b>7.5%</b>	<b>3.5%</b>
<i>At 30 September 2003</i>				
Discount rate	5.2%	5.8%	10.0%	6.2%
Expected return on all plan assets	7.6%	8.0%	12.0%	7.6%
Rate of compensation increase	4.0%	3.75%	7.5%	3.5%

The weighted-average assumptions used to determine the net benefit cost are as follows:

	Europe	Americas	Africa	Asia/Pacific
<i>At 30 September 2004</i>				
Discount rate	<b>5.2%</b>	<b>5.8%</b>	<b>10.0%</b>	<b>6.2%</b>
Expected return on all plan assets	<b>7.6%</b>	<b>8.0%</b>	<b>12.0%</b>	<b>7.6%</b>
Rate of compensation increase	<b>4.0%</b>	<b>3.75%</b>	<b>7.5%</b>	<b>3.5%</b>
<i>At 30 September 2003</i>				
Discount rate	5.8%	7.0%	12.0%	7.0%
Expected return on all plan assets	7.7%	9.0%	12.0%	8.0%
Rate of compensation increase	3.9%	4.75%	9.5%	3.5%

The Group presently expects its contributions to its pension plans and post retirement medical plans to be at a similar level in 2005 to the amounts contributed in 2004.

The following benefit payments, which reflect future service, as appropriate, are expected to be paid:

	Europe £ million	Americas <sup>2</sup> £ million	Africa £ million	Asia/Pacific £ million	Total pension benefits £ million	Other benefits <sup>3</sup> £ million
<i>Year ending 30 September</i>						
2005	64.6	38.4	3.9	8.3	115.2	3.2
2006	65.5	15.3	4.0	9.0	93.8	3.3



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2007	68.9	15.6	4.2	9.6	98.3	3.3
2008	72.6	16.3	4.4	10.3	103.6	3.2
2009	76.9	17.1	4.6	11.2	109.8	3.3
2010 2014	448.7	93.4	25.8	70.3	638.2	17.4

2. Payments in the Americas in 2005 include £21.5 million relating to a litigation settlement reached in November 2003 (see notes 2b) and 26b)).

For the post retirement medical benefits plan at 30 September 2004, the initial health care cost trend rates for valuing the medical benefits and drug benefits post age 65 were 9.0 per cent (2003: 9.0 per cent) and 3.2 per cent (2003: 3.5 per cent) respectively. The rates for valuing post age 65 medical benefits are assumed to reduce gradually to 4.5 per cent in 2011 (2003: 4.5 per cent in 2009). The rates for valuing drug benefits post age 65 are assumed to reduce gradually to 0.65 per cent in 2011 (2003: 1.1 per cent in 2010). For valuing pre age 65 medical and drug benefits, a blended health care trend rate of 9.0 per cent was used for 30 September 2004 (2003: 9.0 per cent). This blended rate was assumed to reduce gradually to 4.5 per cent in 2011 (2003: 4.5 per cent in 2010).

	Pensionable benefits			Other benefits <sup>3</sup>		
	2004 £ million	2003 £ million	2002 £ million	2004 £ million	2003 £ million	2002 £ million
Service cost net of employees contributions	<b>67.4</b>	53.0	54.6	<b>1.7</b>	1.8	1.6
Interest cost on projected benefits obligation	<b>114.0</b>	108.7	102.9	<b>2.6</b>	3.1	3.6
Expected return on assets	<b>(157.4)</b>	(166.2)	(156.7)			
Amortisation of net transition asset	<b>(2.9)</b>	(14.8)	(14.7)			
Amortisation of prior service cost/(credit) <sup>4</sup>	<b>3.1</b>	46.4	3.5	<b>(0.5)</b>	(0.5)	(0.5)
Amortisation of net loss/(gain)	<b>14.8</b>	(1.6)	(7.2)	<b>0.3</b>	0.3	0.3
Cost of special termination benefits	<b>0.7</b>	0.9	0.6			
Curtailment	<b>0.6</b>			<b>(0.4)</b>		
Net periodic pension cost/(credit)	<b>40.3</b>	26.4	(17.0)	<b>3.7</b>	4.7	5.0

3. Other benefits relate to post retirement medical benefits.

4. In 2003 the amortisation of pension prior service cost includes £43.2 million in respect of a settlement of litigation from which the company will derive no future economic benefit.

It is estimated that a one per cent change in the weighted average health care costs trend would have the following effects on the accumulated benefit obligation and net periodic pension cost at 30 September 2004:

	One percentage point	
	Increase	Decrease
Accumulated benefit obligation	4.0	(3.8)
Net periodic pension cost	0.6	(0.5)

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## Notes to the financial statements

## 9. Dividends

	2004 pence	2003 pence	Per share	2004 £ million	2003 £ million	2002 £ million
			2002 pence			
Ordinary						
First interim	15.5	15.5	15.5	76.3	76.4	75.8
Second interim	24.5	23.5	22.5	121.0	115.7	110.8
	40.0	39.0	38.0	197.3	192.1	186.6

## 10. Earnings per share

Basic earnings per share are calculated by dividing the earnings attributable to Ordinary shareholders by the weighted average number of shares in issue during the year.

For diluted earnings per share, the weighted average number of shares in issue is adjusted to assume conversion of all potential dilutive shares. The company has only one category of potential dilutive shares: those share options granted to employees where the exercise price is less than the average market price of the company's shares during the year and where any performance conditions have been met at the balance sheet date.

Adjusted earnings per share (excluding exceptional items) are presented in order to show the underlying earnings performance of the Group.

	2004 £ million	2003 £ million	2002 £ million
<i>i) Earnings</i>			
<i>Amounts used in computing the earnings per share</i>			
Earnings attributable to Ordinary shareholders for the financial year	264.0	219.1	202.9
Adjustment for exceptional items <sup>1</sup>	47.5	41.6	71.4
Adjusted earnings	311.5	260.7	274.3

1. This comprises the exceptional items before interest of £(92.0) million (2003: £(67.0) million, 2002: £(94.7) million) adjusted for the impact of tax of £44.5 million (2003: £25.0 million, 2002: £22.8 million) and minority interests of £nil (2003: £0.4 million, 2002: £0.5 million).

	2004 million	2003 million	2002 million
<i>ii) Average number of 25p Ordinary shares</i>			
Average issued share capital	498.2	497.5	496.0
Less: Average own shares held in trust	5.2	5.0	5.6
Basic	493.0	492.5	490.4
Add: Dilutive share options	0.8	0.2	1.8
Diluted	493.8	492.7	492.2

**11. Fixed assets    intangible assets**

## a) Group summary

	Goodwill £ million	Other intangibles £ million	Total £ million
<i>Gross book value</i>			
At 1 October 2003	232.3	6.2	238.5
Exchange adjustment	(13.3)	(0.4)	(13.7)
Acquired during the year	3.9	0.2	4.1
Adjustments relating to prior year acquisitions	(1.0)		(1.0)
Disposed of during the year	(9.1)	(1.2)	(10.3)
<b>At 30 September 2004</b>	<b>212.8</b>	<b>4.8</b>	<b>217.6</b>
<i>Amortisation</i>			
At 1 October 2003	31.1	1.3	32.4
Exchange adjustment	(1.9)	(0.1)	(2.0)
Provided during the year	14.0	0.5	14.5
Impairment	2.5		2.5
Disposed of during the year	(4.5)	(0.2)	(4.7)
<b>At 30 September 2004</b>	<b>41.2</b>	<b>1.5</b>	<b>42.7</b>
<i>Net book value</i>			
At 1 October 2003	201.2	4.9	206.1
<b>At 30 September 2004</b>	<b>171.6</b>	<b>3.3</b>	<b>174.9</b>

The adjustments relating to prior year acquisitions reflect the finalisation of the fair values of the net assets of businesses acquired reported as provisional at 30 September 2003, and the fair value of the consideration.

**Notes to the financial statements****11. Fixed assets – intangible assets continued****b) Analysis of acquisitions and disposals**

The increase in positive goodwill represents the excess of the fair value of the purchase price over the provisional fair value of the net assets of businesses acquired. The most significant amounts are as follows:

	Positive goodwill £ million	Negative goodwill £ million	Amortisation period Years <sup>4</sup>
<i>i) Businesses acquired</i>			
<i>2004</i>			
There was no significant goodwill on acquisitions of subsidiary undertakings in the year.			
<i>2003</i>			
Praxair Polska	10.1		20
Environmental Management Corporation <sup>1</sup>	32.9		15
<i>2002</i>			
Seiko Instruments Inc – turbomolecular pumps business <sup>2</sup>	59.4		20
Unique Gas and Petrochemicals Public Company Limited	17.5		20
Enron Teesside Operations Limited – industrial assets	9.6		15
Hydromatix Inc	5.6		15
Semco <sup>3</sup>	3.8		15
Minorities in Osaka Sanso Kogyo KK		(5.0)	10

1. Restated in 2004 to reflect an adjustment of £1.4 million to the fair value of the consideration.
2. Restated in 2003 to reflect an adjustment of £0.8 million to the fair value of the net assets.
3. Restated in 2003 to reflect an adjustment of £0.6 million to the fair value of the consideration.
4. Amortisation periods are those over which it is estimated that the value of the business acquired will exceed the value of the identifiable net assets of the business acquired.

	Goodwill £ million
<i>ii) Businesses disposed of</i>	
<i>2004</i>	
US packaged gas business	9.1
<i>2003</i>	
Osaka Sanso Kogyo KK (see note 28c))	(10.5)



## Notes to the financial statements

## 12. Fixed assets – tangible assets

## a) Group summary

	Land and buildings £ million	Plant, machinery and vehicles £ million	Cylinders £ million	Construction in progress £ million	Total £ million
<i>Gross book value</i>					
At 1 October 2003	640.4	4,392.3	690.0	158.4	5,881.1
Exchange adjustment	(17.5)	(190.6)	(17.5)	(8.6)	(234.2)
Capital expenditure <sup>2</sup>	20.6	135.5	24.0	76.0	256.1
Disposals	(13.2)	(121.0)	(11.1)	(5.3)	(150.6)
Transfers	(10.1)	77.9	9.9	(77.7)	
Acquisitions of businesses	2.8	0.9			3.7
Disposals of businesses	(22.7)	(78.1)	(124.0)	(0.9)	(225.7)
At 30 September 2004	<b>600.3</b>	<b>4,216.9</b>	<b>571.3</b>	<b>141.9</b>	<b>5,530.4</b>
<i>Depreciation</i>					
At 1 October 2003	207.7	2,440.4	319.6		2,967.7
Exchange adjustment	(7.2)	(109.7)	(8.0)		(124.9)
Provided during the year	17.1	261.3	31.1		309.5
Disposals	(5.6)	(102.3)	(9.0)		(116.9)
Disposals of businesses	(7.8)	(49.9)	(65.7)		(123.4)
Transfers	(10.4)	10.4			
At 30 September 2004	<b>193.8</b>	<b>2,450.2</b>	<b>268.0</b>		<b>2,912.0</b>
<i>Net book value at 1 October 2003</i> <sup>3</sup>					
Owned assets	395.2	1,945.1	342.0	158.4	2,840.7
Leased assets <sup>4</sup>	37.5	6.8	28.4		72.7
	432.7	1,951.9	370.4	158.4	2,913.4
<i>Net book value at 30 September 2004</i> <sup>3</sup>					
Owned assets	368.5	1,761.3	278.3	141.9	2,550.0
Leased assets <sup>4</sup>	38.0	5.4	25.0		68.4
	<b>406.5</b>	<b>1,766.7</b>	<b>303.3</b>	<b>141.9</b>	<b>2,618.4</b>

1. Net book value of land and buildings at cost was £369.7 million (2003: £395.0 million).
2. Subsidiary undertakings only. Capital expenditure of joint ventures and associates is given in note 1.

3. Net book value includes net interest capitalised of £47.8 million (2003: £56.4 million). The tax effect of this is included in the deferred tax provision.
4. Leased assets are shown net of accumulated depreciation of £121.1 million (2003: £119.1 million).

**b) Depreciation and operating lease rentals**

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Depreciation on leased assets included above	<b>6.5</b>	8.1	8.5
Amortisation of capitalised interest included above	<b>5.5</b>	4.0	4.2
Operating lease rentals			
hire of plant and machinery	<b>27.1</b>	19.7	7.7
property rent	<b>31.6</b>	34.3	23.1
other	<b>18.3</b>	17.6	14.0

**c) Regional analysis**

The Group has numerous manufacturing, distribution and office facilities which are located in some 50 countries. At 30 September 2004, the Group's property, plant and equipment, comprising land and buildings, plant, machinery, vehicles and cylinders were located regionally as follows:

	£ million	%
Europe (mainly the UK)	941.9	36
Americas (mainly the US)	736.9	28
Africa	278.4	11
Asia/Pacific	661.2	25
	2,618.4	100

The above amounts are stated at cost net of accumulated depreciation.



**Notes to the financial statements**

**12. Fixed assets – tangible assets continued**

**d) Asset revaluations**

Following the adoption of FRS15 – Tangible fixed assets in 2000, land and buildings are no longer revalued (see Accounting policies on page 84). The net book value of properties revalued in earlier years was £125.0 million. Properties not revalued were £281.5 million.

**e) Parent summary**

	Land and buildings £ million	Plant, machinery and vehicles £ million	Total £ million
<i>Gross book value</i>			
At 1 October 2003	14.3	18.5	32.8
Capital expenditure	0.1	1.1	1.2
Disposals		(5.6)	(5.6)
<b>At 30 September 2004</b>	<b>14.4</b>	<b>14.0</b>	<b>28.4</b>
<i>Depreciation</i>			
At 1 October 2003	4.2	12.9	17.1
Provided during the year	0.5	0.5	1.0
Disposals		(1.0)	(1.0)
<b>At 30 September 2004</b>	<b>4.7</b>	<b>12.4</b>	<b>17.1</b>
<i>Net book value</i>			
At 1 October 2003	10.1	5.6	15.7
At 30 September 2004	<b>9.7</b>	<b>1.6</b>	<b>11.3</b>

**f) Net book value of land and buildings at 30 September 2004**

	<b>2004</b> £ <b>million</b>	Group 2003 £ million	<b>2004</b> £ <b>million</b>	Parent 2003 £ million
Freehold property	<b>368.5</b>	395.2	<b>9.7</b>	10.1
Leasehold property – long-term	<b>33.9</b>	34.2		
short-term	<b>4.1</b>	3.3		
	<b>406.5</b>	432.7	<b>9.7</b>	10.1

**g) Capital commitments**

	<b>2004</b>	Group 2003
	<b>£</b>	
	<b>million</b>	£ million
Against which orders had been placed	<b>26.2</b>	20.9
Authorised but not committed	<b>101.2</b>	101.9
	<b>127.4</b>	122.8

There were no capital commitments by The BOC Group plc at either 30 September 2004 or 30 September 2003.

The Group's share of its joint ventures and associates' capital commitments was:

	<b>2004</b>	2003
	<b>£ million</b>	£ million
Against which orders had been placed	<b>33.6</b>	14.5
Authorised but not committed	<b>24.8</b>	12.2
	<b>58.4</b>	26.7

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## Notes to the financial statements

## 13. Fixed assets investments

## a) Group summary

	Group share of net assets of associates £ million	Negative goodwill of joint ventures £ million	Group share of net assets of joint ventures £ million	Group loans to joint ventures and associates £ million	Other investments at cost £ million	Provisions against Own share investments £ million	other investments £ million	Total £ million
At 1 October 2003 - previously reported	7.0	52.6	402.3	107.9	39.4	48.1	(0.6)	656.7
Prior year adjustment (see note 31)						(48.1)		(48.1)
At 1 October 2003 - restated	7.0	52.6	402.3	107.9	39.4		(0.6)	608.6
Exchange adjustment	(0.6)	(3.9)	0.5	(26.7)	(9.9)	(1.9)	0.1	(42.4)
Acquisitions/additions		0.1	(41.5)	(2.5)	107.7	6.0		69.8
(Charged)/credited to profit	(0.5)		0.2					(0.3)
Disposals/repayments/transfers		(2.5)	(10.1)	(3.1)	(7.8)		(0.7)	(24.2)
Increase/(decrease) in net assets		0.2	(10.5)					(10.3)
JAG capital restructuring			(53.0)					(53.0)
At 30 September 2004	<b>5.9</b>	<b>46.5</b>	<b>(40.8)</b>	<b>299.5</b>	<b>202.6</b>	<b>35.7</b>	<b>(1.2)</b>	<b>548.2</b>

## i) Joint ventures

The cost of investment in joint ventures was £259.5 million (2003: £308.6 million) and the attributable profit before tax was £79.5 million (2003: £60.4 million, 2002: £40.1 million).

The Group's share of net assets of joint ventures at 30 September 2004 can be analysed as follows:

	Share of net assets £ million	Negative goodwill £ million	Total £ million
Share of fixed assets	748.9		748.9
Negative goodwill		(40.8)	(40.8)
Share of current assets	288.0		288.0
	1,036.9	(40.8)	996.1

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Share of liabilities due within one year	(207.6)		(207.6)
Share of liabilities due after more than one year	(529.8)		(529.8)
	(737.4)		(737.4)
Share of net assets	299.5	(40.8)	258.7

The negative goodwill represents the excess of the fair value of the net assets over the fair value of the purchase consideration and is being amortised over 17 years.

The Group's share of the borrowings of joint ventures at 30 September 2004 was:

	Gross borrowings	Net borrowings
Compania de Nitrogeno de Cantarell <sup>1</sup>	127.2	79.6
Japan Air Gases	55.5	51.5
Elgas	32.0	29.5
Other joint ventures	56.2	33.7
<b>Total</b>	<b>270.9</b>	<b>194.3</b>

1. Excluding loans from joint venture partners.  
Of the net borrowings, £185.4 million was non-recourse.

*ii) Associates*

The cost of investment in associates was £23.9 million (2003: £26.6 million) and the attributable profit before tax was £12.2 million (2003: £10.4 million, 2002: £9.4 million).

The Group's share of the net borrowings of associates was £6.9 million (2003: £2.8 million). All of this was non-recourse.

**Notes to the financial statements****13. Fixed assets investments continued****b) Valuation**

	<b>2004</b>	2003
	<b>£ million</b>	(restated) £ million
Listed on stock exchanges in the UK and overseas	<b>34.7</b>	44.5
Unlisted equity at directors valuation	<b>300.6</b>	441.5
other at directors valuation	<b>212.9</b>	122.6
Total book value	<b>548.2</b>	608.6
Market value of listed investments	<b>85.8</b>	84.3

**c) Income**

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Listed securities	<b>9.9</b>	4.7	7.5
Unlisted securities	<b>69.4</b>	32.0	30.6
	<b>79.3</b>	36.7	38.1
<i>Less:</i> Dividends receivable from joint ventures	<b>69.0</b>	31.7	30.5
Dividends receivable from associates	<b>10.1</b>	3.3	3.4
Income from other fixed asset investments	<b>0.2</b>	1.7	4.2

**d) Parent**

	Investments in subsidiary undertakings	Investments in related undertakings	Amounts due from subsidiary undertakings	Own shares £ million	Other investments £ million	Provisions £ million	Total £ million
At 1 October 2003 previously reported	1,703.0	8.7	1,351.7	42.5	11.1	(16.5)	3,100.5
Prior year adjustment (see note 31)				(42.5)			(42.5)
At 1 October 2003 restated	1,703.0	8.7	1,351.7		11.1	(16.5)	3,058.0
Additions	463.8						463.8
Charged to profit						(4.3)	(4.3)
Disposals	(29.1)	(8.7)			(3.3)		(41.1)
Advances/repayments (net)			(493.8)				(493.8)

At 30 September 2004	<b>2,137.7</b>	<b>857.9</b>	<b>7.8</b>	<b>(20.8)</b>	<b>2,982.6</b>
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Provisions relate to investments in subsidiary undertakings (£16.8 million), amounts due from subsidiary undertakings (£3.5 million) and other investments (£0.5 million).

#### 14. Stocks

	<b>2004</b>	Group 2003
	<b>£</b>	
	<b>million</b>	£ million
Raw materials	<b>89.5</b>	81.3
Work in progress	<b>68.0</b>	51.1
Gases and other finished goods	<b>162.3</b>	172.0
Payments on account	<b>(35.4)</b>	(20.2)
	<b>284.4</b>	284.2

Amounts relating to long-term contracts included in work in progress were £0.4 million (2003: £0.8 million). There were no stocks on the balance sheet of The BOC Group plc at either 30 September 2004 or 30 September 2003.

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## Notes to the financial statements

## 15. Debtors

## a) Debtors falling due within one year

	<b>2004</b>	Group 2003	<b>2004</b>	Parent 2003
	<b>£</b>		<b>£</b>	
	<b>million</b>	£ million	<b>million</b>	£ million
Trade debtors	<b>561.5</b>	569.8		
Amounts due from subsidiary undertakings			<b>286.5</b>	669.4
Amounts due from joint ventures and associates	<b>7.6</b>	5.7	<b>5.7</b>	5.0
Other debtors	<b>106.4</b>	93.5	<b>28.2</b>	15.0
Prepayments and accrued income	<b>30.1</b>	28.8		5.0
	<b>705.6</b>	697.8	<b>320.4</b>	694.4

Trade debtors are shown net of provisions for bad and doubtful debts of £29.8 million (2003: £31.6 million).

## b) Debtors falling due after more than one year

	<b>2004</b>	Group 2003
	<b>£</b>	
	<b>million</b>	£ million
Deferred tax	<b>5.8</b>	6.6
Other debtors	<b>10.5</b>	17.0
	<b>16.3</b>	23.6

There were no debtors falling due after more than one year on the balance sheet of The BOC Group plc at either 30 September 2004 or 30 September 2003.

## 16. Current asset investments

	<b>2004</b>	Group 2003
	<b>£</b>	
	<b>million</b>	£ million
Listed investments	<b>20.8</b>	21.8
Total current asset investments	<b>20.8</b>	21.8
Market value of listed investments	<b>20.8</b>	21.8

There were no current asset investments on the balance sheet of The BOC Group plc at either 30 September 2004 or 30 September 2003.

**17. Cash at bank and in hand**

	<b>2004</b>	Group	<b>2004</b>	Parent
	<b>£</b>	2003	<b>£</b>	2003
	<b>million</b>	£ million	<b>million</b>	£ million
Deposits	<b>26.5</b>	4.7		
Cash at bank and in hand	<b>201.7</b>	72.8	<b>80.8</b>	
	<b>228.2</b>	77.5	<b>80.8</b>	



## Notes to the financial statements

## 18. Creditors: amounts falling due within one year

a) Borrowings and finance leases <sup>1</sup>

	2004 £ million	Group 2003 £ million	2004 £ million	Parent 2003 £ million
Bank loans and overdrafts	80.1	164.6	83.2	178.6
Loans other than from banks	179.4	182.0	168.9	125.0
Finance leases	2.6	14.3		
	<b>262.1</b>	360.9	<b>252.1</b>	303.6

1. Details of borrowings and finance leases are given in note 20.

## b) Other creditors

Deposits and advance payments by customers	55.0	62.8		
Trade creditors	329.2	308.9		
Amounts due to subsidiary undertakings			949.7	992.3
Taxation	139.2	132.7		
Other taxes and social security payable	32.4	34.8		
Other creditors	159.9	117.3	0.9	2.6
Accruals and deferred income	156.9	150.8	53.5	55.0
	<b>872.6</b>	807.3	<b>1,004.1</b>	1,049.9

## 19. Creditors: amounts falling due after more than one year

a) Borrowings and finance leases <sup>1</sup>

	2004 £ million	Group 2003 £ million	2004 £ million	Parent 2003 £ million
Bank loans	88.5	108.9	(2.7)	(20.7)
Loans other than from banks	834.5	968.2	677.2	787.3
Finance leases	5.5	7.6		
	<b>928.5</b>	1,084.7	<b>674.5</b>	766.6

1. Details of borrowings and finance leases are given in note 20.

## b) Other creditors

Deposits and advance payments by customers	22.2	25.2		
Other creditors	6.7	13.1		4.3

Accruals and deferred income	<b>5.8</b>	10.1	<b>3.2</b>	6.1
	<b>34.7</b>	48.4	<b>3.2</b>	10.4

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## Notes to the financial statements

## 20. Net borrowings and finance leases

## a) Analysis

	2004 £ million	Group 2003 £ million	2004 £ million	Parent 2003 £ million
<i>Secured</i>				
Finance leases	8.1	21.9		
Other secured borrowings	55.2	64.9		
<i>Unsecured</i>				
12¼% Unsecured Loan Stock 2012/2017	100.0	100.0	100.0	100.0
7.45% Guaranteed Notes 2006	138.1	150.6		
Pollution Control and Industrial Bonds	16.7	18.3		
European Investment Bank loans	15.7	15.3		
6.75% Bonds 2004		125.0		125.0
1.00% Euroyen Bond 2006	125.4	134.7	125.4	134.7
5 % Bonds 2009	200.0	200.0	200.0	200.0
6.50% Bonds 2016	200.0	200.0	200.0	200.0
Medium-term notes	224.1	156.1	224.1	156.1
Commercial paper	5.5	55.2		
Other borrowings	101.8	203.6	77.1	154.4
Total borrowings and finance leases	1,190.6	1,445.6	926.6	1,070.2
Less: Cash at bank and in hand	228.2	77.5	80.8	
Net borrowings and finance leases	962.4	1,368.1	845.8	1,070.2

A reconciliation of net cash flow to the movement in net debt is given in note 27 b).

## b) Maturity

	2004 £ million	Group 2003 £ million	2004 £ million	Parent 2003 £ million
<i>Long and medium-term bank loans</i>				
Repayable beyond five years	17.0	19.1		
two to five years	26.1	59.1	0.2	(2.9)
one to two years	45.4	30.7	(2.9)	(17.8)
<i>Loans other than from banks</i>				
Repayable beyond five years	303.5	502.2	298.3	496.6
two to five years	383.6	352.1	378.9	193.4
one to two years	147.4	113.9		97.3

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<i>Finance leases</i> repayable beyond one year	<b>5.5</b>	7.6		
Borrowings and finance leases (note 19 a))	<b>928.5</b>	1,084.7	<b>674.5</b>	766.6
<i>Short-term</i> repayable within one year				
Bank loans and overdrafts	<b>80.1</b>	164.6	<b>83.2</b>	178.6
Loans other than from banks	<b>179.4</b>	182.0	<b>168.9</b>	125.0
Finance leases	<b>2.6</b>	14.3		
Total borrowings and finance leases	<b>1,190.6</b>	1,445.6	<b>926.6</b>	1,070.2
<i>Less:</i> Cash at bank and in hand	<b>228.2</b>	77.5	<b>80.8</b>	
Net borrowings and finance leases	<b>962.4</b>	1,368.1	<b>845.8</b>	1,070.2

	<b>2004</b>			<b>2003</b>		
	<b>Finance leases</b>	<b>Other borrowings</b>	<b>Total</b>	Finance leases	Other borrowings	Total
	<b>£ million</b>	<b>£ million</b>	<b>£ million</b>	£ million	£ million	£ million
<i>Repayment profile of borrowings and finance leases</i>						
Long-term repayable						
beyond five years		<b>320.5</b>	<b>320.5</b>	0.5	521.3	521.8
four to five years	<b>0.1</b>	<b>201.4</b>	<b>201.5</b>	0.2	62.6	62.8
three to four years	<b>0.8</b>	<b>58.6</b>	<b>59.4</b>	2.3	149.3	151.6
two to three years	<b>2.6</b>	<b>149.7</b>	<b>152.3</b>	2.7	199.3	202.0
one to two years	<b>2.0</b>	<b>192.8</b>	<b>194.8</b>	1.9	144.6	146.5
Total	<b>5.5</b>	<b>923.0</b>	<b>928.5</b>	7.6	1,077.1	1,084.7

**Notes to the financial statements****20. Net borrowings and finance leases** continued**c) Short-term interest rates**

The average interest rate on commercial paper for the year to 30 September 2004 was 3.3 per cent (2003: 2.5 per cent) and on other short-term borrowings was 9.3 per cent (2003: 8.7 per cent).

**d) Facilities**

The Group maintains a number of short and medium-term committed lines of credit. The main medium-term facilities are multi-currency agreements with a group of relationship banks, under which the Group may borrow up to US\$450.0 million (£249 million) (2003: US\$450.0 million (£271 million)) for general corporate purposes. These facilities were undrawn both at 30 September 2004 and 30 September 2003. The following table shows the maturity profile of these facilities.

	<b>2004</b>	2003
	<b>\$ million</b>	\$ million
Four to five years		450.0
Three to four years	<b>450.0</b>	
Two to three years		
One to two years		
Within one year		
	<b>450.0</b>	450.0

Additional committed facilities are maintained by the principal operating units in the Group.

**e) Security**

The secured loans, maturing between 30 September 2004 and 2019, are principally secured by charges over the property, plant and machinery, stocks and trade debtors of certain overseas subsidiaries.

**21. Financial instruments****a) Interest rate, currency and counterparty exposure**

The Group's approach to managing currency and interest rate risk and its use of swaps in that process is described on page 50 in the financial review under the heading management of financial risks .

*Interest rate swaps*

At 30 September 2004, the Group had entered into five interest rate swap agreements (2003: six) with its main relationship banks with notional principal amounts of £285.3 million (2003: £417.6 million). The swaps' underlying currencies are sterling, US dollars and Japanese yen. The following table shows the maturity profile and weighted average interest rates payable and receivable on interest rate swaps at 30 September:

	<b>2004</b>	2003
	<b>£ million</b>	£ million
<i>Maturity profile</i>		
Beyond five years		200.0
Four to five years	<b>200.0</b>	92.6
Three to four years	<b>85.3</b>	
Two to three years		
One to two years		
Within one year		125.0
	<b>285.3</b>	417.6
	<b>%</b>	<b>%</b>
Weighted average receivable swap rate	<b>3.8</b>	5.2
Weighted average payable swap rate	<b>4.5</b>	4.0

The weighted average receivable/payable swap interest rate is calculated by applying the notional swap interest received or paid, using rates applicable at the financial year end, to the notional principal of outstanding swaps at the financial year end.

During the year, the Group also entered into four interest rate swap agreements that are due to commence in 2006 and 2007 for a period of five years. The notional principal amounts of these swaps are £105.4 million and their underlying currencies are US dollars and Japanese yen.

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## Notes to the financial statements

## 21. Financial instruments continued

## Currency swaps

At 30 September 2004, the Group had entered into 25 currency swap agreements (2003: 13) with its main relationship banks with notional principal amounts of £593.1 million (2003: £474.7 million). The maturity dates range between one month and 48 months from the balance sheet date (2003: between one month and 56 months). The following table illustrates the impact of the currency swaps on the Group's net debt at 30 September:

	Capital employed	Gross borrowings	Cash at bank and in hand £ million	Currency swaps £ million	2004 Net borrowings and finance leases £ million	Capital employed (restated) £ million	2003 Net borrowings and finance leases £ million
Sterling	593.6	(478.1)	71.5	302.0	(104.6)	626.6	(285.3)
US dollar	918.9	(178.1)	15.5	(189.8)	(352.4)	1,152.0	(444.4)
Australian dollar	298.7	(0.1)	16.1	(92.0)	(76.0)	333.7	(95.7)
South African rand	314.0	(54.6)	40.2	(85.2)	(99.6)	306.4	(47.7)
Japanese yen	186.7	(204.8)	2.6	48.1	(154.1)	265.6	(237.9)
Canadian dollar	104.2	(6.7)	1.7	(35.0)	(40.0)	115.1	(56.0)
Thai baht	121.0	(54.9)	2.9		(52.0)	134.2	(67.2)
Other	683.3	(213.3)	77.7	51.9	(83.7)	723.5	(133.9)
<b>Total</b>	<b>3,220.4</b>	<b>(1,190.6)</b>	<b>228.2</b>		<b>(962.4)</b>	<b>3,657.1</b>	<b>(1,368.1)</b>

The weighted average receivable interest rate on currency swaps was 3.9 per cent (2003: 3.4 per cent) and the weighted average payable interest rate was 4.1 per cent (2003: 2.9 per cent). The weighted average receivable/payable swap interest rate is calculated by applying the notional swap interest received or paid, using rates applicable at the financial year end, to the notional principal of outstanding swaps at the financial year end.

The currency and interest rate exposure of the net borrowings of the Group at 30 September, after taking into account interest rate and currency swaps entered into by the Group, is given in the table below.

	Fixed rate £ million	Floating rate £ million	2004 Total £ million	Fixed rate £ million	Floating rate £ million	2003 Total £ million
Sterling	296.8	(192.2)	104.6	300.2	(14.9)	285.3
US dollar	279.1	73.3	352.4	303.6	140.8	444.4
Australian dollar	0.1	75.9	76.0	1.1	94.6	95.7
South African rand	38.0	61.6	99.6	40.7	7.0	47.7
Japanese yen	151.7	2.4	154.1	163.3	74.6	237.9

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Canadian dollar	<b>22.8</b>	<b>17.2</b>	<b>40.0</b>	22.3	33.7	56.0
Thai baht	<b>54.9</b>	<b>(2.9)</b>	<b>52.0</b>	58.3	8.9	67.2
Other	<b>44.4</b>	<b>39.3</b>	<b>83.7</b>	42.3	91.6	133.9
Total	<b>887.8</b>	<b>74.6</b>	<b>962.4</b>	931.8	436.3	1,368.1

*Counterparty risk*

The Group is exposed to credit-related losses in the event of non-performance by counterparties to financial instruments, but does not expect any counterparties to fail to meet their obligations. There are procedures and policies in place limiting the Group's exposure to concentrations of credit or country risk.

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**Notes to the financial statements****21. Financial instruments** continued**b) Fair value information***i) Fair values of financial instruments*

Set out below is a comparison of the carrying amount and the fair value of the Group's financial instruments (excluding short-term debtors and creditors) at 30 September 2004. Further details of the Group's financial instruments are given in note 21 d).

		<b>2004</b>		<b>2003</b>	
	Notes	<b>Carrying amount £ million</b>	<b>Fair value £ million</b>	Carrying amount £ million	Fair value £ million
<i>Primary financial instruments</i>					
Loans to joint ventures and associates	1	<b>202.6</b>	<b>202.6</b>	107.9	107.9
Other fixed asset investments	2	<b>34.5</b>	<b>41.8</b>	38.8	39.7
Current asset investments	3	<b>20.8</b>	<b>20.8</b>	21.8	21.8
Cash at bank and in hand	4	<b>228.2</b>	<b>228.2</b>	77.5	77.5
Borrowings and finance leases (excluding swap agreements)	5	<b>(1,218.5)</b>	<b>(1,286.9)</b>	(1,463.3)	(1,559.4)
Other creditors: amounts falling due after more than one year	6	<b>(26.8)</b>	<b>(26.8)</b>	(37.1)	(37.1)
Provisions for liabilities and charges	6	<b>(10.5)</b>	<b>(10.5)</b>	(10.6)	(10.6)
<i>Derivative financial instruments held to manage the Group's interest rate and currency risk profile</i>					
Foreign currency and interest rate swap agreements	7	<b>27.9</b>	<b>18.4</b>	17.7	25.6
Forward foreign exchange contracts	8		<b>7.5</b>		5.8
Net financial instruments		<b>(741.8)</b>	<b>(804.9)</b>	(1,247.3)	(1,328.8)
Financial assets		<b>486.1</b>		246.0	
Financial liabilities	9	<b>(1,227.9)</b>		(1,493.3)	
Net financial instruments		<b>(741.8)</b>		(1,247.3)	

1. For those bearing either no interest or a floating rate of interest it is deemed that the carrying amount approximates to the fair value. For those bearing a fixed rate of interest an assessment of the interest rate at which the Group could make the same loan under current conditions has been made. Unless this differs significantly from the fixed rate it is also deemed that the carrying amount approximates to the fair value. Where this does differ significantly, the fair value is based on the discounted value of future cash flows.
2. For equity instruments listed on a recognised stock exchange the fair value is the quoted market price. For other equity instruments it is deemed that the carrying amount approximates to the fair value.
- 3.

The fair value is the quoted market price. Where no quoted market price exists, it is deemed that the carrying amount approximates to the fair value.

4. As all bear either no interest or a floating rate of interest it is deemed that the carrying amount approximates to the fair value.
5. For those bearing a floating rate of interest it is deemed that the carrying amount approximates to the fair value. For those bearing a fixed rate of interest the fair value is either the quoted market price where a liquid market exists or has been calculated using well established pricing models.
6. The carrying amount is deemed to approximate to the fair value.
7. The fair value is based on market valuations at the balance sheet date.
8. The fair value is based on market prices and exchange rates at the balance sheet date.
9. Includes foreign currency and interest rate swap agreements.

*ii) Hedges*

As explained on page 50 of the financial review under the heading management of financial risks, the Group's policies are to use forward foreign exchange contracts to hedge transactional currency exposures (principally arising through anticipated sales and purchase transactions) and swap agreements to manage interest rate risks and hedge structural currency exposures.

Currency swaps are only held to change the currency of the Group's borrowings to match better its net investments in its overseas subsidiaries. In accordance with the Group's accounting policies, the assets and liabilities arising from these swap agreements are translated into sterling at the spot rate ruling at the balance sheet date. The resulting exchange gains or losses are recognised in the statement of total recognised gains and losses (to match the exchange gains or losses on the net investments in the overseas subsidiaries).

The carrying amount of the swap agreements (as shown in note 21 b) i)) is the result of the exchange gains and losses recognised in the statement of total recognised gains and losses, and is analysed in the deferred gains and losses table shown below.

	Gains	Swap agreements Losses	Net
	£	£	£
	million	million	million
<i>Deferred gains and losses</i>			
Deferred gains and losses on hedges at 1 October 2003	23.4	(5.7)	17.7
Gains and losses on hedges maturing in 2004	(2.7)	5.7	3.0
Deferred gains and losses on hedges recognised in the statement of total recognised gains and losses in 2004	14.2	(7.0)	7.2
Deferred gains and losses on hedges at 30 September 2004	<b>34.9</b>	<b>(7.0)</b>	<b>27.9</b>

**Notes to the financial statements****21. Financial instruments** continued

The unrecognised difference between the carrying amount and the fair value of the forward foreign exchange contracts and the swap agreements (as shown in note 21 b) i)) is analysed in the unrecognised gains and losses table below.

	Forward foreign exchange contracts		Swap agreements		Net total
	Gains	Losses	Gains	Losses	
	£	£	£	£	£
	million	million	million	million	million
<i>Unrecognised gains and losses</i>					
Unrecognised gains and losses on hedges at 1 October 2003	6.9	(1.1)	18.9	(11.0)	13.7
Gains and losses arising in previous years that were recognised in 2004	(5.1)	0.7	(18.0)	0.6	(21.8)
Gains and losses arising before 2003 that were not recognised in 2004	1.8	(0.4)	0.9	(10.4)	(8.1)
Gains and losses arising in 2004 that were not recognised in 2004	6.6	(0.5)	0.3	(0.3)	6.1
Unrecognised gains and losses on hedges at 30 September 2004	<b>8.4</b>	<b>(0.9)</b>	<b>1.2</b>	<b>(10.7)</b>	<b>(2.0)</b>
<i>Of which</i>					
Gains and losses expected to be recognised in 2005	7.9	(0.7)	0.6	(0.5)	7.3
Gains and losses expected to be recognised in 2006 or later	0.5	(0.2)	0.6	(10.2)	(9.3)

**c) Currency exposures**

As outlined on page 50 in the financial review under the heading 'currency risk', it is the Group's policy to hedge against the potential impact on its profit and loss account of the currency gains and losses arising from monetary assets and liabilities not denominated in the operating or functional currency of the operating unit involved.

After taking account of the hedging transactions, there was no significant net profit and loss account exposure to currency gains and losses arising from monetary assets and liabilities at 30 September 2004.

**d) Financial instruments***i) Financial assets*

The interest rate and currency profile of the Group's financial assets (excluding short-term debtors) at 30 September 2004 is shown below. The categories of the Group's financial assets are shown in note 21 b) i).

2004

2003

	Financial assets on which no interest is received				Financial assets on which no interest is received			
	Floating rate	Fixed rate	which no interest is received	Total	Floating rate	Fixed rate	which no interest is received	Total
	financial assets	financial assets	received	financial assets	financial assets	financial assets	received	financial assets
	£	£	£	£	£	£	£	£
	million	million	million	million	million	million	million	million
Sterling	81.0		2.3	83.3	14.7		2.3	17.0
US dollar	34.0	184.1	32.6	250.7	23.1	100.7	20.2	144.0
Australian dollar	16.1			16.1	3.0			3.0
South African rand	44.2		3.8	48.0	32.3		3.1	35.4
Japanese yen	2.6			2.6	0.8			0.8
Canadian dollar	1.7			1.7	0.2			0.2
Thai baht	5.1		0.7	5.8	4.7		0.8	5.5
Other	69.1	8.7	0.1	77.9	40.1			40.1
Total	253.8	192.8	39.5	486.1	118.9	100.7	26.4	246.0

	2004		2003	
	Fixed rate	financial assets	Fixed rate	financial assets
	Weighted average	period for which rate is fixed	Weighted average	period for which rate is fixed
	interest rate	years	interest rate	years
	%		%	
US dollar	8.2	3.5	7.2	4.5
Other	5.2	0.3		

Financial assets on which no interest is received comprise £24.3 million (2003: £24.2 million) of non-redeemable equity instruments in other companies and £15.2 million (2003: £2.2 million) of loans to joint ventures and associates which have no fixed date of repayment.

The floating rate financial assets, which principally comprise cash and deposits, current asset investments and loans to joint ventures and associates, carry interest based on different benchmark rates depending on the currency of the balance.

The principal benchmark rates for floating rate financial assets are LIBOR for sterling balances, US LIBOR for US dollar balances, Australian bank bill rate for Australian dollar balances, South African prime rate for South African rand balances and Japanese yen LIBOR for Japanese yen balances.

## Notes to the financial statements

## 21. Financial instruments continued

## ii) Financial liabilities

The interest rate and currency profile of the Group's financial liabilities including swaps (excluding short-term creditors) at 30 September 2004 is shown below. The categories of the Group's financial liabilities are shown in note 21 b) i).

	2004				2003			
	Floating rate financial liabilities	Fixed rate financial liabilities	Financial liabilities on which no interest is paid	Total financial liabilities	Floating rate financial liabilities	Fixed rate financial liabilities	Financial liabilities on which no interest is paid	Total financial liabilities
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Sterling	(120.7)	296.8	2.5	178.6	(13.2)	300.2	4.0	291.0
US dollar	99.3	279.1	4.8	383.2	155.0	303.6	9.2	467.8
Australian dollar	92.0	0.1		92.1	97.6	1.1		98.7
South African rand	101.8	38.0		139.8	33.0	40.7		73.7
Japanese yen	5.0	151.7	0.7	157.4	75.4	163.3	0.8	239.5
Canadian dollar	18.9	22.8		41.7	33.9	22.3	0.9	57.1
Thai baht		54.9	10.9	65.8	11.0	58.3	13.0	82.3
Other	108.3	53.1	7.9	169.3	131.7	42.3	9.2	183.2
Total	304.6	896.5	26.8	1,227.9	524.4	931.8	37.1	1,493.3

	2004		2003	
	Weighted average interest rate	Fixed rate financial liabilities Weighted average period for which rate is fixed	Weighted average interest rate	Fixed rate financial liabilities Weighted average period for which rate is fixed
	%	years	%	years
Sterling	9.2	11.9	8.3	12.9
US dollar	5.8	2.0	5.8	3.0
Australian dollar	5.7	1.8	6.2	3.0
South African rand	12.8	3.3	12.2	4.9

Japanese yen	<b>0.9</b>	<b>1.9</b>	0.9	2.9
Canadian dollar	<b>4.7</b>	<b>4.0</b>	4.7	1.0
Thai baht	<b>3.7</b>	<b>1.4</b>	3.9	1.8
Other	<b>6.0</b>	<b>2.6</b>	6.9	3.0

The floating rate financial liabilities principally comprise debt which carries interest based on different benchmark rates depending on the currency of the balance.

The principal benchmark rates for floating rate financial liabilities are LIBOR for sterling balances, US LIBOR for US dollar balances, Australian bank bill rate for Australian dollar balances, South African prime rate for South African rand balances and Japanese yen LIBOR for Japanese yen balances.

The maturity profile of borrowings is set out in note 20 b). Floating rate financial liabilities other than borrowings are mainly employee incentive provisions. These are expected to be utilised over the period to 2011 depending on the future choices of the relevant employees. Financial liabilities on which no interest is paid principally relate to creditors due after more than one year. The majority of the amount relates to deposits for cylinder rentals. It is not anticipated that this balance will reduce significantly in the short to medium term. The remaining balances falling due after more than one year are expected to be paid or utilised by 2009.

## 22. Provisions for liabilities and charges

	Deferred tax	Incentive and other employee provisions	Uninsured losses	Environmental	Other provisions	Total
	£ million	£ million	£ million	£ million	£ million	£ million
At 1 October 2003	279.2	26.1	21.8	19.7	29.8	97.4
Exchange adjustment	(4.1)	(1.7)	(1.7)	(1.6)	(0.8)	(5.8)
Provided in the year		3.9	0.8	6.0	10.3	21.0
Released in the year	(14.8)				(1.2)	(1.2)
Utilised in the year		(5.9)	(0.2)	(4.8)	(9.9)	(20.8)
Acquisitions/(disposals) of businesses				3.1		3.1
Other movements <sup>1</sup>	(7.3)	(1.2)			(0.3)	(1.5)
At 30 September 2004	<b>253.0</b>	<b>21.2</b>	<b>20.7</b>	<b>22.4</b>	<b>27.9</b>	<b>92.2</b>

- The other movements in deferred tax relate mainly to the net profit and loss charge on pensions which, for balance sheet purposes, is included within the corresponding net pension asset/(liability) in accordance with FRS17.

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## Notes to the financial statements

### 22. Provisions for liabilities and charges continued

Incentive and other employee provisions include long-term share incentive units and deferred compensation plans. Note 7 contains further details of the long-term share incentive units.

Provision for uninsured losses covers third party liabilities or claims. Due to the time frame that is often involved in such claims, a significant part of this provision is subject to actuarial valuation. Where this is not appropriate, other external assessments are used.

Environmental provisions have been set aside to cover the costs of remediation for a number of hazardous waste sites. The costs are expected to be incurred between 2005 and 2030. Due to the period over which this expenditure is likely to be incurred, the provision has been discounted at a rate of four per cent. The effect of discounting is £8 million. Management expects that payments will be approximately £4 million each year for the next five years and £10 million in total thereafter.

Other provisions are principally for warranty and legal costs.

Further information on deferred tax is disclosed in note 4.

### 23. Share capital

	Number of shares			
	2004	2003	2004	2003
			£	£
	million	million	million	million
<i>i) Analysis at 30 September</i>				
<i>Equity capital:</i>				
Issued capital	Ordinary shares of 25p each, called up and fully paid			
		497.7	124.7	124.4
Unissued capital	unclassified shares of 25p each	92.3	22.8	23.1
Authorised			147.5	147.5

#### *ii) Share issues*

*Issues of Ordinary shares of 25p each during the year were:*

	Number million
Under the savings related share option scheme	0.7
Under the senior executives share option scheme	0.4

### 24. Reserves

#### a) Group

Share	Joint	Own
premium	ventures	
Revaluation	Associates	
Profit and		
Pensions		

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	account £ million	reserves £ million	loss account £ million	reserves £ million	reserves £ million	reserves £ million	shares £ million	Total £ million
At 1 October 2003								
previously reported	366.0	30.8	1,198.4	(291.1)	273.3	33.0		1,610.4
Prior year adjustment (see note 31)			0.7				(48.8)	(48.1)
At 1 October 2003 restated	366.0	30.8	1,199.1	(291.1)	273.3	33.0	(48.8)	1,562.3
Total recognised gains and losses for the year		(0.7)	198.9		(35.3)	(7.0)		155.9
Transfers in relation to pensions			(37.5)	37.5				
Reversal of goodwill on disposal of a business			15.3					15.3
Consideration received for the sale of own shares held in an ESOP trust							2.5	2.5
Credit in respect of employee share schemes			3.5					3.5
Dividends			(197.3)					(197.3)
Premium on share issues (net)	8.9		(0.5)					8.4
At 30 September 2004	<b>374.9</b>	<b>30.1</b>	<b>1,181.5</b>	<b>(253.6)</b>	<b>238.0</b>	<b>26.0</b>	<b>(46.3)</b>	<b>1,550.6</b>

i) The undistributed profits of Group undertakings may be liable to overseas and/or UK tax (after allowing for double tax relief) if distributed as dividends. There are no material exchange control restrictions on the remittance of funds to the UK.

ii) Goodwill written off against reserves in respect of continuing businesses acquired prior to 30 September 1998 amounts to £154.0 million (2003: £178.3 million). The decrease in the year principally reflects the disposal of the US packaged gas business and movements in exchange rates.

iii) In accordance with the Group's accounting policy, exchange gains (net of losses) on net borrowings credited to reserves in the year amounted to £59.7 million (2003: £20.4 million charge).

iv) There are no non-equity shareholders' interests in the share capital and reserves of the Group.

v) The amount of the pensions' reserves is equivalent to the net pensions liabilities (see note 8) adjusted for current tax of £22.0 million (2003: £nil, 2002: £nil).

vi) Own shares

The application of UITF38: Accounting for ESOP trusts has required the investment in own shares to be reclassified in the balance sheet as a deduction in arriving at shareholders' funds (see note 31).

At 30 September 2004, 5.0 million shares in the company were held pending the exercise of share options. Based on the company's share price at 30 September 2004 of 884p, the market value of own shares held was £44.3 million. This compares with the acquisition cost above. The amount paid for the shares reduces profit available for distribution.

Information on share option schemes appears in the report on remuneration and in notes 7 and 23.



**Notes to the financial statements****24. Reserves continued****b) Parent company**

	Share premium account £ million	Other reserves £ million	Profit and loss account £ million	Own shares £ million	Total £ million
At 1 October 2003 - previously reported	366.0	336.4	853.3		1,555.7
Prior year adjustment (see note 31)			0.7	(43.2)	(42.5)
At 1 October 2003 - restated	366.0	336.4	854.0	(43.2)	1,513.2
Profit for the financial year			11.4		11.4
Dividends			(197.4)		(197.4)
Premium on share issues (net)	8.9		(0.5)		8.4
Credit in respect of employee share schemes			3.5		3.5
Net increase in investment in own shares				(2.6)	(2.6)
At 30 September 2004	<b>374.9</b>	<b>336.4</b>	<b>671.0</b>	<b>(45.8)</b>	<b>1,336.5</b>

The premium on share issues represents amounts paid to The BOC Group plc for the issue of shares under the Group's share option schemes.

Employees paid £8.4 million. The Group paid the balance of £0.5 million to a qualifying employee share ownership trust (Quest).

**25. Financial commitments****a) Annual operating lease commitments**

	Property leases £ million	2004 Other operating leases £ million	Property leases £ million	2003 Other operating leases £ million
<i>On leases expiring:</i>				
Within one year	2.1	2.1	2.3	3.3
Between one and two years	2.2	5.6	1.8	5.6
Between two and five years	5.4	11.0	6.3	10.7
Over five years	14.9	3.2	16.5	8.9
	<b>24.6</b>	<b>21.9</b>	<b>26.9</b>	<b>28.5</b>

	Operating leases £ million
<i>Rentals are due under operating leases from 1 October 2004 to completion as follows:</i>	
Year to 30 September 2005	46.5
Year to 30 September 2006	39.4
Year to 30 September 2007	31.6
Year to 30 September 2008	26.0
Year to 30 September 2009	23.2
Thereafter	115.3
	282.0

#### **b) Other commitments**

The Group is committed to make future purchases under take-or-pay contracts. Obligations under such contracts in effect at 30 September 2004 are as follows:

Year ending 30 September	£ million
2005	57.9
2006	66.3
2007	65.0
2008	65.8
2009	60.5
Thereafter	418.8
	734.3

For the year ended 30 September 2004 total purchases made relating to these contracts amounted to £55.0 million (2003: £65.8 million, 2002: £58.2 million).

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## Notes to the financial statements

### 26. Contingent liabilities and legal proceedings

#### a) Contingent liabilities

	2004	Group 2003	2004	Parent 2003
	£	£	£	£
	million	million	million	million
Guarantees of joint ventures borrowings	8.9	2.8	8.9	2.8
Guarantees of subsidiaries borrowings			289.5	387.6
Other guarantees	32.9	24.0	18.0	10.5
	<b>41.8</b>	26.8	<b>316.4</b>	400.9

#### b) Legal proceedings

Group companies are parties to various legal proceedings, including some in which claims for damages in large amounts have been asserted.

The outcome of litigation to which Group companies are party cannot be readily foreseen, but the directors believe that such litigation should be disposed of without material adverse effect on the Group's financial condition or profitability.

##### *Welding fumes litigation*

A US subsidiary of the Group, The BOC Group, Inc., has been named in US lawsuits alleging injury from exposure to welding fumes. Certain of these cases have been either filed in, or transferred for pre-trial purposes to, the federal district court in the Northern District of Ohio, where a multi-district litigation (MDL) proceeding has been commenced. The MDL proceeding is a vehicle for coordinating pre-trial proceedings in cases pending in different federal district courts in the US. It is currently contemplated that the MDL court will try three cases during the MDL proceeding. The first such case is currently scheduled for mid 2005. In addition to the cases in federal court, The BOC Group, Inc. is a defendant in a number of similar cases pending in state courts. These cases are in different stages of procedural development, and certain cases are scheduled for trial from time to time.

From the time Airco was purchased in 1978 until 2003 The BOC Group, Inc. had never had an adverse jury verdict returned against it in a case alleging injury from exposure to welding fumes. On 28 October 2003, a jury in Madison County, Illinois, rendered a verdict against The BOC Group, Inc. and two co-defendants. The jury awarded US\$1 million to Mr Elam, a former labourer who asserted that his idiopathic Parkinson's disease was attributable to his exposure to welding fumes over a period of years. BOC believes that the verdict is inconsistent with the decisions rendered by juries in previous cases, is not supported by the existing scientific evidence and is pursuing an appeal in the Illinois court system. On 12 May 2004 a jury in Philadelphia County, Pennsylvania, returned a verdict against The BOC Group, Inc. and one co-defendant. The jury awarded Mr Yenko, who alleged that his injury was caused by exposure to asbestos welding rods, US\$525,000, to be divided between the defendants. BOC believes that the jury verdict is inconsistent with the evidence introduced at trial and believes that there are strong grounds for a successful post-trial motion and, if necessary, an appeal.

The BOC Group, Inc. believes that it has strong defences to the claims asserted in these various proceedings related to alleged injury from exposure to welding fumes and intends to defend vigorously such claims. Based on its experience to date, together with its current assessment of the merits of the claims being asserted and applicable insurance, BOC believes that continued defence and resolution of these proceedings will not have a material adverse effect on its financial condition or profitability and no provision has been made.

The welding electrodes business was sold in 1986 and the sale of the US packaged gas business, including the operations involved in distributing packaged gases and welding equipment, was completed in July 2004.

#### *Fluorogas litigation*

In February 2003, the company was notified that a jury verdict in the US District Court for the Western District of Texas (the District Court) was obtained for US\$132 million against Fluorogas Limited, The BOC Group, Inc. and The BOC Group plc. The verdict arose primarily out of an alleged breach of a memorandum of understanding by Fluorogas Limited before it was acquired by The BOC Group plc in September 2001. In March 2003, the court also awarded interest and costs against the defendants, making them jointly and severally liable for a total of US\$174 million. A bond for the full amount was posted with the District Court as part of the normal appeals process.

In August 2004, the appellate court reversed the entire judgement against the BOC entities and all but US\$170,000 in reliance damages against Fluorogas Limited. In addition, the appellate court remanded for reconsideration by the District Court an award of attorney's fees on the US\$170,000 recovery.

Fluorogas Limited was placed in administration under the Insolvency Act of 1986 pursuant to an order of an English Court. It is expected to remain in administration until the conclusion of the remand proceedings in the District Court.

#### *ERISA litigation*

An action was filed in the US District Court for the Southern District of Illinois (the District Court) against The BOC Group Cash Balance Retirement Plan (the Plan). The plaintiffs brought this action on behalf of themselves and all others similarly affected, alleging that the Plan improperly calculated lump sum distributions from the Plan in violation of the Employee Retirement Income Security Act.

In November 2003, the parties reached an agreement to settle at US\$69 million (£43.2 million). The settlement was approved by the District Court at a fairness hearing on 12 March 2004.

## Notes to the financial statements

## 27. Cash flow

## a) Net cash inflow from operating activities

	Notes	2004 £ million	2003 £ million	2002 £ million
Total operating profit before exceptional items		576.9	505.6	500.1
Depreciation and amortisation		324.0	333.4	330.9
Net retirement benefits charge less contributions		(15.9)	5.6	49.9
Operating profit before exceptional items of joint ventures		(99.4)	(86.8)	(63.8)
Operating profit before exceptional items of associates		(13.1)	(11.4)	(10.7)
Change in stocks		(25.0)	(16.6)	13.7
Change in debtors		(35.1)	2.5	(38.4)
Change in creditors		44.0	10.8	57.3
Exceptional cash flows		(11.9)	(28.3)	(67.3)
Other		14.0	(14.7)	(12.4)
Net cash inflow from operating activities		758.5	700.1	759.3

## b) Reconciliation of net cash flow to movement in net debt

(Increase)/decrease in cash		(150.1)	102.5	(21.4)
(Decrease)/increase in debt	27(d)	(180.7)	(128.7)	64.1
(Increase)/decrease in liquid resources		(20.8)	16.2	52.6
Change in net debt resulting from cash flows		(351.6)	(10.0)	95.3
Net borrowings assumed at acquisition		4.7	0.8	0.5
Net liquid resources eliminated on disposal			31.0	
Inception of finance leases		0.2		0.4
Exchange adjustment		(59.0)	20.7	(42.7)
Movement in net debt in the year		(405.7)	42.5	53.5
Net debt at 1 October		1,368.1	1,325.6	1,272.1
Net debt at 30 September		962.4	1,368.1	1,325.6

## c) Analysis of net debt

At 1 October	Acquisitions/ disposals (excluding cash and	Other non-cash	Exchange	At
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	2003	Cash flow £ million	overdrafts) £ million	changes £ million	adjustment £ million	30 September 2004 £ million
Cash at bank and in hand due within one year	77.5	153.5			(2.8)	<b>228.2</b>
Borrowings and finance leases due within one year	(360.9)	230.6	(4.6)	(146.1)	18.9	<b>(262.1)</b>
Borrowings and finance leases due beyond one year	(1,084.7)	(32.5)	(0.1)	145.9	42.9	<b>(928.5)</b>
Net borrowings and finance leases	(1,368.1)	351.6	(4.7)	(0.2)	59.0	<b>(962.4)</b>

**d) (Decrease)/increase in debt**

	2004 £ million (125.0)	2003 £ million (38.2)	2002 £ million (150.0)
6.75% Bonds 2004			200.0
6 1/4% Notes 2002			(150.0)
5 7/8 % Bonds 2009			59.7
7 1/4% Notes 2002			(5.0)
Medium-term notes	<b>74.8</b>	93.7	(18.5)
European Investment Bank loans		(72.4)	59.5
Pollution Control and Industrial Bonds			(81.6)
(Repayment)/net issues of commercial paper	<b>(42.6)</b>	(90.7)	
Other (net)	<b>(87.9)</b>	(21.1)	
(Decrease)/increase in debt	<b>(180.7)</b>	(128.7)	64.1

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## Notes to the financial statements

## 28. Acquisitions and disposals

## a) Cash flow

	2004		2003		2002	
	Acquisitions	Disposals	Acquisitions	Disposals	Acquisitions	Disposals
	£	£	£ million	£ million	£ million	£ million
	million	million	million	million	million	million
<i>Cash flow arising on the acquisition and disposal of businesses</i>						
Goodwill		<b>4.6</b>				
Intangible fixed assets			(2.4)		(0.5)	0.2
Tangible fixed assets	<b>(3.7)</b>	<b>102.3</b>	(61.5)	0.8	(85.7)	1.3
Joint ventures, associates and other investments	<b>(80.6)</b>	<b>10.2</b>	(4.8)	1.1	(12.4)	0.2
Stocks	<b>(0.5)</b>	<b>16.2</b>	(2.7)	0.1	(20.9)	2.4
Debtors	<b>(5.3)</b>	<b>25.2</b>	(15.3)	0.1	(37.5)	0.7
Cash at bank and in hand	<b>(2.8)</b>			0.2	(13.5)	
Creditors including taxation	<b>2.5</b>	<b>3.8</b>	7.8	(0.1)	55.7	(1.2)
Borrowings	<b>4.7</b>		0.8		21.4	
Minorities	<b>(0.8)</b>	<b>0.2</b>	(2.2)	0.3	(8.6)	7.8
Net assets (acquired)/disposed of	<b>(86.5)</b>	<b>162.5</b>	(80.3)	2.5	(102.0)	11.4
Goodwill on acquisitions of subsidiaries <sup>1</sup>	<b>(2.9)</b>		(46.7)		(112.3)	
Goodwill on acquisitions of joint ventures and associates	<b>41.5</b>		(8.0)			
Goodwill in reserves written off on disposals		<b>15.3</b>				
(Deficits)/surplus over book value on disposals		<b>(79.5)</b>		(0.7)		2.5
(Acquisition)/disposal price	<b>(47.9)</b>	<b>98.3</b>	(135.0)	1.8	(214.3)	13.9
Deferred (payments)/receipts <sup>2</sup>	<b>(3.0)</b>		(0.5)	2.1	7.0	(3.3)
	<b>(50.9)</b>	<b>98.3</b>	(135.5)	3.9	(207.3)	10.6

1. Goodwill on acquisition of subsidiaries comprises £3.9 million in respect of acquisitions in 2004 and an adjustment of £1.0 million relating to prior year acquisitions. See note 11 a).
2. Deferred payments and receipts include amounts for current years and payments and/or receipts in respect of prior years.

In September 2004, BOC acquired an additional 30 per cent ownership interest in Compania de Nitrogeno de Cantarell (CNC) from Duke Energy, increasing BOC's overall stake in CNC to 65 per cent. This followed a decision by Duke Energy that a sale of their interest was more in line with their long-term strategy. BOC continues to account

for CNC as a joint venture as, in accordance with UK GAAP FRS9 (Associates and joint ventures), it is a company jointly controlled by BOC and another party.

On 30 July 2004 BOC completed the sale of its US packaged gas business to Airgas Inc. In February 2004 BOC disposed of its 50 per cent holding in Birlesik Oksijen Sanayi (Turkey). These disposals affected the ISP business segment.

#### b) Fair value of acquisitions

	CNC book value £ million	Other book value £ million	Total book value of businesses acquired £ million
Tangible fixed assets		(3.7)	(3.7)
Joint ventures, associates and other investments	(74.1)	(6.5)	(80.6)
Stocks		(0.5)	(0.5)
Debtors		(5.3)	(5.3)
Cash at bank and in hand		(2.8)	(2.8)
Creditors including taxation		2.5	2.5
Borrowings		4.7	4.7
Minorities		(0.8)	(0.8)
Net (assets) acquired	(74.1)	(12.4)	(86.5)
Payment	32.6	18.3	50.9
Deferred payment		(3.0)	(3.0)
Consideration	32.6	15.3	47.9
Goodwill on acquisitions of subsidiaries		(2.9)	(2.9)
Goodwill on acquisitions of joint ventures and associates	41.5		41.5
	74.1	12.4	86.5

Provisionally there were no fair value adjustments in 2004.



## Notes to the financial statements

## 28. Acquisitions and disposals continued

The fair value of acquisitions in 2003 were:

	EMC Water Services book value £ million	Praxair Polska book value £ million	Air Products Canada packaged gases business book value £ million	Other book value £ million	Total book value of businesses acquired £ million	Total adjustments £ million	Total fair value of businesses acquired £ million
Intangible assets				(2.4)	(2.4)		(2.4)
Tangible fixed assets	(0.6)	(17.1)	(13.3)	(24.6)	(55.6)	(5.9)	(61.5)
Joint ventures, associates and other investments				(4.8)	(4.8)		(4.8)
Stocks		(0.6)	(1.9)	(0.2)	(2.7)		(2.7)
Debtors	(3.9)	(3.4)	(6.0)	(2.0)	(15.3)		(15.3)
Creditors including taxation	3.8	2.0	0.6	1.4	7.8		7.8
Borrowings	0.1			0.7	0.8		0.8
Minorities				(2.2)	(2.2)		(2.2)
Net (assets) acquired	(0.6)	(19.1)	(20.6)	(34.1)	(74.4)	(5.9)	(80.3)
Payment	31.1	29.2	25.6	49.6	135.5		135.5
Deferred payment	1.0		0.9	(2.4)	(0.5)		(0.5)
Consideration	32.1	29.2	26.5	47.2	135.0		135.0
Goodwill on acquisitions of subsidiaries	(31.5)	(10.1)		(5.1)	(46.7)		(46.7)
Goodwill on acquisitions of joint ventures and associates				(8.0)	(8.0)		(8.0)
	0.6	19.1	26.5	34.1	80.3		80.3

The fair value adjustments were all in respect of the acquisition of the Canadian packaged gases business of Air Products.

The fair value of acquisitions in 2002 were:

	Unique Gas and		Seiko Instruments Inc	Other book value	Total book value of businesses acquired	Total adjustments	Total fair value of businesses acquired
	Smiths Petrochemicals Company Ltd	Public					
	Group book value	book value	book value	book value	£ million	£ million	£ million
	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Intangible assets			(0.5)		(0.5)		(0.5)
Tangible fixed assets	(9.0)	(25.3)	(2.9)	(44.9)	(82.1)	(3.6)	(85.7)
Joint ventures, associates and other investments		(0.6)	(0.1)	(12.3)	(13.0)	0.6	(12.4)
Stocks	(11.5)	(1.5)	(9.2)	(3.8)	(26.0)	5.1	(20.9)
Debtors	(12.6)	(9.7)	(4.6)	(11.1)	(38.0)	0.5	(37.5)
Cash at bank and in hand		(11.7)	(1.3)	(0.5)	(13.5)		(13.5)
Creditors including taxation	12.4	35.8	3.8	9.2	61.2	(5.5)	55.7
Borrowings	7.7	0.3	0.1	13.3	21.4		21.4
Minorities		0.2		(8.8)	(8.6)		(8.6)
Net (assets) acquired	(13.0)	(12.5)	(14.7)	(58.9)	(99.1)	(2.9)	(102.0)
Payment	6.6	39.7	72.1	88.9	207.3		207.3
Deferred payment			2.4	4.6	7.0		7.0
Consideration	6.6	39.7	74.5	93.5	214.3		214.3
Goodwill on acquisitions of subsidiaries		(17.5)	(60.2)	(34.6)	(112.3)		(112.3)
	6.6	22.2	14.3	58.9	102.0		102.0

**Notes to the financial statements****28. Acquisitions and disposals** continued

The following fair value adjustments were made in 2003 to the book value of the assets and liabilities of the businesses acquired in 2002:

	Smiths Group £ million	Unique Gas and Petrochemicals Public Company Ltd £ million	Seiko Instruments Inc £ million	Total adjustments £ million
<i>Valuations</i>				
Tangible fixed assets		(0.6)		(0.6)
Joint ventures, associates and other investments		0.6		0.6
<i>Alignment of accounting policies</i>				
Tangible fixed assets	1.5	(4.5)		(3.0)
Stocks	4.8		0.3	5.1
Debtors	0.1	0.4		0.5
Taxation		2.2		2.2
<i>Other</i>				
Creditors		(7.8)	0.1	(7.7)
	6.4	(9.7)	0.4	(2.9)

**c) Exchange of business**

In January 2003, the Group combined its Japanese gases business Osaka Sanso Kogyo KK (OSK) with part of Air Liquide Japan to form Japan Air Gases Ltd. The net effect of the transaction was to exchange 55 per cent of the OSK business for a 45 per cent equity share in Japan Air Gases Ltd. This transaction was accounted for in accordance with UK GAAP (UITF31 Exchange of businesses or other non-monetary assets for an interest in a subsidiary, joint venture or associate ).

The unrealised profit of £8.2 million on the disposal of OSK was recognised in the statement of total recognised gains and losses.

	Total book value of business disposed £ million
<i>Value of assets disposed</i>	
Tangible fixed assets	169.3
Joint ventures, associates and other investments	3.0
Stocks	10.3

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Debtors	69.2
Net liquid resources	30.9
Creditors including taxation	(86.5)
Minorities	(3.1)
	193.1
Adjustment to reflect retention of 45 per cent share	(86.9)
Net assets disposed	106.2

	Air Liquide		Air Liquide	OSK	Total fair value of combined business £ million
	Japan assets contributed book value £ million	Valuation adjustments £ million	Japan assets contributed at fair value £ million	contributed assets at fair value £ million	
<i>Value of assets acquired</i>					
Tangible fixed assets	185.0	40.8	225.8	169.3	395.1
Joint ventures, associates and other investments	10.7		10.7	3.0	13.7
Stocks	19.4		19.4	10.3	29.7
Debtors	141.6		141.6	69.2	210.8
Net (borrowings)/liquid resources	(37.9)		(37.9)	30.9	(7.0)
Creditors including taxation	(129.0)	0.2	(128.8)	(86.5)	(215.3)
Minorities	(9.2)		(9.2)	(3.1)	(12.3)
	180.6	41.0	221.6	193.1	414.7
BOC Group share of assets (45 per cent)					186.6
Value of OSK retained by the Group (45 per cent)					(86.9)
Fair value of assets acquired					99.7

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**Notes to the financial statements****28. Acquisitions and disposals** continued

The following fair value adjustments were made to the book value of the assets and liabilities of the Air Liquide Japan business acquired:

	Total adjustments £ million
<i>Valuations</i>	
Tangible fixed assets	40.8
Provisions	9.3
<i>Alignment of accounting policies</i>	
Pension liabilities	(9.1)
	41.0
	£ million
<i>Unrealised gain on disposal</i>	
Consideration, fair value of assets acquired	99.7
Net assets disposed	(106.2)
	(6.5)
Negative goodwill credited on disposal of a subsidiary	14.7
	8.2
Unrealised profit on disposal of a subsidiary	

**29. Related party transactions**

During the year, interest income of £7.3 million (2003: £7.6 million, 2002: £8.3 million) was received from the Cantarell joint venture in Mexico. The Group had no other material related party transactions that might reasonably be expected to influence decisions made by the users of these accounts.

**30. US accounting information****a) Summary of differences between UK and US generally accepted accounting principles and other US accounting information**

The financial statements of The BOC Group plc are prepared in accordance with accounting principles generally accepted in the UK (UK GAAP), which differ in certain significant respects from accounting principles generally accepted in the US (US GAAP).

Set out below is a summary of the more significant adjustments which would be required if US GAAP had been applied, together with reconciliations of net profit, other comprehensive income and shareholders' funds from a UK GAAP to a US GAAP basis. Also presented on a US GAAP basis are a movement in shareholders' funds, a consolidated cash flow statement, information on earnings per share, information on stock based compensation and

details of recently issued US accounting pronouncements.

*Goodwill and other intangible assets*

Under UK GAAP, goodwill arising on acquisitions before 1998 accounted for under the purchase method has been eliminated against shareholders' funds. Additionally, UK GAAP requires that on subsequent disposal or closure of a business, any goodwill previously taken directly to shareholders' funds is then charged against income. The Group adopted FRS10 in 1999, which requires goodwill on subsequent acquisitions to be capitalised and amortised over a period not exceeding 20 years.

Under US GAAP, following the adoption of SFAS142 (Goodwill and other Intangible Assets), which was effective for the Group from 1 October 2002, goodwill continues to be capitalised, although amortisation is no longer charged to the income statement. Instead, an annual impairment test is carried out, with any identified impairment loss recorded in the income statement. Other intangible assets with a finite life continue to be amortised under both UK and US GAAP. UK GAAP is highly prescriptive with regard to the recognition of intangible assets, although US GAAP rules result in the recognition of a greater amount of intangible assets. Therefore, differences arise in the classification of some intangible assets and goodwill between UK and US GAAP. Amortisation that has been charged against goodwill under UK GAAP is added back in the reconciliation to net income on a US GAAP basis.

The average life of other intangible assets is ten years and the annual amortisation charge under US GAAP is expected to be approximately £1 million.

*Impairment of goodwill*

Under UK GAAP, goodwill impairment reviews are carried out at the end of the first financial year following an acquisition, and also when an indicator of impairment exists. The impairment is measured by comparing the carrying value of the goodwill with the higher of the net realisable value and the value in use.

Under US GAAP, goodwill impairment reviews are also conducted when an indicator of impairment exists, in addition to an annual goodwill impairment test, as required by SFAS142. The impairment is measured by comparing the carrying value of a reporting unit to its fair value. Where the carrying value is greater than the fair value, the impairment loss is based on the excess of the carrying value of goodwill in the reporting unit over the implied fair value of the goodwill.

*Profit or loss on the partial disposal of Group companies*

Under UK GAAP (UITF 31), gains on the partial disposal of Group companies involving non-monetary consideration are recorded in the statement of total recognised gains and losses. Under US GAAP, such gains and losses are recorded in the income statement.

*Deferred tax*

The Group adopted FRS19 (Deferred tax) in 2002 for UK GAAP purposes. This requires that full provision for deferred tax is recognised in the financial statements. The adoption of FRS19 has eliminated most of the differences that previously existed between UK GAAP and US GAAP in the accounting for deferred tax. As a result, the tax adjustment now primarily relates to the deferred tax effect of other US GAAP adjustments.

## Notes to the financial statements

### 30. US accounting information continued

#### *Revaluation of fixed assets*

UK GAAP allowed for the periodic revaluation of land and buildings with depreciation then being calculated on the revalued amount. Any surplus or deficit (to the extent that the revaluation reserve was in surplus) on the revaluation was then taken directly to shareholders' funds. With the Group's adoption of FRS15 in 2000, the Group no longer revalues fixed assets. Under US GAAP, revaluations of fixed assets are not permitted and, as a result, the reconciliation restates fixed assets to historical cost. The depreciation charge and any write downs of previously revalued assets are adjusted accordingly.

#### *Impairment of tangible fixed assets*

Under UK GAAP, a tangible fixed asset is reviewed for impairment if an indication exists that the asset may be impaired. If necessary, an impairment loss is recorded. A value in use calculation is carried out, based on discounted pre-tax future cash flows from the asset (or income generating unit to which the asset belongs).

Under US GAAP, a preliminary review of the tangible fixed asset is carried out using undiscounted future cash flows. If the undiscounted future cash flows are less than the asset's carrying value, an impairment loss is required. The impairment loss will be calculated using discounted future cash flows, or the asset's market value.

Under US GAAP, the reversal of previously recognised impairment losses is not permitted.

#### *Restructuring costs*

Under UK GAAP, when a decision has been taken to restructure, supported by a detailed formal plan and the creation of a valid expectation in those affected that the restructuring will take place, the necessary provisions are made for impairment of asset values together with severance and other costs.

Under US GAAP (SFAS146), the requirements for charging restructuring costs to income are more prescriptive and all significant actions arising from the restructuring plan and their completion dates must be identified by the balance sheet date.

#### *Pensions*

For UK GAAP reporting (FRS17 – Retirement benefits), the pension asset or liability in the balance sheet represents the difference between the market value of pension scheme assets at the balance sheet date and the present value of pension scheme liabilities at that date, net of deferred tax.

Under US GAAP (SFAS87), plan assets are valued by reference to market-related value at the date of the financial statements. Liabilities are assessed using the rate of return obtainable on fixed or inflation-linked bonds.

FRS17 requires that past service costs are recognised in full in the period in which they become vested. SFAS87 requires past service costs to be amortised over the remaining service lives of the employees to whom the amendments relate.

There is a significant difference in the treatment of actuarial gains and losses arising during the accounting period. UK GAAP recognises the actuarial gains and losses in full in the year in which they arise in the statement of total recognised gains and losses. Under US GAAP, the actuarial gains and losses which exceed ten per cent of the value of the assets or liabilities at the start of the accounting period are amortised over the remaining service lives of scheme members.

Where an additional minimum liability exists under US GAAP, (ie where the amount provided for any scheme does not cover the unfunded accumulated benefit obligation for that scheme), this must be recognised in the balance

sheet under SFAS87. The adjustment resulting from the recognition of an additional minimum liability is reported as an intangible asset to the extent of the unrecognised prior service cost, after eliminating amounts previously shown as a prepaid benefit cost. Any excess above these amounts is reported in comprehensive income.

#### *Post retirement medical costs*

For UK GAAP reporting (FRS17 Retirement benefits), the post retirement medical liability is discounted using the bond yield on suitable high quality corporate bonds, and disclosed net of related deferred tax.

For US GAAP (SFAS106), the liabilities are assessed and discounted using the rates of return obtainable on high quality fixed income investments.

Differences between the UK and US GAAP figures arise largely from the treatment of actuarial gains and losses.

#### *Securities investments*

Under UK GAAP, current asset investments (of all types) are stated at the lower of cost and net realisable value. Fixed asset investments are stated at cost, or alternatively, at market value or at directors' valuation.

Under US GAAP, securities which are determined to be available-for-sale are stated at fair value and any unrealised gains or losses included as a separate component of shareholders' funds. The deferred tax consequences of unrealised gains or losses are also charged or credited to shareholders' funds.

#### *Contingent consideration*

Under UK GAAP, contingent consideration is provided for as a liability when the likelihood of payment is considered to be probable.

Under US GAAP, contingent consideration is not recognised until the liability is determined beyond reasonable doubt. The elimination of contingent consideration for US GAAP purposes also impacts on the value of goodwill arising on acquisitions, therefore there is no net impact on shareholders' funds.

#### *Financial instruments*

The Group enters into a number of currency swaps, interest rate swaps and forward foreign exchange contracts to hedge its exposure to currency and interest rate risks. Under UK GAAP, such instruments are shown at their carrying value.

Under US GAAP, these instruments are marked to market and any change in value is recognised in either the income statement or through comprehensive income in accordance with SFAS133 depending on whether a derivative is designated as part of a hedge transaction, and if it is, the type of hedge transaction.

#### *Accounting for swaps*

Under UK GAAP, gains or losses on closing out interest rate swap contracts taken to hedge the Group's fixed/floating interest rate position can be taken to profit immediately.

US GAAP requires any gain or loss to be deferred over the remaining hedge period.



**Notes to the financial statements****30. US accounting information** continued*Share of results and net assets of joint ventures and associates*

The Group's share of the results and net assets of its joint ventures and associates (as calculated under UK GAAP) is shown within fixed asset investments. For the purposes of the reconciliations set out below, the Group's share of the results and net assets of its joint ventures and associates has been adjusted to recognise a difference in the method of reporting profits under US GAAP.

*Sale and leaseback transactions*

Under UK GAAP, any profit or loss on the sale and operating leaseback of fixed assets can generally be taken to profit immediately.

US GAAP requires any gain or loss to be deferred over the contract lease period.

*Comprehensive income*

Under US GAAP, SFAS130 establishes requirements for the reporting of comprehensive income and its components (revenue, expenses, gains and losses) in a full set of general purpose financial statements. Components of comprehensive income for the Group determined on a UK GAAP basis include profit for the financial year, pension actuarial gains and losses, and foreign currency translation gains and losses. Information regarding the Group's foreign currency translation gains and losses is included in the statement of total recognised gains and losses under UK GAAP on page 81.

**b) Income statement in US GAAP format**

The Group profit and loss account on page 78 complies with UK GAAP. For SEC reporting purposes this presentation would be considered non GAAP and therefore disclosed below is the income statement which meets the SEC reporting format set forth in Item 10 of Regulation S-X. The financial numbers disclosed within the income statement are prepared under UK GAAP.

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Revenue	<b>3,885.4</b>	3,718.3	3,657.7
Operating expenses			
Payroll costs	<b>(1,015.6)</b>	(1,037.8)	(957.9)
Depreciation and amortisation	<b>(324.0)</b>	(333.4)	(330.9)
Other operating expenses	<b>(2,060.9)</b>	(1,908.5)	(1,963.5)
Total operating expenses	<b>(3,400.5)</b>	(3,279.7)	(3,252.3)
Net operating income	<b>484.9</b>	438.6	405.4
Other income, net	<b>15.8</b>	9.4	33.0
Net interest expense	<b>(88.4)</b>	(96.1)	(103.1)
Income taxes	<b>(101.7)</b>	(96.4)	(106.2)
Minority interests	<b>(46.6)</b>	(36.4)	(26.2)

Net income	<b>264.0</b>	219.1	202.9
Earnings per share basic	<b>53.5p</b>	44.5p	41.4p
Earnings per share diluted	<b>53.5p</b>	44.5p	41.2p

### c) Reconciliation of net profit

	<b>2004</b>	2003	2002
	<b>£</b>	£	£
Years ended 30 September	<b>million</b>	million	million
Net profit as reported in the Group profit and loss account under UK GAAP	<b>264.0</b>	219.1	202.9
Pensions	<b>7.5</b>	62.5	35.4
Post retirement medical costs	<b>(2.4)</b>		0.3
Revaluations realised on asset disposals		1.1	5.8
Write-down of previously revalued assets			20.5
Depreciation of revalued fixed assets	<b>0.2</b>	0.1	0.7
Amortisation of goodwill previously charged to reserves			(7.2)
Non-amortisation of goodwill under SFAS142	<b>14.0</b>	13.9	3.5
Amortisation of other intangibles	<b>(0.5)</b>	(0.5)	
Unrealised profit on disposal of subsidiary		8.2	
Other adjustments on profit on disposal of subsidiary		(20.7)	
Share of results of joint ventures and associates	<b>0.3</b>	0.6	
Interest rate swaps	<b>1.6</b>	1.7	1.9
Financial instruments	<b>(15.7)</b>	(2.8)	19.5
Adjustment on disposal of the US packaged gas business	<b>39.9</b>		
ESOPs and other share options	<b>3.5</b>	1.7	(3.4)
Sale and leaseback	<b>0.1</b>	0.1	0.2
Taxation effect of above adjustments	<b>(14.8)</b>	(20.7)	(24.7)
Net income under US GAAP	<b>297.7</b>	264.3	255.4

All net income arose from continuing operations.

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## Notes to the financial statements

## 30. US accounting information continued

	<b>2004</b>	2003	2002
Average number of 25p Ordinary shares	<b>million</b>	million	million
Basic	<b>493.0</b>	492.5	490.4
Diluted	<b>493.8</b>	492.7	492.2

	<b>2004</b>	2003	2002
<i>Earnings per share</i>	<b>pence</b>	pence	pence
Basic	<b>60.4</b>	53.7	52.1
Diluted	<b>60.3</b>	53.6	51.9

## d) Reconciliation of shareholders funds

	<b>2004</b>	2003
At 30 September	<b>£ million</b>	(restated) £ million
Shareholders funds reported in the Group balance sheet under UK GAAP	<b>1,675.3</b>	1,686.7
UK minority interests	<b>202.8</b>	177.3
	<b>1,878.1</b>	1,864.0
Pensions	<b>154.7</b>	48.8
Post retirement medical costs	<b>(12.2)</b>	(12.5)
Revaluations of fixed assets	<b>(36.8)</b>	(37.7)
Goodwill previously charged to reserves	<b>62.7</b>	65.7
Non-amortisation of goodwill under SFAS142	<b>31.4</b>	17.4
Amortisation of other intangibles	<b>(1.0)</b>	(0.5)
Goodwill on fair value adjustments		1.8
Interest rate swaps	<b>(2.7)</b>	(4.6)
Share of net assets of joint ventures and associates	<b>17.6</b>	4.5
Securities investments	<b>7.3</b>	39.8
Consolidation of variable interest entity under FIN46	<b>(29.7)</b>	
Goodwill on disposal	<b>4.4</b>	
Fixed asset impairments	<b>13.3</b>	
Restructuring provisions	<b>6.5</b>	
Financial instruments	<b>(2.0)</b>	13.7
Provision for executive share schemes	<b>0.9</b>	0.9
Sale and leaseback	<b>(1.9)</b>	(2.2)
Deferred tax	<b>10.2</b>	49.6

Minority interests	<b>(180.7)</b>	(176.2)
Shareholders' funds under US GAAP	<b>1,920.1</b>	1,872.5
<b>e) Movements in shareholders' funds on a US GAAP basis</b>		
Shareholders' funds at 1 October	<b>1,872.5</b>	2,061.0
Net income for the year	<b>297.7</b>	264.3
Dividends	<b>(197.3)</b>	(192.1)
Shares issued	<b>8.7</b>	3.7
Movement in treasury stock	<b>2.5</b>	(6.3)
Pensions	<b>53.3</b>	(291.8)
Exchange adjustment	<b>(98.1)</b>	30.6
Other movements	<b>(19.2)</b>	3.1
Shareholders' funds at 30 September	<b>1,920.1</b>	1,872.5

**Notes to the financial statements****30. US accounting information** continued**f) Consolidated cash flow statement**

The Group cash flow statement on page 80 has been prepared in accordance with UK accounting standard FRS1, the objectives and principles of which are similar to those set out in US accounting principle SFAS95, Statement of Cash Flows. The principal differences between the standards relate to classification of items within the cash flow statement and with regard to the definition of cash and cash equivalents.

Under FRS1, cash flows are presented separately for: a) operating activities; b) dividends from joint ventures and associates; c) returns on investments and servicing of finance; d) tax paid; e) capital expenditure and financial investment; f) acquisitions and disposals; g) equity dividends paid; h) management of liquid resources; and i) financing. Under SFAS95, however, only three categories of cash flow activity are reported: a) operating activities; b) investing activities; and c) financing activities. Dividends from joint ventures and associates, cash flows from returns on investments and servicing of finance (excluding dividends paid to minorities) and tax paid under FRS1 would be included in operating activities under SFAS95; capital expenditure and acquisitions and disposals would be included in investing activities under SFAS95; equity dividends would be included as a financing activity under SFAS95.

Under FRS1, cash is defined as cash in hand and deposits repayable on demand with any qualifying financial institution, less overdrafts from any qualifying financial institution repayable on demand. Under SFAS95, cash is defined as cash in hand and deposits but also includes cash equivalents which are short-term, highly liquid investments. Generally only investments with original maturities of three months or less come within this definition.

Set out below, for illustrative purposes, is a summary consolidated statement of cash flows under SFAS95.

	<b>2004</b>	2003	2002
	<b>£ million</b>	£ million	£ million
Net cash provided by operating activities	<b>673.5</b>	562.4	620.2
Net cash used by investing activities	<b>(45.2)</b>	(389.2)	(550.6)
Net cash used by financing activities	<b>(413.0)</b>	(292.7)	(112.1)
Net increase/(decrease) in cash and cash equivalents	<b>215.3</b>	(119.5)	(42.5)
Cash and cash equivalents at 1 October	<b>76.4</b>	181.9	259.0
Exchange and other movements	<b>(2.0)</b>	14.0	(34.6)
Cash and cash equivalents at 30 September	<b>289.7</b>	76.4	181.9

**g) Stock-based compensation**

For US reporting purposes the company applies APB Opinion 25, Accounting for Stock Issued to Employees and related interpretations, in accounting for its share option plans. By applying this statement the employee share schemes are deemed non-compensatory and therefore do not result in an expense for financial reporting purposes. With the exception of the Long-Term Incentive Plan, grants of share options under executive schemes are at the market price of the company's shares at the time of grant. The schemes are deemed compensatory and a charge is only recognised when certain performance conditions are met.

If compensation cost for the Group's share option plans had been determined based on the fair value at the grant dates for awards under those plans consistent with the method of SFAS123, Accounting for Stock-Based Compensation, the Group's net income under US GAAP would have been:

	<b>2004</b>	2003	2002
	<b>£</b>		
	<b>million</b>	£ million	£ million
Reported net income	<b>297.7</b>	264.3	255.4
Add stock compensation expense recognised in accordance with APB25 (net of related tax)			2.5
Deduct stock compensation expense determined in accordance with SFAS123 (net of related tax)	<b>(5.7)</b>	(7.1)	(6.9)
Pro forma net income	<b>292.0</b>	257.2	251.0

	<b>2004</b>	2003	2002
	<b>pence</b>	pence	pence
<i>Earnings per share:</i>			
Basic as reported	<b>60.4</b>	53.7	52.1
Basic pro forma	<b>59.2</b>	52.2	51.2
Diluted as reported	<b>60.3</b>	53.6	51.9
Diluted pro forma	<b>59.1</b>	52.2	51.0

The Black-Scholes model was used to measure the compensation expense under SFAS123. The assumptions used for grants in 2004 included a dividend yield of 4.5 per cent (2003: 4.5 per cent, 2002: 4.0 per cent), expected share price volatility of 29.5 per cent (2003: 30.6 per cent, 2002: 31.0 per cent), a weighted average expected life of 4.9 years (2003: 5.0 years, 2002: 5.0 years) and a weighted average interest rate of 4.8 per cent (2003: 4.0 per cent, 2002: 4.9 per cent). The weighted average interest rate is based on UK Gilts on the date of grant with a maturity similar to the related options.

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**Notes to the financial statements****30. US accounting information** continued**h) Goodwill**

For US reporting purposes the company applies SFAS142 in accounting for goodwill. The changes in the carrying value of goodwill for the year ended 30 September 2004 are as follows:

	Process Gas Solutions £ million	Industrial and Special Products £ million	BOC Edwards £ million	Afrox hospitals £ million	Gist £ million	Corporate £ million	Total £ million
Balance at 1 October	59.5	82.7	121.0	11.6	0.7	2.7	278.2
Acquired during year		0.6		3.3			3.9
Adjustments related to prior year acquisitions			(2.9)	0.4			(2.5)
Impairments in year			(2.5)				(2.5)
Exchange adjustment	(3.7)	(4.2)	(6.6)	(0.3)		(0.2)	(15.0)
<b>Balance at 30 September</b>	<b>55.8</b>	<b>79.1</b>	<b>109.0</b>	<b>15.0</b>	<b>0.7</b>	<b>2.5</b>	<b>262.1</b>

**i) Recently issued accounting pronouncements implemented in the year***SFAS132 (revised) Employers disclosures about pensions and other post retirement benefits*

SFAS132 (revised) was issued in December 2003 and is effective for years ending after 15 June 2004. This statement revises employers disclosures about pension plans and other post retirement benefit plans. It does not change the measurement or recognition of those plans required by SFAS87, SFAS88 and SFAS106 and retains the disclosure requirements contained in SFAS132. It requires additional disclosures about the types of plan assets, investment strategy, plan obligations, cash flows, and net periodic benefit cost of defined benefit pension plans and other defined benefit post retirement plans. These additional disclosure requirements are presented within note 8c) to the financial statements.

*FIN46 (revised) Consolidation of variable interest entities*

FIN46 (revised) was issued in December 2003. Application of this interpretation is required for all public entities that have interests in variable interest entities for periods ending after 15 December 2003. Application by public entities for all other types of entities is required in financial statements for periods ending after 15 March 2004. This interpretation requires the primary beneficiary to consolidate a variable interest entity if it holds a variable interest that will absorb a majority of the entity's expected losses if they occur, receive a majority of the entity's residual returns if they occur, or both. The effect of FIN46 (revised) has led to the Group's interest in Compania de Nitrogeno de Cantarell being accounted for as a subsidiary under US GAAP. This resulted in additional total assets of £456.9 million, total liabilities of £494.4 million and minority interests of £13.1 million. There is no material impact on the income statement. The £29.7 million adjustment in respect of the variable interest entity relates to the

£13.1 million minority interests and other specific US GAAP adjustments within the entity.

*EITF01 8 Determining whether an arrangement contains a lease*

In May 2003, the Emerging Issues Task Force (EITF) reached a consensus on EITF Issue 01 8. Issue 01 8 provides guidance for determining whether an arrangement contains a lease that is within the scope of SFAS13 Accounting for Leases. If it is determined that a lease exists, the lease and non-lease components of a combined sales arrangement must be accounted for separately. Issue 01 8 is effective prospectively for arrangements initiated, modified, or acquired after 1 July 2003.

Management has evaluated the impact of EITF Issue 01 8 on its on-site supply agreements and has concluded that it does not have a material impact on the Group's results or financial position.

**j) Recently issued accounting pronouncements not yet implemented**

*EITF04 1 Accounting for Pre-existing Relationships between the Parties to a Business Combination*

EITF04 1 applies when two parties that have a pre-existing contractual relationship enter into a business combination. Specifically, the issue is whether a consummation of a business combination between two parties that have a pre-existing contractual relationship should be evaluated to determine if a settlement of a pre-existing contractual relationship exists, thus requiring accounting separate from the business combination. If separate accounting is required, then the measurement of the settlement amount will be decided. Finally, if it is determined that assets of the acquired entity that are related to a pre-existing contractual relationship with the acquiring entity should be recognised as part of the business combination, whether the acquiring entity should recognise those assets as intangible assets apart from goodwill will be decided.

**k) Other information**

*Use of estimates*

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**31. Comparative information**

The application of UITF37 (Purchases and sales of own shares) and UITF38 (Accounting for ESOP trusts) has not had any impact on the Group profit and loss account. The impact on the balance sheet at 30 September 2004 has been to reduce fixed assets and shareholders' funds by £42.1 million (Parent: £41.6 million).

The prior year adjustment of £48.1 million (Parent: £42.5 million) comprises:

- a) a reclassification of the cost of own shares of £48.8 million (Parent: £43.2 million) from fixed assets – investments to shareholders' funds; and
- b) a reclassification of the provision of £0.7 million (Parent: £0.7 million) previously held against own shares to shareholders' funds.

The restatement impact is shown in the relevant notes: 13 (Fixed assets – investments) and 24 (Reserves).



**GROUP UNDERTAKINGS**

A list of the Group's major operating undertakings, certain financing undertakings and undertakings in which the Group has a material interest is detailed below. All holdings shown are Ordinary shares. Undertakings are held either by The BOC Group plc directly (where indicated by\*) or through other operating undertakings or through undertakings formed for the convenient holding of shares in certain subsidiaries, joint ventures or associates. The Group holding percentages shown below represent the ultimate interest of The BOC Group plc. All companies are incorporated and registered in the country in which they operate as listed below.

	Principal activity	Group holding %
<i>Aruba</i>		
BOC Gases Aruba NV	m	100
<i>Australia</i>		
BOC Ltd <sup>3</sup>	nm	100
Elgas Ltd <sup>5</sup>	m	50
<i>Bangladesh</i>		
BOC Bangladesh Ltd	m	60*
<i>Belgium</i>		
SA BOC Edwards NV	l	100
<i>Bermuda</i>		
Priestley Company Ltd	u	100
The Hydrogen Company of Paraguana Ltd	n	100
<i>Brazil</i>		
BOC Edwards Brasil Ltda	lu	100
BOC Gases do Brasil Ltda	n	100
<i>Brunei</i>		
Brunei Oxygen Sdn Bhd <sup>(a),5</sup>	m	25
<i>Canada</i>		
BOC Canada Ltd	m	100
Hibon Inc	l	100
<i>Chile</i>		
Compania de Hidrogeno de Talcahuano Ltda <sup>5</sup>	n	100
Indura S.A., Industria y Comercio <sup>5</sup>	m	41
<i>Colombia</i>		
Gases Industriales de Colombia SA <sup>5</sup>	nm	74

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*Czech Republic*

BOC Edwards s.r.o.	1	100
Gist Czech Republic s.r.o. <sup>5</sup>	4	100

*England*

BOC Edwards Chemical Management Europe Ltd	1	100*
BOC Holdings <sup>1, 3</sup>	u	100*
BOC Ltd	nml	100
BOC Netherlands Holdings Ltd	u	100*
BOC Overseas Finance Ltd	u	100*
Edwards High Vacuum International Ltd	1	100
Fluorogas Ltd <sup>8</sup>	1	100*
Gist Ltd	4	100
Leengate Welding Group Ltd	m	100
Welding Products Holdings Ltd	m	100*

*Fiji*

BOC Fiji Ltd	m	90
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Principal activity  
Group holding %

*France*

Cryostar SAS	n	100
Edwards SAS	1	100
Hibon International SA	1	100
Hibon SAS	1	100
Société de Mécanique Magnétique	1	87

*Germany*

BOC Edwards GmbH	1	100
BOC Gase Deutschland GmbH	n	100
Wilhelm Klein GmbH	1	100

*Hong Kong*

Hong Kong Oxygen & Acetylene Co Ltd	nm	50
The BOC Group Ltd	lu	100

*India*

BOC India Ltd <sup>5</sup>	nm	55*
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*Indonesia*

PT BOC Gases Indonesia	nm	100
PT Gresik Gases Indonesia	n	90
PT Gresik Power Indonesia	n	90

*Ireland*

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BOC Gases Ireland Ltd <sup>3</sup>	nm	100
Priestley Dublin Reinsurance Company Ltd	u	100
<i>Italy</i>		
BOC Edwards SpA	l	100
<i>Japan</i>		
BOC Japan Ltd	u	98
BOC Edwards Japan Ltd	l	100
Japan Air Gases Ltd <sup>5,9</sup>	nml	44
<i>Kenya</i>		
BOC Kenya Ltd	m	65
<i>Korea</i>		
BOC Gases Korea Co Ltd	n	100
Songwon Edwards Ltd	l	97
<i>Luxembourg</i>		
BOC Luxembourg No. 1 Sarl	u	100
BOC Luxembourg No. 2 Sarl	u	100
<i>Malawi</i>		
BOC Malawi Ltd <sup>(c)</sup>	m	42
<i>Malaysia</i>		
Malaysian Oxygen Bhd <sup>(a),4</sup>	nml	23
MOX Gases Sdn Bhd	m	23
<i>Mauritius</i>		
Les Gaz Industriels Ltee <sup>(b)</sup>	m	21
<i>Mexico</i>		
BOC Gases de Mexico, SA de CV <sup>5</sup>	n	100
Compania de Nitrogeno de Cantarell, SA de CV <sup>5,10</sup>	n	65

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**Group undertakings**

	Principal activity	Group holding %
<i>Namibia</i>		
IGL Properties (Pty) Ltd	m	56
<i>Netherlands</i>		
BOC Edwards Pharmaceutical Systems BV	l	100
Gist BV	4	100
The BOC Group BV <sup>3</sup>	u	100
<i>Netherlands Antilles</i>		
BOC Gases Curaçao NV	m	100
<i>New Zealand</i>		
BOC Ltd	nm	100
<i>Nigeria</i>		
BOC Gases Nigeria plc	m	60
<i>Pakistan</i>		
BOC Pakistan Ltd	nm	60*
<i>Papua New Guinea</i>		
BOC Papua New Guinea Pty Ltd	m	74
<i>Peoples Republic of China</i>		
BOC (China) Holdings Co Ltd <sup>3,5</sup>	n	100
BOC Gases (North) Co Ltd <sup>5</sup>	n	100
BOC Gases (Shanghai) Corporation Ltd <sup>5</sup>	n	100
BOC Gases (Suzhou) Co Ltd <sup>5</sup>	n	100
BOC Gases (Tianjin) Co Ltd <sup>5</sup>	n	100*
BOC Gases (Wuhan) Co Ltd <sup>5</sup>	n	100
BOC TISCO Gases Co Ltd <sup>5</sup>	n	50*
BOC Trading (Shanghai) Co Ltd <sup>5</sup>	l	100
Edwards Tianli (Beijing) Pharmaceutical Systems Co Ltd <sup>5</sup>	l	50
Nanjing BOC-YPC Gases Co Ltd <sup>5</sup>	n	50
Shanghai BOC Industrial Gases Co Ltd <sup>5</sup>	n	50*
<i>Philippines</i>		
Consolidated Industrial Gases Inc	nml	100
Southern Industrial Gases Philippines Inc	m	100
<i>Poland</i>		

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BOC Gazy Sp. z o.o.	nm	98
<i>Samoa</i>		
BOC Samoa Ltd	m	96
<i>Singapore</i>		
BOC Gases Pte Ltd	u	100*
Singapore Oxygen Air Liquide Pte Ltd	nml	50
<i>Solomon Islands</i>		
BOC Gases Solomon Islands Ltd	m	100
	Principal activity	Group holding %
<i>South Africa</i>		
African Oxygen Ltd <sup>3</sup>	nmp	56
Afrox Healthcare Ltd <sup>(c),3</sup>	p	38
Afrox Ltd	nm	56
BOC Edwards South Africa (Pty) Ltd	l	100
<i>Switzerland</i>		
BOC AG	n	100
<i>Taiwan</i>		
Asia Union Electronic Chemical Corporation <sup>5</sup>	l	50
BOC Lienhwa Industrial Gases Co Ltd	nml	50
<i>Thailand</i>		
MIG Production Company Ltd	n	54
Thai Industrial Gases Public Co Ltd <sup>3</sup>	nml	99
TIG HyCO Ltd	n	99
Unique Gas and Petrochemical Public Co Ltd	m	99
<i>US</i>		
BOC, Inc	u	100
Environmental Management Corporation	n	100
Linde BOC Process Plants LLC <sup>(a)5</sup>	n	30
The BOC Group, Inc <sup>3</sup>	nmlu	100
<i>US Virgin Islands</i>		
BOC Gases Virgin Islands Inc <sup>5</sup>	n	100
<i>Venezuela</i>		
BOC Gases de Venezuela, C.A.	nm	100
<i>Vietnam</i>		
North Vietnam Industrial Gases Ltd <sup>5</sup>	n	40

*Zambia*

BOC Gases Zambia plc <sup>(c)</sup>	m	39
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*Zimbabwe*

BOC Zimbabwe (Pvt) Ltd	m	100
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1. Unlimited company having share capital with registered office at the same address as The BOC Group plc.
2. Businesses where the Group percentage ownership is 50 per cent or less are accounted for as joint ventures, except as follows: (a) accounted for as associates, (b) accounted for as investment or (c) accounted for as subsidiary (controlled through partly owned intermediate undertaking). See also accounting policies on pages 83 and 84.
3. Group undertakings which made acquisitions or investments during the year.
4. Group holding for dividend purposes is 28 per cent.
5. Group undertakings with financial year ends other than 30 September.
6. The principal activity of each undertaking is indicated as follows:
  - n Process Gas Solutions
  - m Industrial and Special Products
  - l BOC Edwards
  - p Afrox hospitals
  - 4 Gist
  - u Corporate/holding company
7. \* Indicates where investment is held directly by The BOC Group plc.
8. In administration.
9. BOC Japan Ltd holds 45 per cent of Japan Air Gases Ltd.
10. Accounted for as joint venture.

**SHAREHOLDER INFORMATION****Dividends****Ordinary shares**

The company has paid cash dividends on its Ordinary shares in every year since 1899. Since 1988, the dividend policy has been to pay two interim dividends, one in February and one in August. The dividends are reported in the accounts in the year in which they are paid.

Two dividends were paid in 2004. A first interim dividend of 15.5p (net) per share was paid in February and a second interim dividend of 24.5p (net) per share was paid in August. Future dividends of the company will be dependent upon future earnings, the financial position of the company and other factors. A first interim dividend of 15.9p (net) per share has been declared for payment on 1 February 2005.

The table below sets out, in UK pence, the total of the cash amounts of the dividends per share.

	Pence per Ordinary share			\$ per Ordinary share total <sub>1</sub>
	First interim paid	Second interim paid	Total	
2000	15.50	19.50	35.00	0.54
2001	15.50	21.50	37.00	0.53
2002	15.50	22.50	38.00	0.57
2003	15.50	23.50	39.00	0.63
<b>2004</b>	<b>15.50</b>	<b>24.50</b>	<b>40.00</b>	<b>0.73</b>

1. The dollar equivalents of the dividend per Ordinary share are based on the exchange rate at the date of payment of the dividend.

**12 1/4% Unsecured Loan Stock 2012/2017**

Interest payments are made twice each year on 2 April and 2 October at such amounts as will result in an annual rate of 12 1/4 per cent.

**American Depositary Shares**

The cash amount of the dividends applicable to an American Depositary Share representing two Ordinary shares, is set out below:

	<b>2004</b>	2003	2002	2001	2000
	\$	\$	\$	\$	\$
First interim	<b>0.56</b>	0.51	0.44	0.45	0.50
Second interim	<b>0.89</b>	0.75	0.70	0.61	0.58

**Nature of trading market**

The company's Ordinary shares and 12 1/4% Unsecured Loan Stock 2012/2017 are listed on the London Stock Exchange.

The company listed American Depositary Shares (ADS) on the New York Stock Exchange (NYSE) on 18 September 1996 trading under the symbol BOX. Each ADS represents two Ordinary shares and is evidenced by an American Depositary Receipt (ADR). The ADR depository, JPMorgan Chase Bank, holds Ordinary shares in the company through Guaranty Nominees Limited.

At 18 November 2004, there were 241 US registered holders who held 142,086 of the company's Ordinary shares and 69 registered ADS holders representing 46,032 ADSs. In addition, 3,991,283 ADSs were held by and through the Depository Trust Company.

The table below sets out the reported highest and lowest middle market quotations for the company's Ordinary shares on the London Stock Exchange as notified by the company's stockbrokers for the periods indicated.

Financial year quarter	2004		2003		2002		2001		2000	
	High pence	Low pence	High pence	Low pence	High pence	Low pence	High pence	Low pence	High pence	Low pence
First quarter	<b>906.5</b>	<b>791.5</b>	947.0	818.0	1108.0	907.0	1050.0	850.5	1336.0	1242.0
Second quarter	<b>948.0</b>	<b>841.0</b>	904.0	670.0	1100.0	988.0	1076.0	909.0	1376.0	1132.0
Third quarter	<b>949.0</b>	<b>875.5</b>	828.5	755.0	1088.0	999.0	1114.0	928.0	1245.0	901.0
Fourth quarter	<b>943.0</b>	<b>867.0</b>	912.5	767.5	1035.0	836.0	1060.0	780.0	1020.0	871.0

2004	May	June	July	August	September	October
High pence	909.0	949.0	943.0	933.5	900.0	906.5
Low pence	875.5	890.5	896.0	870.0	867.0	870.0

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**Shareholder information**

The table below sets out the highest and lowest reported sales prices for the company's ADSs as reported on the NYSE as notified by the depositary for the periods indicated.

Financial year	2004		2003		2002		2001		2000	
	High \$	Low \$	High \$	Low \$	High \$	Low \$	High \$	Low \$	High \$	Low \$
quarter										
First quarter	31.09	27.60	29.11	25.69	31.76	26.60	31.25	24.31	43.81	41.00
Second quarter	36.15	31.00	29.31	22.00	31.60	27.83	32.75	26.70	44.75	35.87
Third quarter	35.13	31.15	27.30	24.19	31.74	29.75	31.50	26.05	40.18	26.81
Fourth quarter	34.95	31.67	29.63	25.86	31.80	26.02	30.24	22.50	30.00	25.06

2004	May	June	July	August	September	October
High \$	33.30	35.13	34.95	34.57	32.54	33.06
Low \$	31.15	32.97	33.40	32.37	31.67	31.53

**Analysis of shareholdings****a) Substantial holdings at 18 November 2004**

	Number of shares million	% of issued capital
Ordinary shares of 25p each		
Legal & General Investment Management Limited	15.00	3.02

At 18 November 2004 no person or company is known to hold more than five per cent of the Ordinary shares.

The company is not directly or indirectly owned or controlled by any other company or any government.

**b) By size of holding at 30 September 2004**

Number of accounts	% of total number of accounts	Size of holding 25p shares	Number of 25p shares million	% of ordinary capital
19,259	46	1 500	4.9	1
11,221	26	501 1,000	8.3	2
10,310	24	1,001 5,000	20.2	4

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1,300	3	5,001	50,000	18.9	4
551	1	50,001	1,000,000	129.1	26
81	0		Over 1,000,000	317.4	63
42,722	100			498.8	100

**c) By investor type at 30 September 2004**

Number of accounts	% of total number of accounts	Type of investor	Number of 25p shares million	% of ordinary capital
31,778	75	Individuals	28.0	6
9,987	23	Institutional investors	460.6	92
957	2	Other corporate investors	10.2	2
42,722	100		498.8	100

**d) Close company status**

The company is not a close company within the meaning of the Income and Corporation Taxes Act 1988. There has been no change in that status since 30 September 2004.

**e) Stock ownership of management**

The interests of the directors and officers of the company in the shares and options of the company are given in the report on remuneration on pages 64 to 75.

## Shareholder information

### Taxation

A summary of the principal tax consequences for certain beneficial holders of Ordinary shares of BOC and ADSs representing Ordinary shares is set out below. This summary applies to citizens or residents of the UK or US, or otherwise who are subject to UK tax or US federal income tax on a net income basis in respect of such securities. It is not intended to be a comprehensive analysis of all of the potential tax consequences of holding Ordinary shares or ADSs and does not purport to deal with persons who hold their Ordinary shares or ADSs in special circumstances, such as financial institutions, tax exempt organisations, insurance companies, dealers in securities, persons who own, directly or indirectly or by attribution, ten per cent or more of the outstanding share capital or voting stock of BOC, persons holding Ordinary shares or ADSs as part of a hedge, straddle or other risk reduction transaction, or who acquired such Ordinary shares or ADSs through the exercise of an employee stock option or otherwise as compensation. All holders and investors are advised to consult their tax advisors on the tax implications of their particular holdings, including the consequences under applicable state and local law.

The statements of tax laws set out below are based on the laws in force at the date of this report unless otherwise noted, and are subject to any subsequent changes in UK and US law, or in any double tax convention between the UK and the US.

### UK shareholders

The following information applies to individuals who hold Ordinary shares and who are resident or ordinarily resident in the UK for UK tax purposes (UK resident holders).

#### *Taxation of capital gains*

A UK resident holder will be liable to UK tax on the gain from the disposal of Ordinary shares. For the purposes of calculating the gain from the disposal of Ordinary shares, a UK resident holder who held Ordinary shares prior to 31 March 1982 may substitute the market value of such shares as at that date for the original cost of such shares. The market value of Ordinary shares on 31 March 1982 was 168.75p per Ordinary share.

A UK resident holder may also be entitled to indexation relief and taper relief when selling shares. Indexation relief is calculated on the market value of shares held at 31 March 1982 and on the cost of any subsequent purchases from that date. Indexation relief is not available for periods after 1 April 1998. Taper relief provides UK resident holders with relief from tax on gains accrued on the disposal of Ordinary shares held or acquired after 5 April 1998. The amount of taper relief available depends on the length of time such shares have been held and on the UK resident holder's individual facts and circumstances.

#### *Taxation of dividends*

A UK resident holder is entitled to a tax credit on receipt of a cash dividend. The tax credit is a fixed proportion of the dividend and is currently 1/9th of the cash dividend received.

The income subject to UK income tax is the sum of the dividend and the attached tax credit, with the tax credit being available as a deduction against any resulting tax liability.

Special rates of tax apply to dividend income: the ordinary rate is ten per cent and applies to individuals liable to tax at the basic or lower rates of tax; the upper rate is 32.5 per cent which applies to the extent that income exceeds the basic rate band.

For a UK resident holder liable to income tax only at the basic or lower rates of tax, there will thus be no further tax liability in respect of the dividend received. If, however, the UK resident holder is subject to income tax at the higher rate there will be a further tax liability on the sum of the cash dividend received and the associated tax credit.

Where a UK resident holder's tax liability is less than the associated tax credit, no refund is available.

By way of example, the payment by BOC of a cash dividend of £90 would have an associated tax credit of £10 and a UK resident holder is treated as receiving a gross dividend of £100. The upper rate tax of 32.5 per cent on the gross dividend is £32.50. Therefore the UK resident holder liable to tax at the upper rate will have a tax liability of £22.50, being the tax liability on the gross dividend of £32.50 less the tax credit of £10.

#### *Stamp duty*

Stamp duty or stamp duty reserve tax at the rate of 0.5 per cent of consideration payable is normally payable on the purchase price of shares.

#### *Inheritance tax*

Individual shareholders may be liable to inheritance tax on the transfer of Ordinary shares. Inheritance tax may be charged on the amount by which the value of a shareholder's estate is reduced as a result of any transfer by way of gift or other gratuitous transaction made by them or treated as made by them.

#### **US holders**

For the purposes of this summary, a US holder is a beneficial owner of ADSs who is an individual citizen or resident of the US, a corporation or other entity organised under the laws of the US or any state thereof, an estate the income of which is subject to US federal income taxation regardless of its source, or a trust if a court within the US is able to exercise primary supervision over the administration of the trust and one or more US persons have the authority to control all substantial decisions of the trust.

US holders should be aware that a new UK-US Income Tax Convention, as amended by a Protocol to the Convention signed on 19 July 2002, came into force on 31 March 2003 (the New Convention). The New Convention generally has effect in respect of dividends paid on or after 1 May 2003. However, a US holder entitled to benefits under the US-UK Income Tax Convention that came into force on 25 April 1980, as amended by Protocols (the 1980 Convention) may elect to have the provisions of the 1980 Convention continue in their entirety for an additional 12 months if the election to apply the 1980 Convention would result in greater benefits to the holder. If a US holder were to make an effective election, the discussion below with respect to dividend payments made pursuant to the 1980 Convention would continue to apply to dividends paid by the company prior to 1 May 2004. The discussion below notes the instances where the relevant provisions of the New Convention produce a materially different result for a US holder. US holders should note that certain articles in the New Convention limit or restrict the ability of a US holder to claim benefits under the New Convention and that similar provisions were not contained in the 1980 Convention. US holders should consult their own tax advisors concerning the applicability of both Conventions.

US holders of ADSs are treated as owners of underlying Ordinary shares for the purposes of the New Convention, the 1980 Convention and the convention relating to estate and gift tax (the Estate Tax Convention) and for the purposes of the US Internal Revenue Code of 1986, as amended (the Code).

## Shareholder information

### *Taxation of dividends*

Under current UK tax legislation, no tax will be withheld from dividend payments made by BOC. Under the 1980 Convention US holders of ADSs are treated as receiving dividend income equal to the sum of the dividend and the associated tax credit, reduced by UK withholding tax at a rate not exceeding 15 per cent of the amount of the dividend and the associated tax credit. As the tax credit is equal to  $\frac{1}{9}$  th of the dividend the withholding tax is equal to the tax credit.

This will be the case where the holding is not effectively connected with a permanent establishment or fixed base in the UK and provided that the shareholder is not subject to the special rules of the 1980 Convention such as those applying to US tax-exempt entities and certain investment or holding companies where 25 per cent of the capital is held directly or indirectly by persons who are not individual residents or nationals of the US.

Thus, under the 1980 Convention, a US holder receiving a dividend of £90 will be treated as receiving taxable income of £100 less UK withholding tax of £10. No refund of UK tax is available.

Dividends received by a US holder will be foreign source income for US federal income tax purposes in the amount equal to the US dollar value of the gross dividend (that is the sum of the dividend and the associated tax credit if applicable), on the date of such payment. Generally, dividends will not be eligible for the dividends received deduction allowed to US corporations under the Code. Subject to certain limitations, the UK tax treated as withheld from payments will be available as a credit against US tax.

Under the New Convention which generally applies with respect to dividends paid on or after 1 May 2003 (unless an effective election is made to extend the applicability of the 1980 Convention) a US holder has no right to receive the associated tax credit with the dividend payment made by BOC.

US holders should consult their own tax advisors to determine whether they are eligible for benefits under the 1980 Convention and the New Convention, whether, and to what extent, a foreign tax credit will be available with respect to dividends received from BOC, and whether it may be advisable in light of the holder's particular circumstances to elect to have the provisions of the 1980 Convention continue in force until 1 May 2004.

The US dollar amount of any dividends received by a non-corporate US holder prior to 1 January 2009 that constitute qualified dividends will be taxable to the holder at a maximum rate of 15 per cent, provided that certain holding periods are met. BOC currently believes that dividends paid with respect to its ADSs should be treated as qualified dividends for the 2004 taxable year. The US Treasury and the US Internal Revenue Service have announced their intention to promulgate rules pursuant to which holders of ADSs, among others, will be permitted to rely on certifications from issuers to establish that dividends are treated as qualified dividends. US holders are urged to consult their own tax advisers regarding the availability of the reduced dividend tax rate in light of their own particular situation and the computations of their foreign tax credit limitation with respect to any qualified dividends paid to them, as applicable.

### *Taxation of capital gains*

Generally, a US holder who is not resident or ordinarily resident in the UK for tax purposes should not be subject to UK tax on any gain from the disposal of ADSs, but will be subject to US tax on any capital gain realised on the sale or other disposal of ADSs.

### *US information reporting and backup withholding*

Dividend payments made with respect to ADSs and proceeds from the sale or other disposal of ADSs may be subject to information reporting to the US Internal Revenue Service and backup withholding at a current rate of 28 per cent. Holders should consult their own advisors as to the application to them of the information reporting and backup withholding rules.

*Stamp duty*

In practice no UK stamp duty is payable on the transfer of an ADS, provided that the separate instrument of transfer is not executed in, and always remains outside of, the UK. No stamp duty reserve tax is payable on an agreement to transfer ADSs.

*Estate and gift tax*

Under the Estate Tax Convention, a US holder generally is not subject to UK inheritance tax.

*Exchange controls and other limitations affecting security holders*

There are currently no exchange controls or other limitations in the UK affecting security holders.

**Shareholder information****Financial calendar**

		Ordinary Shares/ American Depositary Shares		12¼% Unsecured Loan Stock	
		First interim	Second interim <sup>1</sup>	Half year	2012/2017 Half year 31 Aug 2005
Ex-dividend		5 Jan 2005	29 Jun 2005	2 Mar 2005	
Record date		7 Jan 2005	1 Jul 2005	4 Mar 2005	2 Sep 2005
DRIP notice date		11 Jan 2005	11 Jul 2005		
Payment date	UK	1 Feb 2005	1 Aug 2005	2 Apr 2005	2 Oct 2005
	US	8 Feb 2005	8 Aug 2005		
					Report and
		Three months	Half year 12 May 2005	Nine months Preliminary 17 Nov 2005	accounts Dec 2005
Group results		1 Feb 2005		2 Aug 2005	

1. Proposed dates.

**Key contacts information****Shareholder enquiries**

Shareholders who have questions relating to the Group's business or wish to receive copies of the interim statements should write to:

Director – Investor Relations  
The BOC Group plc, Chertsey Road, Windlesham, Surrey GU20 6HJ, England  
Telephone: 01276 477222  
E-mail: ir@boc.com

**Registrar**

Administrative enquiries concerning shareholdings in the company such as the loss of share certificates, change of address, dividend payment arrangements, amalgamation of multiple accounts, or requests for the full report and accounts should be sent directly to:

Lloyds TSB Registrars  
The Causeway, Worthing, West Sussex BN99 6DA, England  
Teltex for shareholders with hearing difficulties: 0870 600 3950  
Telephone: 0870 600 3958 Fax: 0870 600 3980

If telephoning from outside the UK: +44 121 415 7035 or Fax: +44 1903 854031  
Website: [www.lloydstsb-registrars.co.uk](http://www.lloydstsb-registrars.co.uk)

Correspondence should refer to The BOC Group plc, stating clearly the registered name and address and, if available, the full account number which starts with 0385.

### **Shareholding information**

To view up-to-date information about your shareholding, change your address details, set up a new, or change an existing, dividend mandate, visit the Lloyds TSB Registrars shareview website at [www.shareview.co.uk](http://www.shareview.co.uk)

The portfolio service provides access to more information on your investments including balance movements, indicative share prices and details of recent dividend payments. To register with Lloyds TSB Registrars as a user of the portfolio service and for more information visit the website at [www.shareview.co.uk](http://www.shareview.co.uk)

### **Electronic shareholder communications**

Shareholders can now elect to receive shareholder documents, such as annual and interim reports and notices of general meetings, electronically from the company's website rather than in hard copy through the mail. This has the advantage of improving the speed of communications and reducing administrative costs of printing and postage. The terms on which this electronic facility is provided can be found on the company's website ([www.boc.com](http://www.boc.com)) or on request from the registered office. Any shareholder wishing to take advantage of this free service may do so by registering their details on the Lloyds TSB Registrars shareview website at [www.shareview.co.uk](http://www.shareview.co.uk)

### **Dividend reinvestment plan**

A dividend reinvestment plan (DRIP), through which Ordinary shareholders may invest the whole of their cash dividends in additional shares in the company, is available. Ordinary shareholders on the register at the record date may participate in the plan provided their application forms are received by the DRIP notice date shown in the financial calendar above. Copies of the explanatory brochure and application form are available on the company's website ([www.boc.com](http://www.boc.com)) or from Lloyds TSB Registrars whose details appear above.

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## **Shareholder information**

### **Payment of dividends**

Ordinary shareholders and loan stock holders may arrange to have their dividends or interest paid directly into a bank or building society account through the Bankers Automated Clearing System (BACS). Mandate forms are available on the company's website ([www.boc.com](http://www.boc.com)) or from Lloyds TSB Registrars whose details appear on the previous page. Alternatively you can set up a new, or change an existing, dividend mandate via the Lloyds TSB Registrars shareview website at [www.shareview.co.uk](http://www.shareview.co.uk). In February of each year a consolidated tax voucher relating to Ordinary dividend payments made via BACS during the financial year, will be mailed to the registered address of the shareholder. Loan stock holders will receive tax vouchers at the time of each interest payment in April and October, mailed directly to their registered address.

### **Overseas dividend payments**

Private shareholders in 36 countries may now have their dividends paid directly into their local bank accounts in their local currency. There is a small fixed fee for the service, currently £2.50 per dividend. The dividend payment, less the fee, is normally received within five working days of the dividend payment date. For more information, please contact Lloyds TSB Registrars whose details appear on the previous page.

### **Share dealing services**

For Internet and telephone share dealing services contact Lloyds TSB Registrars by either logging on to [www.shareview.co.uk/dealing](http://www.shareview.co.uk/dealing) or by calling 0870 850 0852 between 8.30 am and 4.30 pm on any business day (excluding bank holidays). You will need your shareholder reference number shown on your share certificate.

Lloyds TSB Registrars also offer a postal share dealing service. For further information contact:

Share Dealing Services  
Lloyds TSB Registrars  
PO Box 1357  
The Causeway, Worthing  
West Sussex, BN99 6UB  
England

### **American Depositary Shares**

The BOC Group plc American Depositary Shares (ADS) are listed on the New York Stock Exchange and trade under the symbol BOX. One ADS represents two The BOC Group plc Ordinary shares. JPMorgan Chase Bank is the depositary and their address for enquiries is:

JPMorgan Chase Bank  
JPMorgan Service Center,  
PO Box 43013, Providence, RI 02940-3013, USA  
Telephone: +1 781 575 4328  
Website: [www.adr.com/shareholder](http://www.adr.com/shareholder)

A dividend reinvestment plan is available through JPMorgan Chase Bank as depositary for holders of ADSs. All enquiries regarding this plan should be addressed to:

Global Invest Direct,  
JPMorgan Chase Bank  
PO Box 43013, Providence, RI 02940-3013, USA  
Telephone, toll free: JPMorgan Service Center on +1 800 749 1687 or +1 800 428 4237

### **US report filings**

All reports and other information filed with the US Securities and Exchange Commission (SEC) may be inspected at the public reference facilities maintained by the SEC at 450 Fifth Street, NW, Washington DC 20549, USA. These reports may also be accessed via the SEC's website at [www.sec.gov](http://www.sec.gov)

### **Agent for service of process in the US**

CT Corporation System  
111 Eighth Avenue, New York, New York 10011, USA

### **ShareGift**

Shareholders with a small number of shares, the value of which makes it uneconomic to sell them, may wish to consider donating them to charity through ShareGift, a registered charity administered by The Orr Mackintosh Foundation. A ShareGift donation form can be obtained from Lloyds TSB Registrars whose details appear on the previous page. Further information about ShareGift is available at [www.sharegift.org](http://www.sharegift.org) or by writing to: ShareGift, The Orr Mackintosh Foundation, 46 Grosvenor Street, London W1K 3HN, England. Telephone: 020 7337 0501.

### **Unsolicited mail**

The company is obliged by law to make its share register publicly available and as a consequence some shareholders may receive unsolicited mail. If you wish to limit the amount of unsolicited mail you receive, contact: The Mailing Preference Service, FREEPOST 29 (LON.20771), London W1E 0ZT, England. Telephone: 020 7291 3310 or register on-line at [www.mpsonline.org.uk](http://www.mpsonline.org.uk)

The Mailing Preference Service is an independent organisation which offers a free service to the public. Registering with them will stop most unsolicited consumer advertising material.

### **Special needs**

If you would like to receive this report in an appropriate alternative format, such as large print, Braille, or audio cassette, please contact Lloyds TSB Registrars on 0870 600 3958 or for shareholders with hearing difficulties on Teltex 0870 600 3950.

**CROSS REFERENCE TO FORM 20-F**

The information in this document that is referred to in the following table shall be deemed to be filed with the US Securities and Exchange Commission for all purposes.

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**GLOSSARY OF TERMS**


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Terms used in the report and accounts	US equivalent or brief description
Acquisition accounting	Purchase accounting
Associate	Equity investment
Capital allowances	Tax term equivalent to US tax depreciation allowances
Cash at bank	Cash
Creditors	Payables
Debtors	Receivables
Finance lease	Capital lease
Financial year	Fiscal year
Freehold	Ownership with absolute rights in perpetuity
Interest receivable	Interest income
Interest payable	Interest expense
Joint venture	Equity investment
Net asset value	Book value
Own shares	Treasury stock
Profit	Income
Profit and loss account	Income statement
Profit and loss account reserves	Retained earnings
Profit for the financial year	Net income
Provisions	Reserves
Called up share capital	Ordinary shares, capital stock or common stock issued and fully paid
Scrip dividend	Stock dividend
Secured loan	Collateralised loan
Shareholders funds	Shareholders equity
Share premium account	Additional paid-up capital or paid-in capital (not distributable)
Shares issued	Stock outstanding
Stocks	Inventories
Tangible fixed assets	Property, plant and equipment
Turnover	Revenue

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