umicore

03 DEC -4 AM 7:21

Office of International Corporate Finance
U.S. Securities and Exchange Commission
450 Fifth Street, NW

Washington, DC 20549-0302
USA

For the attention of Mr Paul M. Dudek

Brussels, November 27, 2003
LegalCorp 48/2003

Dear Sir,

Umicore
Rule 12g3-2(b) Exemption No. 82-3876

Please find enclosed herewith, pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934, copy of the following documents :

- the press releases issued on November 7, 2003 entitled :
  - "Quarterly update";
  - "*Umicore launches equity offering*";
- the press release issued on November 20, 2003 entitled : "Umicore equity offering : overall more than four times over-subscribed";
- the press release issued on November 24, 2003 entitled : "Umicore acquires automotive catalyst recycling assets from the Demet group".

You will also find attached, **for information only**, the prospectus relating to the equity offering. This one is now totally completed.

Yours sincerely,

Umicore

J. Fiérain
Manager
Legal Corporate Dpt.

Ph. Gothier
Deputy General Counsel

Encl.

n.v. Umicore s.a.
Administration & Legal Department
Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Tel +32 2 227 71 11
Fax +32 2 227 79 00
e-mail info@umicore.com

VAT BE401 574 852
Bank 210-0052900-87
TRB 85382

umicore

Press release

7 November 2003

Quarterly update

GENERAL OVERVIEW

Umicore experienced an encouraging third quarter with good levels of business activity during the normally quieter summer months. The contribution of PMG (which is being consolidated from 1 August) has been fully in line with expectations. The Advanced Materials business group demonstrated a further improvement in its level of performance. Towards the end of the period the prices of zinc and copper also showed signs of recovery. Most of the Group's other businesses exhibited a continuation of the trends prevalent during the first half of 2003. Given these developments, Umicore anticipates that full year EBIT (including PMG from 1 August 2003) will reach approximately €130 million.

During the third quarter much time and effort has been dedicated to ensuring the smooth integration of the PMG operations into the new company structure. Priority areas have been the establishment of a clear, unified management structure; the integration of precious metals refining and precious metals management operations; the reduction of working capital in the combined business and the application of a uniform set of financial controls and procedures. At the same time, the integration process has been designed to create minimum disruption to the on-going business activities. In terms of reporting segments, two new groups have been created: Precious Metals Services combines the precious metals refining operations of Umicore and PMG and also includes the expanded metals management business. Precious Metals Products and Catalysts incorporates all the other former PMG businesses (except Fuel Cells) and also includes Thin Film Products which was formerly part of the Advanced Materials business group. Fuel Cells has been grouped within Research, Development and Innovation, which is included in the Corporate & Investment reporting segment.

The Advanced Materials business was strengthened by the acquisition of the EaglePicher germanium business and Umicore has also acquired a 40% stake in Ganzhou Hongsheng Metallurgical and Chemical Company This further adds to Umicore's global leadership in the cobalt market.

On 22 July Umicore sold one million of its own shares previously held as treasury shares. These shares were sold as a block to a financial intermediary and were subsequently placed among a limited number of financial institutions throughout Europe. As at 31 October, Umicore owned 3.24% of its share capital (733,199 shares). Following the placement by Suez of two million Umicore shares in October, Umicore's free float has increased to 79%, which should result in an increased weighting in the Bel 20 Index.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

ADVANCED MATERIALS

Engineered Metal Powders

The Engineered Powders business continued to perform well. The sales of cobalt powders for hard metals tools were particularly healthy, boosted by increasing demand from the electronics and oil drilling sectors. Demand for cobalt powders for diamond tools was subdued in Europe, while Asia remains a growing market for both hard metals and diamond tools applications.

Sales volumes and premiums for zinc powders suffered from reduced demand in the increasingly competitive European and US markets. In contrast, Umicore's Chinese operations performed well and the business was able to meet increased demand from its customers thanks to the successful capacity expansion finalised earlier this year.

In October Umicore finalized the acquisition of a 40% equity stake in Ganzhou Hongsheng Metallurgical and Chemical Company, a cobalt processor based in Ganzhou, China. Umicore already had a cobalt processing partnership with Hongsheng but this transaction is in line with Umicore's overall aim of increasing its presence in China. This transaction allows Umicore to further strengthen its leadership position in the global cobalt products market. Hongsheng has an annual capacity of more than 1,000 tonnes of cobalt products and employs some 540 people.

Specialty Oxides and Chemicals

The market for rechargeable battery materials remained very strong in the third quarter, driven by demand for applications using lithium ion batteries such as mobile phones and laptop computers. The capacity increase at Umicore's lithium cobaltite plant in South Korea to 2,500 tonnes per year will come on stream during the fourth quarter of 2003.

The Ceramics and Chemicals business performed well despite the normal seasonal slowdown in the summer months. The diversified product portfolio and extended geographical reach continued to aid the development of this business. The US facility continued to successfully widen its customer base during this period and also developed a new product - cobalt manganese oxide - for the ceramics industry based on the recycling of catalysts and also residues from the lithium cobaltite production facility in Korea. The plant in the Philippines completed a de-bottlenecking in its nickel refinery and increased its output of nickel specialties for the plating and catalyst industries.

Electro-Optic Materials

Although year-to-date sales of germanium substrates were well below the levels of 2002, the third quarter saw a continuation of the improved demand levels witnessed towards the end of the first half of 2003. Further work was done on the development of germanium substrates for electronic and opto-electronic applications.

Demand for germanium tetrachloride from fibre optic cable manufacturers improved slightly. Deliveries of germanium dioxide were stable.

The slight improvement seen in the finished optics segment in the first half continued into the third quarter. The integration of the activities acquired in the US (assets of EaglePicher Technologies) was implemented during the third quarter.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

Synthetic Diamonds

Megapode performed well with increased sales volumes for all product categories compared to the same period last year. Price pressure remained a feature of the market for diamond grit products.

PRECIOUS METALS PRODUCTS AND CATALYSTS

Automotive Catalysts

The European and American automotive industries continue to show a contraction of overall sales volumes, albeit from historically high levels. In this environment, Umicore's Automotive Catalysts business unit was able to grow its volumes compared to the previous year and performed according to plan. The main factor contributing to this was the implementation of development plans in the US. The ramping up of the production capacity at the Burlington plant in Canada is proceeding according to plan.

The business unit has developed a new catalyst technology for diesel particulate filters (DPF). These catalytically activated diesel particulate filters reduce the emissions from current diesel engines. They comply with the strict legislation for 2005 EU IV and will initially be used by Daimler Chrysler. They will be the first commercially available catalyzed DPF on the market.

Technical Materials

Although the technological strength of this business enabled it to grow its sales volumes year-on-year despite weak overall economic conditions, sales prices were lower. Sales of platinum engineered materials were driven by the growth in demand from LCD glass producers while the Asian market exhibited improved demand in the electronics sector. Sales of electrical contact materials benefited from development projects in China.

Jewellery and Electroplating

The general demand for jewellery is down in Europe but the jewellery business (which includes the Allgemeine subsidiary) benefited from increased demand from its customers – mainly large branded jewellery producers – for higher quality materials. In electroplating, sales volumes were stable.

Precious Metals Chemistry

This business unit produces precious metal compounds for various industries and homogeneous catalysts for bulk and specialty (e.g. pharmaceutical) industries. Sales volumes of homogeneous catalysts increased despite the slowdown in the main end-user sectors. A significant capacity expansion for homogeneous catalysts in Hanau has been completed and is now operational.

Thin Film Products

Demand from the electronics and optics industries was healthy, and the business unit was able to grow its sales volumes compared to the same period of last year. In optical data storage competition was fierce in main markets and sales volumes and margins were under pressure. In displays, a strong position is being developed in chromium products (Taiwan), but sales of indium products (USA, Providence) remained low.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

PRECIOUS METALS SERVICES

The operations at Hoboken performed well, although they were again somewhat affected by the reduced supplies of raw materials. Arrivals of electronic scrap and automotive catalysts slowed down during the summer months and the general availability of these two sources of feed continues to be hampered by the fact that precious metals prices have not shown any significant positive evolution so far this year. The availability of by-products from the non-ferrous metals industry continued to be affected by the reduced activity levels in this industry in Europe. Despite these tight supply conditions, Hoboken was able to secure satisfactory levels of feed during the quarter and specific efforts have been made to further broaden the supply base - something that is made possible by the flexibility of the flowsheet..

The high level of process efficiency has again provided Umicore Precious Metals Services with a positive counterweight to the prevailing market conditions.

The study relating to the integration of PMG's refining activities in Hanau (Germany) into Precious Metals Services is making progress. A decision on the industrial configuration in refining is expected in the coming months. The unification of the metals management operations has already led to new opportunities and has aided the ongoing efforts to reduce capital employed in the combined business.

ZINC

The average zinc price for the third quarter of 2003 showed some improvement, at USD 836 per tonne vs USD 786 for the same period of last year.

Zinc Smelting

Production from Umicore's smelters in Balen and Auby was in line with last year. Market treatment charges remained unsatisfactory, although Umicore has continued to benefit from its long-term contracts policy. The availability of secondary materials improved and sulphuric acid prices were significantly better than last year.
As in the first half of the year, the higher energy costs in Balen - resulting from higher electricity prices and increased levels of taxation on energy consumption - were offset to some extent by lower taxation of electricity in France. Umicore, together with other industrial companies, has continued its information campaign to highlight concerns over energy taxation policy and its possible consequences on the competitiveness of Belgian industry.

Padaeng

The trends that were evident during the first half of the year carried through into the third quarter - the domestic Thai market remained strong and the proportion of alloys in overall sales was up year on year despite poor demand from the Asian die-casting sector..

Zinc Alloys and Chemicals

Significant imports of Asian zinc oxide at low prices meant that the European market for zinc oxide remained depressed. The business benefited from the refocusing of its portfolio on the highest added value activities.

In fine zinc powders, activity was stable, with the performance of recycling activities still slightly affected by lower revenues resulting from the low zinc price.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

The continuous galvanising business benefited from the closure of European smelters in the first half of the year with volumes and premiums improving. Sales volumes increased in general galvanising products although levels of demand varied greatly in Europe from country to country. In the European market, overall demand for die-casting alloys remained healthy, whereas sales of die-casting alloys in Asia were affected as a result of fierce competition.

Building Products

The overall trend was in line with the first half of the year, with sales in Germany still suffering from the depression in the German building industry. The French market was stable, however, and the business unit was also able to take advantage of its improved product offering and increased geographical scope, as a result of the acquisitions of the past year. Management of the product and market portfolio also contributed to slightly better overall premiums for finished products. Improvements in the unit's productivity and cost base also continued to bear fruit.

COPPER

The lower levels of LME copper stocks led to an improvement in the copper price, which averaged USD 1,759 per tonne in the third quarter. Treatment and refining charges remained extremely depressed, however, as a result of the tightness on the concentrates market, with Indian and Chinese smelters still relying on their protective environment to settle very low treatment charges.

The smelting activities at Pirdop fully met expectations in terms of operational performance, and should exceed the planned annual production of 210,000 tonnes of anodes.

Production of cathodes at the Olen refinery was slightly ahead of last year. European demand remained subdued in all sectors, especially in the automotive and building industries. As a result, overall sales of copper wire rod were significantly lower than in the same period of last year. However, sales from the Italian operations were stable and sales of oxygen-free rod continue to grow. Sales of cast products were in line with the third quarter of 2002.

The carve-out of Umicore's copper activities in a fully owned subsidiary will be completed by year end.

CORPORATE AND INVESTMENTS

Traxys

The new marketing and trading joint venture with Arcelor has got off to a positive start. The integration of the various elements in the venture has progressed rapidly.

Research, Development and Innovation

The R&D activities of Umicore have been regrouped to include centralised research and development efforts, the venture unit (formerly part of Advanced Materials), the Umagine innovation unit and Fuel Cells (formerly part of PMG).

In Fuel Cells, sampling and qualification activities at Umicore's main customers accelerated during the third quarter. Umicore also acquired patents relating to catalysis and nano-technology from the Max Planck Institute in Germany.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

Other

In September Umicore announced its intention to stop the activities of its engineering division, Umicore Engineering, by year-end. The Group's net result for 2003 will include any non-recurring restructuring charges relating to this and also charges that have been, or will be, incurred concerning the integration of PMG and the restructuring at the Olen plant.

OUTLOOK

Given the contribution of PMG, the positive evolution in Advanced Materials and the improvement in the zinc price in recent weeks, Umicore now expects that full year EBIT will reach approximately €130 million, including an expected contribution from the former PMG activities in excess of €30 million (from 1 August 2003). Net after tax earnings before exceptional items will exceed €80 million.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

Forward looking statements

This press release contains forward-looking information that involves risks and uncertainties, including statements about Umicore's plans, objectives, expectations and intentions. Readers are cautioned that forward-looking statements include known and unknown risks and are subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond the control of Umicore. Should one or more of these risks, uncertainties or contingencies materialize, or should any underlying assumptions prove incorrect, actual results could vary materially from those anticipated, expected, estimated or projected. As a result, neither Umicore nor any other person assumes any responsibility for the accuracy of these forward-looking statements.

For more information:
n.v. Umicore s.a.:
***Investor Relations** : Mrs Isabelle MICHOTTE - Tel. +32 2 227 71 47 – isabelle.michotte@umicore.com*
***Press:** Mr Eddy CORNELIS - Tel. +32 2 227 70 64 - +32 475 84 00 94 – eddy.cornelis@umicore.com*

PROFILE

Umicore is an international metals and materials group. Its activities are centred on five business areas : Precious Metals Services, Precious Metals Products and Catalysts, Advanced Materials, Zinc and Copper. Each business area is divided into market-focused business units.

Umicore focuses on application areas where it knows its expertise in materials science, chemistry and metallurgy can make a real difference, be it in products that are essential to everyday life or those at the cutting edge of exciting, new technological developments. Umicore's overriding goal of sustainable value creation is based on this ambition to develop, produce and recycle metals in a way that fulfils its mission: materials for a better life.

The Umicore Group has industrial operations on all continents and serves a global customer base; it generated a turnover of EUR 3.2 billion in 2002 and currently employs some 12,500 people.

---

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

umicore

Press release

7 November 2003

Umicore launches equity offering

Umicore today decided to proceed with an equity offering for 2,400,000 new shares (and an additional 400,000 new shares to cover over-allotments) all with VVPR strips and in a price range of €49 to €55. The purpose of the offering is to partially refinance the acquisition of PMG that Umicore completed at the end of July 2003. The shares will be made available through a public offering in Belgium and a private placement to institutional investors in Belgium and abroad (except the United States and Japan).

The offering comprises a priority tranche for existing shareholders for 1,200,000 new shares – twenty existing shares give the possibility to subscribe to one new share. A free tranche for 1,200,000 shares is available for other investors. Should the priority tranche for existing shareholders not be fully subscribed then any remaining shares in this tranche will become available to other investors as part of the free tranche.

The subscription period will run from 10th November 2003 to 19th November 2003 and is subject to possible early closing no earlier than 17th November at 4 pm Brussels time.

The new shares, when issued, will be quoted on the First Market of Euronext Brussels. Such listing will be under the same security code as the existing Umicore shares and VVPR strips and will start on or around 26th November 2003. The new shares will entitle the holder to the full dividend for 2003.

The final offer price will be determined on the basis of a bookbuilding procedure with institutional investors during the subscription period and will be published upon closing of the offering, at the latest on 21st November 2003. All investors will subscribe at the same final price.

The operation has been co-ordinated and managed by Fortis Bank and KBC Securities as Joint Global Coordinators & Bookrunners, with RBC Capital Markets and UBS acting as Joint Lead Managers and Petercam as Co-Manager.

For further details on the offer please visit www.umicore.com. Prospectuses with the characteristics of the offer and in-depth background information on Umicore may be consulted on the company's website or by contacting Umicore's head office directly.

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

Cautionary Statement

This document is for communication purposes only and does not constitute an offer to sell any securities of the Company in or into any jurisdiction. The only reference document for the equity offering referred to in this press release is the Prospectus.

This document is not for distribution, directly or indirectly, in or into the United States. The securities of the Company may not be offered or sold in the United States unless they are registered or exempt from registration. There will be no public offer of securities in the United States or any jurisdiction outside Belgium.

For more information:
n.v. Umicore s.a.:
***Investor Relations** : Mrs Isabelle MICHOTTE - Tel. +32 2 227 71 47 – isabelle.michotte@umicore.com*
***Press:** Mr Eddy CORNELIS - Tel. +32 2 227 70 64 - +32 475 84 00 94 – eddy.cornelis@umicore.com*

PROFILE

Umicore is an international metals and materials group. Its activities are centred on five business areas : Precious Metals Services, Precious Metals Products and Catalysts, Advanced Materials, Zinc and Copper. Each business area is divided into market-focused business units.

Umicore focuses on application areas where it knows its expertise in materials science, chemistry and metallurgy can make a real difference, be it in products that are essential to everyday life or those at the cutting edge of exciting, new technological developments. Umicore's overriding goal of sustainable value creation is based on this ambition to develop, produce and recycle metals in a way that fulfils its mission: materials for a better life.

The Umicore Group has industrial operations on all continents and serves a global customer base; it generated a turnover of EUR 3.2 billion in 2002 and currently employs some 12,500 people.

---

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

umicore

Press release

20 November 2003

Umicore equity offering: overall more than four times over-subscribed

Umicore has successfully completed its equity offering for 2,400,000 new shares which was launched on 10th November. Furthermore, the over-allotment possibility has been used to the full extent of 400,000 shares. The offering attracted a significant level of interest from international investors with subscriptions recorded for more than 9,800,000 shares.

Subscriptions for the Priority Tranche of the offering reached 602,531 – indicating a high degree of participation by existing shareholders in the operation. The Free Tranche was increased from 1,200,000 to 1,800,000 shares with the addition of the 600,000 shares not subscribed to in the Priority Tranche. Demand in the Free Tranche of the offering was very positive with the 9,258,672 shares requested representing over five times the number of shares available in this tranche.

Following the completion of the book-building process the final price has been fixed at €52.60

The geographical split of subscriptions is notable for the very high level of interest shown by investors in the United Kingdom who accounted for approximately 50% of the demand. Belgian and French investors made up 15% and 12% of the overall subscriptions respectively, while the Netherlands, Canada and Germany also reported a significant degree of interest along with other countries in Europe.

The new shares will be issued and listed on the First Market of Euronext Brussels on 26th November 2003.

This equity offering was co-ordinated by Fortis Bank and KBC Securities, with the support of UBS, RBC Capital Markets and Petercam.

This document is not for distribution, directly or indirectly, in or into the United States. It is not an offer of securities for sale into the United States. The securities of the Company may not be offered or sold in the United States unless they are registered or exempt from registration. There is no public offer of securities in the United States or any other jurisdiction outside Belgium.

For more information:
n.v. Umicore s.a.:
***Investor Relations** : Mrs Isabelle MICHOTTE - Tel. +32 2 227 71 47 – isabelle.michotte@umicore.com*
***Press:** Mr Eddy CORNELIS - Tel. +32 2 227 70 64 - +32 475 84 00 94 – eddy.cornelis@umicore.com*

n.v. Umicore s.a.
Corporate Communication
Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com
Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com
BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

PROFILE

Umicore is an international metals and materials group. Its activities are centred on five business areas : Precious Metals Services, Precious Metals Products and Catalysts, Advanced Materials, Zinc and Copper. Each business area is divided into market-focused business units.

Umicore focuses on application areas where it knows its expertise in materials science, chemistry and metallurgy can make a real difference, be it in products that are essential to everyday life or those at the cutting edge of exciting, new technological developments. Umicore's overriding goal of sustainable value creation is based on this ambition to develop, produce and recycle metals in a way that fulfils its mission: materials for a better life.

The Umicore Group has industrial operations on all continents and serves a global customer base; it generated a turnover of EUR 3.2 billion in 2002 and currently employs some 12,500 people.

---

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

umicore

Press release

24 November 2003

Umicore acquires automotive catalyst recycling assets from the Demet group

In order to further support the growth of its precious metals recycling business, Umicore has reached an agreement with the Demet group of companies and their shareholders to acquire certain assets located in Alzenau, Germany, effective January 1st 2004.

These assets relate to the automotive catalyst recycling business of the Demet group, and include Europe's most efficient integrated decanning and sampling line for ceramic catalysts, as well as a unique, patented shredder for metallic catalysts. They are located at Demet's Alzenau plant. Umicore intends to continue to operate the system for collecting automotive catalysts with Demet's franchise partners under the Demet brand for the foreseeable future. The transaction does not involve any of the Demet group's assets that are related to its electronic scrap and industrial residues businesses.

This acquisition fits the strategy of Umicore Precious Metals Services to offer a high standard, closed-loop solution for automotive catalysts to the automobile industry, as well as to catalyst producers and collectors. The European spent automotive catalyst market is expected to grow significantly in the next five years.

The newly acquired business is to be known as Umicore Autocatalyst Recycling GmbH.

The transaction remains subject to clearance from the relevant competition authorities.

For more information:
n.v. Umicore s.a.:
***Investor Relations** : Mrs Isabelle MICHOTTE - Tel. +32 2 227 71 47 – isabelle.michotte@umicore.com*
***Press:** Mr Eddy CORNELIS - Tel. +32 2 227 70 64 - +32 475 84 00 94 – eddy.cornelis@umicore.com*

PROFILE

Umicore is an international metals and materials group. Its activities are centred on five business areas : Precious Metals Services, Precious Metals Products and Catalysts, Advanced Materials, Zinc and Copper. Each business area is divided into market-focused business units.

Umicore focuses on application areas where it knows its expertise in materials science, chemistry and metallurgy can make a real difference, be it in products that are essential to everyday life or those at the cutting edge of exciting, new technological developments. Umicore's overriding goal of sustainable value creation is based on this ambition to develop, produce and recycle metals in a way that fulfils its mission: materials for a better life.

The Umicore Group has industrial operations on all continents and serves a global customer base; it generated a turnover of EUR 3.2 billion in 2002 and currently employs some 12,500 people.

---

n.v. Umicore s.a.
Corporate Communication

Broekstraat 31 Rue du Marais
B-1000 Brussels, Belgium
www.umicore.com

Phone +32 2 227 70 67
Fax +32 2 227 79 03
e-mail info@umicore.com

BTW BE401 574 852
Bank 210-0053806-23 - TRB 85382
Registered Office: Broekstraat 31 Rue du Marais, B-1000 Brussels

Société Anonyme / Naamloze Vennootschap
Registered office: Broekstraat 31 rue du Marais – 1000 Brussels
Register of Legal Entities (enterprise number): 0401574852

OFFERING TO SUBSCRIBE FOR UP TO 2,400,000 NEW SHARES
Additionally, an Over-allotment Option has been granted to the Joint Global Coordinators and Bookrunners in respect of up to 400,000 new shares.

The Offer Shares are offered (i) through a Public Offering in Belgium to Retail Investors and (ii) through a Private Placement to Institutional Investors in Belgium and abroad (excluding the United States and Japan). The Offering comprises a Priority Tranche, which grants existing shareholders a right to an irreducible Priority Allocation for up to 1,200,000 new shares, and a Free Tranche for up to 1,200,000 new shares. In the event of over-subscription, the demand in the Free Tranche may be reduced as described under Section 3.9. "Allocation of the Shares".

The Offer Price will be published on 21 November 2003, subject to early closing.

The Offer Shares are offered with VVPR strips. VVPR strips entitle eligible shareholders to a reduced rate of Belgian withholding tax on dividends as described under Section 3.19. "Belgian Taxation".

Investors in Belgium wishing to subscribe to the Offer Shares can present their Orders directly at the counters of the Selling Agents: Fortis Bank, KBC Securities, KBC Bank, CBC Banque and Petercam, or through any other financial intermediary.

APPLICATION FOR LISTING OF THE OFFER SHARES AND VVPR STRIPS ON THE FIRST MARKET OF EURONEXT BRUSSELS HAS BEEN MADE.

The existing shares in the Company are listed on the First Market of Euronext Brussels under the security code ISIN BE0003626372. The new shares to be issued under the Offering will be admitted to the listing of Euronext Brussels under the same security code. Listing is expected to start on or around 26 November 2003.

The Offering will start on 10 November 2003 and close on 19 November 2003 (subject to early closing).

JOINT GLOBAL COORDINATORS AND BOOKRUNNERS
FORTIS BANK **KBC SECURITIES**

JOINT LEAD MANAGERS
RBC CAPITAL MARKETS **UBS LIMITED**

CO-MANAGER
PETERCAM

SELLING AGENTS IN BELGIUM
CBC BANQUE **FORTIS BANK** **KBC BANK**

This Prospectus can also be consulted via the Internet on the following websites: www.umicore.com, www.kbcsecurities.be, www.fortisbank.be/beleggen, www.fortisbanque.be/investir, and www.petercam.be. The text of the Prospectus on the Internet does not constitute an offer or a solicitation to purchase securities in jurisdictions where such offer or solicitation would be unlawful. Any reproduction or distribution of the electronic version is prohibited.

November 2003

INVESTOR NOTICES

Capitalised terms not defined in this section are defined in the glossary.

This Prospectus is being furnished by the Company solely for the purpose of enabling a prospective investor to consider the purchase of or subscription to the Offer Shares. The information contained in this Prospectus has been provided by the Company and other sources identified herein. No person is or has been authorised by the Company, the Underwriters or the affiliates of any of them to give any information or to make any representations other than those contained in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorised by the Company, the Underwriters or the affiliates of any of them. Any reproduction or distribution of this Prospectus, in whole or in part, and any disclosure of its contents or use of any information herein for any purpose other than considering an investment in the Offer Shares is prohibited. Each offeree of the Offer Shares, by accepting delivery of this Prospectus, agrees to the foregoing.

The Offering and this Prospectus have not been submitted for approval to any supervisory authority outside Belgium. Therefore, no steps may be taken that would constitute, or result in, a public offering of the Offer Shares, Priority Allocation rights and VVPR-strips (together, the "Securities") outside Belgium. The distribution of this Prospectus and the Offering may be restricted by law in certain jurisdictions. Neither the Company nor the Underwriters represents that this Prospectus or any other Offering-related documents may be lawfully distributed, or that the Securities may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating such distribution or offering. Accordingly, the Offering may not be made and the Securities may not be offered or sold, directly or indirectly, and neither this Prospectus nor any other Offering-related documents may be distributed or published in any jurisdiction, except in circumstances that will result in compliance with all applicable laws and regulations. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any of the Securities to any person in any jurisdiction in which it is unlawful to make such offer or solicitation to such person. Persons into whose possession this Prospectus or any Securities come, must inform themselves about, and observe, any such restrictions.

In particular, this Prospectus and any other Offering-related documents may not be distributed to the public outside Belgium, including but not limited to the United States, Canada, Japan and the United Kingdom. Any failure to comply with these restrictions may constitute a violation of U.S., Canadian, Japanese and U.K. securities laws or the securities laws of other jurisdictions.

UNITED STATES

The Offering is being made outside the United States in reliance upon Regulation S (**"Regulation S"**) under the US Securities Act of 1933, as amended (the **"Securities Act"**). The Securities have not been and will not be registered under the Securities Act and, subject to certain exceptions, may not be offered or sold within the United States except in a transaction in compliance with Regulation S or pursuant to an exemption from the registration requirements of the Securities Act.

The Securities have not been approved or disapproved by the US Securities and Exchange Commission, any state securities commission in the United States or any other US regulatory authority, nor have any of the foregoing authorities approved or endorsed the merits of the offering of the Securities or the accuracy or adequacy of this Prospectus. Any representation to the contrary is a criminal offence in the United States.

UNITED KINGDOM

The Offering may only be made to persons falling within applicable exemptions of The Public Offers of Securities Regulations 1995 and accordingly no offer is being made to the public pursuant to those regulations.

This Prospectus is being distributed only to, and is directed at, (a) persons who have professional experience in matters relating to investments falling within Article 19(1)(a) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2001 (the "Order") or (b) high-net-worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(1)(a) of the Order.

The investments to which this Prospectus relates are available only to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, UK persons of the type specified in the foregoing paragraphs. Any other person should not rely on, and will not be able to act on, this Prospectus or any of its contents.

DECISION TO INVEST

In making an investment decision, investors must rely on their own examination of the Company and the terms of the Offering, including the merits and risks involved. Any decision to buy any Offer Shares should be based solely on this Prospectus, taking into account that any summary or description, set forth in this Prospectus, of legal provisions, corporate structuring or contractual relationships is for information purposes only and should not be construed as legal or tax advice as to the interpretation or enforceability of such provisions or relationships. The Offer Shares have not been recommended by any securities commission or regulatory authority in Belgium or elsewhere. Furthermore, the foregoing authorities have not confirmed or approved the accuracy or the adequacy of this Prospectus.

FORWARD-LOOKING INFORMATION

This Prospectus contains forward-looking statements, including without limitation, statements containing the words "believes", "anticipates", "expects" and similar expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, financial conditions, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in "Risk Factors". Given these uncertainties, prospective investors are cautioned not to place any undue reliance on such forward-looking statements. The Company disclaims any obligation to update any such forward-looking statements in this Prospectus to reflect future events or developments.

All terms used in the Prospectus and written with a capital letter, whether used in singular or in plural, are defined in the Glossary at the end of this Prospectus.

TABLE OF CONTENTS

It is intended that this summary of Umicore's activities and the overview of the Offering be read together with the more detailed information appearing elsewhere in this Prospectus.

GROUP PROFILE

Umicore has a long tradition as a metals and materials company and can trace its roots back to the early 20th century. For a number of years, however, Umicore has been shifting its focus away from mining and commodity production towards a more downstream, application-oriented strategy. This process has been gathering pace since 1995 and in 2001 the Company changed its name to reflect more accurately its business approach and the type of products and services it provides.

Today, Umicore is an international metals and materials group. Its activities are centred on five business areas: Precious Metals Services, Precious Metals Products and Catalysts, Advanced Materials, Zinc and Copper. Each business area is divided into market-focused business units. Umicore's investments, corporate service and support functions are grouped under Corporate and Investments.

Umicore focuses on application areas where it can bring to bear its expertise in materials science, metallurgy and chemistry be it in products that are essential to everyday life or those at the cutting edge of exciting new technological developments. Umicore's goal of sustainable value creation is based on this ambition to develop, produce and recycle metals in a way that fulfils its mission: "materials for a better life".

Umicore has industrial operations on all continents and serves a global customer base.

SUMMARY OF UMICORE'S BUSINESSES

Advanced Materials – The Advanced Materials business group produces high-purity metals, alloys, compounds and engineered products for a wide range of applications and has a leading position[1] in fine cobalt powders and compounds and germanium products. The business group is today divided into three business units: Engineered Metal Powders; Specialty Oxides and Chemicals; Electro-Optic Materials, all of which have leadership positions in their specific niche markets. A fourth business unit, Thin Film Products, has recently been incorporated in Precious Metals Products and Catalysts but the description of this business is included in the Advanced Materials section for the purposes of this Prospectus. In addition to these business units, there is a 50/50 joint venture between Umicore subsidiary Sibeka and De Beers for the production of synthetic diamonds.

Due to the fast-evolving nature of many of the markets in which Advanced Materials is present, the business group undertakes significant research and development efforts in order to gain and maintain competitive advantage. Advanced Materials seeks to maximize the recycling and re-use of scarce metals. Minimizing waste, as well as recovering and reprocessing used or intermediate waste products are central to the aim of developing a closed loop business model.

Precious Metals Services – Umicore is the world's leading recycler and refiner of complex materials containing precious metals. It operates at facilities in Hoboken (Belgium), Hanau (Germany), Guarulhos (Brazil) and Tsukuba (Japan). The facility at Hoboken, near Antwerp, is the most advanced precious metals recycling and recovery operation in the world. Servicing an international client base, Precious Metals Services is able to process and treat a wide range of materials, from the by-products from non-ferrous metals operations to precious-metals-bearing scrap from electronic and catalytic applications.

The business group remains at the forefront of precious metals recovery technology and operates the world's largest silver refinery. Umicore Precious Metals Services is also Europe's leading refiner of palladium and rhodium. Precious Metals Services also includes a metals management function that provides hedging, liquidity, trading, leasing and consulting services for internal and external customers.

Precious Metals Products and Catalysts – Umicore is one of the world's foremost providers of precious metals based products and solutions. It provides the majority of its semi-finished products, finished products and chemical compounds to customers whose businesses are driven by advanced technology. It is, for example, a world leader in the design and production of automotive catalyst systems for use in different types of vehicles. The business group is split into four business areas – Automotive Catalysts; Technical Materials; Jewellery and Electroplating; Precious Metals Chemistry. A fifth unit – Thin Film Products – has recently been transferred from the Advanced Materials business group.

---

1 In this section and in Chapter 4 ("Umicore's Businesses"), Umicore's position relative to its competitors is generally expressed by reference to production or sales volumes

The business has production, servicing and technical support centres throughout the world.

Copper – Umicore is one of the leading copper producers in Europe and the Group's production capacity for copper products exceeds 600,000 tonnes per year. These products come in a variety of different formats such as wire rod, billets and cakes. Umicore is Europe's largest non-integrated producer of wire rod and its plants at Olen (Belgium) and Avellino (Italy) have a combined capacity of 470,000 tonnes a year.

Umicore has a newly modernised smelting facility at Pirdop in Bulgaria, which obtains part of its concentrate needs from Bulgarian copper mines. The production capacity at Pirdop has recently been increased to 210,000 tonnes per year. This production provides a significant proportion of the feedstock for the Olen refinery in the form of copper anodes. The balance of the feed for the Olen refinery comes from copper raw materials suppliers from around the world and suppliers of copper scrap.

Zinc – Umicore is one of the world's leading players in the zinc industry with a total production capacity of over 600,000 tonnes. The company's zinc business group employs a strategy that focuses on the operational excellence of its smelting operations and the development of leadership positions in added value products. Umicore is the world's number one producer of zinc products for building applications and is Europe's leading producer of zinc alloys for die-casting and galvanizing and zinc chemicals for a variety of applications. Umicore is also the world's biggest recycler of zinc and aims to provide a 'closed loop' for zinc products.

Umicore owns a 47.27% stake in Padaeng Industry in Thailand – South East Asia's only sizeable zinc producer.

Corporate and Investments – This business area comprises Umicore's investments that are not reported as part of the different business groups. This primarily refers to Traxys – a 50/50 marketing and trading joint venture with Arcelor International, which was created in June 2003, and Umicore's financial investments.

This area also includes the corporate and shared operational functions such as Umicore Marketing Services (which provides world wide sales and marketing support for Umicore's business groups), Umicore Engineering (involved in the planning, design and implementation of internal engineering, construction and metallurgical projects and other engineering-related support functions within the Umicore Group)[1], and Research, Development and Innovation (which includes the Fuel Cells venture).

1 Following a previous decision to move away from providing technology to third parties, Umicore has announced to the work's council its intention to reorganise its engineering activities

KEY FIGURES

	1999	*2000*	*2001*	*2002*	***H1 2003***
			€ million		
Turnover	3,180.2	3,834.7	3,511.2	3,172.1	**1,480.2**
Added Value	566.8	657.1	641.6	602.2	**312.9**
EBIT	88.5	175.9	143.7	98.7	**49.4**
EBITDA	207.5	307.8	276.3	237.7	**111.3**
Net Consolidated Profit (loss) Group share	69.3	136.1	116.0	48.4	**27.9**
Net Consolidated Profit (loss) before extraordinary items, Group share	60.2	140.0	105.2	68.3	**37.9**
Net Consolidated Profit (loss) before extraordinary items and inventory write downs, Group share	61.3	140.0	108.5	70.9	**37.3**
Net Consolidated Profit (loss) before extraordinary items, inventory write downs and goodwill amortization, Group share	69.7	152.8	117.3	79.4	**42.0**
Capital expenditure	80.4	111.0	178.1	152.1	**66.2**
Cash flow before financing	175.2	192.3	85.7	160.0	**(107.9)**
Consolidated net financial debt	334.7	184.3	261.5	132.9	**288.9**
Capital employed (end of period)	1,508.3	1,464.8	1,514.7	1,322.1	**1,427.4**
Total shares outstanding	25,617,515	25,617,515	22,600,000	22,600,000	**22,600,000**
Workforce at end of period (Padaeng incl. as from 2001)	8,065	7,892	8,987	9,089	**8,986**
EPS declared (€ per share)	2.70	5.31	5.13	2.14	**1.23**
EPS adjusted	2.35	5.47	4.65	3.02	**1.68**
EPS adjusted before inventory write downs	2.39	5.47	4.80	3.14	**1.65**
EPS adjusted before inventory write downs and goodwill amortization	2.72	5.97	5.19	3.51	**1.86**
Net debt/equity (end of period)	32%	16%	23%	12%	**27%**
Return on capital employed (ROCE)	6.0%	11.7%	9.5%	6.6%	**6.9%**
Dividend per share (gross)	1.25	1.40	1.40	1.40	

NB: see Financial Glossary for definitions of financial terms

ACQUISITION OF PMG

On 31 July 2003 Umicore consummated the acquisition of the Precious Metals Group (PMG) of OM Group, Inc., a New York Stock Exchange-listed company based in Cleveland Ohio, USA. PMG was previously part of Degussa AG and was acquired by OM Group in 2001. The acquisition was completed following the receipt of the necessary approvals from the relevant competition authorities and satisfaction of other conditions to closing. The purchase price paid at the closing for the acquired businesses was EUR 696,795,000 in cash (after adjustment as discussed below) and Umicore also assumed existing pension liabilities (see Section 6.2. Note (8)). The acquisition was funded through bank financing (see Section 2.3.).

Financial information on PMG

The financial data relating to PMG are presented in sections 4.6 and 6.2 of the Prospectus. Umicore has acquired a number of legal entities which were not consolidated as a group. As a consequence, the financial information is presented in a different format as compared to the audited financial statements that are typically available for a consolidated group. These financial data are unaudited.

Umicore has carried out an extensive due diligence of the individual financial statements of the main entities acquired and has gained sufficient comfort that the information, as set out in sections 4.6 and 6.2 of the Prospectus, presents fairly, in all material respects, the financial position of PMG.

Stock Purchase Agreement

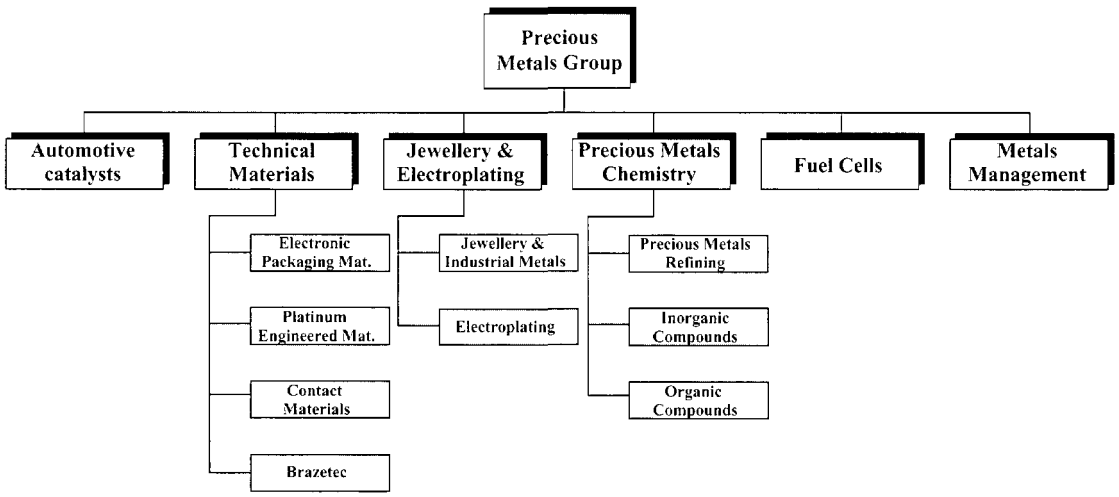
The Company and certain of its direct and indirect subsidiaries acquired the shares of and interests in nineteen (19) OM Group consolidated and unconsolidated subsidiaries, partnerships and joint venture entities comprising PMG, and certain other limited assets related to PMG, all pursuant to a Stock Purchase Agreement among the parties (PMG Agreement). In addition, ownership of certain direct and indirect subsidiaries of such acquired entities was also transferred as a result of the acquisition. The PMG Agreement contained customary closing conditions including, but not limited to obtaining certain corporate approvals, permits, consents and competition authority clearances, all of which were satisfied or waived, such that closing occurred on 31 July 2003. The initial purchase price in the Stock Purchase Agreement was EUR 643,000,000, and was subject to certain closing and post-closing adjustments based on the net debt, net working capital, precious metals lease and precious metal fixed stock inventory levels of PMG on 31 December 2002 as compared to levels of such items at closing, with such adjustments being determined based on unaudited financial statements of PMG delivered at closing. The purchase price adjustments resulted in a purchase price at closing of EUR 696,795,000, reflecting primarily the cash that was included in the acquired entities. The purchase price is subject to further adjustment upon delivery of audited financial statements of PMG as of the closing date. Umicore expects these further adjustments to be completed prior to 31 December 2003.

The PMG Agreement contained representations and warranties of OM Group covering customary matters related to the transaction and the acquired entities including, but not limited to corporate and financial matters, material contracts, real and personal property (owned and leased), intellectual property, governmental compliance and permits, employment matters and benefit plans, product claims and inventory and accounts receivable. Further, OM Group and the other affiliated sellers agreed to indemnify Umicore for breaches of such representations and warranties, subject to certain limitations, caps and other provisions. For example, Umicore cannot recover any amounts under the indemnification provisions until the sum of all losses related to breaches of representations and warranties (other than those which relate to environmental matters) exceeds EUR 10,000,000 (and then only for the excess of Umicore's losses over such amount) and Umicore's recovery under this indemnity is limited to a maximum of ten percent (10%) of the purchase price. Also, the time periods during which Umicore may claim and recover for such breaches are limited depending on the specific representation or warranty on which the claim is based.

The PMG Agreement also included certain special environmental indemnities under which OM Group is obligated to reimburse Umicore for monetary losses or expenses caused by existing environmental conditions, non-compliance with environmental laws and costs arising from the failure to transfer environmental permits. OM Group's environmental indemnification obligation extends for an eight-year period following the closing, and requires the sellers to pay a percentage of any environmental losses, which percentage declines each year after the closing for claims made in that year. The EUR 10,000,000 threshold and ten percent (10%) cap also apply to this environmental indemnity. However, in connection with OM Group's 2001 acquisition of PMG from Degussa AG, OM Group obtained environmental indemnification rights that were assignable in the event OM Group sold the underlying assets. Accordingly, pursuant to the PMG Agreement, OM Group also agreed to pass through any environmental claims for Umicore's benefit against the environmental indemnity that it received from Degussa, and such pass-through will entitle Umicore to collect any recovery under such claims.

The PMG Agreement also contains a tax indemnity such that any taxes owed by any acquired entity for any tax period prior to closing will be paid by OM Group.

PMG organization at the time of the acquisition



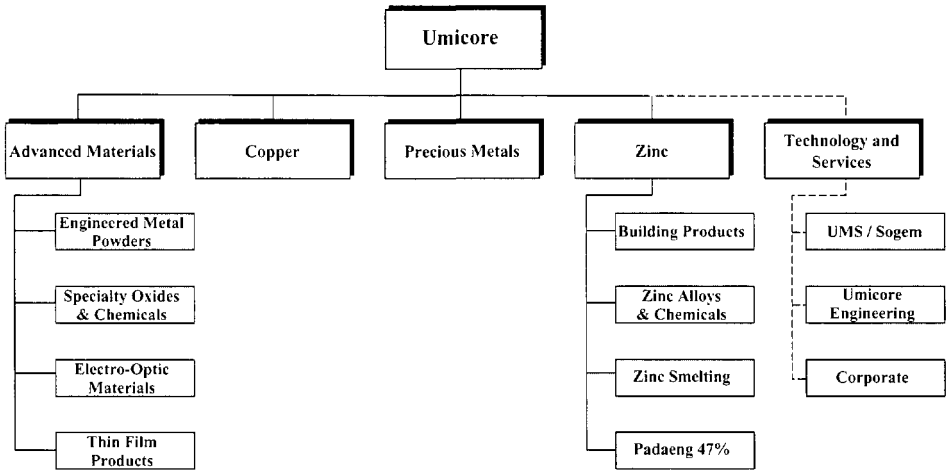
Rationale

PMG is involved both in the refining and recycling of precious metals and also in the transformation of these metals into value-added products such as automotive catalysts, technical materials, semi-finished products for jewellery, electroplating products, and organic and inorganic compounds. PMG also has extensive metals management expertise. The acquisition of PMG enables Umicore to develop a downstream presence in precious metals based on the production of these added-value, precious-metals-based products. The combination and consolidation of activities also serves to reinforce Umicore's leadership in precious metals recycling and refining. PMG also offers a highly attractive and complementary research and development portfolio, which includes a promising Fuel Cells venture, which is one of the leaders in this developing technology.

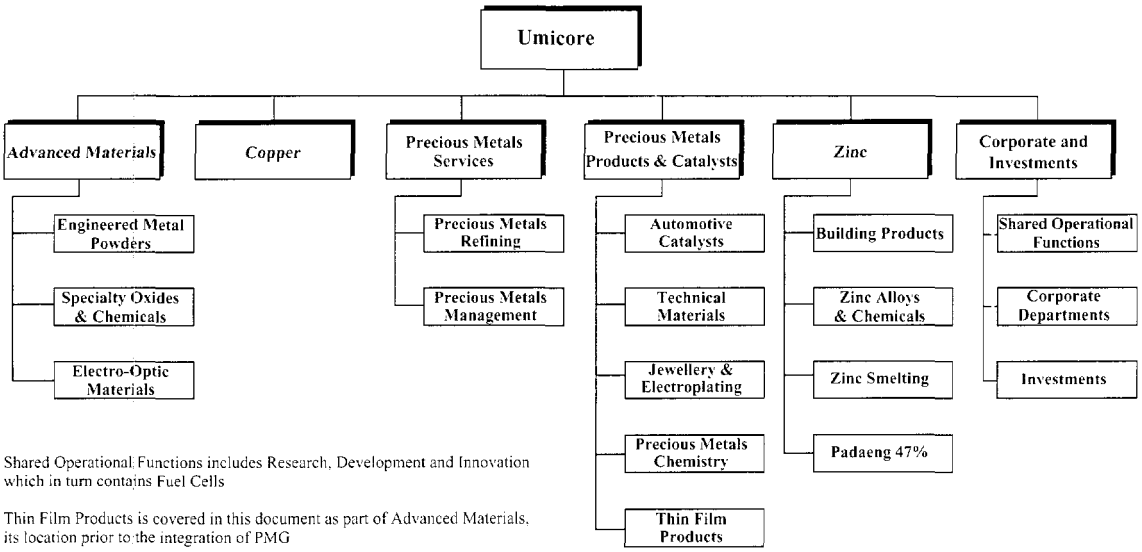
Integration

The integration of the PMG businesses commenced on the day the acquisition was announced with the unveiling of a new organization chart for the combined business entity. This led to the creation of a new business segment called Precious Metals Services. This grouped Umicore's existing precious metals recycling and refining activities with the equivalent activities in PMG's Precious Metals Chemistry business along with PMG's Metals Management function. A separate business segment was created called Precious Metals Products and Catalysts grouping the majority of the other PMG businesses (Automotive Catalysts; the organic and inorganic chemicals element of Precious Metals Chemistry; Technical Materials; Jewellery and Electroplating), and to which the Thin Film Products business unit was added. The former Fuel Cells business unit of PMG becomes part of Research Development and Innovation.

Umicore structure at the end of 2002



Umicore structure after the integration of PMG



Note: Prior to Umicore's acquisition of PMG, Umicore's precious metals operations were organised in one business area known as Precious Metals. In the business area sections of this Prospectus, the overview of Umicore's precious metals operations refers to the former Precious Metals only while the combined structure and activities of the new Precious Metals Services and Precious Metals Products and Catalysts business areas are dealt with in the PMG section.

Other elements of the initial integration process include the following:

Integration Committee – this eight-person committee was set up to plan and implement the integration of PMG into Umicore. One of its main tasks, through a number of working groups, is to identify and implement all possible synergies for the combined group.

Senior Management – the two most senior PMG executives (Martin Hess and Pascal Reymondet) became members of the Umicore Executive Committee.

Human Resources – specific steps have been taken to manage the cultural and organizational fit between Umicore and PMG.

Sales and Marketing – a number of the offices of PMG and Umicore Marketing Services are being combined where there are overlaps in a particular country or city. Once this process has been completed Umicore will have a sales and marketing network with an increased geographical reach.

Consolidation – PMG will be consolidated in Umicore's books from 1 August 2003.

Initial synergies were identified during the acquisition process and these have been investigated further by the Integration Committee. The main area of synergies already identified is in the refining area of what is now known as Precious Metals Services. Umicore has targeted a reduction of working capital requirements within the Precious Metals Services business of EUR 60 million by the end of 2003, although there can be no assurance that this target will be reached.

Other areas of synergy include the optimisation of Umicore's research and development portfolio – Umicore has primarily been process oriented in this regard whereas PMG's programme is more product oriented. The combination of the sales and marketing activities of Umicore and PMG and the incorporation of PMG's considerable experience in metals management are also expected to bring benefits to the combined company.

Other synergies are being explored in a number of different areas.

THE OFFERING

The Company	Umicore SA/NV.
Offering	Up to 2,400,000 new ordinary Company shares, with VVPR strips, and up to 400,000 new ordinary Company shares (with VVPR strips) covered by the Over-allotment Option. The Offer Shares are being offered through a Public Offering in Belgium and a Private Placement to Institutional Investors inside and outside Belgium, excluding the United States and Japan. The Offer Shares and VVPR strips have not been and will not be registered under the US Securities Act of 1933 (as amended) and may not be offered or sold within the United States or to or for the benefit of US persons.
Over-allotment Option	The Company has granted the Joint Global Coordinators and Bookrunners an option to subscribe for up to 400,000 Additional Shares at the Offer Price, exercisable 30 days after the Closing Date, solely to cover over-allotments, if any.
Offer Price	The price of the Offer Shares will be fixed shortly after the closing of the Bookbuilding and Subscription Period, which is expected to close on 19 November 2003, subject to early closing. The Offer Price will be a single Euro price, applicable for all investors and will be published in the Belgian financial press two Banking Days after the closing of the Bookbuilding and Subscription Period and, at the latest, on 21 November 2003.
Bookbuilding and Subscription Period	The period commencing on 10 November 2003 and ending on 19 November 2003, at 4:00 p.m., Brussels time, subject to early closing, during which binding offers are solicited from Institutional Investors inside and outside Belgium in order to determine the Offer Price. This period will be open for at least five Banking Days.
Payment Date	The Offer Price, together with any stock exchange tax, if applicable, must be paid, three Banking Days following the allocation, and at the latest on 25 November 2003.
Closing Date	The date on which the realisation of the capital increase by issuance of up to 2,400,000 new shares, as decided upon by the Board of Directors of the Company on 7 November 2003, will be established. This date will be published in the Belgian financial press together with the announcement of the Offer Price and the results of the Offering, and is expected to be at the latest on 25 November 2003.
Listing Date	Application has been submitted to Euronext Brussels for the listing of the Offer Shares on the First Market of Euronext Brussels. This listing is expected to take place on the first Banking Day following the Closing Date of the Offering, and at the latest on 26 November 2003.
Use of Proceeds	The gross proceeds to the Company from the Offering are expected to be in the range of EUR 130 to 150 million, and will be used for the partial refinancing of the acquisition of PMG (cf. Section 2.3. "Purpose of the Transaction").
Dividends	The Offer Shares are entitled to dividends declared, if any, with respect to profits of the financial year ending 31 December 2003 and subsequent years.
Security Codes	ISIN: BE 0003626372 for the shares. ISIN: BE 0005550216 for the VVPR strips.

RISK FACTORS

The main risks to which Umicore believes it is exposed today are listed below and Umicore has taken – and will continue to take – measures with a view to managing those risks as effectively as possible. There can be no assurance, however, that those measures will be fully effective in any given instance and therefore one cannot exclude that some of those risks may materialise, thereby possibly affecting Umicore's operations, business, financial condition and results. Additional risks which are currently unknown to Umicore or which are currently considered not to be material, could prove detrimental to Umicore or to the value of the Company's shares.

RISKS RELATED TO UMICORE AND THE INDUSTRY

Main business and profitability drivers

Each of Umicore's businesses is exposed to specific industry sectors, which are subject to their own industry cycles, which may or may not be directly correlated to macro-economic cycles. The impact of such economic factors may significantly affect the profitability drivers and the results of Umicore.

Key profitability drivers include:

- Advanced Materials: premiums for processing cobalt, germanium and other metals into high added value compounds; sales volumes; speed of introduction of new products.
- Copper: treatment and refining charges (TC/RCs) for smelting copper concentrates and refining copper blister and anodes into copper cathodes; transformation premiums for processing copper cathodes into semis; production and sales volumes.
- Precious Metals Services: refining charges for refining and recycling complex precious-metals bearing materials; precious metals yields; volumes.
- Precious Metals Products and Catalysts: premiums for processing precious metals (mainly PGMs (platinum group metals), silver and gold) into high added value products and compounds; sales volumes.
- Zinc: treatment charges for processing zinc concentrates into zinc ingots; transformation premiums for processing zinc ingots into added value products; volumes.

Metal price fluctuations

The primary raw materials Umicore uses contain precious metals, zinc and copper, as well as other metals. The costs of those raw materials fluctuate due to actual or perceived changes in supply and demand, but can also sometimes be influenced significantly by certain other factors, including speculative actions, the availability and cost of substitute materials and currency exchange rates. Fluctuations in metal prices – more particularly zinc and precious metals – can have a significant impact on the Company's results. It should be noted that the zinc activities are the most sensitive to such price fluctuations.

Umicore does not operate any mines (except for Padaeng Industry in Thailand) but purchases zinc and copper mainly in the form of concentrates and scrap and sells zinc and copper it produces from such raw materials in the form of refined metals and products. The raw materials used and the metals or products manufactured by Umicore are generally purchased and sold on the same basis (namely based on the relevant London Metal Exchange quotations), thereby allowing the use of certain hedging instruments. The Group's policy is to hedge itself, to the maximum extent possible, against transactional risks, i.e. the risk of the price of the metal fluctuating between the time the price is fixed with a customer or supplier and the time the transaction is settled. Forward contracts are used to hedge such risks.

In addition to transactional risks, Umicore is also exposed to metals-related structural risks. Those risks derive mainly from the impact that metal prices have on treatment and/or refining charges and on surplus metal recovered from materials supplied for treatment. At times Umicore has undertaken limited hedges, more particularly as far as precious metals are concerned. In the absence of any such hedges, the short term sensitivity at EBIT level to fluctuations in the zinc price can be estimated at approximately USD 20 million per annum for a change of USD 100 per tonne in the zinc price. Except for precious metals, the impact of a price change for the other metals is less significant.

In the Precious Metals Services division, Umicore primarily produces platinum, palladium, rhodium, gold and silver. Umicore has hedged longer-term price risks in respect of PGMs relating to certain supply agreements.

The short-term sensitivity to fluctuations in precious metals prices, in the absence of any hedges, is difficult to assess with sufficient accuracy due to the variability of the division's feed over time, although higher PGM prices generally tend to be earnings enhancing.

Umicore also holds certain amounts of precious metals, zinc, copper and other metals it processes in inventory, which it accounts for at the lower of cost price and market value. If, as of the date of any given balance sheet, the market price of those metals were lower than the cost of such metal inventory determined under the LIFO method, Umicore would need to write down such inventory to current market value. There can be no assurance that such a write down would not be required in the future.

Impairment of assets

The Company is regularly undertaking impairment tests in respect of the economic value of its assets in order to evaluate the need to adjust their carrying value. No material impairment adjustment has been required as at 31 December 2002 and 30 June 2003. It can however not be excluded that non-cash impairment charges may be necessary in the future, more particularly in respect of the Company's copper assets, depending on the long term forecasts of certain external factors such as metal prices, treatment charges and currencies.

Currency exchange rates

Since Umicore's revenues are to a significant extent denominated in US dollars while the majority of its operations are located outside the dollar zone (particularly in Europe), any change in the US dollar exchange rate against the Euro will have a significant impact of the Company's results.

In this context, Umicore has continued to hedge its USD exposure by way of forward sales, with a view to protecting its future profitability and cash flows. In addition to the hedging transactions carried out in 2000 and 2001 for the years 2002, 2003 and 2004, the Company in 2002 set up additional hedging arrangements for 2003, 2004 and 2005. As a result and taking into account the acquisition of PMG, the dollar risk hedging programme for the years to come can be summarized as follows:

2003: about 95% risk cover at an average rate of 0.93 USD/EUR
2004: about 85% risk cover at an average rate of 0.91 USD/EUR
2005: about 25% risk cover at an average rate of 0.98 USD/EUR.

In the absence of any hedging of the USD – EUR exchange rate, a 1US¢ variation gives rise to a variation in EBIT of EUR 4 – 5 million on an annual basis.

In addition to the sensitivity to changes in the US dollar to Euro exchange rates, there is a sensitivity to certain other currencies, such as the Brazilian real and the South African rand, following the acquisition of PMG.

The company is also subject to transactional risks in respect of currencies, i.e. the risk of the currency exchange rates fluctuating between the time the price is fixed with a customer or supplier and the time the transaction is settled. As for metals, the Group's policy is to hedge its exposure, to the maximum extent possible, against those risks.

Technological Change, Evolving Industry Standards and New Product Introductions and Enhancements

Many of Umicore's operations, particularly in Advanced Materials and Precious Metals Products and Catalysts, have products and products under development that are technologically innovative. Those businesses are dependent on their ability to anticipate the next generation of products that their customers will develop and their ability to develop the technology and product solutions that will form the essential precursors of their customers' innovative products. Any failure by Umicore to predict relevant product trends and technology developments could adversely affect the sales of Umicore products.

In addition, those markets are characterized by rapid and significant technological change due to industry standards that may change at short notice and by the introduction of new products and technologies that render existing products and technologies non-competitive or obsolete. There can be no assurance that any of the products currently existing or being developed by Umicore, or any products to be developed in the future, will be technologically feasible or accepted by the marketplace, that any such development will be completed in any particular timeframe, or that Umicore's products or proprietary technologies will not become non competitive or obsolete.

In the Fuel Cells division, which Umicore acquired as part of PMG, major investments have been made over the past years, leading to the current strong position in technology. Umicore does not know when or whether its customers will successfully complete research and development of commercially viable fuel cells or fuel cell subsystems, which are the sole use of Umicore's Membrane Electrode Assemblies ("MEAs") and electrocatalysts and the primary use of Umicore's fuel reforming catalysts. This activity does not currently generate sufficient revenue to cover the research and development costs. The commercial success of fuel cells depends, to a significant degree, on the development of market demand for fuel cells in the automotive industry as well as for stationary (e.g. residential power units) and portable applications. Market demand may never develop, or develop more slowly than Umicore anticipates, Umicore may not have chosen suitable joint development or customer partners or fuel cells may face competition from other technologies.

Following the acquisition of PMG, Umicore has also increased its exposure to the automobile sector and the risks inherent to this industry.

The environment

The Company has production sites in many countries around the world. It is therefore subject to numerous environmental laws and regulations concerning certain substances that are, or due to the Company's long historical presence on some of the sites, have been, used or produced in or discharged from these operations. In addition, soil and/or groundwater contamination presently exists on most of these sites and may in the future be discovered at levels that require remediation.

Such legislation and regulations are complex and constantly evolving. There can be no assurance that future changes in laws or regulations would not require the Company to install additional controls for certain of its emission sources, to undertake changes in its manufacturing processes or to remediate soil and groundwater contamination in areas where such clean-up is currently not required. Third parties may also file direct claims before the courts in which they require a court to order the Company to clean up its property, and/or pay compensation for damages incurred as a result of the contamination or use of the Company's products.

Regarding Flanders, the Company and the Flemish authorities have differing interpretations of the Company's obligations to clean up pollution in the neighbouring areas of its sites. These differences have led to procedures before the highest Belgian administrative court, the Council of State (*Conseil d'Etat/Raad van State*), in which the Company challenges certain decisions of the Flemish Waste Authority (OVAM). Discussions are continuing in good spirit between the Company and the authorities with a view to reaching an agreement defining Umicore's commitments and obligations over a certain period, in respect of the clean-up of its own sites, as already agreed upon in a covenant, and extended to certain neighbouring areas as would be agreed upon in the new agreement. If no agreement is reached and the Company is unsuccessful in its current proceedings before the Council of State, it might, after having exhausted all available legal remedies, be facing additional clean-up obligations in certain neighbouring areas. Umicore however believes that the related additional costs to be provisioned, would remain in the upper range of the additional provisions indicated in Section 4.8.3. As far as France is concerned, the Company is in discussions with the relevant authorities regarding the clean-up obligations of Umicore for the Auby, Viviez and Calais sites. Whilst the Company does not believe that its obligations will exceed the amounts already provisioned and/or foreseen, as indicated in Section 4.8.3, there currently is no certainty in that respect. For further information on Umicore's environmental compliance and related provisions and expenditure, please refer to the Environment, Health and Safety Section 4.8.

Acquisitions

Umicore has made several small to medium size acquisitions in recent years and has recently completed a very substantial move with the acquisition of PMG, the business of which is complementary to the traditional business of the Company. Umicore might continue to expand through acquisitions as part of its growth strategy.

Acquisitions involve a number of risks including, amongst others, difficulties in the integration of operations, the assumption of certain actual or potential, known or unknown, liabilities, the ability to manage geographically remote units, the diversion of management's attention from other business concerns and the potential loss of key employees of the acquired companies. In particular, the process of integrating the PMG businesses into the existing structure may result in unforeseen operating difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of Umicore's other operations. There is no guarantee that Umicore will realize all of the anticipated benefits of the acquisition. In particular, difficulties or costs associated with the acquisition or integration of PMG may arise amongst others from:

- unexpected loss of key employees or customers of PMG;
- the harmonization of PMG's standards, procedures and controls with Umicore's;
- the coordination of new product and process development;
- the possible presence of one or more material liabilities unknown at the time of the acquisition of those operations;
- restructuring and/or environmental measures; and
- an increase in the scope, geographic diversity and complexity of Umicore's operations.

Additional financing requirements, existing debt and covenants

As a result of the acquisition of PMG at the end of July 2003, Umicore has strongly increased its short-term indebtedness. This will need to be refinanced but there can be no assurance that funds will be available on favourable terms or on a timely basis for the longer term. In addition, financing in future periods will depend upon various factors that cannot be predicted or that may be beyond Umicore's control, such as prevailing conditions on the debt markets.

Upon completion of the PMG acquisition, Umicore had a net financial debt of about EUR 900 million. Umicore will depend on its future cash flows from operations to service the debt. Any failure to maintain a sufficient revenue stream would adversely affect Umicore's ability to service these debt obligations. Additionally, future interest payments and debt reimbursements will utilize a substantial portion of the cash flows generated from operations, thereby possibly affecting the availability of cash to fund working capital requirements, capital expenditures, research and development expenses, strategic external growth opportunities or other general corporate purposes. The higher debt level could also increase Umicore's vulnerability to adverse economic and competitive conditions while debt covenants may limit the options available to the company when facing certain issues.

Failure to comply with the terms of the credit agreements could result in the Company being in default of the terms of those agreements. This in turn could permit the acceleration of the related debt and result in default of the terms attached to the other debt instruments.

International operations

Umicore has substantial international operations and is therefore subject to certain risks, which may include unfavourable political, regulatory, labour and tax conditions in other countries. About 20% of Umicore's sales in 2002 were derived from operations outside Belgium, France and Germany. As a result of the acquisition of PMG, this proportion will increase to more than 30%. Accordingly, the risks related to the differing legal and regulatory requirements and the social, political and economic conditions of many jurisdictions will increase. Risks inherent in international operations include amongst others the following:

- agreements may be difficult to enforce and receivables difficult to collect through a foreign country's legal system;
- foreign countries may impose additional withholding taxes or otherwise tax Umicore's foreign income, impose tariffs or adopt other restrictions on foreign trade or investment, including currency exchange controls;
- export licences may be difficult to obtain;
- intellectual property rights may be more difficult to enforce in foreign countries;
- general economic conditions in the countries in which the Company operates could have an adverse effect on the earnings from operations in those countries;
- unexpected adverse changes in foreign laws or regulatory requirements may occur, including those regarding export duties and quotas.

Increased electricity costs

Electricity represents a significant portion of the production costs for some of Umicore's operations, in particular for Umicore's zinc refining processes. Electricity will continue to represent a significant portion of the production costs for these operations and Umicore may be negatively impacted by future higher electricity prices or by increases in local taxes on electricity consumption as a result, among other things, of the Kyoto Protocol.

Dependence on Key Personnel

The future success of Umicore will depend in part on the continued services of the management team and its key technical, research, development and other personnel. Although Umicore believes that it will be able to attract and retain skilled and experienced personnel, there can be no assurance that it will be able to do so.

Uncertainty of Forward-Looking Statements

This Prospectus contains certain forward-looking statements that involve risks and uncertainties, such as the information regarding the size and growth of the markets, the market shares in the different industries and their evolution. This information has been estimated by the management on the basis of their market knowledge, available studies and information from trade associations. There can be no assurance that those forecasts will be achieved.

Implementation of IFRS

The European Commission has decided that companies listed on one of the European Union's stock exchanges will have to prepare and report their consolidated financial statements according to International Financial Reporting Standards (IFRS) by 2005.

As already announced, Umicore is considering moving to IFRS as early as from the 2003 financial statements. In that case, IFRS would also apply to the first consolidation of the newly acquired PMG entities. The implementation of IFRS as from 2003 would require the establishment of a restated opening balance sheet as at 1 January 2002, and a restated profit and loss statement for the year 2002.

Loans to non-consolidated companies

Metallo Chimique (Non-Ferrous International)

In 1996, Umicore granted a non-secured, subordinated loan to Non Ferrous International Luxemburg (NFI) and, in addition, acquired a minority equity interest in this company.

Those transactions were aimed at developing industrial and commercial synergies between Umicore and the main subsidiaries of NFI: Metallo Chimique and Metallo Chimique International.

This shareholders' loan has been granted for an indefinite period of time. The reimbursement of the principal and the payment of the interests are subject to certain covenants and ratios. The interest rate is 7% per annum. At 30 June 2003, the amount of this loan still outstanding was EUR 13,75 million.

As a result of the situation prevailing on the copper market Metallo Chimique and Metallo Chimique International have initiated a wide-ranging restructuring programme in order to redefine new business objectives in cooperation with Umicore.

Kovanco

Umicore has granted a loan of EUR 12.5 million to Kovanco in the context of the exploratory discussions held last year with Kovanco regarding a possible combination of the copper activities of Umicore and Lamitref Industries. Those funds have been used by Kovanco to subscribe to a capital increase of Lamitref Industries with a view to financing ongoing working capital needs and certain development projects. The loan, which is secured by the shares, bonds and subscription rights held by Kovanco respectively in Lamitref Holdings and Lamitref Industries, is due for repayment in September 2005.

Suez

As of 13 October 2003, Suez SA owned, through its subsidiary Société Générale de Belgique (now "Suez-Tractebel"), 4,018,100 shares in the Company, i.e. 17.78% of the Company's capital. Suez has announced in the past and has recently confirmed that its stake in the Company is not strategic.

Suez has undertaken not to dispose in any way of these 4,018,100 shares before the announcement by the Company on 4 March 2004 of its 2003 results, other than in accordance with the existing terms and conditions of (i) the exchangeable bonds issued by Suez regarding shares in the Company and (ii) the stock options granted by Société Générale de Belgique to certain executives of Umicore (see Sections 2.4 and 5.2.5 of this Prospectus).

Competition

Many of the different industries and markets in which the Company operates are rapidly evolving and intensely competitive. The Company currently or potentially competes with a number of smaller and larger companies. Competitive pressures created by any one of these companies, or by the Company's competitors collectively, could have a material adverse effect on the Company's business, results of operations and financial condition.

The Company believes that the principal competitive factors in its markets are technological know how, cutting edge new product research and development, productivity factors and the quality of human resources. Certain of the Company's current or potential competitors may have longer operating histories in their specific competing activities, larger customer bases, greater brand recognition and greater financial, marketing, technical and other resources than the Company. There can be no assurance that the Company will be able to compete successfully against current and future competitors. Furthermore, as a strategic response to changes in the competitive environment, the Company may, from time to time, make certain pricing, service or marketing decisions or acquisitions that could have an adverse effect on its business, results of operations and financial condition.

Details of these competitors can be found in Chapter 4 "Umicore's Businesses".

RISKS RELATED TO THE OFFER SHARES

Risks related to the volatility of the stock exchange price of the Company's shares

The share price might not be reflecting the real value of Umicore and may be influenced by many factors, including the liquidity of the market for the shares, Umicore's results or those of other industry players, investor perception of Umicore, its business, the general economic and market conditions.

Over-allotment and stabilisation

In connection with this issue, the Joint Global Coordinators and Bookrunners, on behalf of the Underwriters, may over-allot or effect transactions on Euronext Brussels, which stabilise or maintain the market price of the Offer Shares at a level that might not otherwise prevail in the open market. Such stabilising, if any, may take place as from the allocation of the Offer Shares until the expiry of a period of 30 days after the Closing Date.

1. GENERAL INFORMATION AND INFORMATION CONCERNING THE RESPONSIBILITY FOR THE PROSPECTUS AND FOR AUDITING THE ACCOUNTS

1.1. RESPONSIBILITY FOR THE CONTENT OF THE PROSPECTUS

The Board of Directors of the Company assumes the responsibility for the content of this Prospectus.

The Company declares that, to the best of its knowledge, the information provided in this Prospectus is true and accurate in all material respects and that there is no omission that would make this Prospectus or any statement in this Prospectus misleading in any material respect.

Thomas Leysen	Karel Vinck
Managing Director	Chairman of the Board

1.2. RESPONSIBILITY FOR THE AUDITING OF THE ACCOUNTS

The consolidated and statutory annual accounts of the Company as at and for the periods ending on 31 December 2000, 2001 and 2002, drawn up according to Belgian GAAP, have been audited by PriceWaterhouseCoopers, Reviseurs d'Entreprises/Bedrijfsrevisoren, Woluwedal 18 Bd. de la Woluwe 1932 Sint-Stevens-Woluwe/Woluwe Saint-Etienne, represented by Robert Peirce and Luc Discry, statutory auditors.

Unqualified auditors' opinions have been issued with respect to these accounts.

The auditors' report for the year 2002 is given in Chapter 6 "FINANCIAL INFORMATION".

The financial statements of the Company over the six-month period ended as of 30 June 2003 have been subject to a limited review by the statutory auditor. This limited review did not reveal any element that would have called for significant corrections to the half-year financial statements.

1.3. APPROVAL OF THE PROSPECTUS

This Prospectus is published following its approval by the Banking and Finance Commission on 4 November 2003, pursuant to article 14 of the Law of 22 April 2003 on the public offerings of securities. This approval does not imply any opinion from the Banking and Finance Commission on the merits or the quality of the Offering, the Offer Shares or the Company and neither does it render judgment on the position of the persons conducting the Offering.

1.4. LEGAL PUBLICATIONS

The notice required by Article 13, paragraph 1 of the above-mentioned Law was published in the press on 8 November 2003.

All publications with regard to the Offering will be made in the Belgian financial press.

1.5. AVAILABLE INFORMATION

This Prospectus will be made available to investors at no cost at the registered office of the Company and at the counters in Belgium of KBC Bank, CBC Banque, Fortis Bank and Petercam. It is also available, subject to certain conditions, on the websites of the Company and of KBC Securities, Fortis Bank and Petercam.

The Prospectus is available in English, French and Dutch. The Company assumes responsibility for the consistency between the three languages. In Belgium, only the French and Dutch printed version of the Prospectus as published in Belgium is legally valid.

Copies of the Articles of Association and the financial statements of the Company and any other documents mentioned in this Prospectus that are available for inspection by the public, are made available to investors at no cost at the registered office of the Company, or can be consulted on the Company's website at www.umicore.com.

Price-sensitive information (as defined in Article 10, §1, 1°, b) of the Law of 2 August 2002 with respect to the supervision of the financial sector and financial services), will be made available to investors through an announcement in at least the Belgian financial press and the Euronext reporting and publication system and other information vendors in accordance with Article 6 of the Royal Decree of 31 March 2003 on the obligation of issuers of securities admitted to trading on a Belgian regulated market.

2. GENERAL INFORMATION WITH REGARD TO THE OFFERING

2.1. SUMMARY OF THE DECISIONS CONCERNING THE OFFERING

The Extraordinary Shareholders' Meeting of 30 March 2001 authorised the Board of Directors to increase the capital of the Company by a maximum amount of EUR 500 million in one or more transactions during a period of five years commencing on 28 April 2001 (date of the publication of this decision in the Annexes to the Belgian Official Gazette) and to limit or cancel the preferential subscription right of existing shareholders in relation to any such capital increase.

The Board of Directors of the Company decided on 7 November 2003 to increase the capital of the Company by the issuance of up to 2,400,000 new shares with VVPR strips. The new shares with VVPR strips issued through the capital increase will be offered through (i) a Public Offering in Belgium to Retail Investors and (ii) a Private Placement to Institutional Investors in Belgium and abroad excluding the United States and Japan.

Additionally, the Board of Directors decided on 7 November 2003 to grant to the Joint Global Coordinators and Bookrunners an Over-allotment Option to subscribe for up to 400,000 new Additional Shares with VVPR strips, and to increase the Company's capital accordingly. The realisation of this capital increase will be established if and to the extent such option is effectively exercised.

The existing shareholders of the Company will not have a preferential subscription right in relation to the capital increase. However, the Board of Directors has decided to grant them a Priority Allocation. This Priority Allocation will apply to the allotment of up to 1,200,000 new shares. Existing shareholders in jurisdictions outside Belgium, where the granting or exercise of the Priority Allocation would qualify as a public offering or require compliance with registration or other similar requirements in such jurisdictions will, however, not be able to participate in the capital increase.

Should the above-mentioned 2,400,000 new shares not be fully subscribed, the Board of Directors reserves the right either to cancel the Offering or to proceed with a partial capital increase for the amount subscribed.

The Board of Directors, or two directors acting jointly, will determine the Offer Price within the Price Range set by the Board of Directors on 7 November 2003. The Price Range will be published in the Belgian financial press on or about 8 November 2003. The Offer Price, which will be published in the Belgian financial press two Banking Days after the closing of the Bookbuilding and Subscription Period and at the latest on 21 November 2003, will be determined on the basis of a book-building procedure led by the Joint Global Coordinators and Bookrunners in agreement with the Company and on the basis of the analysis of the qualitative and quantitative aspects of the Order book. It will take into account, inter alia, the number of Orders received, the total number of Offer Shares requested by investors, the price sensitivity of the Orders, the quality of the investors, the general market and investment conditions.

The Offer Price will consist of the fractional capital value per share and an issuance premium.

Without prejudice to the Board of Directors' right not to pursue the capital increase procedure, the realisation of the capital increase with respect to the 2,400,000 new shares is expected to be established on 25 November 2003 at the latest; the realisation of the capital increase with respect to the 400,000 new shares is expected to be established on 24 December 2003 at the latest. The Board of Directors also delegated powers to take all necessary actions in order to arrange and finalise the practical organisation of the Offering and the capital increase.

2.2. SPECIAL REPORTS

2.2.1. Report of the Board of Directors

In accordance with article 596 § 2 of the Belgian Companies Code, the Board of Directors has prepared a report with respect to the cancellation of the preferential subscription rights of the existing shareholders of the Company, the conclusions of which are as follows:

"The Board of Directors considers that the capital increase, which takes place in the frame of the reimbursement of part of the amounts borrowed by the company for the acquisition of PMG, is in the interest of the company and its shareholders.

Furthermore, the Board of Directors considers that the cancellation of the preferential subscription right of existing shareholders complies with the interest of the company and its shareholders as it aims at maximising

the subscription price and the total volume of subscription and allows the best possible development of the capital increase. Taking into account, inter alia, the volatility of the capital market and international practices, it is indeed essential that a maximum of potential subscriptions are put in competition, as from the beginning of the subscription period. The existing shareholders benefit in addition from a priority allocation, which will encourage their participation and reduce their potential dilution."

2.2.2. Report of the statutory auditor

In accordance with article 596 § 2 of the Belgian Companies Code, the auditor of the Company has also prepared a report, the conclusions of which are as follows:

"Based on our examination of the information provided in the report prepared by the Board of Directors pertaining to the proposed capital increases with cancellation of the preferential subscription right, we confirm that the financial and accounting information included in this report is reliable and sufficient to inform the shareholders."

2.3. PURPOSE OF THE TRANSACTION

On 3 June 2003 Umicore announced the acquisition of the Precious Metals Group of OM Group. The acquisition was completed on 31 July 2003. This acquisition was initially funded through the drawing for an amount of EUR 651 million under a EUR 725 million 12-months syndicated credit facility.

The purpose of this equity Offering is the partial refinancing of the abovementioned credit facility. The balance of the outstanding amount under the 12-month credit facility is expected to be refinanced through a combination of medium and long-term debt with maturities of 5 years or more.

Together with the current equity Offering, such medium- and long-term funding will provide the Company with additional flexibility to pursue its strategic goals and growth objectives in its different businesses.

PMG will be consolidated in the Company's financial statements from 1 August 2003. The Company expects that EUR 60 million of synergies will have been achieved in terms of working capital reductions by the end of 2003 (although there can be no assurances that this objective will be met). Other synergies are being explored in a number of different areas.

2.4. INTENTIONS OF SUEZ

As of 13 October 2003, Suez SA owned, through its subsidiary Société Générale de Belgique, 4,018,100 shares in the Company, i.e., 17.78% of the Company's capital. Suez has announced in the past and has recently confirmed that its stake in the Company is not strategic.

Suez has undertaken not to dispose in any way of these 4,018,100 shares before the announcement by the Company on 4 March 2004 of its 2003 results, other than in accordance with the existing terms and conditions of (i) the exchangeable bonds issued by Suez regarding shares in the Company and (ii) the stock options granted by Société Générale de Belgique to certain executives of Umicore.

The terms and conditions of the exchangeable bonds are summarised and the stock options are addressed in Section 5.2.5.

The Board of Directors of the Company, after consultation with the Joint Global Coordinators and Bookrunners, may decide to grant an exemption to Suez from this obligation, in case the shares would be sold as a block to one or several investors who would in turn commit to retain these shares at least till the same date.

3. TERMS AND CONDITIONS OF THE OFFERING

3.1. SIZE AND NATURE OF THE OFFERING

The Offering consists of up to 2,400,000 new ordinary shares with VVPR strips to be issued by the Company and increased with up to 400,000 Additional Shares solely to cover over-allotments.

The Offering is organised as a Public Offering in Belgium and a Private Placement to Belgian and international Institutional Investors. (See also "Investor Notices").

The Offering is divided into two tranches: A) the Priority Tranche of up to 1,200,000 new shares for existing retail and institutional shareholders and B) the Free Tranche of up to 1,200,000 new shares before claw back, increased with up to 400,000 Additional Shares to cover over-allotments.

Clawback

If the Priority Tranche is not fully subscribed, the unsubscribed shares will be added to the Free Tranche and will be available for allocation under this Free Tranche.

3.1.1. Priority Tranche

Subscriptions to the Priority Tranche are only open to existing (retail and institutional) shareholders of the Company, it being understood that existing shareholders in jurisdictions outside Belgium where the granting or exercise of the Priority Allocation would qualify as a public offering or require compliance with registration or other similar requirements in such jurisdictions will not be able to participate in the capital increase. Subscription rights to the Priority Tranche have not been, and will not be, registered under the US Securities Act of 1933 (as amended) and may not be offered or sold within the United States or to or for the account or benefit of US persons. (See also "Investor Notices").

They will benefit from an irreducible Priority Allocation, the proportion of which will be published in the Belgian financial press on 8 November 2003.

This right to Priority Allocation will be represented by coupon n° 11 of the bearer shares of the Company and by a certificate representing the Priority Allocation right of the registered shares. Such certificate will be issued by the Company and sent to registered shareholders. The coupon n° 11 of the VVPR strips does not represent a right to Priority Allocation.

The right to Priority Allocation will not be listed on Euronext Brussels. As of 10 November 2003, the shares of the Company will be listed ex-coupon n° 11. Coupon n° 11 will be declared null and void at the end of the Bookbuilding and Subscription Period.

Holders of old shares issued by companies with which the Company has merged in the past will be entitled to participate in the Priority Allocation only to the extent that these old shares are still exchangeable against shares in the Company and that holders submit an amount of old shares that corresponds to shares in the Company in the amount of a whole number. The holders of old shares must exchange their old shares for shares in the Company prior to participating in the Priority Tranche of the Offer.

3.1.2. Free Tranche

Any investor can subscribe to shares in the Free Tranche, subject to the selling restrictions mentioned above. Subscriptions under the Free Tranche may be subject to apportionment in the case of over-subscription. The exact number of shares allotted to the Retail and Institutional Investors will be determined after the book-building procedure in accordance with Section 3.4.

3.2. OFFER PRICE

The Offer Price will be determined within a Price Range that will be published in the Belgian financial press on 8 November 2003.

The Offer Price will be a single price in Euro, applicable to all investors and will be determined by the Joint Global Coordinators and Bookrunners and the Company, on the basis of a book-building procedure, in which only Institutional Investors will participate, and taking into account various relevant qualitative and quantitative elements, including but not limited to the number of Offer Shares requested, the size of the Orders received, the quality of the investors submitting such Orders, the prices at which the Orders were made and the evolution of the Company's stock exchange share price during the Book-building and Subscription Period and the

market circumstances at that time. The Offer Price will be determined shortly after the closing of the Bookbuilding and Subscription Period and at the latest on 20 November 2003 and will be published in the Belgian financial press the first Banking Day following its determination, i.e. on 21 November 2003.

3.3. SUBSCRIPTION PERIOD

The Subscription Period will begin on 10 November 2003 and will be closed on 19 November 2003. There might be an early closing of the Subscription Period, upon joint decision of the Joint Global Coordinators and Bookrunners and the Company. Such early closing will be considered in case the Offering is fully subscribed and will be announced in the Belgian financial press. The Subscription Period will in any event be open for at least five Banking Days.

3.4. SUBSCRIPTION PROCEDURE

General

Orders can be submitted to the Underwriters/Selling Agents at no cost to the investor.

Only one application form per investor will be accepted. If the Joint Global Coordinators and Bookrunners determine, or have reason to believe, that a single investor has submitted several Orders, through one or more Underwriters/Selling Agents, they may disregard such Orders.

Orders can also be submitted through any other financial intermediary. In that case, investors should inquire about the costs that such financial intermediaries – non-Underwriters/non-Selling Agents – might charge.

To be validly submitted, Orders must be registered with the Selling Agents at the latest on the last day of the Subscription Period before 4.00 p.m. Brussels time.

Orders submitted for the Priority Tranche must be accompanied by the adequate number of coupons n° 11 or certificates representing Priority Allocation rights required for the subscription per Offer Share and as published in the Belgian financial press at the start of the Offering. If the coupons are held in a securities account, then the subscriber must transfer or authorise the transfer of the coupons to the securities account of the Selling Agent with which the Order is placed. Retail Investors must explicitly give such authorisation by signing the subscription form or by signing the Order form at the counter of the Selling Agent or financial intermediary.

If, during the Subscription Period, significant events occur that can have a substantial influence on the investors' assessment of the Offering, a supplement to the Prospectus will be published in the Belgian financial press and Orders already submitted at the time the supplement is published, can be cancelled in writing by the investors if they choose to do so.

Institutional Investors

During the Bookbuilding and Subscription Period, Institutional Investors are invited to submit their Order(s) indicating the number of shares they commit to purchase, and the price(s) at which they are making such Order(s).

Institutional Investors are invited to introduce their Orders as soon as possible with the Underwriters.

Retail Investors

During the Subscription Period, Retail Investors are invited to submit their Order(s), indicating the number of shares they commit to purchase. They will subscribe at the Offer Price.

Orders can be submitted, at no cost, at the counters of the Selling Agents in Belgium: Fortis Bank, KBC Securities, KBC Bank, CBC Banque and Petercam.

3.5. PAYMENT AND TAXES

The Offer Shares must be fully paid in Euro. The payment will consist of the total Offer Price of the allocated shares, accrued with the stock exchange tax of 3.50‰ of the Offer Price, if applicable, with a maximum of EUR 250 per Order, and the costs if any (cf. "Subscription procedure").

The payment date will be 3 Banking Days after the allocation, i.e. at the latest on 25 November 2003.

3.6. ENTITLEMENT TO DIVIDENDS

The Offer Shares are entitled to dividends declared, if any, with respect to the financial year ending 31 December 2003 and subsequent years. Umicore aims at maintaining its policy to pay stable or gradually increasing annual dividend.

In accordance with Belgian Law, the right to collect dividends declared on registered shares expires five years after the due date, whereupon the Company is no longer under an obligation to pay such dividends. The right to collect dividends on bearer shares does not expire unless the Company has deposited the dividends with the "Caisse des Dépôts et Consignations/Deposito- en Consignatiekas", in which case the right to collect dividends expires after 30 years and the Belgian State becomes the beneficiary of any dividends that remain uncollected.

3.7. FORM AND DELIVERY OF THE OFFER SHARES

The Offer Shares are ordinary shares in the Company with VVPR strips. The physical certificates will be available as soon as possible and in any case within three months after the Listing Date. They will be available in the form of physical certificates representing 1, 5, 10, 25 and 50 share(s), with coupons n° 12 up to and including 30. Until their physical delivery, the bearer shares will be represented by global certificates and only book-entry settlement will be possible.

Investors requesting physical delivery of bearer shares are required to pay a tax of 0.2% in addition to the costs for such physical delivery. These costs amount to EUR 10 (+VAT) for delivery at the counters of KBC Bank and CBC Banque and to EUR 20 (+VAT) at Fortis Bank and Petercam. Investors should inquire about the costs that might be charged by other financial institutions which are not Selling Agents.

Shareholders may opt for registered shares, in which case ownership of the shares in the Company and the VVPR strips will be recorded in the registers of the Company. Shareholders may at any time ask the Company for their registered shares to be converted into bearer shares or vice versa. The costs of these conversions will be charged to the shareholders.

3.8. OVER-ALLOTMENT OPTION

The Company has granted the Joint Global Coordinators and Bookrunners an option to subscribe for up to 400,000 Additional Shares at the Offer Price, exercisable 30 days after the Closing Date, solely to cover over-allotments, if any.

The Over-allotment Option will serve as a stabilisation mechanism as from the allocation of the Offer Shares (cf. 3.15. "Listing – Stabilisation" below).

To enable the banks to execute any settlement obligation relating to any such Over-allotment Option, the Company will enter into a lending agreement, free of charge and for the same period as the Over-allotment Option.

3.9. ALLOCATION OF THE SHARES

The exact number of Offer Shares allotted to respectively the Retail Investors and the Institutional Investors will be determined at the end of the Book-building and Subscription Period by the Joint Global Coordinators and Bookrunners in agreement with the Company and will depend on the quantitative and qualitative analysis of the Order book. In the event that the Offer Shares are oversubscribed, preferential treatment may be given to demands submitted by Retail Investors at the branches of the Joint Global Coordinators and Bookrunners rather than through other financial intermediaries. Insofar as not all Offer Shares offered in the Priority Tranche are subscribed, the balance of that tranche will be allotted to investors in the Free Tranche, if the demand exceeds the number of shares offered in that latter tranche.

In the case of over-subscription in the Free Tranche, the allocation to Retail Investors will be made on the basis of an allocation key, which can only be defined after the analysis of the Order book. In the event of apportionment, the distribution, if any, between Institutional Investors will depend on various relevant elements such as: the date of the subscription, the size of their individual interest, the quality of the investor as well as the reasonableness of their subscription and the proposed subscription price. On the basis of these criteria, among others, the Joint Global Coordinators and Bookrunners, in agreement with the Company, will establish a classification to determine how the distribution between the Institutional Investors will be carried out.

The results of the Offering and the allocation key for the Retail Investors will be published in the Belgian financial press, two Banking Days following the closing of the Bookbuilding and Subscription Period and at the latest on 21 November 2003.

3.10. UNDERWRITING

The Underwriters, as listed below, after determination of the Offer Price, are expected to enter into an underwriting agreement at the latest on the Listing Date scheduled on 26 November 2003. Without prejudice to the right of the parties not to enter into an underwriting agreement, it is expected that the execution of an underwriting agreement may depend on factors including, but not limited to, market conditions and the results of the bookbuilding. If executed, then it is expected that the underwriting agreement will provide that the Underwriters will, severally but not jointly, agree to subscribe for and/or purchase (in their name but for the account of the Retail and Institutional Investors) from the Company, the following percentages of the Offer Shares with a view to immediately distributing the same to these investors:

- Fortis Bank 35%
- KBC Securities 35%
- Royal Bank of Canada Europe Limited 15%
- UBS Limited 10%
- Petercam SA/NV 5%

This underwriting will, subject to certain conditions precedent, relate to the Offer Shares acquired by the Underwriters for allocation to investors.

The Company has undertaken towards the Joint Global Coordinators and Bookrunners and the underwriting agreement will provide, inter alia, that the Company shall not, except with the prior written consent of the Joint Global Coordinators and Bookrunners (which shall not be unreasonably withheld), (i) until the date that is 180 days after the Closing Date (a) issue or sell, or attempt to dispose of, or solicit any offer to buy any shares, warrants or other securities in the Company or grant or issue any options, convertible securities or other rights to subscribe for or purchase shares in the Company, or enter into any contract (including derivative transactions) or commitment with like effect, otherwise than in accordance with the existing employee incentive stock option plans, or (b) reduce its share capital, and (ii) until the date that is 30 days after the Closing Date purchase any of its own securities. Notwithstanding the foregoing the Company will however be allowed to use its own treasury shares as consideration in relation to any acquisition of any company or business.

3.11. PROCEEDS AND COSTS OF THE OFFERING

The expected total gross proceeds of the Offering are estimated to be in the range of EUR 130 to 150 million (including the proceeds of the Additional Shares).

The total costs of the Offering are estimated to be approximately 3.1% of the amount of the Offering, assuming full exercise of the Over-allotment Option.

These costs include legal, administrative and other costs (EUR 1 million), remuneration of the Banking and Finance Commission (EUR 8,000), legal publications and the printing of the shares and Prospectuses (EUR 200,000) as well as the fees paid to the Underwriters (EUR 3.45 million).

The fees to the Underwriters consists of 2.10% on the total gross proceeds of the Offering, structured as follows: 20% underwriting fee, 20% management fee and 60% selling fee (to be distributed to a certain extent to all financial institutions registering Orders). Additionally, the Company is prepared to pay to the Joint Global Coordinators and Bookrunners and/or to the other Underwriters, an incentive fee of up to 0.20%, based on quantitative or qualitative criteria to be agreed upon with the Joint Global Coordinators and Bookrunners.

All these costs will be borne by the Company.

3.12. PAYING AGENTS

The financial service in Belgium for the shares of the Company is provided by Fortis Bank, KBC Bank, Petercam, Dexia Bank, ING Bank and Degroof Bank free of charge for the shareholder. Should the Company review this policy, it will be published in the Belgian financial press.

3.13. RIGHTS ATTACHED TO THE SHARES

The new Offer Shares will be ordinary shares having the same rights as the existing shares in the Company. They will be entitled to the dividend, if any, as from 1 January 2003 and will hence benefit from the results of the fiscal year 2003 and thereafter.

3.13.1. Voting rights

Each share in the Company is entitled to one vote, without prejudice to transitory provisions applying to shares in companies with which the Company has merged in the past (such as Article 24 of the Company's articles of association).

3.13.2. Preferential Subscription rights

The Belgian Companies Code gives shareholders preferential rights to subscribe on a pro-rata basis for any issue for cash of new shares or other securities giving rights to acquire or subscribe for shares. When deciding an issuance of securities, the shareholders' meeting may limit or cancel such preferential subscription right, in the Company's interest. Pursuant to Article 6 of the Company's articles of association, the Board of Directors is also authorised to do so when issuing securities within the framework of the authorised capital, including in case of capital increases for the benefit of specific persons other than the Company's employees and capital increases in the event of a public takeover bid. This authorisation applies to capital increases up to an aggregate amount of EUR 500 million.

3.13.3. Distribution of profits

Article 21 of the Company's articles of association provides as follows:

"At least five per cent of the annual net profit shall be transferred to a reserve account. This transfer shall cease to be obligatory when the reserve account reaches ten per cent of the share capital of the Company. Further to a proposal by the Board of Directors, the ordinary general meeting of shareholders shall decide on the appropriation of the balance of the profit. The Board of Directors may, during the financial year, decide to distribute an interim dividend, in accordance with the law. Dividends and interim dividends shall be paid at the times and places determined by the Board of Directors."

3.13.4. Liquidation

Article 22 of the Company's articles of association provides as follows:

"In all cases of dissolution, the method of liquidation shall be determined, and the liquidation shall be effected, in accordance with the Companies Code."

3.14. REGULATIONS APPLICABLE IN BELGIUM IN THE CASE OF THEFT OR LOSS OF SECURITIES

The theft or loss of securities is regulated by the Law of 24 July 1921, amended by the Law of 22 July 1991, on the involuntary dispossession of bearer securities.

In summary, the rules are as follows:

- a protest has to be lodged at the National Department of Securities ("Nationaal Kantoor voor Roerende Waarden"/"Office National des Valeurs Mobilières");
- payments are suspended and any transfer of the protested securities becomes null and void;
- the securities are given back to the owner as soon as they are found;
- the securities mentioned in the bulletin of oppositions ("Bulletin der met verzet aangetekende waarden"/"Bulletin des Oppositions") for an uninterrupted period of four years become null and void. The person who entered the protest then is entitled to:
  - the right to receive the payment of the dividends, interest and, if any, the principal due or any capital distribution and any liquidation balance;
  - the right to receive at his request and at his cost a new security with the same number as the original security.

The objection to the protest is proven by any deed or action brought to the notice of the issuing institution and that shows a third party is considered to be entitled to the existence, in his favour, of a right to the protested security.

3.15. LISTING – STABILISATION

The Offer Shares are freely transferable.

The admission to listing on the First Market of Euronext Brussels of the Offer Shares and VVPR strips has been requested. The existing shares in the Company are already listed on Euronext Brussels. The listing of the Offer Shares, resulting from the capital increase, is expected to take place the first Banking Day following the establishment of the realisation of the capital increase and at the latest on 26 November 2003.

The Additional Shares, in so far as they are issued and for the maximum amount allocated to investors (to cover over-allotments), will allow the Joint Global Coordinators and Bookrunners to arrange for stabilisation of the stock price of the shares in the Company as from the allocation of the Offer Shares until the expiry of a period of 30 days after the Closing Date. Such stabilisation will not counter the market trend at any time. At the latest at the end of this period, the Joint Global Coordinators and Bookrunners will analyse the over-allotment position and will consequently determine the number of shares for which the Over-allotment Option will be exercised. Such exercise will be done at the Offer Price.

3.16. APPLICABLE LAW

This Offering is subject to Belgian law. The Courts of Brussels have sole jurisdiction over any disputes in relation to this Offering.

3.17. OVERSEAS SHAREHOLDERS

The attention of Overseas Shareholders is drawn to the following in connection with the Offering.

3.17.1. General

The Offering and this Prospectus have not been submitted for approval to any supervisory authority outside Belgium. Therefore, no steps may be taken that would constitute, or result in, a public offering of the Offer Shares, Priority Allocation rights and VVPR-strips (together, the "Securities") outside Belgium. The distribution of this Prospectus and the Offering may be restricted by law in certain jurisdictions. Neither the Company nor the Underwriters represents that this Prospectus or any other Offering-related documents may be lawfully distributed, or that the Securities may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating such distribution or offering. Accordingly, the Offering may not be made and the Securities may not be offered or sold, directly or indirectly, and neither this Prospectus nor any other Offering-related documents may be distributed or published in any jurisdiction, except in circumstances that will result in compliance with all applicable laws and regulations. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any of the Securities to any person in any jurisdiction in which it is unlawful to make such offer or solicitation to such person.

Persons into whose possession this Prospectus, the subscription form or any Priority Allocation rights come, should not, in connection with the Offering, distribute or send the same in or into, or transfer Priority Allocation rights to any jurisdiction where to do so would or might contravene local securities laws or regulations. If a subscription form or Priority Allocation rights are received by any person in any such territory, or by their agent or nominee, they must not seek to take up their rights referred to in the subscription form or in this Prospectus or transfer the Priority Allocation rights except under an express written agreement between them and the Company. Any person who does forward this Prospectus or a subscription form into any such territory (whether under a contractual or legal obligation or otherwise) should draw the recipient's attention to the contents of this paragraph 3.17.

Any person outside Belgium wishing to accept the Offering of Securities must satisfy himself as to the full observance of the laws of any relevant territory in connection therewith, including obtaining any requisite governmental or other consents, observing any requisite formalities and paying any issue, transfer or other taxes due in such territories. Any acceptance will be deemed to constitute a representation and warranty to the Company that these laws and requirements have been complied with. If an Overseas Shareholder is in any doubt as to his position, he should consult his own independent professional adviser.

The Company reserves the right to treat as invalid any acceptance or purported acceptance of the Offering of Securities in a manner which appears to the Company or its agents to have been executed, effected or despatched in a manner which may involve a breach of the laws or regulations of any jurisdiction.

3.17.2. United States

The Securities have not been and will not be registered under the Securities Act and, subject to certain exceptions, may not be offered, sold, taken up, delivered or transferred, directly or indirectly, in or into the United States. This Prospectus does not constitute an offer for, or an invitation to apply for, or an offer or invitation to purchase or subscribe for, any Securities in the United States.

The Company reserves the right to treat as invalid any subscription form which:

(i) appears to the Company or its agents to have been executed in or despatched from the United States;

(ii) provides an address in the United States for delivery of Securities; or

(iii) the Company or its agents believe may violate applicable legal or regulatory requirements.

Until 40 days after the commencement of the Offering, an offer, sale or transfer of the Securities within the United States by a dealer (whether or not participating in the Offering) may violate the registration requirements of the Securities Act.

3.17.3. Other Overseas Territories

Persons resident in other Overseas Territories should consult their independent professional advisers as to whether they require any governmental or other consents or need to observe any other formalities to enable them to participate in the Offering.

3.18. REPRESENTATIONS AND WARRANTIES RELATING TO OVERSEAS TERRITORIES

Any person exercising Priority Allocation rights or subscribing for Offer Shares represents and warrants to the Company that, except where proof has been provided to the Company's satisfaction that such person's participation in the Offering will not result in the contravention of any applicable legal or regulatory requirement in any jurisdiction, (i) such person is not exercising Priority Allocation rights or subscribing for Offer Shares from within any restricted jurisdiction; (ii) such person is not in any territory in which it is unlawful to make or accept an offer to subscribe for Securities; (iii) such person has not received or sent copies of the Prospectus, the subscription form or any other Offering-related document in, into or from any restricted jurisdiction; (iv) such person is not acting on a non-discretionary basis for the account or benefit of a person located within any restricted jurisdiction at the time the instruction to accept the Priority Allocation was given; and (v) such person is not acquiring Securities with a view to their offer, sale, resale, transfer, delivery or distribution, directly or indirectly, in or into any restricted jurisdiction. The Company reserves the right to treat as invalid any acceptance or purported acceptance of the Offering if it (a) appears to the Company or its agents to have been executed in, or despatched from, any restricted jurisdiction or otherwise executed, effected or despatched in a manner which may involve a breach of the laws of any jurisdiction or if the Company or its agents believe that the same may violate any applicable legal or regulatory requirements; (b) includes an address for delivery of Securities in any restricted jurisdiction (or any other jurisdiction outside Belgium in which it would be unlawful to extend the Offering); or (c) purports to exclude the warranties required by this Section 3.18.

3.19. BELGIAN TAXATION

The following is a summary of the Belgian federal income tax consequences of the ownership of Offer Shares by an investor purchasing them.

This summary does not purport to address all material tax consequences of the ownership of the Offer Shares, and does not take into account the specific circumstances of any particular investors, some of which may be subject to special rules, or the tax laws of any country other than Belgium. In particular, the summary deals only with investors that hold, or will hold, the Offer Shares as capital assets and does not address the tax treatment of investors that are subject to special rules, such as banks, insurance companies, collective investments undertakings, dealers in securities or currencies, persons that hold, or will hold, the Offer Shares as a position in a straddle, share-repurchase transaction, conversion transaction, synthetic security or other integrated financial transaction.

The summary is based on laws, treaties and regulatory interpretations in effect on the date hereof, all of which are subject to change, including changes that could have retroactive effect.

Investors should consult their own advisers regarding the tax consequence of an investment in the Offer Shares in light of their particular circumstances, including the effect of any state, local or other national laws.

For the purpose of this discussion, a resident private investor is an individual subject to the Belgian individual income tax (i.e., an individual that is domiciled in Belgium or has the seat of his wealth in Belgium or a person assimilated to a resident), a corporation subject to the Belgian corporate income tax (i.e., a corporation that has its statutory seat, its main establishment, its administrative seat or seat of management in Belgium) or a legal entity subject to the Belgian tax on legal entities (i.e., a legal entity other than a corporation subject to the corporate income tax, that has its statutory seat, its main establishment, its administrative seat or seat of management in Belgium). A Belgian non-resident is a person that is not a Belgian resident.

3.19.1. Income Taxes

3.19.1.1. Dividends

As a general rule, a withholding tax of 25% is levied on the gross amount of dividends paid on or attributed to the Offer Shares. Under certain circumstances, the 25% withholding tax rate is reduced to 15% with respect to certain qualifying shares issued as of 1 January 1994. The Offer Shares are eligible for this reduced withholding tax rate and will be issued together with a "VVPR" strip, which is a separate security representing the right to receive dividends at the withholding tax rate of 15%. The reduced withholding tax rate of 15% will only be granted if the ordinary coupon is presented simultaneously with the VVPR strip bearing the same sequential number before 30 November in the year the dividend is declared payable. These VVPR strips are described under "– VVPR Strips" below. Dividends subject to the dividend withholding tax include all benefits from shares in whatever form as well as repayments of statutory capital, except repayments of fiscal capital made in accordance with the Belgian Companies Code. In principle, fiscal capital includes paid-in capital and paid-in share premiums.

A Belgian withholding tax of 10% is levied on redemption and liquidation distributions carried out by the Company. No withholding tax will be due for redemptions carried out on the central stock market of Euronext Brussels.

In addition, no withholding tax will be due on dividends paid to a resident corporation provided the resident corporation owns or has owned at the time of the distribution of the dividend at least 25% of the share capital of the Company for an uninterrupted period of at least one year. For such investors owning a share participation of at least 25% in the share capital of the Company for less than one year, the Company will levy the withholding tax without transferring it to the Belgian Treasury. As soon as such investors own the share participation of at least 25% in the capital of the Company for one year, they will receive the amount of this temporary levied withholding tax.

3.19.1.1.1. Resident private investors

For resident private investors acquiring the Offer Shares as a private investment, the dividend withholding tax constitutes final tax liability. The dividends should not be declared in the personal income tax return.

Should the beneficiary opt to declare these dividends, they will, in principle, be taxed at rates which are separate from the progressive personal income tax rates, and which are equivalent to the withholding tax (25%, or 15% in case of VVPR shares, or 10% in case of redemption and liquidation distributions) plus communal surcharges. However, if the tax amount obtained by taxing both these dividends and other declared income together on the progressive personal income tax rates is lower than that resulting from the application of the separate rates, the progressive rates will apply. In both cases, the income tax payable will be increased by the communal surcharges and the withholding tax levied at source will normally be creditable from the total amount of tax due and even reimbursable should it exceed the tax actually payable, provided that the dividend distribution does not reduce the value of or entail a reduction in value of or a capital loss on the Offer Shares. The said condition is not applicable if such investor proves that he/she held the Offer Shares in full legal ownership during an uninterrupted period of twelve months prior to the attribution of the dividends.

For resident individuals who hold the Offer Shares for professional purposes, the dividends received will be taxed at the progressive personal income tax rates. The withholding tax will be creditable against personal income tax and is reimbursable to the extent that it exceeds the tax actually payable subject to two conditions: the taxpayer must own the Offer Shares at the time of payment or attribution of the dividends in full legal ownership

and the dividend distribution must not reduce the value of or entail a reduction in value of or a capital loss on the Offer Shares. The second condition is not applicable if such investor proves that he/she held the Offer Shares in full legal ownership during an uninterrupted period of twelve months prior to the attribution of the dividends.

3.19.1.1.2. Resident corporations and Belgian branches of non-resident corporations

For resident corporations and for companies with their tax residence outside Belgium, holding the Offer Shares through a permanent establishment in Belgium, the gross dividend (including the withholding tax levied) received will be taxed at the resident corporate income tax rate of 33,99% (i.e. 33% increased by 3% crisis contribution).

The withholding tax may in principle be credited against corporate tax and is reimbursable to the extent that it exceeds the corporate tax payable, subject to two conditions: the taxpayer must own the Offer Shares at the time of payment or attribution of the dividends in full legal ownership and the dividend distribution must not entail a reduction in value of or a capital loss on the Offer Shares. The second condition is not applicable if such investors prove that they held the Offer Shares in full legal ownership during an uninterrupted period of twelve months prior to the attribution of the dividends or if, during that said period, the Offer Shares never belonged to a taxpayer not being a resident corporation or not being a non-resident corporation which has, in an uninterrupted manner, invested the Offer Shares in a permanent establishment or a fixed base in Belgium. Such investors may deduct up to 95% of gross dividends received from their taxable profits (other than from certain disallowed expenses) under the Belgian Dividend Received Deduction ("DRD") regime. The application of the DRD regime is subject to the following conditions to be fulfilled at the date of attribution or payment of the dividends: (i) the participation has an acquisition value of at least EUR 1,200,000 or represents at least 10% of the capital of the Company; (ii) full legal ownership of the Offer Shares, (iii) the Offer Shares must qualify as fixed financial assets under Belgian GAAP, and (iv) the Offer Shares must be or will be held for an uninterrupted period of at least one year.

The conditions (i), (ii), (iii) and (iv) do not apply to dividends received by qualifying investment companies. The condition (i) does not apply to dividends received by Belgian financial institutions and insurance companies and stock exchange companies.

3.19.1.1.3. Resident legal entities

For resident legal entities, the withholding tax levied normally constitutes the final tax liability.

3.19.1.1.4. Non-residents

For individuals or legal entities not resident in Belgium, who are not holding the Offer Shares through a permanent establishment or a fixed base in Belgium, the withholding tax is in theory (i.e. except where reductions or exemptions are granted under Belgian internal tax law or double taxation treaties) also levied at the rate of 25% if the Offer Shares are not offered with VVPR strips or at the rate of 15% if VVPR strips are offered or 10% in case of redemption or liquidation distributions.

Such investors, may, pursuant to the double tax treaty concluded between the Kingdom of Belgium and their state of residence and subject to certain conditions, either benefit from a reimbursement for amounts withheld in excess of the treaty rate or may benefit from a reduction of the withholding tax rate deducted at source. The reduction and reimbursement of the withholding tax under the relevant double tax treaty is subject to the timely filing of a tax form "Form 276 Div" with the relevant Belgian tax administration.

Prospective holders should consult their own tax advisors as to whether they qualify for a reduction in withholding tax upon payment of dividends, and as to the procedural requirements for obtaining a reduced withholding tax upon the payment of the dividends or for making claims for reimbursement.

Moreover, EU resident companies qualifying under the EEC Parent-Subsidiary Directive of 23 July 1990 (90/435/EEC) owning a share participation at least 25% of the share capital of the Company for at least one year are exempt from Belgian withholding tax. For such qualifying EU resident companies owning a share participation of at least 25% in the share capital of the Company for less than one year, the Company will levy the withholding tax without transferring it to the Belgian Treasury. As soon as the qualifying EU resident companies own the share participation of at least 25% in the capital of the Company for one year, they will receive the amount of this temporary levied withholding tax.

3.19.1.2. Capital Gains and Losses

3.19.1.2.1. Resident private investors

Resident private investors holding the Offer Shares as a private investment are not subject to Belgian capital gains tax on the disposal of the Offer Shares. Capital losses are not tax deductible.

Such investors may, however, be subject to a 33% tax if the capital gain is deemed, by way of exception, to be speculative or if the capital gain is otherwise realised outside the scope of the normal management of one's own private estate, or to a 16.5% tax if, during the five years before the transfer of the Offer Shares, the shareholder, or the person from whom he has received the Offer Shares, has held, an important shareholding in the Company (i.e., a shareholding of more than 25%, together with the Offer Shares held by some relatives), and the Offer Shares are transferred directly or indirectly to a non-resident company. These taxes are subject to the communal surcharge. Losses on speculative transaction on the Offer Shares or on transactions outside the scope of the normal management are tax deductible from the income from similar transactions.

Individual residents who hold the Offer Shares for professional purposes are taxable at the ordinary progressive income tax rates on any capital gains realised on the disposal of the Offer Shares. Losses on Offer Shares realised by such an investor are tax deductible.

3.19.1.2.2. Resident corporations and Belgian branches of non-resident corporations

Resident corporations and companies with their tax residence outside Belgium holding the Offer Shares through a permanent establishment in Belgium will not be taxed on capital gains realized on the disposal of the Offer Shares.

Losses on the Offer Shares realised by such investors will not be tax deductible.

3.19.1.2.3. Resident legal entities

Resident legal entities are normally not subject to the Belgian capital gains taxation on the disposal of the Offer Shares, but they may be subject to the 16.5% tax described above. See "Capital Gains and Losses – resident private investors" if they hold an important participation (more than 25%).

Losses on the Offer Shares are not tax deductible.

3.19.1.2.4. Non-residents

Non-resident shareholders who do not hold the Offer Shares through a permanent establishment or fixed base in Belgium, will generally not be subject to any Belgian income tax on capital gains realised upon the sale, exchange, redemption (except for the dividend withholding tax, see supra: 1.1.) or other transfer of the Offer Shares.

3.19.1.3. Tax reduction on the investment in the Offer Shares ("The Monory bis Law")

Cash payments up to a maximum of 600 EUR for qualifying Offer Shares to which a Belgian resident has subscribed for as employee of the Company, or as employee of certain qualifying subsidiaries of the Company, afford, subject to certain conditions described below, a right to a personal income tax reduction.

Qualifying Offer Shares are new shares subscribed for on the primary market, i.e. new shares subscribed for at the incorporation or a capital increase. Offer Shares acquired on the secondary market, i.e. purchase of existing shares on the stock market, are not considered as Qualifying Offer Shares.

This tax reduction is, in addition, limited to taxpayers who are, at the time of subscription of the qualifying Offer Shares, working for the Company or certain qualifying subsidiaries of the Company under an employment contract and receiving a remuneration ("*bezoldigingen van werknemers*"/"*rémunérations des travailleurs*") as mentioned in articles 30, 1° and 31 of the Belgian Income Tax Code of 1992. Directors, even if they are working for the Company under an employment contract, are not eligible for this tax reduction, as they do not receive a remuneration as mentioned in the said articles of the Belgian Income Tax Code of 1992. A company will be considered as a qualifying subsidiary of the Company if the Company is irrefutably deemed to control that company. Such control is deemed to exist in the following circumstances wherein the Company possesses: (i) the majority of voting rights in that company either as a result of a participation or on the basis of an agreement, (ii) the right to appoint and to remove the majority of the members of the Board of Directors of that company, (iii) the authority to control by virtue of the company's articles of association or by virtue of contracts concluded with that company or (iv) a joint control on that company.

This tax reduction, claimable through annual tax return, cannot be cumulated with the tax reduction for pension savings.

The said tax reduction is granted subject to the condition that the said employees prove in their personal income tax return related to the taxable period in which the payment occurred that the qualifying Offer Shares were acquired and that the qualifying Offer Shares were held at the end of that taxable period. The said tax reduction will only be maintained if the employee provides the evidence that he/she has held the Offer Shares during the subsequent five taxable periods.

3.19.2. Indirect taxes

3.19.2.1. Tax on stock exchange transactions

The subscription price of the allocated Offer Shares, increased by the stock exchange tax of 3.50‰, with a maximum of EUR 250 per subscription form and per party, will have to be paid with value date 25 November 2003 at the latest.

No stock exchange tax is payable by: (i) professional intermediaries described in Article 2 of the Law of 6 April 1995 acting for their own account, (ii) insurance companies described in Article 2, 1 1 of the Law of 9 July 1975 acting for their own account, (iii) pension funds described in Article 2, 13, 6 of the Law of 9 July 1975 acting for their own account, (iv) UCIT's described in the Belgian law of 4 December 1990 acting for their own account, or (v) non-residents (upon delivery of a certificate of non-residence).

3.19.2.2. Tax on the physical delivery of bearer shares

Investors wishing to take physical delivery of bearer shares will be required to pay a tax of 0.2 % of the subscription price as well as any possible costs charged by financial institutions. The rate of 0.2% has been increased to 0.4% pursuant to article 20 of the Law of 5 August 2003 but the King has not yet determined the date of entry into force of this increased rate.

For further information on the possible cashing costs that may be charged by the other financial intermediaries, holders are requested to turn to the financial intermediaries where they will cash their Offer Shares and coupons.

3.19.2.3. VVPR strips

3.19.2.3.1. Concept

The Offer Shares meet the conditions pursuant to which shares are entitled to a reduced withholding tax rate of 15% on the dividends and are therefore considered as "Verminderde voorheffing/Précompte Réduit" or "VVPR" shares.

The coupons, representing the right to the dividend at the ordinary withholding tax rate, are appended to each Share offered pursuant to this Offering circular. In addition, each VVPR share will be accompanied with a second sheet of coupon, which gives right to the reduced withholding tax rate of 15%. The coupons of the second sheet must bear the same sequential numbers as those of the ordinary coupons and must bear the legend in French "Strip-PR" or, in Dutch, "Strip-VV" (together "VVPR strips"). The VVPR strips are listed on the Euronext Brussels and are traded separately. They are sold simultaneously with the Offer Shares offered as part of the Offering.

The reduced withholding tax rate of 15% will only be granted if the ordinary coupon is presented simultaneously with the VVPR strip bearing the same sequential number before 30 November in the year the dividend is declared payable. If the ordinary coupon is presented without the corresponding VVPR strip, the applicable withholding tax rate will be 25% or such other rate as may be applicable to the taxpayer in question.

Some of the Company's existing shares are shares without corresponding sequential numbered VVPR strips.

Strips can be traded separately from the Offer Shares.

3.19.2.3.2. Capital gains and losses

Resident private investors and individuals not resident in Belgium, holding the VVPR strips as a private investment are not subject to Belgian capital gains tax on the disposal of the VVPR strips, and cannot deduct losses. Resident private investors may, however, be subject to a 33% tax (to be increased with a communal

surcharge) if the capital gain is deemed to be speculative or if the capital gain is otherwise realised outside the scope of the normal management of one's own private estate. Losses on speculative transactions or on transactions outside the scope of the normal management are tax deductible from the income from similar transactions.

Capital gains realised on VVPR strips by resident private investors holding the Offer Shares for professional purposes or by individuals not resident in Belgium who acquired the strips for a business conducted in Belgium through a fixed base or a permanent establishment in Belgium, are taxable as an ordinary income, and losses on VVPR strips are tax deductible.

3.19.2.3.3. Tax on stock exchange transactions and tax on the physical delivery of bearer shares

The rules concerning the levy of the tax on stock exchange transactions and the tax on the physical delivery of bearer shares with respect to the Offer Shares are also applicable to the VVPR strips.

4. UMICORE'S BUSINESSES

This section covers Umicore's strategy and each of Umicore's businesses including the activities of PMG as they stood immediately prior to the acquisition of PMG by Umicore in June 2003. This enables a simpler description of each business area, which can be related directly to specific facts and figures. The integration process within the new Umicore is well underway and readers are reminded that future reporting will follow that organizational structure laid out in the Summary of this Prospectus. The information provided in this chapter is exclusively from Company sources and, to some extent, resulting from the due diligence performed by Umicore during the course of the PMG acquisition.

4.1. CORPORATE STRATEGIES AND POLICIES

4.1.1. Strategic Framework

Umicore has positioned itself as a metals and materials group. Its strengths lie in a specific approach to business, which can be encapsulated in the following four characteristics:

Focus on applications:

The development of new products and new services is dictated by the requirements of its customers and its customers' customers. Through its focus on applications and the offer of flexible solutions Umicore strives for *market leadership*[1] in all selected areas where it is present.

Adding value:

The company is active over a large segment of the value chain, looking for ways to add value beyond the production of refined metals. Umicore does not seek to be a producer of pure commodities. Umicore has been stretching its presence in the value chain in almost all of the market segments in which it is active: starting from its historic expertise in smelting and refining of base metals (Umicore's roots), the company has successfully targeted more downstream parts of the value chain and also a wider range of metals and materials to serve various downstream markets.

Recycling:

Recycling is part of Umicore's core business, a vital service to many of its customers, a key requirement for sustainable development of its business and an opportunity to recover metals at a competitive price.

Excellence in technology, operations and people management:

Umicore strives for excellence in technology, operations and people management. Continuous improvement of both the cost base and product quality remains vital in order to prosper in the materials business. This is why Umicore uses the European Foundation of Quality Management (EFQM) model to monitor its performance. In all its operations Umicore is also committed to the well-being of its people and seeks to improve environmental performance in a pro-active way.

Specific elements of the strategic framework are explored in more depth below:

4.1.2. Growth

In 1999, Umicore set out a specific series of four growth objectives to be achieved by 2003:

- Consolidating its leading position in precious metals recycling
- Doubling the size of the Advanced Materials business
- Increasing the added value and recycling volumes in the zinc business by 50%
- Realizing the potential of the copper business.

In Precious Metals this objective has already been achieved. Organic growth has seen added value increase by 65% between 1999 and 2002. Return on capital employed has risen to 32.3% in 2002. During this period the Precious Metals business has reinforced its position as the most flexible and diverse recycler of precious-metals-bearing secondary and end-of-life materials in the world, a position that has been further reinforced through the acquisition of PMG.

---

1 In this chapter, Umicore's position relative to its competitors is generally expressed by reference to production or sales volumes.

In Advanced Materials, growth in profits had increased by 93% between 1999 and 2002. Turnover, however, reduced slightly over the same period mainly reflecting lower prevailing metals prices. The acquisition of PMG offers potential in terms of additional markets and product development for Umicore's Advanced Materials business and these are currently being explored.

In Zinc, the 50% growth target for recycling volumes was exceeded in 2002 with production of recycled zinc increasing from 113,000 tonnes in 1999 to 176,000 tonnes in 2002. Sales volumes of value added products had risen by 26% over the same period and continue to grow in 2003 towards the set target. The profitability of the business was nevertheless hit by the cyclical downturn in the price of zinc.

The potential of the copper business remains unfulfilled and despite several notable achievements, most significantly the modernization of the Pirdop smelter in Bulgaria and subsequent capacity increase, the business continues to produce unsatisfactory returns largely related to the prevailing reduction in demand from end-users of copper in Europe and unfavourable supply conditions in the market. Umicore is in the process of carving out its copper business in a fully-owned entity. This should give Umicore added flexibility in exploring potential partnership opportunities.

4.1.2.1. Growth initiatives

Umicore's growth has been achieved through a combination of organic growth and acquisitions. Umicore has successfully completed a number of acquisitions in recent years which reflect the company's transition to a materials company focused on value-added products, recycling and an increasingly international production base. In addition, several key internal growth initiatives have been undertaken within the various business groups. These acquisitions and internal growth initiatives are summarized at the end of each business group chapter.

4.1.2.2. Investment criteria

Umicore pursues acquisitions according to the following criteria:

- Industrial and strategic logic: there must be a rationale leading to improved results (higher revenues or lower costs) over a reasonable time
- Shareholder value creation: the transaction must be concluded at terms that still allow for a clear upside potential for Umicore
- Management capability: the capacity to integrate the acquisition is a critical success factor
- Umicore will test any potential acquisition in respect of the values and philosophy of its mission statement.

4.1.3. Sustainable development

Umicore's strategic framework is combined with a commitment to sustainable development. Umicore is part of the FTSE4Good Index and has been awarded a 'best in class' rating by Storebrand Socially Responsible Investments.

4.1.4. Recycling

Recycling is a central element of Umicore's strategy and a keystone of its mission to make "materials for a better life". Recycling plays a role (to a greater or lesser degree) in all of Umicore's key businesses. Recycling is not only beneficial for the environment it also offers certain clear economic benefits and is therefore compatible with the principles of sustainable development.

By implementing a 'closed loop' business model in most of its businesses Umicore is able to develop closer and more stable relationships with its customers:

Zinc – 26% of Umicore's production came from recycled zinc in 2002. Residues from customers and other companies in the galvanizing, die-casting and zinc chemicals sectors (along with other end-of-life zinc) are returned to Umicore for refining. Umicore is able to offer this recycling as part of a full service to its customers, relieving them of the need to process such residues and securing valuable sources of supply for Umicore at the same time.

Precious Metals – Umicore is the world's biggest recycler of precious metals. Close to 100% of Umicore's feed in the Hoboken precious metals recycling facility come from secondary sources e.g. residues from lead, zinc and copper smelters and end-of-life products such as electronic scrap, spent auto and petro-chemical catalysts.

Advanced Materials – Umicore seeks to offer a closed loop service wherever possible to its clients in this business segment. In Electro-Optic Materials, Umicore recycles germanium residues from clients in the fibre optic sector. In Engineered Metal Powders Umicore operates an agreement with the world's largest tungsten manufacturer whereby Umicore processes cobalt in this company's tungsten leach residues. This partnership also presents additional opportunities in terms of sales of Umicore's cobalt powders. Up to 70% of the materials present in Thin Film Products' sputtering targets need to be recycled – a service which Umicore can provide to its customers.

Copper – Approximately 20% of the feed stock for Umicore's Olen refinery comes from copper recycled by Metallo Chimique (one of Europe's leading copper recyclers in which Umicore has an 8.8% stake). In addition, Umicore has established a long-term relationship with various players in the European fabricating industry and converts their copper scrap into usable copper in the shapes they require.

4.2. ADVANCED MATERIALS

	1999	*2000*	*2001*	*2002*	***H1 2003***
			€ million		
EBIT	17.8	40.2	46.6	32.9	**21.7**
EBITDA	47.4	75.9	79.3	68.6	**36.5**
Added Value	88.6	106.6	117.7	101.9	**62.8**
Turnover	358.3	434.5	364.8	354.6	**195.1**
Average capital employed	467.4	483.5	459.4	405.1	**373.0**
ROCE	5.2%	7.5%	11.7%	8.2%	**11.5%**
Capital Expenditure	11.4	27.0	33.9	18.8	**7.9**
Workforce at end of period	965	1,034	1,100	1,383	**1,397**

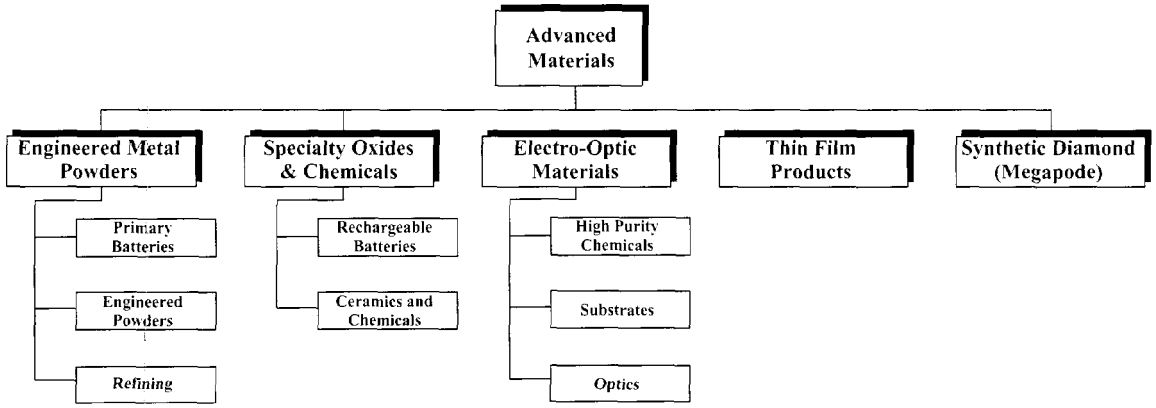
ADVANCED MATERIALS: locations

The Advanced Materials business group produces high-purity metals, alloys, compounds and engineered products for a wide range of applications and has a leading position in cobalt fine powders and compounds and germanium products.

Cobalt is a by-product of copper and nickel ore processing. One of the distinguishing features of cobalt is its very high melting point, which makes it ideally suited to applications where high temperatures are involved. Cobalt powders and compounds are utilised in high temperature super-alloys used mainly in aircraft manufacture, in catalysts, paint drying agents, magnetic alloys, cemented carbides, batteries and various other applications.

Germanium is mainly a by-product of some zinc refining operations. Its most interesting characteristics are its semiconductivity and transparency to infra-red radiation. Germanium compounds are used in the manufacture of optical fibres, infrared optical systems, radiation detectors, substrates for solar cells and semi-conductors.

The Advanced Materials business group is divided into four business units, for the most part consisting of different business lines:



NB: As part of the integration process following the acquisition of PMG, Thin Film Products becomes part of the business group Precious Metals Products and Catalysts effective January 2004. However, for the purposes of this business description it appears in the Advanced Materials section.

In addition to these business units is a 50/50 joint venture between Umicore subsidiary Sibeka and De Beers for the production of synthetic diamonds.

4.2.1. Engineered Metal Powders (EMP)

Umicore produces and purchases refined cobalt and zinc and transforms these refined metals into metal powder for a variety of high-technology end uses. It is a leading provider of specialty materials to the primary battery industry and the cemented carbide and diamond tools industries.

The business unit Engineered Metal Powders comprises the business lines Primary Batteries, and Engineered Powders as well as the cobalt refining activities:

4.2.1.1. Primary Batteries

PRIMARY BATTERIES – product overview

PRODUCT	*APPLICATION*	*END-USER*
Zinc Powder	Alkaline batteries for a variety of applications.	Mainly consumer goods such as toys, electronic devices. Batteries are purchased directly by consumers
Indium metal/salt	Zinc alkaline batteries	As above

Umicore Engineered Metal Powders is the most important independent manufacturer of alloyed zinc powders for the alkaline batteries. These powders are manufactured with high purity zinc produced by Umicore. Furthermore, the business unit provides indium hydroxide, an additive to fight corrosion in batteries. Umicore supplies these high-grade materials to almost all the battery manufacturers in the world.

The zinc powder activities for primary batteries are in Overpelt (Belgium) and Shanghai (PR China).

4.2.1.2. Engineered Powders

ENGINEERED POWDERS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Cobalt powders/cobalite	Diamond tools	Mining quarrying, construction industry
Cobalt powders	Hard metals/cemented carbide tools, round tools and dies	Mining, construction, high precision drilling, automobile industry, general machining

Besides traditional cobalt powders, which are used as a binder in the manufacturing of hard metals and diamond tools, Umicore has developed a new generation of alloyed powders (cobalite) which offers a cheaper alternative to cobalt powders but also complementary properties for specific applications.

The engineered powders are used in applications such as specialty alloys, hard metals and diamond tools, magnets, etc. Umicore is the largest supplier of cobalt powders for the hard metals and diamond tools industry. It offers a wide range of fine to submicron cobalt powders. The finest grades of cobalt powder offer unique properties for high tech hard metals applications such as micro-drills for printed circuit boards.

The cobalt powder activities are located in Olen (Belgium), Maxton (North Carolina, USA), Edmonton (Canada) and Shanghai (China)

4.2.1.3. Cobalt refining

Umicore produces refined cobalt in Olen (Belgium) and in Roodepoort (South Africa). Umicore is able to recycle cobalt-bearing residues from customers and to offer these customers a full service.

Competitors in Engineered Metal Powders include: OM Group (USA); Eurotungstene (France); Tanaka Chemical Corp. (Japan); Grillo (Germany); Mitsui & Co.(Japan); Noranda (Canada). No one competitor is able to offer the range of products manufactured by Umicore.

4.2.2. Specialty Oxides and Chemicals (SOC)

This unit consists of the business lines Rechargeable Batteries and Ceramics & Chemicals.

4.2.2.1 Rechargeable Batteries

RECHARGEABLE BATTERIES – product overview

PRODUCT	*APPLICATION*	*END-USER*
Cobalt oxide (pre-cursor for lithium cobaltite)	Lithium ion (Li-Ion) batteries	Li-Ion batteries used in laptop computers, mobile phones, digital cameras
Cobalt powders, cobalt hydroxide	Ni-Mh, Nickel Cadmium batteries	Nickel metal hydride (Ni-Mh) batteries used in laptop computers, mobile phones
Lithium cobalt oxide (Lithium cobaltite)	Li-Ion batteries	The above are manufactured by specialist battery producers

Umicore has a leading position in the production of cobalt-based compounds for the lithium-ion battery industry. This high growth market is driven by the increase of the use of portable devices such as mobile phones and laptop computers. Umicore manufactures battery grade cobalt oxide and hydroxide in Olen (Belgium) and lithium-cobaltite in Cheonan (S-Korea). The capacity of the latter is being expanded in order to keep pace with the strong growth of this market. Major R&D efforts are made to continuously improve the quality of the product to follow the fast-growing trend towards higher performance batteries. Also, new compounds (Co, Ni and Fe based) for the next generations of lithium ion rechargeable batteries are part of the extensive R&D portfolio.

CERAMICS AND CHEMICALS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Cobalt oxide	Pigment for ceramics, thermistors, magnet materials, catalysts, glass	Ceramics, chemicals and electronics industries
Cobalt hydroxide, chloride, sulphate, nitrate and acetate	Paint drying, rubber adhesion promotion, petrochemical catalysts, PET catalysts, pigments, animal feed	Paint, tyre, chemicals, plastics, ceramics industries
Nickel sulphate	Electroplating	Electroplating industry (a variety of end user applications)
Nickel oxide	Pigment, thermistors, glass	Ceramics and electronics industry
Nickel carbonate, nitrate, acetate	Pigment, catalyst production / plating	Ceramics and chemicals industries
Cadmium carbonate and sulphide	Pigment	Pigment industry

Umicore has a long history in the production, development and marketing of inorganic salts and oxides of cobalt and nickel. These products are traditionally used in a wide range of applications and can be found in many different places in our society and environment. The cobalt blue pigment is undoubtedly the oldest and most famous product in this family, but many others are also essential and critical in paint, tyre, plating, petro- catalyst and even agricultural industries.

A fuller insight into the product portfolio:

Cobalt oxides: through its plants in Belgium (Olen) and South Africa (Roodepoort), Umicore is by far the largest cobalt oxide manufacturer worldwide. With a unique production process, Umicore is able to manufacture the most consistent and highest quality cobalt oxide available on the market.

Cobalt inorganic chemicals: Umicore is designated as the 'preferred supplier' by many carboxylate-manufacturers. It has experienced rapid growth in the last few years and is now worldwide the number one supplier of cobalt hydroxide. Also part of the product portfolio:

- Cobalt chloride (crystals and solution), used in the tyres, paint drying, and many other chemical applications as well as cobalt sulphate and carbonate, which are mainly used in the animal feed, catalyst and plating industries.

- Nickel inorganic chemicals: through its unique proprietary refining process out of copper, precious metals, and cobalt bearing raw materials, Umicore is able to manufacture a highly consistent and pure quality of nickel sulphate. Umicore is the largest producer of this product with a quality which is the reference for the global plating industry.

  Recently, Umicore diversified its product range with a new range of nickel inorganic salts: black nickel oxide, nickel carbonate, nickel nitrate and nickel phosphate. These products are mainly used in the catalyst and plating market. Together with its cobalt compounds, Umicore offers a complete solution to those markets.

- Manganese inorganic chemicals: in order to complete its product range towards the catalyst and electronics industries, Umicore also offers manganese nitrate solution, as well as custom solutions based on cobalt and manganese.

- Cadmium inorganic chemicals: in order to complete its product portfolio for the pigment industry, Umicore has in its product range cadmium compounds, such as cadmium carbonate and cadmium sulphide.

Specialty Oxides and Chemicals has also developed a range of organic chemicals such as nickel, cobalt and manganese acetates for a variety of applications.

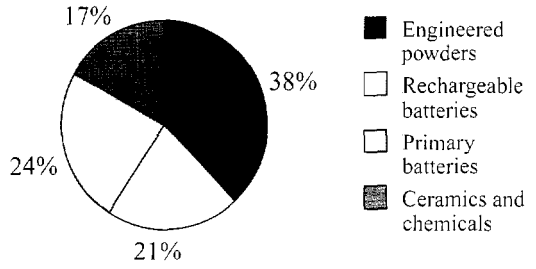
The activities are located in Olen, Belgium (nickel sulphate, cobalt hydroxide, cobalt oxide), Roodepoort, South Africa (cobalt oxides), Arab, Alabama, USA (cobalt, nickel, manganese specialties) and Subic, Philippines (cobalt and nickel salts).

Competitors in Specialty Oxides and Chemicals include: OM Group (USA); Tanaka Chemical Corp (Japan); Shepherd (USA); Inco Specialty Products (Canada).

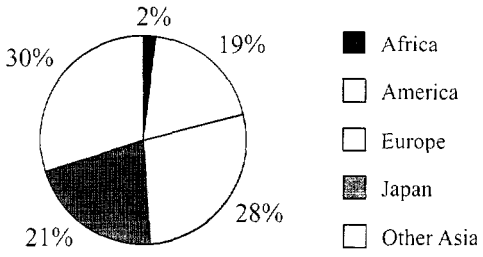
4.2.2.3 SOC and EMP charts:

The following charts are given for Umicore's cobalt business as a whole – Specialty Oxides and Chemicals and Engineered Metal Powders. Until the end of 2002 (the reference period for the charts) the two businesses were part of one larger business unit – Cobalt and Energy Products.

Sales volumes by business line 2002[1]



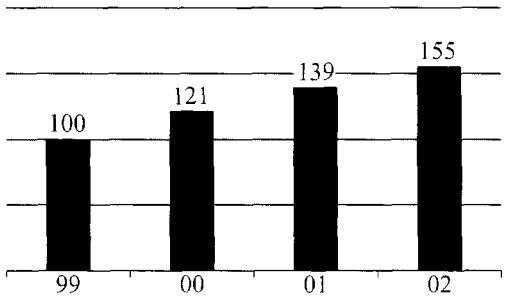
Sales by geographic area 2002[1]



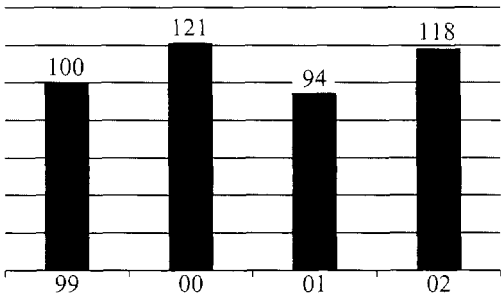
1 Before split of business into Specialty Oxides and Chemicals and Engineered Metal Powders

Indexed sales in volumes (1999=100):

Zinc powders for primary batteries



Cobalt materials



4.2.3. Electro-Optic Materials (EOM)

Umicore Electro-Optic Materials is the world's largest producer of germanium and related compounds, operating plants in Olen (Belgium; refining and manufacturing of germanium products), Boston (Massachusetts, USA; specialised in silicon and germanium wafers), Acigne (France; production of chalcogenide glass), Stevenage (UK; laser optics), Dundee (UK; optical coating services), Maxton (North Carolina, USA; production of germanium tetrachloride ($GeCl_4$) for optical fibres), Quapaw (Oklahoma, USA; $GeCl_4$ and infra-red optics products) and Warsaw (Poland; research and production of indium phosphide wafers).

The group recovers germanium mainly from zinc residues sourced through long-established relationships with major refineries. Its strong market position is derived from a unique technology to extract germanium from zinc residues and to refine to very high purity levels. It has been a major producer of germanium for more than 40 years. Utilising its experience in germanium production, together with its secured materials supply, Umicore has developed a leading position in various niche, high-growth, downstream operations, which enjoy a strong reputation among customers.

Umicore Electro-Optic Materials is well positioned to benefit from the continuing development of its related markets. Through its US operations, it has gained further exposure to the world's largest customer base, and it has a close, research-based relationship with a number of major clients.

The applications of the business unit are now concentrated around three business lines: High Purity Chemicals, Optics and Substrates.

4.2.3.1. High Purity Chemicals

HIGH PURITY CHEMICALS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Germanium Tetrachloride ($GeCl_4$)	Dopant in optical fibres	Data, communications industries
Germanium dioxide (GeO_2)	Catalyst for PET plastics	Manufacturers of bottles, photographic film, transparent sheets and heat resistant plastic containers
	Bismuth germanate crystals	Medical sector, nuclear physics
	Phosphors	Mercury vapour lamp makers

Raw materials containing as little as 0.5% germanium are refined to yield the high purity chemicals germanium dioxide and germanium tetrachloride. Germanium dioxide is best known as a catalyst in PET-plastics production, as a basis for the manufacture of phosphors in the lighting industry, and for the production of bismuth germanate crystals (also used as phosphors).

Germanium tetrachloride is used as a source material in the production of optical fibres. Germanium waste streams produced by the optical fibre industry are returned to Umicore Electro-Optic Materials for recycling and Umicore in turn provides germanium to these customers thereby closing the loop. Umicore Electro-Optic Materials extended its recycling service to the customers by investing in a state-of-the-art recycling unit in Olen, Belgium.

Competitors in this business include: Metaleurop (PPM subsidiary, Germany); Germanium Corp. (USA); Jemco (Japan); Sumitomo (Japan).

4.2.3.2. Optics

OPTICS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Germanium blanks, lenses and windows	Infrared applications: Thermal imaging/night vision and CO_2 laser optics	Equipment makers for civilian and military applications (public safety, fire fighting, process monitoring, automotive night vision, laser machining)
Optical components: Lenses, mirrors, windows, beam splitters, cavity optics, scanner optics, beam combiners	CO_2 lasers	Scientific and industrial laser manufacturers Laser equipment users
Optical coatings	CO_2 laser coatings, Infrared anti-reflection coatings Visual/Near Infra Red coatings on a variety of materials	Infrared and laser optics sector
Chalcogenide glass lenses	Lenses for thermal imaging particularly for high volume commercial applications like night vision in top-end cars	Equipment makers for civilian and military applications (public safety, fire fighting, process monitoring, automotive night vision, laser machining)

Umicore's Optics business line is a vertically integrated group of specialist subsidiaries, dedicated to serving the thermal imaging and laser optics markets with high-tech materials such as germanium and chalcogenide glass, thin film coatings and optical components.

The business line offers the above range of products for the following applications:

Thermal imaging:

Germanium is widely used in infrared (IR) optical systems. Umicore Electro-Optic Materials' expertise lies in the growth of high quality optical-grade germanium single crystals and the shaping into blanks, lenses and windows. The germanium is transformed and processed in Belgium and in the US (Quapaw, OK).

The production of chalcogenide glasses at Umicore's facility in Acigne, France, is a response to the demand for low cost infrared optics. These products are aimed at mass-market thermal imaging applications and are used in military and civilian applications which encompass security, night vision in cars (high potential) and medical.

Lasers:

Laser optics, including CO_2 optical components such as lenses and mirrors and beam delivery units and systems are designed and fabricated in Stevenage, UK. The starting materials are zinc selenide, zinc sulphide, silicon and copper.

Umicore's facility in Dundee, UK, provides the ultra low absorption coatings for CO_2 lasers.

Thin film coatings:

Besides coatings for laser applications, Umicore provides an extensive range of other types of coatings and filters for infrared and visible systems used in various optical applications, including DLC coatings on germanium and coatings on chalcogenide glass.

Detectors

Umicore Electro-Optic Materials refines and grows high-purity germanium crystals, with the purity level required for gamma-ray detection.

Competitors in Optics include: II-VI (Two-six) Corp (USA); Ophir (USA); PPM (Germany)

4.2.3.3. Substrates

SUBSTRATES – product overview

PRODUCT	*APPLICATION*	*END-USER*
Germanium wafers	Space solar panels; LEDs and laser diodes	Space and electronics industry
Silicon-on-Insulator wafers	Micro electro-mechanical systems	Electronics
Germanium crystals	Photodiodes, transistors, X-ray monochromators	Photography, medical sector

The substrates business line of Umicore is a group of specialist facilities dedicated to serving the space photovoltaics and other opto-electronic and electronic devices markets, with state-of-the-art semiconductor substrates.

Substrates are thin circular slices (wafers) cut from ingots of single crystal semiconductors. Thin layers of compound semiconductors are grown by Umicore's customers on these substrates, reproducing their crystallographic structure, by means of a process called epitaxy. These layers are the active elements that make chips work in electronic and opto-electronic devices.

Umicore Electro-Optic Materials is the world's largest producer of germanium substrates and the provider of the widest wafer diameters, with unique crystallographic perfection. It has been diversifying its product offering for some years, focusing on opto- and micro-electronic applications for its substrates other than solar cells.

In this context, Umicore Electro-Optic Materials has already established an industrial production capacity for indium phosphide wafers in Poland.

Below is a more detailed look at the product offer:

- *Large size germanium substrates or wafers*
- *Thinning and polishing services* for a wide range of semiconductor materials (silicon, germanium, silicon carbide, etc)
- *Bonded thick-film Silicon-on-Insulator (SOI)*, a quite recently developed product which offers superior performance versus traditional silicon, and is used in growing applications such as MEMS (micro electro-mechanical systems)
- *Bonded thick-film Germanium-on-Insulator (GOI) wafers*, for an extended range of applications. This product is under development.
- *Germanium crystals*: Since the early 1960s Umicore Electro-Optic Materials has provided electronic grade germanium crystals and wafers for transistors, photodiodes and X-ray monochromators.
- *Indium phosphide substrates*: a compound III-V semiconductor with properties that make it important for a number of future generation opto-electronic and electronic devices. This product is in qualification with customers.
- *Silicon carbide substrates*: the semiconductor material of choice for short wavelength opto-electronic, high temperature, radiation resistant, and high-power/high-frequency electronic devices. This product is currently at the development stage.

Application fields:

Space applications:

Since the early 1990s the telecommunication industry has been provided with polished germanium wafers for the production of gallium arsenide-on-germanium solar cells for satellites. The germanium properties and cost-effectiveness make it the substrate of choice for high efficiency multi-junction solar cells used in space applications. This market is still by far the major market for germanium substrates.

More recently Umicore has started the development of silicon carbide substrates with the aim to supply the market of high power, high frequency and high temperature resistant electronics used in satellites.

Other opto-electronic and electronic applications:

A variety of semiconductor applications are being developed based upon germanium substrates. One such example is the exciting evolution in solid state lighting with the development of high and ultra high brightness light emitting diodes (LEDs). These LEDs are much more energy efficient and long lasting than traditional light bulbs. Germanium is a cost-effective alternative to gallium arsenide commonly used for the fabrication of red, orange and yellow LEDs.

Silicon carbide substrates are also used for LEDs and cover the green-blue-white part of the colour spectrum.

Interest continues to grow in germanium for electronic applications. In this context, Umicore has entered into a partnership with IMEC, a Belgian research institute, and Soitec, one of the world's leaders in wafer bonding (SOI and other) and epitaxy, to develop germanium-based substrates for electronics and opto-electronics applications.

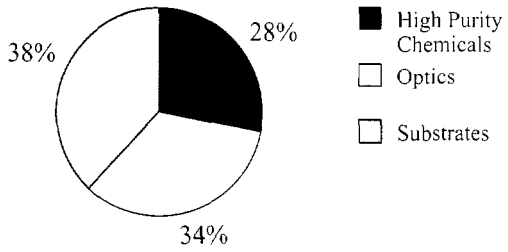
Indium phosphide substrates, which offer improved performance over the currently widespread compound semiconductors (e.g. gallium arsenide), have strong potential in the coming generation of high-speed telecommunication equipment, for both wired and wireless systems. Both opto-electronic (detectors and lasers) and electronics applications are targeted in this sector. Timing, however, remains uncertain, due to the recent crisis in the telecommunications sector.

Silicon carbide, besides its current use in opto-electronic devices, is at the start of an anticipated growth curve in the electronics field where it allows the development of high-power, high-temperature, high-frequency devices.

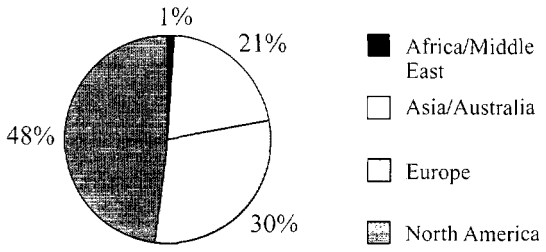
Competitors in the substrates business (germanium, Si and SOI) include: AXT (USA); EaglePicher Technologies (USA); Shinetsu (Japan); Analog Devices (USA); Okmetic (Finland).

4.2.3.4. EOM charts:

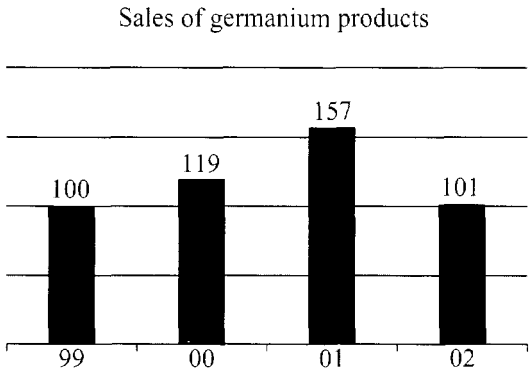
Electro-Optic Materials sales by business line 2002



Electro-Optic Materials sales by geographic region 2002



Indexed sales volumes (1999 = 100):



4.2.4. Thin Film Products (TFP)

THIN FILM PRODUCTS

PRODUCT	*APPLICATION*	*END-USER*
Sputtering targets (Ag, Au, AlTi, ZnS – SiO2, GeInSbTe, Ag alloys)	Optical data storage applications – CDs DVDs in replicated, recordable and re-writable formats	Recording, computer industries, consumer electronics
Sputtering targets, evaporation materials and accessories (ZnO, Si, Ti, ZnS, SiO2, Ta2O5)	Lens coatings (ophthalmic, infra red, microscopes etc.), optical filters, lighting systems	Medical, ophthalmic, aviation, telecommunications industries
Sputtering targets and evaporation materials for microelectronics (Cu, CuCr, NiV, WTi, Ta, NiCr, Al, Ti)	Advanced packaging, compound semiconductors, micro systems and silicon front end segments	Electronics and semiconductor industries
Indium oxide	Batteries	Battery producers and various
Indium Tin Oxide	Display screens, solar cells, glass coatings	Electronics and space industries, building and automotive industries
Indium hydroxide	Gassing suppression in batteries	Battery producers
High purity indium	Semiconductors	Electronics industry
Low melting point alloys (LMPAs)	Lens blocking, turbine blades	Aircraft industry, optics
Coating materials (Ti and Ti alloys, Cr, Zr,C)	Wear protection for tools and decorative coatings	Construction, automobile industries

NB: Thin Film Products has been incorporated in the Precious Metals Products and Catalysts business group during the integration process that followed the acquisition of PMG.

In mid-2002, Umicore acquired two materials companies, Unaxis Materials AG in Balzers, Liechtenstein along with its branches in Nashua, (NH, USA) and in Hsinchu Hsien, Taiwan, and Arconium, based in Providence, (RI, USA). Both acquisitions were combined in a new business unit, Thin Film Products, along with Umicore's previous specialty metals activities.

Thin Film Products is now one of the leading producers of sputtering targets and evaporation materials for high vacuum coating. It can build on more than 50 years of experience in this field. Its product portfolio covers areas such as optics, optical data storage, wear and decorative coatings, electronics and semiconductors, and displays and solar cells. Thin Film Products aims to further grow and develop leadership positions in a number of selected markets.

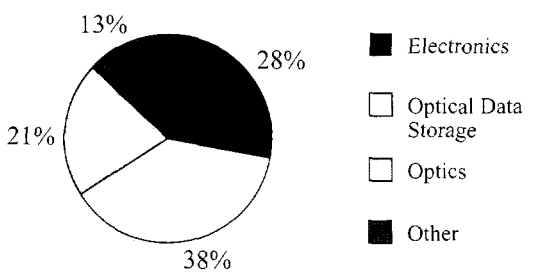
4.2.4.1. Umicore Thin Film Products' expertise in materials covers the following range:

- *Electronics and semiconductors:* Sputtering targets and evaporation materials for thin film applications in the advanced packaging, compound semiconductors, micro systems, and silicon front-end segments.
- *Optics and accessories:* Anti-reflective coatings for glasses reduce reflections and ghost images while enhancing the transmission of light. In addition, a wide range of applications in precision optics serving infrared optics, lighting systems, laser technology, projection systems, and medical applications.
- *Optical data storage:* CDs and DVDs are changing the world of data storage. Initially, the most important requirements for target materials were reflectivity and corrosion resistance. By adding recordable and rewriteable discs with increasingly high storage capacities, the requirements for target materials have become much more sophisticated. A large proportion of the world's CDs and DVDs are today coated with Umicore Thin Film Products' materials. Moreover, Umicore is leading the way in recycling and developing environmentally friendly products and processes in a closed circle – from the raw material to the value added product.
- *Wear and decorative coatings:* the requirements for every type of cutting, drilling, milling and turning tool continue to grow. Basic tungsten carbide tools can no longer meet many of the tough new standards required of modern tools. Today, all state-of-the-art tools need specialized coatings to extend tool life and fulfil the special needs of the cutting process. Thin Film Products provides the specialized coatings needed in the manufacture of cutting, drilling, milling, and turning tools.
- *Displays and solar cells:* the integration of electronics and optics finds its use in an increasing number of devices. Displays and solar cells are typical examples of layered structures of various electro-optically functional coatings on glass or plastic substrates. ITO (Indium tin oxide), for example, is used as a transparent conductive oxide. Even for the most complex applications, such as thin film solar cells, Umicore Thin Film Products can produce the materials for every single layer present. By involving both universities and industrial partners, Umicore is at the forefront of technological evolution.

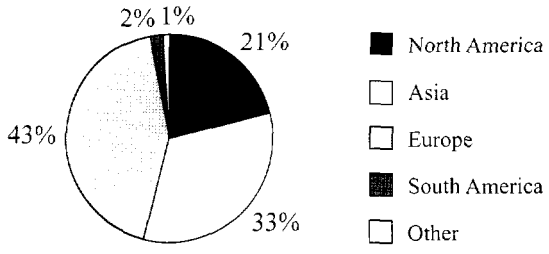
Competitors in the Thin Film Products business include: Merck (Germany), Cerac (USA) Indium Corp of America (USA), Tosoh (Japan), Mitsubishi Materials Corp. (Japan), Nikko Materials (Japan), Praxair (USA).

4.2.4.2. TFP charts:

Thin Film Products sales per application 2002



Thin Film Products sales per geographic region 2002



4.2.5. Synthetic Diamonds

SYNTHETIC DIAMONDS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Synthetic diamond (grit)	Diamond tools – saws, drills, grinders; wire drawing	Any industry using such tools e.g. construction, oil industry
Cubic boron nitrate (CBN)	Cutting tools esp. for ferrous metals	Esp. automobile and construction industries
Poly-crystalline products (PCP)	High-precision cutting and drilling tools, abrasive non-ferrous metal cutting, wear resistant surfacing	Esp. mining and oil drilling

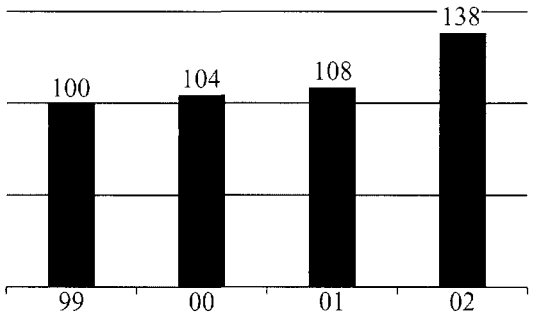
Sibeka (80% Umicore, 20% De Beers), holds a 50% stake in Megapode, the world's leading producer of synthetic diamonds (for industrial applications). Megapode produces and markets under the name Element Six (formerly De Beers Industrial Diamonds). The company has an extensive range of products including carbide-backed polycrystalline diamonds (PCD) and polycrystalline cubic boron nitrate (PCBN) composites for cutting and polishing tools and for mining, drilling and machining applications. The company has processing and manufacturing facilities in Ireland, Sweden, South Africa and the United Kingdom.

In recent years the market for diamond grit has been subject to severe price pressure from producers in countries such as China. Megapode has responded to this challenge by reconfiguring its production base for these products and further improving its cost structure while maintaining its focus on quality.

There are three main players in the production of synthetic diamonds for industrial applications – Megapode, General Electric (superabrasives division currently being sold) (US) and Iljin (South Korea). Volume production from these three producers is estimated to account for half of the total world production with a host of smaller operations in countries such as China and Ukraine making up the remaining 50%.

Synthetic diamond chart:

Indexed sales in volume (1999 = 100)



4.2.6. Advanced Materials: growth initiatives 2000-2003

4.2.6.1. Organic growth

Advanced Materials has engaged in a significant number of organic growth initiatives during this period. These have taken place in all the business units and have focused on three main axes:

1) *Capacity expansion* – the significant capacity expansion projects that have been implemented include: germanium substrates and cobalt oxides (Olen, Belgium), zinc powders (Shanghai, China), lithium cobaltite (Cheonan, South Korea), cobalt compounds (Roodepoort, South Africa). The recycling capabilities in cobalt and germanium have also been increased during this period.

2) *New facilities* – these include a new plant for lithium cobaltite and other lithium metal oxides (Cheonan, South Korea – see above for capacity expansion); a pre-alloyed powders production line (Olen, Belgium), new technology and production facilities for zinc powders (Overpelt, Belgium), production facility for fine nickel and copper powders used in electronics (Fort Saskatchewan, Canada) and a new manufacturing facility for chalcogenide glass (Acigne, France).

3) *New products* – Significant efforts have been made in developing new substrates products both in germanium and also towards the introduction of new materials such as indium phosphide (new production facilities in Belgium and in Poland) and silicon carbide. Other new products have included high purity cobalt and sub-micron cobalt powders.

At the time of writing, the lithium cobaltite capacity expansion in South Korea is in its final stage. The main axis of growth continues to be the focus on the development efforts in substrates including new germanium substrates for electronic applications, indium phosphide and silicon carbide substrates. The newest business unit in Advanced Materials, Thin Film Products, is continuing its focus on developing new products.

4.2.6.2. Acquisitions:

Since 2000 Umicore has made a number of small to medium sized acquisitions in Advanced Materials which have further strengthened its technological base and offer to its customers:

The acquisition of two UK-based finished optics businesses in 2000, *V & S Scientific and Tayside Optical Technology*, led the Optics business line to more downstream and added-value products.

In 2001, Umicore acquired the cobalt, nickel and manganese assets of *The Hall Chemical Company* (Alabama, USA), allowing the company to expand its product portfolio as well as to develop its presence in the US.

Umicore also increased its stake in the French company *Vertex* from 40% to 100%. Vertex's chalcogenide glasses offer the opportunity to enter and develop new markets for cheaper infrared optics a.o. for night vision applications.

Unaxis Materials AG (Liechtenstein) and *Arconium* (RI, USA) were acquired in 2002. They were integrated in a new business unit called Thin Film Products, with the existing specialty metals activities of Umicore. This group of activities has provided Umicore with a strong base to develop leadership positions in various markets for thin film coatings.

The acquisition of 67% of *Pacific Rare Metals* (Philippines) in 2002 extended Umicore's cobalt and nickel compounds product range and geographical reach. This business is part of the Specialty Oxides and Chemicals business unit.

In 2003, most of the germanium assets of *EaglePicher Technologies* (OK, USA) were acquired. They provide Umicore with an important US manufacturing base for germanium-based products used in infrared optics and fibre optics. They also extend Umicore's product range in infrared optics.

4.2.7. Advanced Materials: security of supply

A secure supply of raw materials is as important in Advanced Materials as it is for any of the other businesses in Umicore. Although the relationships with the most suppliers tend to have been cultivated over the long-term, the contracts themselves tend to be shorter term than in the zinc and copper businesses. In addition to these supply sources, Umicore's ability to recycle germanium and cobalt residues provides another valuable supply source which also carries other commercial advantages. Some 10% of Umicore's cobalt needs and 20% of its germanium requirements come from recycling.

4.2.8. Advanced Materials: business drivers

The drivers in the Advanced Materials business are on one hand linked directly to the activity levels in the multitude of different niche sectors which this business serves, as well as to more fundamental trends in the economy, and on the other side to factors at company level that determine competitive advantage.

The variety of the applications of the different products offered by Advanced Materials means that if activity levels are low in one segment it is often compensated by higher business levels in another. As an example, a weak demand from the electronics and telecommunication (fibre optics) industries in 2002 was compensated by increasing demand for lithium-ion battery raw materials. Similarly, in 2001 a temporary downturn in demand for rechargeable battery materials was compensated by a buoyant demand for primary (non rechargeable) batteries and for germanium substrates (either for space solar cells – underpinned by ongoing satellite programmes, or by the development of new applications in solid state lighting).

Although the business has a high level of exposure to technology markets such as electronics, satellites and communications, there is also significant exposure to more traditional sectors such as tooling (e.g. for the automotive, construction, mining sectors) even if the products linked to these sectors are high-tech in nature.

The cost price of the various metals present in the products that Umicore offers in this business are normally passed directly through in the sales price and therefore have little effect on the business performance (although affecting the turnover levels). Although Umicore refines a limited amount of germanium and cobalt, there is a degree of price sensitivity linked to these refining activities. Overall, a sustained high price level (e.g. cobalt) increases the risk of substitution – even temporary – or at least stimulates the search for cheaper alternatives. In this respect, the ability of a company to offer alternative products is especially important in order to keep or gain a competitive advantage. Umicore has, for example, developed Cobalite, a range of alloyed powders which offer a cheaper alternative to pure cobalt powder as a binder for diamond tools.

The profitability of the businesses is much more dependent on the level of premiums (part of the product price that is over and above the contained metal value) than on the metal prices. Competition, bargaining power of the customers, supply-demand situations, price-quality ratios, services offered in addition to the product – all are important factors determining the levels of these premiums.

Other business drivers can be summarised as follows:

R&D – Umicore's research and development efforts are essential to keep ahead of the competition in such fast-moving sectors. Umicore expends significant amounts of time, effort and money in ensuring the development of new products and the improvement of processes. Another important element in this regard is the development of research partnerships either with customers or external agencies.

Speed to market – also linked with the R&D element is the ability of Umicore to anticipate (or react fastest to) market opportunities and developments in fast-moving, niche market segments.

Environment – trends in environmental matters are strong drivers for Umicore's Advanced Materials' products. Umicore offers and permanently develops products supporting energy savings programs, such as battery materials for electric and hybrid vehicles, materials for renewable energy (solar cells), solid state lighting (LEDs consume up to 90% less energy than traditional light bulbs), sputtering targets for thin film deposition on energy-saving glass used in buildings. Umicore is also involved in the development of materials for various types of fuel cells, the future expected green energy source of the future. The latter developments are strongly enhanced by the acquisition of PMG, which is a leader in the development of PEM fuel cells.

Recycling – the ability to offer a 'closed loop' product offering to customers is becoming increasingly important and supports the above mentioned environmental trends.

Security – Products for surveillance applications (both civilian and military) are in higher demand. Umicore supplies infrared optics for such surveillance equipment. Infra-red optics systems are also used for fire fighting (vision in smoky conditions), for rescue operations and for night vision in cars.

Military/defence programs – programmes involving infrared optics for night vision systems and missile guidance, solar cells for military satellites, special types of batteries, etc. often are a booster for a wide range of advanced materials produced by Umicore.

Portability and miniaturization – especially related to electronics devices – is another ongoing trend requiring more and more advanced materials such as small and powerful batteries, LEDs and laser diodes, solar cells, light LCD screens, etc.

4.2.9. Market conditions

The growth in the mobile phone sector (and other applications for rechargeable batteries such as lap-top computers) has recently fuelled significant growth in Umicore's sales of cobalt-based products for rechargeable batteries. A recovery in the electronic, oil drilling and wood cutting sectors has also led to a pick-up in demand for cobalt products for hard metal tools. Other markets for cobalt-related products in general have recently been stable.

The Electro-Optic Materials business has been feeling the effects of the slow-down in the fibre-optics market and reduced activity levels in the world's various satellite programmes. However, the markets for optics-related products have remained relatively stable.

The Thin Film Products business serves several markets. Sales to customers in the electronics and optics sectors have been stable while sales to the optical data storage sector have been lower although Umicore has been successful in developing new products for rewriteable DVDs.

4.3. ZINC

	1999	*2000*	*2001*	*2002*	***H1 2003***
			€ million		
EBIT	84.0	88.8	51.8	21.2	**10.9**
EBITDA	121.1	128.2	86.6	59.3	**28.6**
Added Value	279.2	274.0	244.2	210.1	**110.0**
Turnover	841.5	971.8	817.9	762.7	**389.7**
Average capital employed	347.1	333.2	290.5	258.1	**276.0**
ROCE	24.2%	26.7%	17%	7.3%	**7.1%**
Capital Expenditure	17.9	25.3	41.6	43.4	**23.0**
Workforce at end of period[1]	2,440	2,448	3,441	3,611	**3,586**
Average zinc price (USD/tonne)	1,077	1,128	886	778	**780**

1: Padaeng included from 2001

ZINC: locations

❶ **Australia** > West Footscray
❷ **Belgium** > Angleur
Belgium > Balen
Belgium > Overpelt
Belgium > Zolder
❸ **China** > Changsha
❹ **France** > Auby
France > Bray-et-Lû
France > Calais
France > Escrennes
France > Le Vigeant
France > Neuilly-sur-Marne
France > Viviez
❺ **Germany** > Maintal
❻ **Malaysia** > Pasir Gudang
❼ **Netherlands** > Eijsden
❽ **Norway** > Larvik
❾ **Portugal** > Porto
❿ **Slovakia** > Bratislava
⓫ **Switzerland** > Lyss
⓬ **Thailand** > Bangkok
Thailand > Mae Sod
Thailand > Rayong
Thailand > Tak

Umicore is one of the world's leading players in the zinc industry with a total production capacity of over 600,000 tonnes of zinc products and a global presence. It is downstream integrated and covers the industry's value chain from smelting to the production of semi-finished and finished products for most zinc applications.

The strategy of Umicore's zinc business consists of operational excellence in its smelting activities, leadership in added value products and 'closed loop' services. In smelting, this translates into maximising quality and throughput, minimising the cost base and optimising the share of recycling feedstock. Umicore is the world's fourth largest zinc producer and the world's largest zinc recycler, generating returns on capital employed that are among the highest in its sector. Over 25% of the feedstock used by Umicore Zinc is made up of recycled material.

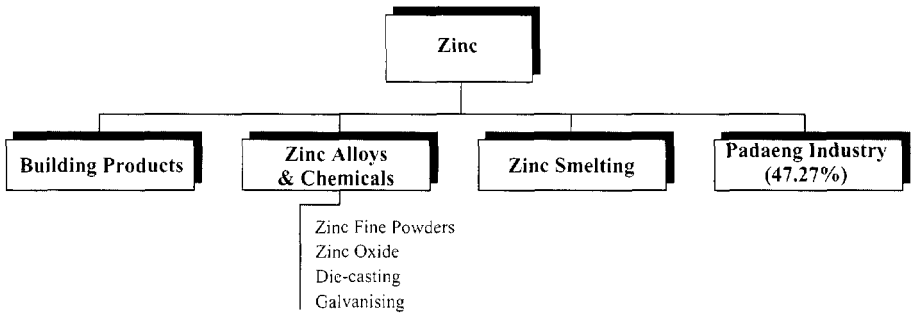
Umicore's earnings in Zinc are sensitive to fluctuations in the zinc price and the terms obtained for processing raw materials (treatment charges). The short-term sensitivity at EBIT level to fluctuations in the zinc price can be estimated at approximately USD 20 million per annum for a change of USD 100 per tonne in the zinc price. For treatment charges the sensitivity is approximately USD 8 million for a change in treatment terms of USD 10 per tonne of concentrates.

Following a strict customer and added value development focus, Umicore has become one of the world's leading zinc alloys and chemicals producers as well as the world's number one producer of zinc products for building applications. Its substantial recycling capacity allows for a unique 'one-stop-shopping' customer offer,

generating superior margins. In 2002, 73% of Umicore's total zinc tonnage sold consisted of added value products, making it relatively less sensitive to zinc price fluctuations than most of its competitors.

Umicore Zinc is organised around four activity centres: Zinc Smelting, Zinc Alloys & Chemicals, Building Products, as well as a 47.27% stake in Padaeng Industry (PDI), South East Asia's sole sizeable zinc producer, located in Thailand.

Business group organization



4.3.1. Zinc Smelting

ZINC SMELTING – product overview

PRODUCT	*APPLICATION*	*END-USER*
Zinc cathodes (base zinc – Special High Grade quality)		Umicore's production from this process is used as feed for Umicore's downstream activities.

Umicore's zinc smelting activities are located in four European sites and in Padaeng Industry in Thailand.

The four European sites: Balen and Overpelt in Belgium; Auby and Calais in France are managed as an integrated unit. First, zinc concentrates are roasted at Balen, Auby and Calais (France), converting zinc sulphides into zinc oxides. In a leaching process, the roast product called calcine, is subsequently dissolved together with oxidic materials from secondary products that have been pre-treated at the Overpelt site. After purification, the solution is fed into the electrolysis cell houses of Auby and Balen (together accounting for a production capacity of over 500,000 tonnes of saleable cathodes per year). The other business units transform the zinc produced by Zinc Smelting as well as secondary zinc into marketable products. Recycling and processing of by-products and side elements from the process is optimised within the group, thereby closing the loop.

Overall, and despite an above average rate of recycling, the smelting business line represents one of the biggest zinc concentrates buyers in the world with a tonnage roughly equal to 800,000 tonnes a year. This allows a solid bargaining platform to attract competitive treatment charges (see section on business drivers).

Umicore also endeavours to shield itself from feedstock market fluctuations by negotiating multi-year supply contracts. The fundamental approach is to maintain the geographical diversity of supply sources. At the end of 2002, all the zinc concentrate volume requirements for 2003 were covered, with the terms for two thirds of these requirements already negotiated. As at the time of writing, close to 100% of concentrates requirements in volumes were covered for 2004.

4.3.2. Padaeng

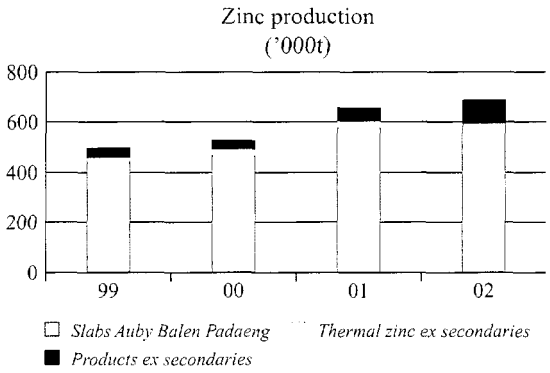
Umicore holds a 47.27% stake in Padaeng Industry, South East Asia's sole sizeable zinc producer. Padaeng Industry is located in Thailand and is an integrated player with a flexible flowsheet, operating a zinc silicate ore mine (Mae Sod district), a roasting facility (located at Rayong), a smelting plant and a casting plant (in Tak). It has an annual production capacity of over 100,000 tonnes and produces mainly special high grade zinc ingots (some 70%) and zinc alloys (some 30%), most of which are destined for the domestic Thai market. Since the entry of Umicore into its capital, Padaeng's sourcing strategy and financial structure have been improved, its product and customer mix refocused in favour of more value added products, and its production processes optimised. By aligning both companies' commercial strategies, Umicore has been able to strengthen its presence in the South East Asian market.

The Mae Sod mining reserves are ensured for at least another 10 years while the Rayong roaster complements the feed for the smelter from external sulphide concentrates (the present concentrates inflow is about 150 000 tonnes of concentrates per year).

The Padaeng complex has the advantage of being the only one in Southeast Asia that is both flexible in terms of feed (silicate ores combined with classical feed is possible) and endowed with modern processing facilities and downstream products.

Competitors in zinc smelting include: Pasminco (Australia, USA); Xstrata (Spain, Germany, Australia); Korea Zinc (South Korea, USA, Australia); Teck Cominco (Canada, Peru); Noranda (Canada); Outokumpu/ Boliden (Finland, Norway) and various Chinese smelters.

Zinc production chart:



4.3.3 Zinc Alloys and Chemicals

ZINC ALLOYS & CHEMICALS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Zinc slabs (SHG)	Mainly for galvanizing	Construction and automobile industries
Basic alloys (CGG)	Mainly for galvanizing	Steel, construction industries
Specialty alloys:		
1) Die-casting alloys such as Zamak	Die-casting	Toy, automobile and brown goods manufacturers
2) Galvanizing alloys such as Galveco and Galfan	Used for galvanizing steel, car bodies, brown goods	Construction industry (incl. power industry for power pylons); automobile industry; brown goods manufacturers
Zinc Oxide	Rubber, glass, ceramics, batteries, electrogalvanizing and plating, catalysts and other chemical applications, paints, cosmetics, dermatology, electronics (varistors), animal feed, fertilizer, plastics	Tyre and cable manufacturers, battery producers, glass and ceramics industry, chemical industry, paint manufacturers, pharmaceutical companies, electronics manufacturers, farming, plastics manufacturers
Fine zinc powders	Coatings – paints and mechanical plating/sherardizing	Construction, shipbuilding
	Chemicals – hydro-metallurgy, reduction processes	Chemicals industry, battery manufacturers, metal refineries

In line with its downstream philosophy, Umicore systematically targeted increased sales of specialty products such as alloys and chemicals. In the course of 2002, the Zinc Alloying and Zinc Chemicals business units were combined, enhancing the 'one stop shopping' concept and the recycling focus.

4.3.3.1 Zinc Alloys

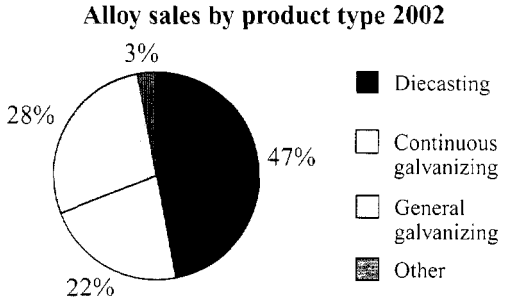
Umicore's zinc alloys are mainly used for die-casting operations and galvanising (both continuous and general). In hot-chamber die-casting, the metal that is to form the casting is injected into a die or mould. The high production rates (short cycle times and multiple castings per shot) and the high precision associated with zinc die-casting make the process particularly appropriate for high production batches or small precision components. Zinc alloys in particular offer the advantages of a longer die life, lower maintenance costs and excellent metallurgical properties. Umicore is the leading producer of die-casting alloys in the world.

In the general galvanising process, a metal (generally steel) object is provided with a zinc coating through immersion into a zinc bath. Continuous galvanising implies a continuous process whereby the metal preparation phases – dipping, measurement and post-treatment – are set up in one continuous production line. The use of zinc alloys results in higher performance, both in terms of process economics (such as limiting the formation of residues) and product characteristics (such as higher corrosion resistance, higher formability and coating thickness control).

Umicore's Zinc Alloying business line has developed a series of customised technical and economical services that enable customers to optimise the use of special zinc products in their transformation process (technical assistance, purchase optimisation, product design and development, etc.). This results in intensive global client partnerships and exchange of expertise. Illustrative of the Group's customer focus, Umicore acquired GM Metals in France at the beginning of 2002, completing its services to die-casting customers by providing recycling capabilities.

Competition in the alloys sector comes from: Xstrata (Spain, Germany), Teck Cominco (Canada, Peru), Simar (Italy); Pasminco (Australia, USA).

Zinc Alloys chart:



4.3.3.2 Zinc Chemicals

Umicore's zinc chemicals business mainly concerns the fine zinc powders and zinc oxides markets. Both markets are characterised by their broad range of applications (paints, tyres, ceramics, chemicals) and high levels of competition. Umicore invests heavily in R&D and close customer relationships, providing excellent market insight. Umicore operates globally and continues to strengthen its international network.

4.3.3.2.1. Fine zinc powders

Following the acquisition of Larvik Pigment in 2001 and Fuhong in 2002, Umicore became the world's leading producer of fine zinc powders and now has an annual production of some 90,000 tonnes. Larvik's feedstock is essentially secondaries, underscoring the importance of recycling for the Group (over 60% of Umicore's zinc chemicals feed comes from secondary sources). In the course of 2002, Umicore entered into the fast growing Chinese market through the acquisition of Fuhong. Umicore now has a network of five production facilities situated in Belgium, Norway, Malaysia, Australia and China.

Fine Zinc powder is used in three main areas.

- First in paints where it is employed to protect steel surfaces from corrosion. Zinc-rich paints are an essential component in the protection of major structures such as offshore oil platforms, bridges, petrochemical and power installations. It is a highly competitive global market with the main customers being the world's major paint producers. Similarly, fine zinc powder is extensively used

in mechanical plating/galvanising, whereby small components (nuts, bolts) are coated with a uniform layer of zinc, providing enhanced corrosion protection.

- Fine zinc powder also finds its way into several chemical applications and acts as a powerful reducing agent used for the bleaching of paper, textile or kaolin. Other chemical applications include reduction steps in organic chemistry and recovery of precious metals. This market is limited to a few application areas and customers and requires pure / tailor-made products.

- Fine zinc powder is also used in high quantities in the zinc electrowinning process to purify leach solutions. This is by far the biggest use but is mostly a captive market for the various zinc producers.

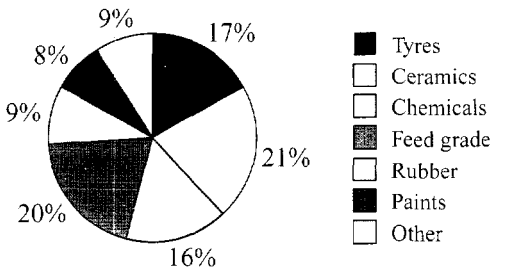
4.3.3.2.2. Zinc oxides

Today, with a total production capacity of 60,000 tonnes per year, Umicore is the largest zinc oxide producer in Europe and one of the leading producers in the world. Umicore operates three modern plants at Eijsden (The Netherlands), Larvik (Norway) and Melbourne (Australia). The geographical spread of operations offer multinational groups the opportunity to use a single global supply source. The main zinc oxide applications are in ceramics, feed grade, in tyres and in chemicals (together accounting for over 70% of Umicore's zinc oxide business).

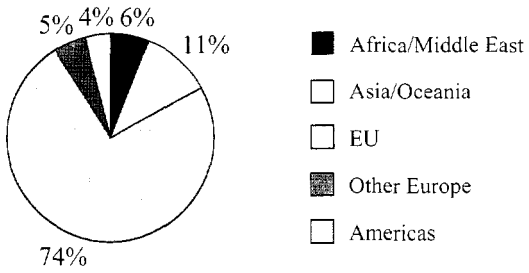
Competitors in zinc chemicals include: Grillo (Germany); US Zinc (US); Elementis (UK); Purity Zinc Metals (US) and various smaller producers especially in China.

4.3.3.2.3. Zinc Alloys & Chemicals charts

Oxide sales by application 2002



Geographical distribution of Alloys and Chemicals sales 2002



4.3.4 Building Products

BUILDING PRODUCTS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Zinc/lead coils and sheets Roof systems Façades Flashings Ornaments Rainwater systems (Copper and steel products also available)	Weather-proofing and decorating buildings	Commercial and domestic construction industries

Umicore Building Products produces zinc sheets and coils, rainwater systems, rolled zinc and roofing products for contractors in the construction sector in general and the roofing and façade markets in particular. Operating under the VM Zinc® brand, Umicore is a leading producer in Europe, by far the world's largest market for zinc building materials. Umicore also offers a complete range of lead semi-finished products to the building industry.

The unit is based in France where it has its headquarters (Bagnolet, near Paris) and three of its production plants: rolling mills in Viviez (south west France), Auby (northern France) and a transformation plant in Bray-et-

Lû (Normandy, France). Other production facilities are located in Overpelt (Belgium) for lead, and for finished products in Maintal (Germany), Lyss (Switzerland) and Bratislava (Slovakia). Umicore also owns a 40% share of the Peruvian rolled zinc and calots producer IEQSA, located in Lima (Peru).

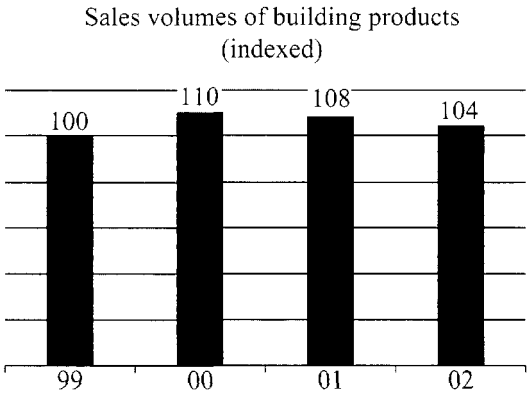
Around 50% of volumes are sold on the French market, and Belgium and Germany are also important markets in Europe. The unit has dedicated commercial offices in these countries, and smaller offices in Spain, Italy, Portugal, Hungary, Denmark, USA, Australia, UK, Switzerland, Poland and Russia. Agency agreements cover a number of other geographical areas.

Umicore's strategy is aimed at broadening its product range in the more mature markets while at the same time targeting specific new growth markets (where zinc is not yet a standard building material), such as for example the US, Australia and Central & Eastern Europe (in 2002 a commercial JV was concluded in Russia). Product and installation quality is deemed crucial and receives continuous priority. The share of higher added value products is gradually being increased and already accounts for over 50% of products sold. Given its multi-metal expertise, Umicore is gradually extending its position in multi-metal transformed products for the construction sector (copper, steel). Illustrative of this, in late 2002 the Group concluded an agreement to purchase the Swiss and Slovak assets of Swiss-based Strub.

Main competition from other rolled zinc products is represented by Rheinzink, part of the Grillo group and based in Germany. Like Umicore Building Products, Rheinzink holds roughly one third of the world market for rolled zinc. The final third is split amongst a relatively large number of much smaller players. Indirect competition comes from other metals such as copper, aluminium, galvanized coated steel, stainless steel, or lead and also from alternative materials such as tiling. Umicore Building Products has taken steps to include other metals in its offer because according to local tradition certain metals may hold a privileged place for certain applications.

Other European competitors in Building Products are companies such as: Nedzink (Netherlands); Silesia (Poland); Simar (Italy)

Building Products chart indexed (1999 = 100):



4.3.5 Zinc: growth initiatives 2000-2003

4.3.5.1 Organic growth:

Since 1999 Umicore has increased its production capacity by some 70,000 tonnes through sequential debottleneckings in the three plants of Auby, Calais and Balen. This has been done as part of the policy to treat more secondary zinc bearing materials. In parallel, Umicore Zinc has developed new processes and disposal methods of the zinc flowsheet residues.

In the field of zinc specialties, Umicore has worked closely with its customers in the development of new zinc alloys which fit specific requirements. In the recent years, new alloys such as Galvacar® and Galveco® have been launched for automotive applications. Also, Technigalva+ (ZnNiBi) has been put on the market. Growth not only stems from the alloy sales themselves but from the technical collaboration with customers which often requires the use of multidisciplinary skills in galvanizing bath analysis and metal dissolution know how. This enables Umicore to be more closely linked with its customers and their associated processes without competing with its clients.

In Building Products, organic growth initiatives include the development of new products, systems and services for traditional markets and the penetration of the facade segment with a new product offer. Building Products has also been very active in seeking to develop markets in regions of the world where zinc has not traditionally been used as a building material (Australia, USA).

The current organic growth focus of Umicore Zinc does not include an expansion of its primary smelting capacity. However, the company remains intent on increasing its recycling capabilities and on achieving further growth in its added-value, downstream zinc activities.

4.3.5.2 Acquisitions:

Umicore developed its presence in Asia in 2000 with the acquisition of a major stake in *Padaeng Industry* of Thailand, the sole zinc producer South East Asia.

Umicore completed the acquisition of the *Larvik Group* in early 2001, which positioned Umicore as one of the world leaders in fine zinc powders for paints.

In 2002, Umicore acquired *Fuhong* (China – fine zinc powder), *GM Metals* (France – zinc recycling and production of die-casting alloys), *Strub* (Switzerland and Slovakia – building products in zinc and other metals), and 50% of *Rezinal* (Belgium – zinc recycling). All these acquisitions are in line with Umicore's strategy of focusing on added-value products and recycling. They provide the Group with openings in new markets and synergies with the existing zinc operations.

Umicore finalized the purchase of a strategic stake (40%) in IEQSA (Peru) in 2003, which extended its zinc building products geographical coverage to South America.

4.3.6 Zinc: security of supply

Being one of the world biggest consumers of zinc concentrates, Umicore has developed along the years strong relationships with zinc miners all around the world. In line with its focus on recycling, Umicore has invested in technology that enables its European smelting operations to treat secondary feed. For the business group as a whole, secondary feed now accounts for more than 25% of the total intake in zinc content.

Overall the feed strategy is oriented towards two main goals:

1: continue to increase the intake of secondary materials with new sources of supply and through success in recovering zinc from low grade or complex residues.

2: diversify and further strengthen its sourcing of concentrates.

While Umicore Zinc is a 100% custom smelter with no mines owned, its purchasing power, its well-located geographical position (close to the ports of Calais and Antwerp) and its ability to treat various types of concentrates, have enabled it to build a strong position when sourcing concentrate feed.

Umicore currently sources about 30% of its feed in Europe, 20% from North America, 30% from Central & South America, 10% from Australia and 10% from Africa.

Padaeng Industry sources approximately 30% of its feed from its own mine in Mae Sod in Thailand and is in the process of exploring for other ore bodies in South East Asia.

4.3.7. Business drivers in zinc

4.3.7.1. Smelting

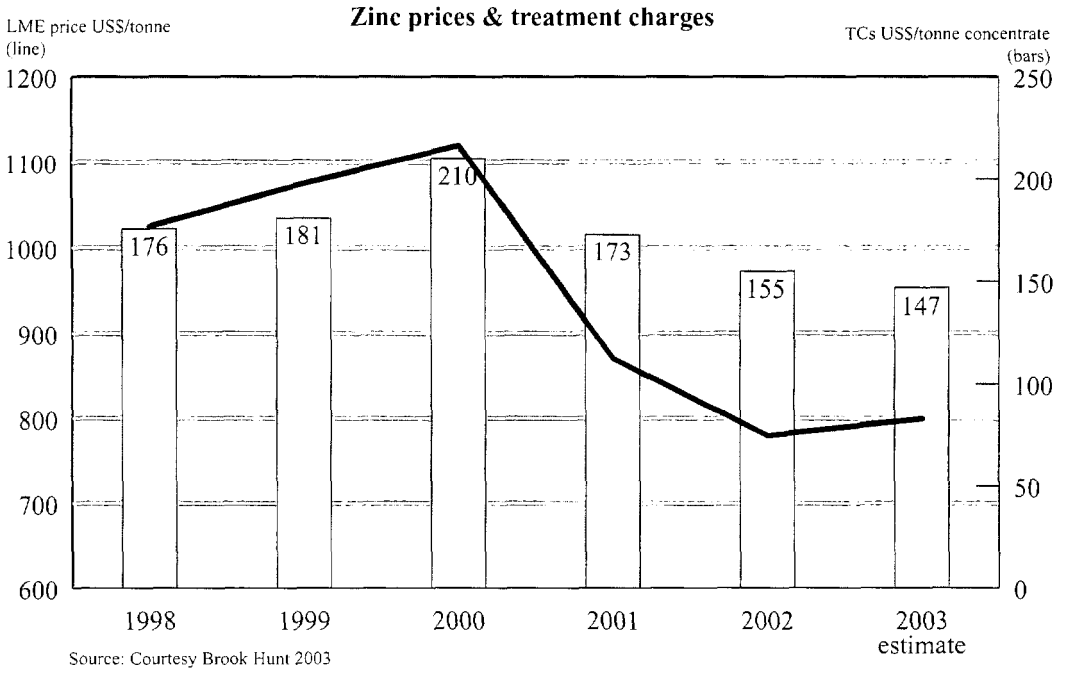
Umicore's zinc smelting business has three sources of revenue:

- First is the treatment charge, expressed in USD per tonne of concentrate and based on a reference zinc price level, partially adjustable for fluctuations in the zinc market price – an upward adjustment when the zinc price rises (escalator) and a downward adjustment when the zinc price falls (de-escalator). As treatment charges also fluctuate in relation to the supply and demand balance for concentrates, Umicore, in line with industry practice, negotiates contracts based on the so-called "brick system" which ensures a smoothing of annual fluctuations in treatment charges. In addition, the company enters into longer-term supply contracts where this is beneficial.

- Second is the so-called metal yield or bonus, which is the difference between the metal paid (zinc contained in concentrate minus a deduction) and the metal recovered from the materials supplied for treatment – traditionally this amounts to around 10% of the zinc content in the concentrates.

- A third source of revenue stems from the sale of by-products such as sulphuric acid.

Metal price fluctuations can have a significant impact on the company's results. Of all metals produced by the Group, zinc is by far the most sensitive to fluctuations. Where there is no strategic cover, a variation in the zinc price of USD 100 per tonne gives rise to a variation in Group EBIT of approximately USD 20 million on an annual basis. The sensitivity stems from the correlation between the zinc price and treatment charges (see escalators and de-escalators) and also on the level of revenues from metal yield boni. This sensitivity to the zinc price is a calculation that applies to the short-term fluctuations in the zinc price. It should be remembered that certain correction mechanisms/factors come into play over longer periods. In terms of sensitivity to treatment charges, Umicore's zinc operations process some 800,000 tonnes of concentrates a year. The sensitivity is therefore approximately USD 8 million per year to a USD 10 per tonne shift in treatment charges. Below is a chart which illustrates recent evolutions in the zinc price and treatment charges indicating that both appear to be presently at a low point in the cycle:



Source: Courtesy Brook Hunt 2003

The zinc business, like most of the other non-ferrous metals, is affected by internal and external drivers. External drivers include volume (zinc is mainly consumed in the construction and automotive industries and henceforth follows their good or bad fortune), the zinc price and treatment charges and also the dollar exchange rate. The items above are beyond the control of a zinc smelting/transforming company.

The internal drivers within Umicore's control are:

- Operational efficiency in producing or transforming zinc at the lowest costs

- Capability to attract premiums for high quality materials or achieve customer satisfaction (reliability, transportation, services etc)

4.3.7.2. Alloys, chemicals, building materials and semis

Transformed zinc margins are largely unaffected by zinc price variations since pricing on the whole incorporates shifts in the LME zinc price. The net margin depends on a transformation premium paid by the customers which reflects the supply/demand status of the local market and the product quality and related services.

The demand for alloys, chemicals and building materials is mainly linked to the activity levels in the sectors related to these applications. For example, swings in the fortunes of the construction or the automotive

industries, can have a bearing on the volumes of zinc sold. Consumption is, however, supported to a certain extent by the structural growth of reactive steels which use specific zinc alloys and also diversification into high-growth countries such as China.

In the building materials sector, a roofing system (for example) is marketed as a product in its own right with all the service, installation, design, quality offerings etc. worked into the product price. This price follows changes in the zinc price to a certain extent. However, the dynamics of the sector mean that any pass through of raw material cost fluctuations to the client tend to be slower when the price of zinc increases than when it decreases, thereby leading to a degree of counter-cyclicality. All things being equal, Umicore Building Products is able to maintain price margins when the zinc price falls but this becomes more difficult when the zinc price rises.

4.3.8. Current market conditions in zinc

The recent general economic climate and the resultant slowdown in end-user industries has driven down the zinc price, hurting Umicore's zinc revenues. Despite attempts to rationalise the industry's supply side (a.o. closure of two European smelters), the average zinc price during the first half of 2003 remained at USD 780 per tonne, at a similar level to the average zinc price in 2002 (USD 778 per tonne).

An imbalance in the mine versus smelter capacity led to a tightening of the concentrates market resulting in unsatisfactory treatment charges in 2002. Despite some improvement in the availability of secondary materials during early 2003, market terms have so far failed to redress.

In alloys, market conditions improved during early 2003 versus a subdued 2002. European demand for die-casting alloys was strong while premiums benefited from the industry's supply rationalisation efforts. Sales of die-casting alloys in Asia slowed. The fine zinc powder business remained stable during the first half of 2003 with contrasting underlying market trends per continent. In spite of a depressed European zinc oxide market following continuing cheap Asian imports, Umicore's restructuring initiatives and its focus on added value underpinned its performance in this field.

The continuing depression in the German construction sector has driven the overall European building materials market slightly down in spite of steady French and Belgian markets. Overall premiums have held up well following their fall in 2002 (due to increased price competition from smaller operators) and Umicore successfully continues to grow its sales to Southern European and non-European countries.

4.4. COPPER

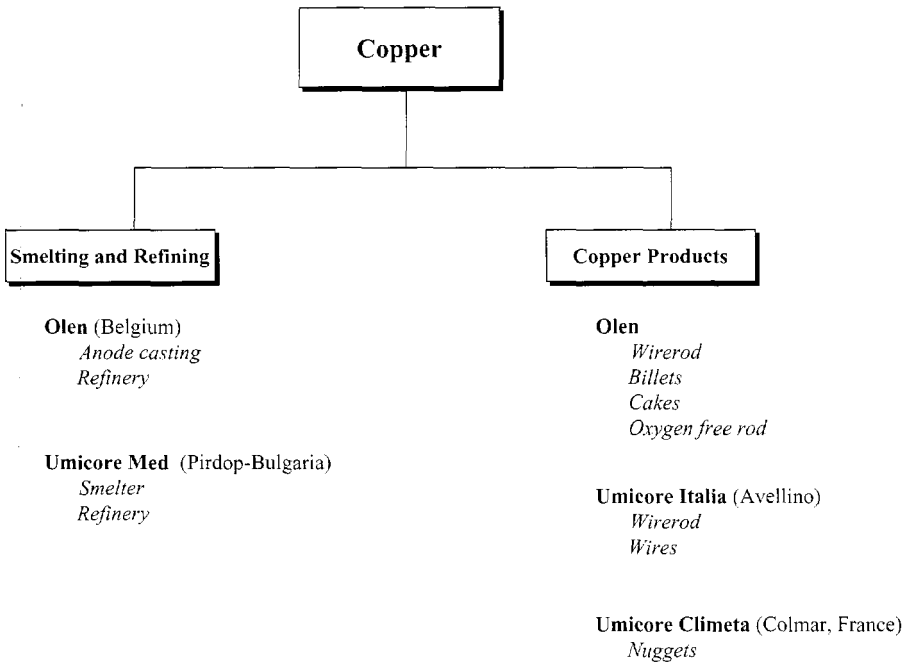
	1999	*2000*	*2001*	*2002*	***H1 2003***
			€ million		
EBIT	1.7	25.0	13.0	9.7	**1.3**
EBITDA	25.2	54.4	43.5	41.2	**16.7**
Added Value	85.6	108.6	98.9	91.9	**44.5**
Turnover	791.7	1,154.5	1,036.2	924.2	**439.4**
Average capital employed	366.9	399.7	417.3	426.0	**424.7**
ROCE	0.5%	6.2%	2.9%	2.0%	**0.4%**
Capital Expenditure	24.0	38.1	77.3	43.3	**17.1**
Workforce at end of period[1]	2,282	2,087	2,120	1,809	**1,638**
Average copper price (USD/tonne)	1,573	1,814	1,577	1,557	**1,652**

1: Bulgarian operations consolidated from 1 January 1999

COPPER: locations

Umicore is a leading producer of copper products in Europe with a combined annual capacity of over 600,000 tonnes. Umicore Copper produces wirerod, billets, cakes and other shapes mainly servicing the construction, transport and electronics sectors. With a combined annual capacity of 470,000 tonnes Umicore is the first non-integrated wirerod producer in Europe.

Umicore Copper is organised around two activity centres: Copper Smelting & Refining, and Copper Products.



4.4.1. Copper Smelting & Refining

COPPER SMELTING AND REFINING – product overview

PRODUCT	*APPLICATION*	*END-USER*
Cathodes	Primarily for internal use to transform into copper products	See products section below

Umicore Copper is an integrated operator, covering smelting, refining and transformation to semi-finished products. The Group operates four sites: Olen in Belgium, Pirdop in Bulgaria, Avellino in Italy and Blodelsheim in France.

At Pirdop, Umicore operates a newly modernised smelter that obtains part of its concentrate needs from Bulgarian copper mines and functions as the main source of feedstock for the copper refinery in Olen. Umicore Med in Pirdop also produces about 45,000 tonnes of refined copper cathode for regional markets.

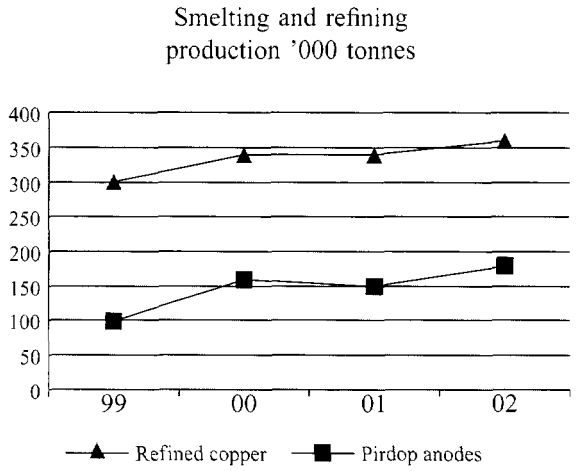
In 2002, the Pirdop plant, which was acquired by Umicore in 1997, saw the completion of a USD 150 million investment programme, which targeted both production and environmental issues. Apart from productivity improvements, this plan involved a significant increase in the smelting capacity. During the first half of 2003, Pirdop's operational performance fully met expectations and the plant has reached the planned annual production level of 210,000 tonnes of anodes. The environmental remediation part of the investment, aimed at cleaning up the historical site pollution, was also completed in the course of 2002.

Since 1997, Pirdop's productivity has seen a tremendous improvement with more than twice as much output now being achieved with less than half of the manpower.

Umicore Copper in Olen comprises a melting and casting anode furnace processing copper blister and scrap and a state-of-the-art FSD (Full Size Deposit) refinery, commissioned in 1996-1998 with an annual capacity of 340,000 tonnes.

Competitors in the smelting and refining sector in Europe are KGHM (Poland), Norddeutsche Affinerie (Germany), Atlantic Copper (Spain), Outokumpu/Boliden (Finland, Sweden).

Smelting and refining chart:



4.4.2. Copper Products

COPPER PRODUCTS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Contirod (wire rod)	Cables, wire, conductors	Communications, railway power cables, electricity industry, automobile industry, building wire
Foxrod (oxygen free wire rod)	High-performance wire	Robotics industry, electronics
Nuggets	Alloys, electroplating, galvanizing, powders	Plating and printing industries
Wire	Cables and wires	See Contirod above
Billets	Tubing, piping, shaped bars, bearings	Industrial equipment manufacturers, construction, HVAC
Cakes	Sheets, plates, strips, foils, electric components, tanks, transformers, coins	Construction, electric/electronics, mint

At the Olen site Umicore runs its proprietary continuous casting process for wire rod (Contirod®) with an annual capacity of 280,000 tonnes. Umicore also operates two upcast lines with a capacity of 18,000 tonnes per year of oxygen free rod, marketed under the brand name Foxrod®, which is dedicated to ultra-fine wire and copper profiles.

In Avellino, Italy, Umicore has a second Contirod line with a capacity of 170,000 tonnes of wirerod per year. In the same location a drawing unit produces about 8,000 tonnes a year of various types of bare wires. Olen and Avellino represent an annual wirerod capacity of 470,000 tonnes (including Foxrod and nuggets). In wirerod, Umicore Copper enjoys the biggest share of the non-integrated European market and has about 17% of the total rod production. Although the European rod market is mainly a domestic one, Umicore also exported in 2002 about 55,000 tonnes of wirerod to non-European countries proving its success in exporting to other regions.

Early in 2003, Umicore Copper took over the assets of Climeta, a company producing copper nuggets. Copper nuggets are mainly used in the electroplating industry and as such form a further downstream development of the business into activities with an interesting higher added value component.

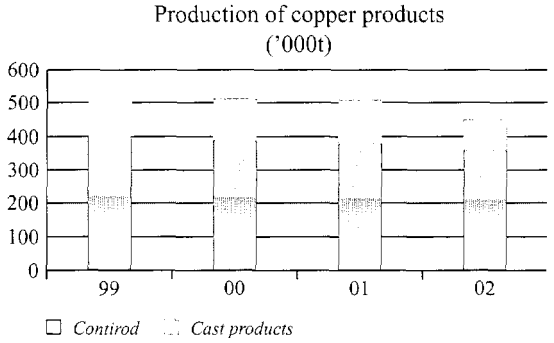
Climeta produces some 3,000 tonnes of copper nuggets per year of various specifications and distributes other complementary products for the electroplating industry, mainly nickel crowns.

Besides wirerod and wire, Umicore Copper also produces, in Olen, cast shapes – billets and cakes – with a combined annual capacity of 140,000 tonnes. Billets are used in the fabrication of tubes, bars and sections while

cakes are sold to rolling mills for the making of flat products such as sheets foils and strips. Umicore Copper is the second largest independent supplier of these products on the European market. Umicore has a market share of about 18% of this non-integrated market.

Competition in copper products comes from European companies such as: Norddeutsche Affinerie (Germany), KGHM (Poland), Nexans (France), Colata Continua Italiana (Italy), Brixlegg (Austria), Atlantic Copper (Spain).

Copper products chart:



4.4.3. Copper: Growth initiatives 2000-2003

4.4.3.1. Organic growth:

Umicore focused strongly on internal developments such as the integration, development and expansion of the Bulgarian smelter and refinery it acquired in 1997 (details of the capacity expansion at Pirdop and the rehabilitation programme can be found in the sections above). During this period Umicore also increased its production capacity for oxygen-free rod from 2,500 tonnes to 18,000 and completed the second phase of the new tankhouse at the Olen refinery.

4.4.3.2. Acquisitions:

In 2003, Umicore acquired production facilities for copper nuggets from Climeta (France). These added-value products are used in the plating industry and complete Umicore's product range.

4.4.4. Copper: security of supply

Umicore's strategy is to secure its feed through long term supply contracts, optimising both the share of recycled feedstock and the utilization of its four facilities.

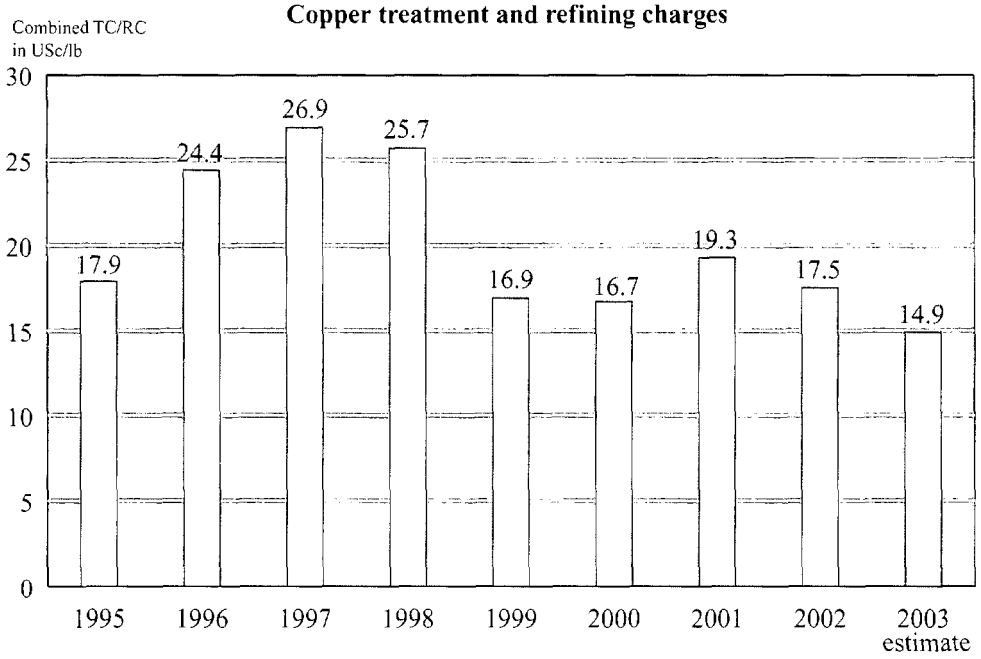
Approximately 35% of the Pirdop smelter feedstock is supplied by long-term contracts with local Bulgarian mines while the balance is met by imported concentrates contracted with established copper miners from around the world through long-term contracts. Pirdop itself provides a significant portion of the Olen feedstock in the form of anodes. Olen is also supplied by Non-Ferrous International (NFI) – a leading European metal recycler – in which Umicore holds an 8.8% stake and other copper smelters. The Avellino site gets most of its cathode feedstock from long term contracts with world-wide suppliers and a part also comes from customers under tolling agreements.

As for recycling, some 25% of Umicore's copper feedstock comes directly or indirectly from secondary sources.

4.4.5. Copper business drivers (Smelting, refining and products)

Results of Umicore Copper are mostly driven by the level of treatment and refining charges offered in the market, which are determined by the material supply/demand balance. The EBIT sensitivity is approximately USD 4.5 million per year for a change of one cent/lb in treatment and refining charges. Additional revenues are driven by the premium on the cathodes produced and the conversion premium to transform cathodes into wirerod and shapes. These premia reflect the state of supply and the company's market competitiveness respectively.

Copper treatment and refining charges



Source: Brook Hunt

4.4.6. Consolidation prospects

Umicore is assessing consolidation opportunities within the European copper industry. This assessment process has slowed down since the acquisition of PMG but it remains one of Umicore's medium term objectives. In preparation for any future value creating partnership, Umicore is carving out its copper activities into a fully owned subsidiary and announced an additional restructuring programme at the Olen site (involving a workforce reduction of 127 FTEs, mainly in support service functions).

4.4.7. Market conditions

The worldwide drop in demand for copper in 2001 resulted in historic lows for the copper price. Despite a degree of production discipline from miners, the price did not recover during 2002. Market treatment and refining charges have remained at extremely low levels amidst a tight market for concentrates and scrap while LME inventories have not come off their highs.

Conditions did not materially improve during the first half of 2003. A tight market for raw materials (concentrates and scrap) resulting in particular from increased demand from Indian and Chinese smelters (able to settle for low treatment charges due to subsidies) put additional pressure on global treatment and refining charges, further impacting smelting and refining revenues of Umicore Copper.

Demand in the western world remains depressed. The weakness in the German industrial sector (especially electronics, communications and construction) continued. European wire rod premiums also suffered, despite some resilience in Southern European markets.

4.5. PRECIOUS METALS (HOBOKEN)

	1999	*2000*	*2001*	*2002*	***H1 2003***
			€ million		
EBIT	(0.3)	30.6	50.3	52.5	**23.3**
EBITDA	20.8	50.9	71.4	74.0	**33.3**
Added Value	95.9	116.7	139.7	158.3	**74.9**
Turnover	777.8	739.7	764.3	767.9	**347.7**
Average capital employed	221.0	176.5	176.0	162.3	**160.3**
ROCE	(0.1%)	17.4%	28.6%	32.3%	**29.1%**
Capital Expenditure	10.4	14.6	17.9	36.3	**12.4**
Workforce at end of period	1,215	1,226	1,179	1,160	**1,149**

NB: The description below is of Umicore's precious metals operations prior to the acquisition of PMG

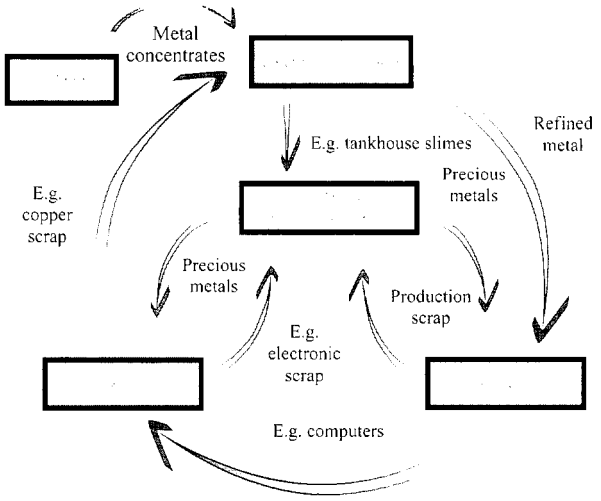
PRECIOUS METALS: locations

Umicore Precious Metals (UPM) is a world market leader in recycling complex materials containing precious metals. Its core business is to provide full-feature refining and recycling services to an international customer base.

UPM's facility in Hoboken, near Antwerp (Belgium) is one of the world's largest and most advanced precious metals recycling and recovery operations. The plant recycles and refines precious metals and other non-ferrous metals from a wide range of complex industrial intermediate materials (by-products from other non-ferrous smelting and refining operations) and specific precious metals-bearing scrap from electronic, photographic and catalytic (oil refining, petrochemical and automotive) applications.

In order to consolidate its position as the world's leading precious metals recycler, Umicore Precious Metals has conducted a significant investment programme, which included the re-engineering of the entire metallurgical flowsheet, based on state-of-the-art technology. New installations such as a copper smelter and silver and gold refineries were commissioned at the end of the 1990s accompanied by substantial capacity increases for platinum group metals. Installed capacity is sufficient to face the expected growth in raw materials availability and supply. In 2003, a copper leaching and electrowinning facility was commissioned which has further improved the operational capacities and capabilities of the plant.

Precious metals, specialty metals, secondary metals as well as base metals are recovered by means of a unique metallurgical flowsheet, satisfying the most stringent environmental standards. It is committed to achieving the best levels of recovery of valuable elements in its feed supply.



Umicore Precious Metals position in the market: a service that completes the supply chain.

Umicore Precious Metals is recognised as a world-class player, not only for the quality of its technologies and products, but also for the quality of service it provides to its customers. The company often acts as a toll refiner, where all or part of the metals contained in the raw materials are returned to the supplier. Alternatively Umicore Precious Metals purchases the raw materials or the metals contained and uses its expertise to sell the valuable metals at the best available market conditions.

The company operates a metals management function which provides a range of services internally and to its customers. The clients, for example, can optimise their operations by using these services such as leasing, cessions or other techniques to reduce their own capital employed.

Hoboken operates a unique metallurgical flowsheet which ensures the efficient refining of a wide range of complex and valuable raw materials. More than EUR 100 million was invested over time in the development and installation of this new metallurgical process. It is based on complex lead, copper, nickel metallurgy, using these base metals as collectors for precious metals and other by-products such as antimony, bismuth, tin, selenium, tellurium and indium. The main advantage of the new process is increased productivity combined with greater efficiency, which results in maximized metal recovery rates and means that metals can be returned to customers faster.

4.5.1. Sampling & Assaying

Sampling and assaying are crucial stages in Hoboken's high value precious metals activity.

Umicore Precious Metals' sampling department produces representative samples of each lot of incoming material. The samples will be used to determine the metals content of the entire lot. The diversity, complexity and often varying levels of precious metals content of the several thousand incoming lots per year mean sampling and assaying are essential in determining the customers' financial yield.

Umicore's Precious Metals dedicates more than 15% of its operating budget to this unrivalled service. The sampling site is recognised internationally as a reference for sampling and assaying of complex materials, even with extremely low metals contents.

Correct, accurate and dedicated sampling is the first step towards the exact determination of the precious and non-ferrous metals content of the delivered material. Umicore Precious Metals, committed to in-house development of process technology, has used its experience to combine traditional methods and new technologies into comprehensive, largely automated sampling programmes for all its business lines. Sampling of electronic scrap, spent catalysts, tankhouse slimes, metallic material, sweeps and bulk material has to a large extent been

automated, minimising human intervention that could affect the results. This part of the plant is located in a secured area with restricted access ensuring a thorough protection against potential fraud.

The samples are sent to the in-house analytical laboratories where a combination of advanced instrumentation and conventional assays contribute to the accurate identification and assessment of the metals contained in the sample.

4.5.2. Raw materials

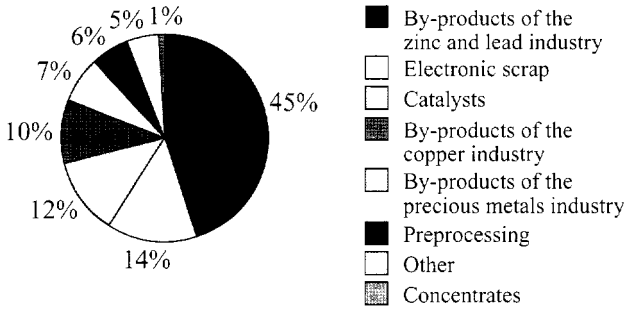
Umicore Precious Metals treats a wide range of complex raw materials from a variety of world-wide sources. Each year Hoboken receives more than 200,000 tonnes of about 200 different raw materials containing among others lead, copper, nickel and precious metals. The fully integrated, multiple input flowsheet allows Umicore Precious Metals to process these complex precious metals-bearing products coming from all types of industries. Increasingly there is a special focus on new sources of feed such as electronic scrap and spent catalysts. The flexibility of the flowsheet allows a high degree of selectivity depending on what are the most attractive types of raw materials available at any time on the market.

Basically, there are two different categories of raw materials treated at the Hoboken plant:

1. By-products from non-ferrous smelting and refining operations
   - Anode slimes
   - Drosses, mattes, speiss
   - Lead residues from zinc industry

2. Consumer and industrial recyclable products
   - Electronic scrap
   - Spent catalysts
   - Sweeps and bullions

4.5.2.1. Supplies of raw materials 2002



Tankhouse/Anode Slimes

Precious-metals-containing anode or tankhouse slimes are produced during the electro-refining of copper and other base metals. It is a high value, complex product containing up to 15 different metals and impurities in fluctuating proportions.

Drosses, mattes and speiss

Umicore Precious Metals is the major market player for treating intermediate products from lead and copper smelters containing a valuable content of precious metals including drosses, mattes and speiss.

Electronic Scrap

Over the last few decades, the development and use of electronic equipment has accelerated tremendously. As a consequence, the life cycle of electronic devices is decreasing, while the production volumes are increasing.

Electronic scrap contains significant amounts of valuable precious metals and base metals. In order to protect our resources, there is a growing need for ecologically sound but profitable solutions for their recovery.

Spent Catalysts

Spent precious-metals-containing catalysts from the oil refining and petrochemical industry have been part of Umicore Precious Metals' feed for a decade or two.

As far as autocatalysts are concerned, Umicore Precious Metals was one of the first companies to process PGM-coated beads or honeycomb into high-purity platinum, palladium and rhodium sponge.

Sweeps and bullions

Umicore Precious Metals has a long-standing experience treating sweeps and bullions. Ranging from various sources such as incineration of electronic scrap, precious-metals-bearing milled slags or metallic scraps, sweeps and bullions actually close the loop of the pre-processing chain resulting in final refining.

Sweeps are defined as a dry, free-flowing, inorganic powder consisting of fine particles, homogenised and bearing significant precious metal elements (sometimes resulting from an incinerating process) and are sourced from the photographic industry, jewellery manufacturers, recyclers and pre-processors of end-of-life materials.

Bullions originate primarily from a smelting or melting process of jewellery, electronic and dentistry scrap, containing sufficient amounts of recoverable elements, cast into ingots or blocks. Copper is one of the major non-ferrous elements combined with precious metals and/or platinum group metals.

4.5.3. Product overview

PRECIOUS METALS – product overview

PRODUCT	*APPLICATION*
Gold	Electronics, coins, jewellery
Silver	Jewellery, photography, catalysts, mirrors, coins, dentistry, electronics
Platinum	Car catalysts, chemical applications, glass industry, electronics, dentistry, jewellery
Palladium	Electronics, car catalysts, jewellery, dentistry
Rhodium	Car catalysts, chemicals, glass de-colouring

PRECIOUS METALS – by-product overview

PRODUCT	*APPLICATION*
Lead	Batteries, pigments and compounds, cable sheeting, rolled and extruded products, alloys
Copper	See copper section
Sulphuric acid (commercialised by Umicore Zinc)	Paper bleaching, fertilizers
Antimony (sodium antimonate)	TV and other lead glass, flame retardant
Arsenic trioxide	Wood protection, laser printers, glassware
Tin (calcium stannate)	Solder, chemicals, tin-plate
Nickel (nickel sulphate)	Used by Advanced Materials
Bismuth	Alloys, solders, pastes, galvanising
Aggregate	Concrete additive

It should be remembered that the primary offering of Umicore's Precious Metals business is the service provided to the raw materials suppliers.

The end products are pure un-wrought metals:

Silver – Umicore Precious Metals has a production capacity of more than 2,400 tonnes per year of high purity silver, which makes it one of the world's largest silver refineries. Silver is produced as granules and ingots.

Gold – Umicore Precious Metals' production capacity for gold exceeds 100 tonnes per year. Gold is produced as high-purity ingots and grains.

Platinum Group Metals – Umicore Precious Metals is Europe's largest producer of rhodium and palladium, and second largest of platinum, with production capacities of 2.5, 25 and 15 tonnes per year respectively. All these metals are produced in the form of a high purity powder, known as sponge.

Specialty metals: tellurium, selenium and indium – Umicore Precious Metals has an annual production capacity of 150 tonnes of tellurium, 600 tonnes of selenium and 30 tonnes of indium.

Secondary metals (metal compounds): Umicore Precious Metals has a production capacity of about 6,000 tonnes per year of sodium antimonate, which is produced as a powder and 1,000 tonnes of arsenic trioxide.

Base metals

Lead – Umicore Precious Metals produces refined lead. Its capacity exceeds 125,000 tonnes per year but production is significantly lower than this.

Copper – Copper cathodes are produced in the recently commissioned electrowinning refinery which is dedicated to refining copper blister with a high precious metals content previously refined at Olen. Capacity amounts to 30,000 tonnes per year.

Other products:

Sulphuric acid – capacity is about 100,000 tonnes per year.

4.5.4. Competitors

UPM competes with a number of precious metals recycling and refining service providers.

UPM operates the most flexible precious metals recycling plant and is able to focus on large volumes of any type of raw materials with relatively low concentrations of precious metals. Competitors able to treat a wide range of secondary products include Noranda in Canada, Boliden in Sweden and Norddeutsche Affinerie in Germany.

The other competitors are mainly active in the handling of a more limited range of secondary raw materials, or are even specialised in the treatment of one type of scrap only.

Johnson Matthey, Engelhard and Heraeus, which are the major manufacturers of precious metals based products and the main global competitors of PMG (see PMG section), all offer recycling services for a certain range of materials, often in the frame of a closed-loop activity.

Other important players in the smelting/refining of secondary precious metals-bearing materials include:

- Falconbridge (spent catalysts)
- Gemini (spent industrial catalysts)
- Impala (primary PGM smelter/refinery + spent catalysts)
- Inco (spent auto catalysts)
- Multimetco (spent catalysts)
- NE Chemcat (spent catalysts)
- Nippon PGM/Dowa (spent catalysts, copper anode slimes, lead/zinc by-products)
- Norilsk (primary PGM smelter/refinery + spent auto catalysts, ...)
- Penoles (non-ferrous metal by-products)
- Stillwater (spent auto catalysts)
- Techemet (spent auto catalysts)

4.5.5. Precious Metals: growth initiatives 2000 – 2003

4.5.5.1. Organic growth:

The most recent major investment at Hoboken has been the leaching and electrowinning facility, which was commissioned in early 2003 (for details see above). Ongoing efforts are made to tap new sources of recyclable materials (secondary or end-of-life) and thereby grow the business. In this context, UPM intends to develop its links with OEMs.

4.5.5.2. Acquisitions

The acquisition of PMG in 2003 was the most fundamental step in Umicore's recent development both on a general corporate level but also for the precious metals business in the added scope it brings in several areas including accessing a wide range of downstream product areas, and further expansion of competencies in metals management.

4.5.6. Precious Metals: security of feed

Securing feed from the various supply sources of precious-metals-bearing materials is of paramount importance for Umicore Precious Metals. The business is insulated to a certain extent from reductions in availability of any one raw material due to its flexible flow sheet and consequent ability to change the proportions of different feed at short notice. Umicore is able to optimise its returns by selecting the most attractive possible combinations of feed materials at any given time – this is made possible by the flexibility of the flow sheet. The Hoboken facility has spare capacity which will enable the company to handle any future increase in raw materials supply or refining needs

In recent years Umicore has made significant efforts to convince various smelting and refining operations which previously treated their residues 'in-house' to outsource this function to the Hoboken facility. The ability to offer this beneficial service in terms of economics, logistics and environmental considerations has enabled Umicore to secure important feed from operations as far away as South America.

Umicore also has strong relationships with various networks of scrap collectors throughout the world and is able to secure feedstock of electronic scrap, spent petrochemical catalysts and automotive catalysts from a variety of different sources. In this context Umicore has its own automotive catalyst collection and de-canning operation, Bowden, based in Tennessee (USA) and also operates a decanning operation at Hoboken.

It is Umicore's stated objective to further develop partnerships with various OEMs in various manufacturing sectors in order to benefit from the current legislative trend (especially in Europe) whereby OEMs are becoming increasingly liable for ensuring the collection and recycling of their end-of-life products.

4.5.7. Business drivers

As stated above, UPM depends on the availability of precious metals-bearing materials (which is linked to economic conditions of various sectors of activity, to the metals price and to the evolution of legislation), on its ability to attract raw materials in a competitive environment, and on its operational excellence.

Technology

UPM has developed a proprietary, flexible technology for the treatment of complex precious metals bearing materials, supported by a low cost of operation and a high level of recovery, which ensures it a competitive advantage and leadership position in the market. It is constantly updating its technological capabilities in order to further improve its flexibility – the facility has recently made a breakthrough in its ability to process leach residues from the zinc industry for example. Its state-of-the-art sampling and assaying installations reinforce this position. In addition to its know-how, the level of investment made in developing a high-volume, flexible plant at Hoboken ensures that the entry barrier has been set at a high level.

Environment, recycling and legislation

Present and future raw materials feed, which is key to the success of UPM, is strongly supported by the strengthening of environmental legislation in key areas of the world.

Pollution control boosts the consumption of PGMs, e.g. in autocatalysts, which at the end of their life-cycle enter into the recycling circuit, and constitute a growing feed for Hoboken.

Recycling, especially of end-of-life consumer and industrial products, is becoming more and more widespread, either on a voluntary basis or following the introduction of legislative measures. For example, the

recent WEEE European directive will gradually make compulsory the recycling of electrical and electronic devices (many of which contain precious metals). This trend should further increase the availability of precious-metals-bearing materials to be recycled and offers large growth opportunities for UPM.

4.5.8. Current market conditions

The operations at Hoboken have recently been somewhat affected by the reduced supplies of raw materials. Availability of tank house slimes from the copper industry and residues from lead smelters have been down, leading to increased competition in the market for these raw materials. In particular, the closure of several lead and zinc smelters in Europe has resulted in changes in the flows of by-products from that industry and affected the availability of certain types of feed. However, Umicore's flow sheet has provided the appropriate flexibility to cope with this situation and to secure satisfactory levels of activity albeit with a variable mix of feed.

The low price of palladium and rhodium has affected the availability of end-of-life materials such as electronic scrap and auto-catalysts as collectors wait for prices to rise. The downturn in the electronics industry has also meant reduced replacement of equipment and a consequent temporary reduction in e-scrap availability. However, in the medium to longer term the availability of both electronic scrap and spent catalysts is set to increase, driven by increased consumption of these products and coupled with legislative trends (covered in the 'business drivers' section).

Continued improvements in productivity and process efficiency (the latter leading to further reductions in working capital) have provided Umicore Precious Metals with a positive counterweight to the prevailing market conditions.

4.6. PMG

OM Group reported operating profits of USD 66.9 million in 2002 for its Precious Metals Chemistry segment, or USD 84 million before restructuring charges of USD 17.1 million This segment included all PMG business units but Metals Management, i.e. Automotive Catalysts, Technical Materials, Jewelry & Electroplating, Refining Services, Compounds and Fuel Cells.

Metals Management activities which were treated as a separate segment, reported an operating profit of USD 11.1 million for 2002. The above figures were extracted from OM Group's annual report and filings with the US Securities and Exchange Commission ("SEC").

All PMG figures reported by OM Group were established in accordance with US GAAP. They also reflect purchase accounting entries resulting from the acquisition of dmc[2] by OM Group in 2001.

The figures presented in the table below are extracted from PMG's management reports, which are established in EUR, for the year 2002 and the first half of 2003. They were prepared in accordance with US GAAP, but exclude purchase accounting entries that were specific to OM Group and restructuring charges.

	First half 2002	*Full year 2002*	*First half 2003*
	(Unaudited figures, million EUR)		
Sales	2,262	4,427	1,859
Sales excl. precious metals content	279	552	279
EBIT	44	79	37
Depreciation & amortization	10	22	11
EBITDA	54	101	48

Sales in the first half of 2003 were lower than in the corresponding period of 2002 reflecting primarily the effect of a weaker US dollar. Excluding precious metals, sales were in line with prior year, with higher sales in Automotive Catalysts and in Jewelry & Electroplating compensating for lower sales in other business units. EBIT decreased by 7 million EUR from the first half of 2002, mainly due to the planned costs of ramping up the autocatalysts production capacity in North America, lower performance in Refining Services and unfavourable exchange rate fluctuations.

The due diligence conducted by Umicore and its external advisors has not revealed elements that would have called for significant corrections to the sales or EBIT figures as shown in PMG's management report for 2002 and the first half of 2003 in order to align them to the accounting rules presently used by Umicore.

Similarly, the conversion from US GAAP to IFRS may have an impact on individual lines of profit and loss statements but should not lead to a significant change of the reported EBIT numbers.

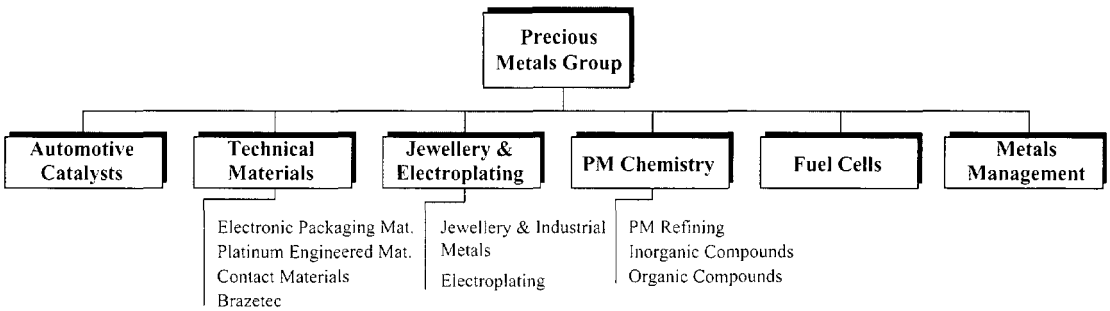
The estimated impact of the acquisition of PMG on the balance sheet of Umicore has been added in section 6.2.

PMG: Locations

4.6.1. History

PMG's history goes back to the 19th century, with the foundation of Deutsche Gold- und Silberscheideanstalt AG (Degussa) in Frankfurt-Main in 1873. The first development of highly adherent, bright gold for the decoration of glass, porcelain and ceramics happened in 1879 (later called the Cerdec division). In 1968 it started its research and development activities in the field of automotive catalysts. As a consequence of the merger of Degussa AG and Hüls AG in 1998 the divisions Precious Metals, Automotive Catalysts and Cerdec were merged, carved out under the name Degussa Metals Catalyst Cerdec ("dmc^2"), and became a wholly-owned subsidiary of Degussa-Hüls as of 1 January 2000. In 2001, Degussa-Hüls AG sold dmc^2 to OM Group in the US, which immediately thereafter sold the Cerdec division and some precious metals powder activities to Ferro Corporation in the US. Following the sale, OM Group owned the metals management, automotive catalyst, fuel cells, precious metals chemistry, technical materials and jewellery and electroplating businesses of dmc^2, which were regrouped as OM Group's Precious Metals Group. In 2002, under pressure from its high indebtedness, OM Group put its Precious Metals Group up for sale. In June 2003, OM Group and Umicore announced an agreement for the sale of OM Group's Precious Metals Group to Umicore for an amount of EUR 643m. The sale was completed at the end of July 2003.

Below is a chart showing the organization of PMG in its different business units and business lines prior to integration within Umicore:



PMG has approximately 3,500 employees, and has production, sales and marketing and technical service centre facilities located around the world. PMG has four technology centres, fifteen regional production locations and five customer service locations.

4.6.2. Business overview

In PMG, Umicore has acquired an international diversified producer of complex functional materials based on extensive expertise in chemistry, metallurgy and materials science using mainly precious metals. PMG is a technology leader and sells many of its products to original equipment manufacturers (OEMs), component manufacturers and, in some cases, manufacturers of finished goods. For example, PMG develops and produces:

- Catalysts for use in gasoline and diesel emission control systems mounted in automobiles, heavy-duty vehicles and motorcycles;
- Precious metal and base metal products that are purchased by manufacturers of electronic components especially for use in the telecommunication, automotive and consumer electronic industries;
- Organic and inorganic precious metal compounds required for the catalytic reactions that are used in the production of specialty chemicals, pharmaceuticals and other chemical products;
- Platinum engineered materials for use in high-tech glass manufacturing, such as flat screens for personal computers;
- Semi-finished precious metals for use by manufacturers of traditional jewellery.

In conjunction with and in addition to its product offerings, PMG also offers its customers two specialized services: refining of precious metals, particularly platinum group metals, from used materials, especially automotive, chemical and petrochemical catalysts and materials from the jewellery and electronics industries; and precious metals management services, such as the provision of precious metals, precious metals consultancy and hedging services. PMG also engages in proprietary trading of precious metals within specific risk limits.

PMG is also targeting the promising market for novel environmentally friendly energy systems called Proton Exchange Membrane Fuel Cells (PEM Fuel Cells), which will use components, such as complete membrane electrode assemblies (MEAs) and electrocatalysts (for use in MEAs) as well as fuel reforming catalysts for the conversion of hydrocarbons into hydrogen. These components are designed for PEM Fuel Cells for use in portable applications (laptop computers, cellular phones); stationary applications (power and heat generators) and mobile applications (automobiles).

4.6.2.1. Research and Development

PMG's research and development program is an integral part of its business model and a necessary tool to develop innovative products. PMG employs approximately 350 scientists, technicians and auxiliary personnel engaged in research and development. The R&D activities focus on adapting proprietary technologies to new products as well as working closely with customers to fulfill their specific needs. Although the majority of research and development is done on a divisional basis, PMG has institutionalized a research and development platform to ensure that research and development is shared across all the different businesses.

4.6.2.2. Business focus

In line with Umicore's overall approach, PMG focuses on customers whose businesses are driven by changes in technology and who need novel materials tailor made to enable their products to perform their intended functions. It focuses on the following five complementary technology platforms:

- Solid state chemistry: technology relating to the production, qualities and chemical reactions of solid chemical materials.
- Powders and nano-technology: technology relating to the production of fine and nano-sized powders.
- Catalysis: technology relating to the synthesis and use of substances that cause or modify (slow, or more often accelerate) a chemical reaction without being consumed in the reaction. These substances are called "catalysts".

- Surface technology: the technology relating to the modification of solid surfaces.

- Materials science: the technology relating to the characteristics and scientific uses of various materials.

4.6.2.3. General market drivers

Two key trends are driving growing market demand for PMG's complex functional materials:

1. The demand for more intelligent products

PMG offers competencies in complex functional materials which allow it to exploit the growing market demand for innovative technological solutions in a variety of different sectors. PMG develops and produces functional materials that are technological precursors for products based on key growing or emerging technologies, including:

- Energy technologies such as fuel cells and batteries;

- Catalysis technologies for the pharmaceutical, fine chemistry and environmental industries;

- Information technologies such as high-compression data storage and packaging materials for micro- and power electronics.

PMG is a technology leader which can supply its customers with the essential precursors they need to make advanced products that demand greater functionality, smaller size and lower cost. For example, PMG offers electronic packaging materials used in microelectronics and platinum engineered materials for use in high-tech glass manufacturing, such as flat glass for computer screens.

2. The desire to improve quality of life through resource management, environmental protection and novel energy concepts:

To address the demand for improving the quality of life through resource management, environmental protection and novel energy concepts, PMG has focused on developing products and services that are expected to meet these needs, such as:

- Gasoline and diesel catalysts for advanced automotive emission control systems;

- Recycling of platinum group metals from used automotive, chemical and petrochemical catalysts;

- Essential components of novel PEM fuel cell systems, which in comparison to conventional power systems are expected to use less (or no) fossil fuels and would offer low or no pollution, higher fuel efficiency, greater flexibility in installation and operation, quiet operation, low vibration and potentially lower maintenance and capital costs;

- Cadmium-free alloys for the electrical industry.

4.6.2.4. PMG's competitive strengths

- *Diverse technology skills:* combining its five technology platforms to provide its customers with innovative solutions and to perform tasks internally that its competitors must out-source, enabling it to assist customers quickly and cost-effectively.

- *Precious metal know-how:* Precious metals are a primary raw material for most of PMG's products and services. PMG's experience in precious metals management gives it an advantage over some of its competitors. Its ability to refine precious metals from spent materials also enables it to offer customers a complete service package from supply of precious metals materials to recovery of precious metals from used materials (a closed loop offering).

- *Joint development arrangements with market and technology leaders:* PMG has entered into joint development arrangements with current market and technology leaders (as well as with companies it believes will be future leaders) to create innovative, technologically demanding products. This is particularly well illustrated in the case of Automotive Catalysts, the Fuel Cells venture and in homogeneous catalysis.

- *Global presence:* PMG has a global presence, with offices, research and development laboratories, production sites and technical service centres throughout the world.

- *Dedication to research and development:* as PMG focuses on customers whose businesses are driven by change in technology, it invests in research and development relating to new technologies, focusing primarily on those business areas with the greatest revenue potential. In this context (and also a major contributor to the success of the businesses themselves) the strength of its team of experts such as chemists, physicists, metals scientists and engineers is key.

- *Broad product and service range:* PMG leverages its technology strengths into diverse markets, allowing customers to do one-stop shopping for their many different needs. This diversity also has other benefits such as reducing the exposure of the business as a whole to any one end-user industry or sector. Similarly, the businesses within PMG are a mixture of mature businesses exhibiting stable growth characteristics and those exposed to newer, more rapidly growing markets.

PMG's principal competitors, as well as its customers, vary by business area, and are mentioned in the relevant descriptions below.

4.6.3. Automotive Catalysts (AC)

AUTOMOTIVE CATALYSTS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Gasoline catalysts	Emission control in automobiles, and other vehicles	Automobile manufacturers
Diesel catalysts	Emission control in automobiles, and other vehicles	Automobile manufacturers
Diesel particulate filters	Control of particulate emissions in automobiles and other vehicles	Automobile manufacturers
NOx adsorber catalysts	Emission control in lean burn gasoline engines	Automobile manufacturers

The headquarters and most important R&D laboratories of Automotive Catalysts are located in Hanau (Germany). In addition, it has eight production sites: Rheinfelden (Germany), Karlskoga (Sweden), Port Elizabeth (South Africa; 55% ownership), Burlington, (Ontario, Canada), Americana (Brazil), including the three 50% joint ventures: ICT Inc. (USA), ICT Co. (Japan), and Ordeg Co. Ltd. (South Korea). Furthermore, the division has five technical centres for the development of automotive catalysts world-wide.

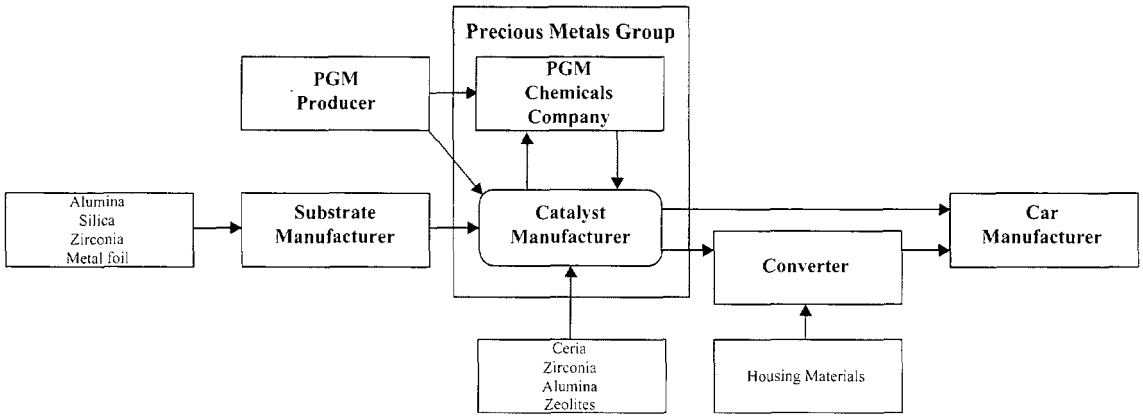
Automotive catalysts or car catalytic converters are anti-pollution devices located in the exhaust system of a vehicle. They are designed to control a vehicle's exhaust emission released by the combustion of gasoline and diesel fuels by facilitating chemical reactions that convert harmful exhaust pollutants, such as carbon monoxide, unburned hydrocarbons, nitrogen oxides, and particulates to normal atmospheric gases, such as nitrogen, carbon dioxide and water.

The autocatalyst comprises of a fine ceramic or metallic honeycomb substrate (known as "brick") coated with a thin layer of active chemicals and catalysts. The most important catalysts are Platinum Group Metals: platinum (Pt), palladium (Pd) and rhodium (Rh). To eliminate the pollutants, post-combustion auto catalysts are used within the exhaust system to promote reactions that prevent their emission. The manufacture of auto catalysts requires specialist processes and technical know-how.

The Automotive Catalyst business is the third largest designer and manufacturer of catalysts used in gasoline internal combustion engines in the world and the largest designer and manufacturer of catalysts in the world for use in diesel internal combustion engines. Automotive Catalysts primarily supplies platinum metals based catalysts to automotive OEMs for use in emission control systems for automobiles and heavy-duty vehicles, as well as minor sales to the retrofit and replacement markets. Automotive Catalysts works in close cooperation with automotive OEMs to design and develop the automotive emission control systems.

4.6.3.1. Value chain

Automotive Catalysts is active in the middle of the auto catalysts value chain:



PMG designs catalytic solutions for and in collaboration with OEMs in order to enable them to meet emission regulations for their vehicles. The centre part of the value/supply chain above is where the most value is added to the catalytic elements of the automotive emission control systems.

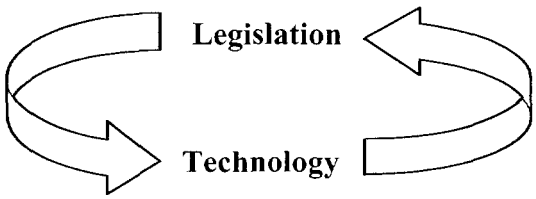
4.6.3.2. Automotive Catalysts: business drivers

Technology:

The ability to develop increasingly innovative and technologically advanced solutions to meet the needs of the automotive OEMs is the key factor in this sector. Over the years, as emission regulations have become stricter so the catalyst designers have had to come up with more and more advanced technologies to meet the various requirements of their customers. New technologies include but are not limited to multi-brick catalyst systems (previously only one brick tended to be used); multi-step coatings and catalytic systems that interact with the new generation of engine management systems. Through the combination of technology leadership and close customer collaboration PMG aims to design systems that not only enable the customer to meet relevant emission standards but also to reduce costs.

Legislation:

The other key driver in this market is the trend towards increased legislation regarding automotive emissions not only in Europe and the USA but throughout the world. The rate of growth in the catalysts market is expected to exceed the rate of growth in the automotive market because tightening automotive emissions legislation throughout the world will increase the use and complexity of emission control systems and require the use of more catalysts per automobile. The increase in such legislative measures drives the search for new technologies. At the same time, technological breakthroughs can encourage the drafting of new legislation:



4.6.3.3. Markets:

Automotive Catalysts, through its leadership in diesel catalysts, has benefited from a shift in the European market towards this technology, as diesel internal combustion engines generally are more fuel-efficient than gasoline internal combustion engines.

The European market for diesel catalysts is expected to grow further when diesel particulate filters become more widely used, eliminating certain concerns in the use of diesel fuel. Research and development

efforts have enabled Automotive Catalysts to supply the first, and currently only, commercial catalysed diesel particulate filter for use in an automobile. In addition, another focus of both internal research and development efforts and joint development arrangements is the development of diesel catalysts for use in heavy-duty diesel vehicles. In this context, the business is well positioned to address the new emerging market for heavy-duty diesel emission control systems.

In the past, Automotive Catalysts has been underrepresented in the United States. Over the last years, it has dedicated significant marketing and technical resources to the United States in order to gain a stronger market position. These efforts resulted through the award of major orders and even a strategic supply agreement with General Motors in 2002. A ramp-up of production has been taking place at the Burlington facility in Canada during 2003 with shipments due to commence in 2004.

4.6.3.4. Customers and competitors

The main customers of Automotive Catalysts are manufacturers of automobiles and heavy-duty vehicles. These manufacturers are BMW, DaimlerChrysler, Fiat, Ford, General Motors, Mitsubishi Motors Corporation, Opel/Saab (a brand of General Motors), Nissan Motors, PSA Peugeot Citroën and Volkswagen.

Based upon its own internal data, Automotive Catalysts estimates its global market share at approximately 20% for internal combustion engines. Important *competitors* are Engelhard (USA), Johnson Matthey (UK), Delphi Automotive Systems Corp. affiliate ASEC (US), and to a lesser extent, Catalytic Solutions (CSI) (USA). The Automotive Catalyst Division is one of the global leaders in the segment of catalysts for diesel engines (passenger cars).

4.6.4. Technical Materials (TM)

TECHNICAL MATERIALS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Metallic and composite materials: Solder paste, solder balls; die attach materials and sealing materials.	Electronic (micro and power) packaging applications such as ball grid array assemblies	Electronics industry
Platinum/rhodium components, coatings and systems	Production of high-quality glass (flat panel displays) and also in chemical applications	High-end glass manufacturers and chemical industry
Contact and fuse materials	E.g. Circuit breakers and switches	Electrical and electronics industries
Soft solders, brazing alloys, solder pastes[1]	Joining metal to metal	Various industries including construction, tooling and white goods

1 via BrazeTech subsidiary

Technical Materials' headquarters and primary production site are in Hanau (Germany). TM has other important production sites in Vicenza (Italy), Sao Paulo and Manaus (Brazil) and South Plainfield, (NJ, USA). The South Plainfield operation has been restructured to become a finishing operation only. Other smaller operations are located in Singapore and Tsukuba (Japan).

Technical Materials is one of the leading global producers of mainly precious metals based semi-finished products, components and process solutions for the electronic packaging, electrical engineering and glass industries. Many of the products contain either silver or platinum. It is also the leading provider of contact and fuse materials for the electrical engineering industries in the world and a technological leader in the growth markets for platinum engineered materials for the glass industry and electronic packaging materials for the micro- and power electronics industry. Finally, it has a leading position in brazing technology products for the construction and tooling industries.

In manufacturing its brazing materials and contact and fuse materials, PMG predominantly uses silver as a raw material, which is the best material for these applications considering price and material properties.

4.6.4.1. Markets:

Together with the Precious Metals Chemistry business, TM is able to offer the complete cycle for precious metals from recycling to processing and production. This is a considerable advantage because it allows TM to provide a "one stop-shopping-solution" which is greatly appreciated by customers.

Technical Materials has leading market positions in all its strategic product groups. In all four of its units the focus is in matching its technological expertise with in-depth knowledge of the applications of key customers. Technical Materials has a strong presence in Europe and South America whereas the positions in North America and Asia offer further growth opportunities.

4.6.4.2. Customers and competitors

The Technical Materials Division's primary customers are in the electronic packaging, electrical engineering, chemical and glass industries. The Technical Materials Division has a wide spread customer base not depending on one single customer.

Competitors for the TM business unit include a.o. AMI Doduco (USA), Metalor (Switzerland), Chugai (Japan), AMES (USA), Johnson Matthey (UK), CLAL (USA), Lucas Milhaupt (USA), Wolverine (USA), Thessco (UK), Heraeus (Germany), Tanaka (Japan), Senju Metal Industry Co (Japan), Alpha Metals (USA) and Honeywell (USA).

4.6.5. Jewellery and Electroplating (JE)

JEWELLERY AND ELECTROPLATING – product overview

PRODUCT	*APPLICATION*	*END-USER*
Sheets, tubes, strips, wires, blanks	Jewellery, coins	Jewellery industry
Prealloys, anodes, sputtering materials, solders	Various applications in electronics, electrical engineering, optical data storage, photography, surface technology, medical	Electronics industry, CD/DVD manufacturers, photography industry
Refining services	Providing closed loop offering to various customers	JE customers
Precious metal electrolytes, salts and additives	Electroplating	Electronics, ophthalmic, jewellery, watch making, automotive and textile industries

JE operates through a listed company: Allgemeine Gold- und Silberscheideanstalt AG, a 90.8% subsidiary of PMG. Galvanotechnik GmbH (Schwäbisch Gmünd, Germany) a 100% subsidiary of Allgemeine, supplies the electroplating products.

Allgemeine headquarters and main production sites are located in Pforzheim (Germany). It has also been expanding through acquiring and investing in companies with similar businesses and customer focus: Schöne Edelmetaal BV in the Netherlands, JJ Degussa Thailand Ltd in Thailand (Joint Venture), Ögussa GmbH in Austria.

JE is organised into two business units: the Jewellery and Industrial Metals Unit and the Electroplating Unit. Although these two units focus on different technologies, they are combined under Jewellery and Electroplating given their overlapping regional markets and common target customers.

4.6.5.1. Markets

Jewellery and Electroplating offers precious metals products and services to the jewellery, cutlery, garment, flatware, electrical engineering and electronics industries.

- The Jewellery and Industrial Metals unit offers semi-finished precious metal products, precious metal refining focused on the spent materials of the unit's customers and precious metals management to customers in the jewellery, electronics, electrical engineering, optical data storage, photography, surface technology, photochemical and chemical industries. Its semi-finished

precious metals such as sheets, tubes, strips and wires are used for traditional jewellery applications, and also are used for industrial use, such as silver anodes for electroplating.

- The Electroplating unit supplies precious metal electrolytes, precious metal salts and additives. Its electrolyte products and precious metal salts are primarily used in customized electroplating processes offered to customers in the electronics, life-style (spectacles, fashion accessories, watches and jewellery), automotive, medical and textile industries. An electroplating process is a technology whereby thin metallic layers are deposited on different metallic and non-metallic materials. The business designs electroplating processes to suit a customer's needs and can provide the electroplating process in its facilities or assist a customer in setting up self-run facilities.

4.6.5.2. Customers and competitors:

Jewellery and Electroplating's primary customers are in the jewellery, cutlery, flatware, electrical engineering and electronics industries. The Jewellery and Electroplating Division has a wide spread customer base and is not dependent on sales to any one customer.

The business has several large international *competitors*, as well as smaller, more specialised competitors. Among them are Cookson Group (UK), Heraeus (Germany), Metalor (Switzerland), Saxonia Edelmetalle (Germany), Atotech (Germany), Engelhard\CLAL (USA / France), Enthone-OMI (USA) and Shipley Ronal (a sub-division of Rohm & Haas Company) (USA).

4.6.6. Precious Metals Chemistry (PMC)

PRECIOUS METALS CHEMISTRY – product overview

PRODUCT	*APPLICATION*	*END-USER*
Organic and inorganic precious metals compounds	Heterogeneous catalysis	Automotive and chemical industries
	Homogeneous catalysis	Life science, pharmaceutical and specialty chemicals industries
Recycling and refining service for materials containing precious metals		Collectors of spent automotive catalysts, chemical and petrochemical industries

Hanau (Germany) is the most important production site of PMC and co-ordinates the worldwide activities. Apart from that, the division has production facilities in Sao Paulo (Brazil), Manaus (Brazil), Buenos Aires (Argentina), Tsukuba (Japan) and South Plainfield (New Jersey, USA). In 2001, a joint venture was also created with Rhodia (Cycleon) in France, which is active in the collection of spent automotive catalysts in Southern Europe.

The Precious Metals Chemistry Division produces organic and inorganic precious metals compounds for use in catalytic applications and surface applications mainly based on platinum group metals: platinum, palladium, rhodium, ruthenium and iridium. Through this division, PMG also refines platinum group metals from spent materials, such as used automotive, chemical and petrochemical catalysts. In addition to external sales, Precious Metals Chemistry provides many of its products to other PMG businesses such as inorganic precious metals compounds used in the Automotive Catalysts business; and in electrocatalysts and reforming catalysts in Fuel Cells. Precious metal salts are also provided to the electroplating business.

4.6.6.1. Markets

In the past, the majority of Precious Metals Chemistry revenues came from sales of inorganic compounds used in heterogeneous catalysis, such as automotive catalysts, and from related refining services. Future growth is expected to come from the market for organic compounds used in homogeneous catalysis, such as for the production of pharmaceuticals, and in the refining of spent catalysts for customers in the market for these compounds.

The presence of refining activities and the compounds business enables PMG to offer to its customers the entire business loop consisting of PGM compound supply, recycling of precious metals from spent products,

(mainly catalysts) and precious metals management. Although the refining and compounds businesses have become part of different business units within Umicore, the closed loop offering remains central to the business approach. The refining itself is of high importance for customers because it not only recovers valuable components from their spent products but also makes them partially independent of the highly volatile PGM markets.

4.6.6.2. Business drivers

An important growth driver for inorganic and organic precious metals compounds is the tendency of chemical and pharmaceutical companies to outsource the development and production of catalysts. The main reasons are the increasing complexity of catalysts, which require more and more specialised know-how and the necessary expertise in precious metals management, which is indispensable for the production of precious-metals-containing catalysts. Specialised companies can therefore provide this more efficiently. PMC should particularly benefit from this trend, due to its strong expertise in the field of homogeneous catalysis, which grows faster than the heterogeneous catalysis segment. Organic precious metals compounds are mainly used for homogeneous catalysis and are expected to be the fastest growing product of PMC. Another reason for its projected above-market growth is PMC's superior technological expertise in R&D and applied technology, which is highly appreciated by its customers.

4.6.6.3. Customers and competitors

Besides its internal use, the Precious Metals Chemistry Division's primary customers are in the automotive, pharmaceutical, life science and specialty chemical industries.

The main *competitors* in the field of Precious Metals Chemistry are Johnson Matthey (UK), Engelhard (USA), Heraeus (Germany) and Tanaka Kikinzoku Kogyo KK (Japan).

4.6.6.4. Precious Metals Chemistry market shares

World number 2 in organic compounds and world number 3 in inorganic compounds.

4.6.7. Fuel Cells (FC)

FUEL CELLS – product overview

PRODUCT	*APPLICATION*	*END-USER*
Core fuel cell components:		
protonics™ fuel processing catalysts	Fuel processing	Hydrogen production esp. for fuel cells
pMembrain™ MEAs	Membrane electrode assemblies used in PEM fuel cells	Fuel cell developers
elyst™ electrocatalysts	Membrane electrode assemblies used in PEM fuel cells	MEA developers

Currently, all of PMG's fuel cell activities are centred in Hanau (Germany).

The Fuel Cells business is one of the global leaders in the development of Membrane Electrode Assemblies (MEAs), electrocatalysts and reforming catalysts, the key functional components of Polymer Electrolyte Membrane (PEM) fuel cells. A PEM fuel cell (PEMFC) is an electrochemical device that produces electricity from hydrogen without combustion, with pure water and heat as the only by-products. PEMFCs are thus an alternative to fossil fuels for the production of electrical energy, although a fuel cell system can also be operated using fossil fuels in the absence of the appropriate hydrogen infrastructure. Fuel cells can be used in stationary applications (such as residential power plants), mobile applications (such as automobiles and trucks) where fuel cells would be a partial or complete substitute for internal combustion engines, and also in portable applications (such as laptop computers).

PMG's Fuel Cells business has an extensive technical background in precious metals catalysis, state-of-the-art technology, a comprehensive product package, a high number of patents and intellectual property, and good access to the market. It also has good synergies with the other business units and an advanced pilot plant. It is highly valued as a development partner for the leading fuel cell developers because of that leading technology.

The development of PEM fuel cells-technology was pursued for a considerable time by Degussa-Hüls, PMG's owner until 2001. This development has been greatly intensified during recent years. Degussa-Hüls possessed outstanding know-how in the fields of chemical catalysis, automotive catalysts, precious metals chemistry, coating technologies, carbon black and nano-technologies. These core technologies for fuel cells were bundled and concentrated in the creation of what was then called dmc^2 and provided the basis for PMG's leading position in fuel cell technology.

The primary products of PMG's Fuel Cells business are:

- MEAs under the brand pMembrain™, which include PMG's electrocatalysts, used as a core component in PEM fuel cells that produce electricity and water from hydrogen;
- Reforming catalysts under the brand protonics™ used in the fuel processors of PEMFCs for the generation and purification of hydrogen from fossil fuel.

4.6.7.1. Market prospects

Addressing the expected future market demand for fuel cell components is the current major research and development project. Commercial introduction of the first fuel cells for portable applications is expected sometime in 2005-2006, for stationary applications sometime in 2007-2008 and for mobile applications after 2010. Fuel Cells is working to place itself in a leading technological and strategic position to exploit these commercial markets.

4.6.7.2. Development partners and competitors

The key development partners of the Fuel Cells business are producers or manufacturers of complete PEMFCs and developers of fuel processors and stacks that are part of PEMFCs. Despite the intensive links to partners and future customers, FC avoids exclusive development and supplier arrangements and maintains contacts with all relevant developers of fuel cell technology.

The Fuel Cells' main competitors are Johnson Matthey (UK), Dupont (USA), 3M (USA) and W.L. Gore & Associates, Inc. (USA) Its primary customers will be the producers and manufacturers of complete PEM fuel cells and the developers of fuel processors that are often used in combination with PEM fuel cells.

4.6.8. Metals Management (MM)

METALS MANAGEMENT – product overview

PRODUCT	*APPLICATION*	*END-USER*
Hedging, leasing, trading, liquidity provision		Internal customers. External customers such as car manufacturers, dental and electronics firms, trading companies

The Metals Management division is headquartered in Hanau, Germany. The only other location of MM is in South Plainfield, NJ (USA) where almost the entire range of activities mentioned above is offered.

Metals Management is essentially a service organization. It is designed to meet the precious metals needs of every other PMG division, including the provision of precious metals and hedging for the purchase and sale of precious metals. The Metals Management segment also provides precious metals consultancy services both within PMG and to its external customers, engages in proprietary trading within conservative risk limits and sells precious metal in pure form to investors in Germany and Austria.

Although all precious metals included in PMG's products pass through the Metals Management, revenues from such precious metals are reported in the relevant business. Therefore, Metals Management's revenues only consist of revenues from precious metals sold to external customers, from trading, leasing, hedging and the sale precious metal in pure form.

Metals Management has historically been a stable profit contributor with no net trading losses and no significant individual trading losses. This is because of its risk management systems and trading limits. The risk management guidelines set by the management limit trading positions and require organizational separation of trading and trading supervision. The trading limits are both quantitative limits reflecting the fact that different

precious metals have different levels of liquidity, and loss realization limits that require the closing out of a position if its mark-to-market valuation reaches a fixed USD limit. Individual loss realization limits are defined for each trading investment and open positions are tested against these limits twice a day. In addition, in the unlikely event that all limits would be reached simultaneously, an overall loss realization limit of USD 1.3 million is effective. All PMG locations that use precious metals have an on-site precious metals management function that manages the purchase, sale, shipping and financing of precious metals for that division. In each of these locations, precious metals risk management guidelines are in place and enforced. Adherence to these risk management guidelines is monitored by a separate controlling division, who have representatives within Metals Management for continuous oversight of its activities.

Through its Metals Management Division, PMG engages in various international activities, including:

- Provision of the necessary precious metal for the various businesses of PMG.
- Hedging for the purchase and sale of precious metals.
- Sale of precious metals to selected customers.
- Consultancy both within PMG and to its internal and external customers in all questions of precious metals management.
- Proprietary precious metals trading.
- Sale of precious metal ingots to investors (only in Germany and Austria).
- Leasing.

Anglo American Platinum Corporation Limited, Johannesburg (South Africa) is the largest global primary supplier of platinum group metals. PMG sources a substantial portion of its platinum group metal needs from a subsidiary of Anglo American pursuant to a medium-term supply contract and sources the remainder through a variety of channels and from different sources.

This division plans to realise value and growth by combining the supply bases of PMG and Umicore and by skilled management of the precious metals inventories.

4.7. CORPORATE AND INVESTMENTS

	1999	*2000*	*2001*	*2002*	***H1 2003****
			€ million		
EBIT	(13.6)	(8.7)	(13.4)	(13.3)	**(8.4)**
EBITDA	(0.9)	(1.7)	(4.4)	(5.4)	**(3.8)**
Added Value	17.5	51.2	41.2	39.9	**20.8**
Average capital employed	184.0	153.0	207.2	188.6	**140.7**
Capital Expenditure	16.6	6.0	7.4	10.2	**5.8**
Workforce at end of period	1,163	1,097	1,241	1,126	**1,216**

* Umicore's stake in the Traxys joint venture was not consolidated as at 30 June 2003

1 Australia > Melbourne
2 Austria > Vienna
3 Belgium > Brussels
Belgium > Louvain-la-Neuve
4 Bolivia > La Paz
5 Brazil > Belo Horizonte
6 Brazil > Saõ Paulo
7 Bulgaria > Sofia
8 Canada > Toronto
9 Canada > Vancouver
10 China > Beijing
11 China > Guangzhou
12 China > Hong Kong
13 China > Shanghai
14 Denmark > Them
15 France > Paris
16 Germany > Essen
17 Hungary > Budakeszi
18 India > Delhi
19 India > Mumbai
20 Italy > Milan
21 Japan > Tokyo
22 Korea > Seoul
23 Luxembourg > Luxembourg
24 Malaysia > Klang Selangor
25 Mexico > Mexico
26 Peru > Lima
27 Poland > Warsaw
28 Portugal > Porto
29 Russia > Moscow
30 Singapore > Singapore
31 South Africa > Johannesburg
32 Spain > Barcelona
33 Spain > Madrid
34 Switzerland > Fribourg
35 Taiwan > Taipei
36 Thailand > Bangkok
37 UAE > Dubai
38 UK > Hertford
UK > Sheffield
39 Ukraine > Kiev
40 USA > New York
41 USA > Pittsburgh
42 USA > Raleigh
43 USA > White Pine
44 Venezuela > Caracas

Umicore's shared operational functions and corporate activities are grouped together in one reporting segment. This segment also includes the company's financial investments that do not report directly into one of the company's business groups.

4.7.1. Shared Operational Functions

Shared Operational Functions include Umicore Marketing Services; Umicore Engineering[12], Purchasing & Transportation, Information Systems and two functions – Environment Health and Safety and Research Development and Innovation that are dealt with in more detail:

4.7.1.1. Environment Health and Safety

See Section 4.8 for details

4.7.1.2. Research, Development and Innovation

Umicore RDI contributes to the execution of Umicore's strategy (both corporate strategy and the strategy of the business units) by developing new processes and products.

A central research laboratory is located in Olen (Belgium) and is equipped with laboratories for small scale testing, analytical chemistry, quality control and characterization as well as pilot plant testing. New competencies and product areas are developed in line with strategic needs. They can be separated into the fields of hydrometallurgy, pyrometallurgy and physical metallurgy with considerable use being made of physical and mathematical modelling. Collaboration with specialists from universities and various research institutes is seen as an ideal way to supplement and expand the existing knowledge base within Umicore. Constant and intensive collaboration with customers both within and outside the company is seen as a vital way of identifying issues and applying the correct solutions. Besides RDI's efforts in technology, processes and product, a significant portion of the Group's development work is carried out by the staff of the business units themselves. RDI assists the business units in their own research and development work where necessary.

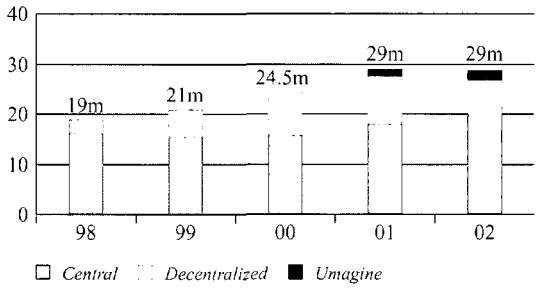
1 Following a previous decision to move away from providing technology to third parties, Umicore has announced to the work's council its intention to reorganise its engineering activities.

An idea collection, screening and incubation programme, known as Umagine, as well as a Corporate Venturing initiative are also an intrinsic part of Umicore's R&D effort. Umagine was established in 2001 with a view to providing a channel through which internally generated ideas could be focussed, assessed and developed in an entrepreneurial environment. The Corporate Venturing initiative harbours internal and external projects and start-up initiatives emanating outside the company or internally from RDI, Umagine or the business units. Corporate Venturing has already been responsible for seeing a number of projects through to the commercial stage. Currently two of its main projects are the development of indium phosphide and silicon carbide substrates in collaboration with the Polish Institute of Electronic Materials Technology (ITME) and the European Space Agency (ESA) respectively.

Umicore spends close to EUR 30m annually on research and development. RDI, which also comprises the patents department, has a staff of 140. Since the acquisition of PMG, Umicore's research and development efforts have taken on a new dimension, with the number of people involved in R&D increasing to more than 530 and the number of patent families increasing from 85 to 235. R&D spending will also grow to over EUR 60 million per year, with a shift of focus from intensive process development to more product-oriented development.

The former Fuel Cells business unit of PMG has been located within RDI as strong development efforts are required before commercial demand takes off.

Umicore research and development spending (€):



4.7.2. Investments

4.7.2.1. Traxys (50%)

In July 2003, Umicore and Arcelor International agreed to combine their commercial non-ferrous and ferro-alloys activities into a trading, marketing and distribution joint venture named Traxys. For Umicore this involved the activities that were primarily carried out by its trading affiliate Sogem.

The joint venture created a larger, global organisation with extended market coverage and a comprehensive geographical reach with more than 20 offices in main producing and consuming areas. Traxys has the capability to serve a broad base of industrial customers and offers a full range of commercial and financial services to customers in the minerals and metals industries. Traxys provides those services as a collaborative and transparent link between metals and raw materials producers and their clients.

Umicore's core contribution to Traxys consists mainly of what were Sogem's Brussels headquarters as well as agency and distribution activities in France and Spain and its Latin American offices. Control and ownership of Traxys is shared equally between Umicore and Arcelor.

In the absence of sufficiently detailed balance sheet information, and in line with article 107 section 3 of the Royal Decree dated 30 January 2001, Umicore's stake in the Traxys joint venture was not consolidated as at 30 June 2003.

4.7.2.2. Sibeka (80%)

Historically, Sibeka has been primarily concerned with the diamond activities/investments of Umicore. Today the bulk of Sibeka's results come from its 50/50 joint venture with De Beers called Megapode which is the world's leading producer of synthetic diamonds for industrial applications. Umicore's equity share in Megapode's results is reported as part of the Advanced Materials business group. The remainder of Sibeka's results is reported in the Corporate and Investments section. The weight of this contribution has significantly decreased over time as Sibeka exited from its diamond tool activities and natural diamond investment.

The remaining 20% of Sibeka is owned by De Beers Investments.

4.7.2.3. Metallo Chimique (Non-Ferrous International) (8.8%)

Metallo Chimique is a leading recycler of metals and other materials and has operations in Beerse (Belgium) and Bilbao (Spain). Umicore sources approximately 15% of its raw materials feed (blister copper) for its Olen copper refinery from Metallo Chimique.

4.7.2.4. America Mineral Fields (AMFI) (9.8%)

AMFI is a mining and exploration company listed on the Toronto Stock Exchange. The company's main projects are the Kolwezi Tailings copper/cobalt project (80% stake) and Kipushi zinc/copper mine in the Democratic Republic of Congo. The company also holds a 51% stake in a kimberlite and alluvial diamond exploration project in Angola.

4.8. ENVIRONMENT, HEALTH AND SAFETY

Umicore is dedicated to achieving excellence in terms of environment, health and safety (EHS). This is part of the Group's overall commitment to the principles of sustainable development. This means that there is no compromise on occupational health and safety, that the Group strives to minimise its environmental impact and its use of natural resources such as water and energy and that continuous efforts are made towards reducing the impact of its products, services and historical legacy on the environment.

4.8.1. Umicore's Environmental Charter

Umicore is committed to dealing with these issues in a transparent, responsible, accountable and proactive way in line with its ten-point Environmental Charter:

1) **Corporate commitment**

Meet and anticipate applicable environmental laws and regulations and ensure that they are enforced. At all times, apply best-management practices to minimise environmental risks.

2) **Improvement process**

Continue to improve environmental performance, taking into account technical developments and scientific understanding as well as economic and social constraints. Contribute to progress by joining appropriate R&D studies and programmes.

3) **Integrated management**

Integrate sound environmental policies, programmes and practices as an essential element of environmental management at all levels and in all functions.

4) **Employee education**

Educate, train and motivate employees to conduct their activities in an environmentally responsible manner.

5) **Prior assessment**

Assess the environmental impact before starting a new activity or developing a new product or process, as well as before transferring an activity or decommissioning a facility.

6) **Product stewardship**

Inform and advise customers as to product-related safety, health and environmental hazards

7) **Facilities and operations**

Operate facilities and conduct activities taking into consideration the efficient use of energy and raw materials, by maximising recycling and reclamation. Minimise the generation of residual waste and encourage an efficient waste management.

8) **Risk management**

Assess the environmental effects and develop emergency plans in conjunction with relevant authorities, emergency services and the local community.

9) Self-imposed control

Assure a permanent environmental survey of compliance with legal as well as company requirements and assess the efficiency of equipment and management systems designed for the protection of the environment.

10) Openness to concerns

Foster open dialogue with people concerned by the environmental aspects of company activities. Work with official agencies and other relevant parties in developing environmentally sound, cost-efficient and equitable standards based on reliable and predictable environmental criteria.

4.8.2. Environmental Performance

Umicore measures environmental performance at all its operating facilities and compares progress against a set of objectives. Umicore uses Environmental Performance Indicators (EPI) to assess all relevant environmental data and also as a tool against which its eight, Group-wide environmental objectives are measured. These objectives are:

1) To increase the input of secondary materials to more than 30% of raw materials feed at all European sites by 2005.

2) To reduce use of precious water sources by 20% and maximise recovery systems or use less-valuable water sources as an alternative at all European sites (10% by 2003, 20% by 2005).

3) To strive to respect climate change/CO_2 objectives by increasing energy efficiency, by recycling and by using other means of reducing CO_2 emissions (relates to country-specific and general EU CO_2 reduction targets for the reference period 1990-2010 in all EU sites).

4) To reduce by 50% overall emissions of metals to air and water from process sources measured in total load and impact at Group level in Europe by 2005.

5) Implement an environment management system and obtain ISO 14001 certification at all sites (in 2003 for all major industrial sites involved in recycling and in 2006 for all other sites).

6) Implement an environment management level with a target of "no notified violations", full compliance and an excess rate below 2.5% by 2005 both at Group and site level.

7) Implement an effective complaints management system and solve 50% of relevant complaints from local neighbourhoods. Halve complaint levels by 2005.

8) Implement local environmental communications plans (by 2003) and publish local environment reports by 2005.

This is complemented by a programme, implemented in 2002, to assess and provide information on any environmental risks that might be posed by any of Umicore's products. The entire process from collecting and processing EPI data to preparing the final Environment, Health and Safety report is audited and verified by external environmental specialists. The latest Environment & Safety Reports (2001 and 2002) were audited and verified by Environmental Resources Management Certification and Verification Services (ERM CVS).

The five main groups of environmental performance indicators (input, output, environmental management, societal and financial performance) that form the basis of the reporting system are collected for all sites in a standardised and quantifiable format. Progress continues to be made towards the Group's environmental objectives, notably air emissions, environmental certification and the use of fresh water.

4.8.3. Environmental compliance, provisions and expenditure

This section should be read in conjunction with the section on environmental risks in the Risk Factors section.

Introduction

The Group's activities entail certain environmental costs and risks, the most significant of which are detailed further, on a country-by-country basis, in this section.

Umicore has already provisioned about EUR 32 million of the aggregate amount for the clean-up of historical pollution in France and in Belgium. It expects to require further provisions for remediation of historical pollution of EUR 5 to 10 million per year for the next five to six years. In the context of the move to IFRS, and depending on the negotiations with the relevant authorities, Umicore may be in a position to make a definitive provision for the entire cost of remediation in the accounts at 31 December 2003.

Environmental compliance costs in 2002 were approximately EUR 14 million of direct operating cost and further EUR 4 million in ecotaxes. This expenditure includes wastewater treatment, solid waste management and abatement and control of air emissions.

Furthermore, in 2002 the Company invested almost EUR 16 million in environmental compliance projects. As the regulatory systems, especially in Western Europe, become increasingly stringent, it is likely that the Company will be required to maintain a significant investment programme related to environmental compliance and supported by associated operating costs.

In addition to costs (such as remediation costs) which can be provisioned, environmental regulations entail recurring costs in connection with the Company's ordinary activities. Generally, the recurring and foreseeable investments and expenditures in relation to the environment are budgeted and included in budgets and earnings forecasts for the Company and its main business units.

Countries

Belgium

In Belgium, the progress towards reaching a solution for remediation of historic soil and groundwater pollution at the Company's sites in the Flemish Region (Balen, Olen, Overpelt, Hoboken) began in 1997 with the signing of a a 10-year covenant between the Company and OVAM. OVAM is the Flemish public agency responsible for waste and soil and groundwater protection. This Covenant aims to provide a framework for the soil and groundwater surveys and remedial works that need to be carried out by the Company at its Flemish sites, and provides for the identification of clean-up and remediation works to be carried out by Umicore during the Covenant period, and for a maximum financial commitment of Umicore in this respect.

The Covenant provides for three phases. In phase A, the Company was to submit descriptive soil surveys to OVAM in which the pollution risks for the different sites must be assessed. Phase A is closed. In phase B, and on the basis of the evaluation of the results of the descriptive soil surveys, a priority order must be determined by the Company and OVAM with respect to sites for which a clean-up project must be drafted. In phase C, the priority order for the clean-up works will be determined.

In phase B, OVAM issued declarations of conformity for the descriptive soil investigations for all four sites, but at the same time modified the submitted surveys to the extent that OVAM decided to include surrounding land, surface waters and river beds that would allegedly have been contaminated through atmospherical deposition or by industrial waste water discharge by the Company, in the Company's clean-up obligations.

Legal discussions on the extent of the contractual and/or legal soil clean-up obligations of the Company, have led to requests of annulment being filed by Umicore before the Belgian Council of State (Conseil d'Etat / Raad van State). The requests of annulment are directed against the above-mentioned OVAM decisions (and the decisions of the Flemish Minister of the Environment confirming these OVAM decisions in appeal. The Council of State's decisions are not expected before the year 2005. The Company is currently engaged in discussions with OVAM and the Flemish Government in order to address, in a new covenant based on the principles of the 1997 Covenant, not only the *intra muros* contamination and clean-up, but also the question of the clean-up of certain well-defined parts of the *extra muros* contamination. Like the 1997 Covenant, this new covenant would contain a maximum financial commitment by Umicore with respect to remediation work to be carried out during the covenant period, and an undertaking from the authorities not to seek, during such period, any remediation or indemnification from Umicore other than as set out in the Covenant.

Also, at one of the Flemish sites (Olen), the presence of radioactive waste is being closely monitored by the Company and discussions are ongoing with the authorities on how to deal with these materials while taking into account their historical nature. An Olen advisory committee was set up in 1993, and a clean-up project has been established together with the competent authorities. The Company has provisioned EUR 5 million for the clean-up of the radioactive waste at the Olen site.

Dioxin emissions in the air have attracted particular attention in Belgium. The Company is using the best available technology that does not entail excessive costs to minimise dioxin emissions as much as possible. Authorities are monitoring these emissions closely and it cannot be excluded that the Company may be forced to adhere to even more stringent permit standards in the future, which may require additional capital expenditures. In this context, the Company obtained a decision from the Council of State in 2002, suspending the (renewal of) an environmental permit for the operation of the installation for storage and physical-chemical treatment of sludge at the Olen site, which contained very strict conditions for dioxin emissions. These conditions were not in line with the general sector standards and seem to have been tailored specifically for the Company. As the Council of State's auditor's advice supports the Company's vision, the Council of State will most likely annul the permit. The former environmental permit remains valid until the authorities have issued a new permit with more reasonable emission conditions.

France

In France, the Company has undertaken, in collaboration with the local authorities, a risk assessment of the soil and groundwater contamination at its main operating facilities (Viviez, Auby and Calais). It is anticipated that these sites will require similar remediation actions to those of the zinc production facilities in Flanders. The Company is awaiting the final results of the risk assessment with respect to these three sites in order to be in a position to make a provision for the cost of remediation for these sites most likely in the accounts at 31 December 2003.

Bulgaria

In Bulgaria, following the privatisation agreement of 1997 between Umicore and the Bulgarian Government a suitable investment programme was initiated to address both the historical pollution and the compliance requirements since Bulgaria is striving for Western European standards. Pursuant to the Privatisation Agreement, the Bulgarian Government remains legally and fully responsible for historical pollution. Umicore successfully managed a USD 25 million environmental remediation programme on behalf of the Bulgarian Government and financed by the World Bank.

Acquisition of PMG

With respect to PMG, the due diligence process undertaken prior to the acquisition has identified material environmental issues, mainly with respect to soil and groundwater contamination, at the German and Brazilian sites. The Company is dealing with this at present and does not expect any material costs to arise from the rehabilitation of these sites. The purchase agreement executed with OMG also provides for certain indemnification against environmental liabilities relating to conditions existing at the date of the purchase.

4.8.4. Sustainable Development and Public Policy

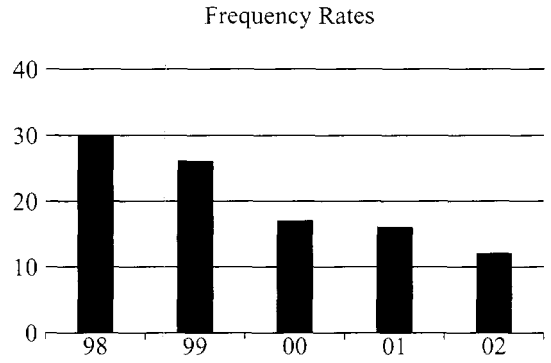
Umicore is committed to active participation in the regulatory arena within Eurometaux and with different commodity associations such as the International Zinc Association and International Copper Association. Umicore also joined a dozen of the world's leading metal & mining companies in support of the International Council on Mining and Metals (ICMM). Umicore is a signatory of the ICMM's Sustainable Development Charter.

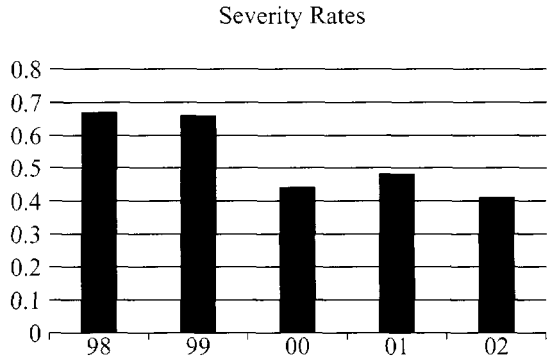
Umicore strategic framework is combined with a commitment to sustainable development. This means that it aims to maximise the eco-efficiency of its operations, striving for minimum use of scarce natural resources such as energy, water and primary materials. Sustainability is enshrined in Umicore's approach to search for innovative business opportunities that could enhance the lifetime management of the materials it uses and of its products. Umicore aims to generate wealth not only for its employees but also for the broader community by creating jobs and essential *materials for a better life*. It is Umicore's aim that its activities contribute to meeting the basic needs of today's generation without compromising those of future generations. In particular, Umicore continuously analyses and aims to reduce the impact that its products, services and current and past operations may have on the environment.

Umicore is part of the FTSE4Good Index and has been awarded a 'best in class' rating by Storebrand Socially Responsible Investments.

4.8.5. Health & Safety

The responsibility for Health and Safety rests with site management where joint Health and Safety committees contribute to ensuring improvement in this area. At group level Umicore has established yearly safety performance objectives that should position the company among the top performers in its sector by the end of 2005. In this respect Umicore has reported year-by-year improvements since 1997. In 2002, the frequency rate[1] of 13 was down on the 2001 level of 15.5, while the severity rate[2] fell from 0.47 to 0.45 (although this was short of the objective of 0.35).





1: Frequency = number of accidents (with at least one lost working day) per one million working hours

2: Severity = Number of real lost calendar days per thousand working hours

4.9. LITIGATION

The reader should be aware that the paragraphs below cover only that litigation that is not dealt with in the text on Umicore's businesses or elsewhere in the Prospectus. Information with regard to environmental litigation is summarised in the previous section.

4.9.1. Barclays Physical Trading Ltd.

Pursuant to the opening of the insolvency proceedings initiated in London against Enron, Umicore put an end to two contracts for the sale of copper cathodes entered into with this company as it had not obtained entire payment of the lots sold. Before having obtained the delivery of these cathodes from Umicore, Enron had already sold 11,000 tonnes of the cathodes to Barclays Physical Trading, Ltd within the frame of a financing arrangement entered into by these two companies.

In January 2002 Barclays Physical Trading Ltd initiated legal proceedings against Umicore before the Commercial Court of Brussels to obtain the delivery of these 11,000 tonnes of copper cathodes or the payment of USD 16,208,500 USD (interest to be added). On 23 June 2003 the Commercial Court of Brussels rejected this claim as unfounded and ordered Barclays Physical Trading, Ltd to pay damages of 792,978.85 EUR to Umicore. Barclays Physical Trading, Ltd lodged an appeal against this judgment before the Brussels Court of Appeal. Pleadings will probably take place in the course of the judicial year 2005-2006. Meanwhile Barclays Physical Trading, Ltd has blocked the sum of 792,978.85 EUR with a bailiff.

In parallel with the procedure before the Commercial Court of Brussels, upon the unilateral request of Barclays Physical Trading, Ltd, the Antwerp Court of Appeal ordered a seizure of 6,500 tons of copper cathodes on Umicore's site in Olen on 27 March 2002. Pursuant to the 23 June 2003 judgment of the Commercial Court of Brussels the seizure was officially removed but the procedure before the Antwerp Court of Appeal is left open in order for the Court to rule on the damages due by Barclays Physical Trading, Ltd to Umicore in consideration of the physical and financial blocking of the cathodes concerned. Pleadings will take place on 11 May 2004.

Umicore declared its claims vis-à-vis Enron to the judicial administrators, who still have to take a final position with regard to same.

4.9.2. Plastic Investment Company

In June 1999, Umicore sold to Plastic Investment Company (PIC) a subsidiary of the Belgian-listed company Trust Capital, its stake in Overpelt Plascobel (OVP) for a price of BEF 625 million (EUR 15.49 million). On 14 April 2000, PIC initiated a legal procedure against Umicore aiming at obtaining damages amounting to BEF 625 million (EUR 15.49 million), alleging that Umicore had used fraudulent and deceptive actions during the negotiation process to mislead the purchaser about the substance of OVP and its level of profitability. Umicore strongly objected to such allegations and filed a memorandum (conclusions) detailing its position with the Commercial Court of Brussels in September 2002. PIC has not yet filed any memorandum in response. Umicore believes that the argumentation developed by PIC is without any merit.

4.9.3. Former employees of Gécamines

Several former employees of Gécamines, the Congolese state-owned entity, which took over the assets of Union Minière in 1967 following its expropriation, filed claims against Umicore for the payment of amounts due by Gécamines following their dismissal by the latter. Société Générale des Minerais, whose rights and obligations have been taken over by Umicore following several reorganisations, had indeed accepted, from 1967 till 1974, to guarantee certain employees of Gécamines for the payment of certain elements of their remuneration in the event of default by Gécamines. In 1974, Gécamines had agreed to hold Umicore harmless in this respect. Gécamines, however, contests the validity of this guarantee.

While Umicore expects that in some of these cases it will be ordered to pay certain amounts to former Gecamines employees, Umicore also believes that overall, and based on currently prevailing case law, the outcome of these procedures should not in aggregate have a material financial impact on Umicore.

4.9.4. VAT settlement with the Belgian special tax inspection

Although the Company believed it had solid arguments to successfully defend itself against the claim of the Belgian special tax inspection ("BBI/ISI") before the courts, the Company entered in December 2000 into a settlement agreement with the Belgian special tax inspection regarding VAT allegedly due on the intra-community delivery of silver to Italian and Swiss companies. The Company's settlement with the Belgian tax authorities on this issue is legally valid, final and subject to confidentiality. However, a complaint against unknown persons was filed by a few individuals. An official investigation is currently ongoing and has led to documents pertaining to this case in general and the settlement in particular being seized both at the premises of the Company as well as at the premises of the special tax inspection. The Company firmly believes that, as far as it is concerned, this complaint is without merit. In addition, a few newspapers articles have recently mentioned that the European Commission would allegedly plan to initiate an investigation with respect to State aids in relation to the settlement; however the Company has not received any notification in this respect.

4.9.5. Other

In addition to the foregoing, the Company is experiencing a number of claims and legal proceedings incidental to the normal conduct of its business. Management does not believe that such claims and proceedings are likely, in the aggregate, to have a material adverse affect on the financial condition of the Company.

4.10. NON-RECURRING CHARGES

In the first half of 2003 Umicore incurred non-recurring charges of EUR 9.5 million largely in relation to various restructuring measures, early retirement packages, and environmental programmes. In the second half of 2003 Umicore expects to incur further charges, which largely relate to environmental programmes on the one hand and to restructuring measures at its Olen site and the planned cessation of the activities of Umicore Engineering on the other hand, as well as some changes resulting from the integration of PMG.

5. GENERAL INFORMATION ABOUT UMICORE

5.1. GENERAL INFORMATION

On 7 July 1904, the Company was founded with the name ATELIERS DE CONSTRUCTIONS ELECTRIQUES DE CHARLEROI. On 26 March 1986, the Company's name was changed to ACEC, on 26 July 1989 to ACEC-UNION MINIERE, on 13 May 1992 to n.v. UNION MINIERE s.a. and on 3 September 2001 to UMICORE.

5.1.1. Corporate Name

The Company bears the name "Umicore".

5.1.2. Registered Office

The Company's registered office is located at rue du Marais 31 Broekstraat, 1000 Brussels, Belgium. The Board of Directors of the Company is authorised to transfer the registered office to any other place in Belgium.

5.1.3. Register of Legal Entities nr. 0401 574 852

5.1.4. Duration

The Company is incorporated for an unlimited duration.

5.1.5. Legal form

The Company is a limited liability company (*naamloze vennootschap/société anonyme*) governed by Belgian law. The Company makes or has made a call on public savings.

5.1.6. Financial year

The financial year starts on 1 January and ends on 31 December of each year.

5.1.7. Consultation of the Company records

The Company's statutory annual accounts, annual report and certification by the auditor are deposited with the National Bank of Belgium.

The articles of association, any decisions modifying them and the special reports required by the Companies Code can be obtained at the Clerk's office of the Commercial Court of Brussels.

5.1.8. Purpose of the Company

Article 3 of the Company's articles of association provides as follows:

"The purpose for which the company is established shall be:

1) the design, manufacture, construction, purchase, sale, installation, maintenance and repair of all types of electrical, electronic, nuclear, mechanical or hydraulic objects, machines and devices and all accessories, as well as the preparation and transformation of the raw materials required for its activities;

2) the seeking out, setting up, acquisition, operation and management, for its own account or for the account of third parties, of all mining, metallurgical or chemical activities or enterprises related to the production of materials and to systems using these materials, as well as the conception, design, study, construction, procurement, commissioning and technical inspection of industrial installations;

3) the trade in products resulting from such activities and in equipment and supplies needed to produce or manufacture these products, as well as all operations, for its own account or for the account of third parties, relating to the trade, storage, handling and transport of all products.

It may use the resources that it possesses to perform all services in order to realize its purpose.

It may take out and make use of all patents relating directly and indirectly to its activities; it may also purchase or acquire by any other means such patents or licenses and make use of them.

It may carry out all real estate activities in any legal form, including the purchase, sale, leasing and renting of real estate, the issuing of real estate income certificates or land certificates or the management of real estate properties.

It may perform all industrial, financial and commercial operations related directly or indirectly to the purpose mentioned above, including applying for, acquiring or selling concessions.

In addition to the activities described in the preceding paragraphs, the Company's purpose includes becoming involved, by way of contributions, mergers, absorptions, subscriptions, acquisition of participating interests, or any other manner, in, and more generally lending its financial support in whatever form to, any enterprise, association or corporation the purpose of which is similar to, connected with, or beneficial to the realization of its purpose.

The Company may realize its purpose in Belgium and abroad, directly or indirectly, in its own name or for the account of third parties, alone or in association, by carrying out all operations beneficial to the realization of its purpose or those of the corporations, associations and establishments in which it holds an interest."

5.2. COMPANY CAPITAL

5.2.1. Share capital

At present, the share capital of the Company amounts to EUR 500,000,000 and is represented by 22,600,000 shares without par value. The capital is entirely paid up.

In addition, there are 1,687,055 outstanding rights to subscribe or acquire shares in the Company linked to the stock option plans described hereafter, of which 505,180 are subscription rights (i.e., rights to subscribe to newly issued shares) and 1,181,875 are options to purchase existing shares. An additional number of 1,181,875 subscription rights could possibly be issued in the near future so that the Company could either deliver new or existing shares under ISOP 2001, ISOP 2002 and ISOP 2003, as mentioned in Section 5.2.6.

5.2.2. Authorised capital

The authorised capital has not been used since its latest renewal on 30 March 2001.

Article 6 of the Company's articles of association provides as follows:

"In accordance with the terms of a decision taken by the Extraordinary General Meeting held on 30 March 2001, the Board of Directors is authorised, for a period of five years commencing on the date of publication of the afore-mentioned decision in the Annexes to the Belgian Official Gazette, to increase the share capital by a maximum amount of five hundred million (500,000,000) euros according to the terms and conditions it shall define.

The Board may effect this increase in one or more stages, either by contributions in cash or, subject to legal restrictions, contributions other than in cash, as well as by incorporation of reserves, whether available or unavailable for distribution, or of share premiums, with or without issuing new stock. These increases may give rise to the issue of shares with voting rights, of convertible bonds, as well as of subscription rights or other securities, whether or not attached to other stock of the company, or attached to stock issued by another company. The Board may decide that the new shares shall be registered shares, and shall not be convertible into other types of shares.

On this occasion, the Board may, in the best interests of the company and in accordance with legal provisions, limit or declare inapplicable the preferential rights of shareholders, to the benefit of one or more designated persons that it chooses.

If the capital increase includes a share premium, the amount of this premium shall be allocated to an unavailable "share premium" reserve, from which it may not be withdrawn in whole or part except to be incorporated into the capital by a decision of the Board of Directors using, as the case may be, the authorisation conferred upon it by this article, or to be reduced or cancelled by a decision of the general meeting of shareholders in accordance with article 612 of the Company Code.

The Board of Directors is expressly authorised to make use of the authorised capital according to the provisions set out in article 607 of the Company Code, for a period of three years commencing at the extraordinary General Meeting of Shareholders held on 9 April 2003."

5.2.3. Modifications to the capital during the last three years

Date	*Modification*	*Total capital after modification (EUR)*	*Number of shares after modification*
30 March 2001	Cancellation of own shares Conversion in EUR Capital increase by incorporation of share premium	500,000,000	24,000,000
21 December 2001	Cancellation of own shares	500,000,000	22,600,000

5.2.4. Authorisation to acquire own shares

Pursuant to the authorisation granted for the first time by the extraordinary shareholders' meeting of 2 June 1998, which was renewed several times and for the last time by the extraordinary shareholders' meeting of 9 April 2003, the Company may acquire on the stock market, until the annual shareholders' meeting to be held in 2004, shares in the Company up to a maximum of 10% of the subscribed capital, at a price per share between (i) the lowest closing stock market price for the last 20 trading days preceding the date of acquisition minus ten per cent (10%) and (ii) a maximum price per share of EUR 90.00.

This authorisation also enables the Company's subsidiaries to acquire on the stock market, or in any other way, shares in the Company under the same conditions.

On 31 October 2003 Umicore owned 738,314 own shares.

5.2.5. Main Shareholders

Based on the information available to the Company pursuant to Article 8 of the articles of association of the Company and the Law of 2 March 1989 on the disclosure of major participations in listed companies and regulating public takeover bids, shareholders owning 3% or more of the Company's shares are as follows:

Name	*(%)*
SGB group (Suez)	17.78 (as of 13 October 2003)
Umicore	3.24 (as of 31 October 2003)

Société Générale de Belgique (SGB), a subsidiary of Suez, holds, after the recent sale of 2,000,000 shares, 4,018,100 shares (17.78% of the share capital) as of 13 October 2003. Suez has announced in the past and has recently confirmed that its stake in the Company is not strategic. In this context, Suez has issued exchangeable bonds, of which the terms are summarised below.

Exchangeable bonds

In January 2001, Suez issued exchangeable bonds due 14 January 2005 (the "Bonds") exchangeable into ordinary shares of the Company (the "Shares"), at the option of the holder to and including 7 January 2005, unless previously redeemed. At the time of their issuance, the Bonds covered 5,690,570 Shares, i.e., most of Suez' holding in the Company.

Each Bond has a nominal value of EUR 1,000 and is exchangeable into 23.0760 Shares during the first year following issuance of the Bonds; 22.2445 Shares during the second year following issuance of the Bonds; 21.4707 Shares during the third year following issuance of the Bonds; and 20.5761 Shares during the fourth year following issuance of the Bonds; subject to adjustments in certain events and subject to the right of Suez to elect cash settlement in lieu of delivery of Shares (by paying an amount equal to the volume-weighted average closing price of the Shares on Euronext Brussels on the decision date and on the immediately following exchange business day).

As a result, the exchange price is EUR 43.335, EUR 44.955, EUR 46.575 and EUR 48.600 per Share during the first, second, third and fourth years following issuance, respectively.

Unless previously redeemed or exchanged, the Bonds will be repaid in full at their principal amount at maturity on 14 January 2005.

Subject to the average closing price of the Shares over a period of any 20 exchange business days in the immediately preceding 30-exchange-business-day period, being greater than 120 per cent of the then-prevailing exchange price, and on giving not less than 30 days' irrevocable notice, Suez has the right to redeem the Bonds at a redemption price equal to the principal amount thereof, together with accrued interest.

In addition, each holder of a Bond has the right to require Suez to redeem such Bond in whole on 14 January 2004, at a redemption price equal to 102 per cent of the principal amount thereof, together with accrued interest. Furthermore, the Bonds will be redeemable upon the occurrence of certain tax events.

The Bonds are listed on the Luxembourg Stock Exchange.

Stock options granted by SGB

Some of the shares held by Suez-Tractebel, former Société Générale de Belgique, is covered by stock options granted in December 2000 to members of Umicore's senior management in the form of stock options. This stock option plan comes in addition to the stock option plans set up by the Company itself, which are summarised in the next section.

5.2.6. Stock Option Plans granted by the Company

Plan	*Expiry date*	*Exercise*	*Exercise price (the exercise price may be higher in certain countries)*	*Number of Options still to be exercised(*)*
Subscription rights 1994-1998	20.03.2005	at any time except for the	€ 51.88	1,000
	20.03.2006	last 10 or 11 days of	€ 54.98	1,000
	20.03.2007	March, June, September	€ 55.23	1,000
	20.03.2008	and December	€ 62.96	1,000
				4,000
ESOP 1999 (10 years) ..	10.06.2009	once a year : from May 20	€ 36.60	224,470
		until June 10	€ 37.29	51,925
				276,395
ISOP 2000 (7 years)	13.03.2007	all working days of	€ 30.50	175,365
	(31.05.2007	Euronext Brussels	€ 34.78	23,000
	in certain		€ 32.57	25,420
	countries		€ 39.50	1,000
	other than			
	Belgium)			**224,785**
ISOP 2001 (7 years)	14.03.2008	all working days of	€ 42.43	338,325
		Euronext Brussels	€ 41.44	25,580
			€ 41.80	2,825
				366,730
ISOP 2002 (7 years)	14.03.2009	all working days of	€ 48.15	358,770
		Euronext Brussels	€ 46.11	28,340
			€ 37.02	4,150
				391,260
ISOP 2003 (7 years)	13.03.2010	all working days of	€ 34.18	397,355
		Euronext Brussels from	€ 35.10	26,530
		1 March 2004		
				423,885
Total				**1,687,055**

(*) situation as at 30 September 2003

ESOP refers to "Employee Stock Option Plan" (worldwide plan for blue collars, white collars and managers). ISOP refers to "Incentive Stock Option Plan" (worldwide plan for managers).

All options issued under the ESOP 1999 and ISOP 2000 were issued as subscription rights, each giving the right to subscribe to one new share in the Company. The Company subsequently decided that it would either create new shares, as originally provided for, or deliver existing shares held by Umicore at its discretion. All options issued under ISOP 2001, ISOP 2002 and ISOP 2003 were issued as options to purchase existing shares. However, an additional number of 1,181,875 subscription rights could possibly be issued in the near future so that the Company could either deliver new or existing shares under ISOP 2001, ISOP 2002 and ISOP 2003.

Having regard to Article 501 of the Belgian Companies Code, Umicore will allow the holders of subscription rights 1994-1998 and subscription rights under the ESOP 1999 and ISOP 2000 to exercise of their warrants, allowing them to subscribe for the Offer Shares, subject to the same restrictions that may apply to

existing shareholders in jurisdictions outside Belgium. The Company has informed the holders of options under the ESOP 1999 and ISOP 2000 accordingly.

5.3. CORPORATE GOVERNANCE CONSIDERATIONS

5.3.1. Composition of the Board of Directors

The Board of Directors, whose members are appointed by the Shareholders' Meeting, must consist of at least six members. Their term of office may not exceed six years, but they may be re-elected.

On 1 January 2003, the Board of Directors consisted of eleven members: ten non-executive Directors and one executive Director.

Two of the Directors represent the major shareholder, Société Générale de Belgique (SGB); seven of the Directors are independent Directors, i.e. directors who are not related to the major shareholders as indicated in Section 5.2.5. and who have not been members of the Company's Executive Committee or "Comité de Direction/ Directiecomité" (management committee) for the last 2 years.

The duties of Chairman and Chief Executive Officer are carried out by different individuals.

The present Board of Directors consists of:

Karel Vinck, 65, Chairman

NON-EXECUTIVE DIRECTOR

Before joining Umicore, Karel Vinck was Chief Executive Officer of Eternit and Bekaert. He is presently Chairman of the Executive Committee of S.N.C.B./N.M.B.S., the Belgian railway company. He is also a member of the Board of Société Générale de Belgique, Barco, Tractebel, the Catholic University of Leuven and Théâtre Royal de la Monnaie. He is honorary chairman of VEV, the Flemish employers association and Chairman of the Flemish Science Policy Council.

Positions held at Umicore

He was Executive Chairman from May 2000 until October 2002 and has been Chairman since that date. He has been a director since October 1994; he is a member of the Strategy Committee and he chairs the Nomination and Remuneration Committee from 2003. His present period of office expires at the 2006 Ordinary General Meeting.

Thomas Leysen, 43, Chief Executive Officer

EXECUTIVE DIRECTOR

He became Chief Executive Officer of Umicore in 2000, after having held various positions within Umicore and its affiliates. He is also Chairman of VUM Media, a newspaper publishing company, Chairman of Agoria and a member of the Board of Atlas Copco. He is a member of the Executive Committee of the Belgian Employers Federation (FEB/VBO) and Vice-Chairman of Eurometaux.

Positions held at Umicore

He has been a director and Chief Executive Officer since May 2000; he is also a member of the Strategy Committee. His present period of office expires at the 2006 Ordinary General Meeting.

Etienne Davignon, 71, Vice-Chairman

NON-EXECUTIVE DIRECTOR, REPRESENTING THE MAJOR SHAREHOLDER, SGB

From 1962 to 1977, Etienne Davignon was Head of the Cabinet of the Belgian Ministry of Foreign Affairs and, from 1969 to 1977, he was responsible for the Political Department of the said Ministry. In 1977, he was appointed Vice-President of the European Commission, in charge of industry, research and energy until the end of 1984. In 1985, he joined Société Générale de Belgique and was the company's Executive Chairman until 2001. He is currently Vice-Chairman of the company.

Etienne Davignon is a member of the Board of Suez, BASF, Pechiney, Sofina, Solvay and is Vice-Chairman of Fortis.

Positions held at Umicore

He has been Vice-Chairman since May 2000 and a director since December 1989; he is also Chairman of the Strategy Committee and is a member of the Nomination and Remuneration Committee (he chaired this committee until the end of 2002). His present period of office expires at the 2005 Ordinary General Meeting.

Jean-Pierre Standaert, 56

NON-EXECUTIVE DIRECTOR, REPRESENTING THE MAJOR SHAREHOLDER, SGB

He started his career at Cimenteries CBR in 1975 and joined Société Générale de Belgique in 1988 where he is currently General Manager. From 1998 until end 2002 he was group director for legal and tax affairs at Suez. In 2003, he became counsellor to the chairman at Suez. He is also member of the Board of Tractebel.

Position held at Umicore

He has been a director since July 1989. His present period of office expires at the 2005 Ordinary General Meeting.

Etienne Denis, 60

NON-EXECUTIVE DIRECTOR

Etienne Denis holds a PhD in Science from the University of Louvain. After working at the University and with Gécamines in Congo he joined Umicore in 1974 where he held numerous positions over the years. He is a member of the Board of Directors of Sibeka.

Positions held at Umicore

He was a member of the Executive Committee from 1991 to the end of April 2003 and has been a Director since May 2003. His present period of office expires at the 2006 Ordinary General Meeting.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Jean-Luc Dehaene, 63

Jean-Luc Dehaene has occupied several ministerial posts and was Prime Minister of Belgium from 1992 to 1999. He is a member of the Board of Interbrew, Telindus, Domo and Corona-Lotus. He is Chairman of the Board of the College of Europe (Bruges) and mayor of Vilvoorde.

Positions held at Umicore

He has been a director since October 1999; he is also a member of the Strategy Committee. His present period of office expires at the 2006 Ordinary General Meeting.

Philippe Delaunois, 61

Philippe Delaunois worked in the Belgian steel industry for most of his career, and until 1999 he was Managing Director of the Cockerill-Sambre group. He is currently Chairman of the Board of Mediabel and CFE and is Chief Executive Officer of the Belgian lime group Carmeuse. He is a member of the Board of BBL ING group, VUM Media and DEME.

Positions held at Umicore

He has been a director since May 1999; he has been a member of the Strategy Committee since December 1999 and of the Nomination and Remuneration Committee since May 2000. His present period of office expires at the 2005 Ordinary General Meeting.

Arnoud de Pret, 58

Arnoud de Pret was with Morgan Guaranty Trust Company in New York from 1972 until 1978. From 1978 until 1981 he was group treasurer of Cockerill-Sambre, and until 1990 he was group finance manager and member of the Executive Committee of UCB. He was Chief Financial Officer and member of the Executive Committee of Umicore from 1991 until May 2000. He is a member of the Board of Interbrew, Delhaize group and Sibelco.

Positions held at Umicore

He has been a director since May 2000; he is also a member of the Audit Committee. His present period of office expires at the 2005 Ordinary General Meeting.

Jonathan Oppenheimer, 33

Jonathan Oppenheimer is a director of De Beers Consolidated Mines Ltd and Head of Producer Relations, Africa. He is also the chairman of Element Six group of companies.

Position held at Umicore

He has been a director since September 2001. His present period of office expires at the 2005 Ordinary General Meeting.

Robert F.W. van Oordt, 67

Robert van Oordt was a consultant and former partner at McKinsey and Cie (1967-1979), Chief Operating Officer and member of the Board of Hunter Douglas (1979-1989), chairman of the Executive Board of Bührmann Tetterode (1990-1993) and of KNP BT (1993-1996) and chief executive officer of Rodamco Europe (2000-2001). He is Chairman of the Supervisory Board of Rodamco Europe, a supervisory director of Draka Holding and a member of the Board of Fortis Bank, of Nokia Corporation and of Schering-Plough Corporation.

Positions held at Umicore

He has been a director since May 1997; since that time, he has been a member – and since May 2000 he has been Chairman – of the company's Audit Committee. His present period of office expires at the 2005 Ordinary General Meeting.

Klaus Wendel, 60

Until 2000 he was a member of the Executive Committee of Société Générale de Belgique responsible for group control. He is a member of the Board of Tractebel. He is now an independent consultant in finance and budget control. After a career in finance and budget control with General Electric (USA), Siemens, Cockerill-Sambre and CBR, he joined Société Générale de Belgique in 1988.

Positions held at Umicore

He has been a director since July 1989; he is also a member of the Audit Committee. His present period of office expires at the 2006 Ordinary General Meeting.

5.3.2. Committees

5.3.2.1. Audit Committee

The Audit Committee consists of three members who are all independent non-executive directors.

The mission of the Audit Committee is to assist the Board of Directors in fulfilling its oversight duties with regard to the Umicore Group's financial reporting process, including monitoring the integrity of the financial statements, external auditor qualifications and independence and performance of both the internal audit department and the external auditors.

To this effect, the Audit Committee:

- has the right to seek any necessary information from any corporate body or any member of the company's staff to fulfil its duties;
- has the right to obtain outside legal help and any professional advice, at the Company's expense, which might be necessary for the fulfilment of its duties;
- has the power to call any member of the Company's staff to be interviewed at a meeting of the committee as and when required.

The chairman of the Audit Committee reports to the Board on the results of its work and examinations and communicates the committee's recommendations.

Number of meetings in 2002: seven
Number of meetings so far in 2003: two

5.3.2.2. Nomination and Remuneration Committee

The Nomination and Remuneration Committee consists of three members who are all non-executive Directors. It is chaired by the chairman of the Board.

The mission of the Nomination and Remuneration Committee is:

- to recommend new directors for election to the Board;
- to recommend to the Board the candidates for membership of the the "Comité de Direction/ Directiecomité" and to approve their remuneration as well as to recommend to the Board the dismissal of any member of the "Comité de Direction/Directiecomité".
- to recommend a management remuneration policy to the Board.
- to define a succession plan for the Chief Executive Officer and to review succession planning for the "Comité de Direction/Directiecomité".
- to recommend the appropriate stock option plans to the Board.

The chairman of the Nomination and Remuneration Committee reports to the Board on the results of its work and examinations and makes recommendations accordingly.

Number of meetings in 2002: two
Number of meetings so far in 2003: two

5.3.2.3. Strategy Committee

The Strategy Committee consists of five members, appointed by the Board.

Its mission is to review the strategic business plans of the Umicore Group, as well as major investments or divestments, and to submit its recommendations to the Board of Directors.

Number of meetings in 2002: two
Number of meetings so far in 2003: zero

5.3.3. Board of Directors compensation

The total amount of remuneration granted to Directors in 2002 in respect of their activities in the Company amounted to EUR 250,000.

No loan or guarantees have been granted by the Company to members of the Board.

As of 31 December 2002, the members of the Board of Directors together held a total of 139,010 shares. As of the same date they also held 58,000 options issued by the Company and 100,000 options granted by Société Générale de Belgique. These options are held only by those Directors who are currently employed by Umicore or have previously been employed by Umicore. There is one independent director who owns 5,000 options, stemming from the period he was a member of the Executive Committee.

5.3.4. Management

5.3.4.1. General organisational structure of Umicore

In accordance with the articles of association, the Board of Directors has delegated responsibility for the daily management of the Company to Mr Thomas Leysen, in his capacity as Chief Executive Officer. The Board of Directors has furthermore set up on 19 August 2003 a "Comité de Direction/Directiecomité", chaired by Mr Thomas Leysen.

5.3.4.2. "Comité de Direction/Directiecomité"

On 19 August 2003 the Board of Directors decided to transform the existing Executive Committee into a Comité de Direction/Directiecomité" (management committee) within the meaning of Article 524bis of the Companies Code.

The "Comité de Direction/Directiecomité" is composed of at least nine members, Directors or other persons. The "Comité de Direction/Directiecomité" is presided over by a chairman, appointed by the Board of Directors, who must be a director. The members of the "Comité de Direction/Directiecomité" are appointed upon recommendation of the Nomination and Remuneration Committee. The "Comité de Direction/Directiecomité" as a whole or any individual member can be dismissed at any time by the Board of Directors.

Without prejudice to the powers reserved to the Board of Directors pursuant to Article 524bis of the Companies Code, the "Comité de Direction/Directiecomité" is entrusted with the powers to decide:

- *On any matters relating to the daily management of the Company.*
- *On any matters related to the implementation of resolutions approved by the Board of Directors.*
- *On any matters related to the operational management and organisation of the group and to its structure.*
- *On any matters related to the financing of the normal operations of the group, such as, without limitation, bank loans, guarantees granted in favour of the company's wholly owned subsidiaries, hedging programs and swap agreements (ISDA), regardless of the amount concerned.*
- *On any M&A transactions within the line of business of Umicore for an amount less than EUR 12,500,000.*
- *On internal investments such as the acquisition of equipment, technologies, services and any other similar investments for an amount less than EUR 12,500,000. However, for renewal or modernisation investments, the limit shall be EUR 25,000,000.*

The powers of the "Comité de Direction/Directiecomité" are without prejudice to the powers of daily management granted to the Chief Executive Officer. The daily management of the Company is thus vested in the Chief Executive Officer acting individually as well as to the "Comité de Direction/Directiecomité" acting collectively.

The "Comité de Direction/Directiecomité" is entitled to grant special proxies to any of its members or any manager or employee of the Company, who will then act as an attorney-in-fact of the "Comité de Direction/ Directiecomité". Without prejudice to the additional representation powers granted under Article 14 of the articles of association, the Company is validly represented before court and in all acts, including those in which a civil servant or a ministerial officer intervenes, by one Director and one member of the "Comité de Direction/ Directiecomité" signing jointly or, within the powers granted to such "Comité de Direction/Directiecomité", by two members acting jointly. The Company will also be validly represented, within the limits of their mandates, by any special representative appointed by the "Comité de Direction/Directiecomité".

As from 19 August 2003 the "Comité de Direction/Directiecomité" consists of:

Thomas Leysen, 43
Chief Executive Officer

Thomas Leysen holds a law degree from the University of Leuven. He started his career in the shipping and commodity trading business. He joined Umicore in 1990 and held various executive positions. He became CEO of Umicore in 2000. He is also chairman of VUM Media, chairman of Agoria, and a member of the board of Atlas Copco.

Jean-Luc Deleersnyder, 42
Executive Vice-President
Supervising: Zinc business group
Purchasing & Transportation

Jean-Luc Deleersnyder holds a Masters degree in Electromechanical Engineering and a PhD in Operations Management from the University in Ghent. He was also a CIM Fellow at North Carolina State University. He joined McKinsey & Co in 1988 as a management consultant. He joined Umicore in 1995 where he successively occupied the position of head of the Strategy Department and Corporate Vice-President Human Resources. He was appointed to his present position in 1999.

Alain Godefroid, 55
Corporate Vice-President
Supervising: Legal Affairs
Environment, Health & Safety

Alain Godefroid holds a Law doctorate from the University of Brussels (ULB) and a MCJ from the University of Texas at Austin. After working as a lawyer in the United States and in Europe, he joined Umicore in 1978 as Legal Counsel. He was appointed to his present function in 1995.

Marc Grynberg, 37
Chief Financial Officer
Supervising: Finance
Information Systems

Marc Grynberg holds a Commercial Engineering degree from the University of Brussels (Ecole de Commerce Solvay). After several management positions in the finance function at DuPont de Nemours in Brussels and Geneva, he joined Umicore in 1996 as Group Controller. He was appointed CFO in 2000.

Martin Hess, 51
Executive Vice-President
Supervising: Automotive Catalysts

Martin Hess joined Degussa in 1972. He occupied several positions within various divisions of Degussa and has worked in a number of different countries around the world. He became head of the Automotive Catalyst business in 1999. He joined Umicore's Executive Committee following the acquisition of PMG.

Hugo Morel, 53
Executive Vice-President
Supervising: Precious Metals Services

Hugo Morel holds a Masters degree in Metallurgical Engineering from the University of Leuven. He joined Umicore in 1974 and held several jobs in production, commercial departments, strategy and general management of different units. He was appointed to his present position in 2002.

Michel Moser, 45
Executive Vice-President
Supervising: Corporate Development and Corporate Communications
Umicore Marketing Services

Michel Moser holds a Commercial Engineering degree from the University of Brussels (Ecole de Commerce Solvay) and a post-graduate degree in International Commerce. He joined Société Générale des Minerais (Sogem) in 1983 and held positions in Brussels, New York and Hong Kong. He managed the brokerage Sogemin Metals in London between 1995 and 2000. He joined the Executive Committee in May 2003.

Pascal Reymondet, 44
Executive Vice-President
Supervising: Precious Metals Products

Pascal Reymondet holds an MSc from Stanford University and an Engineering degree from the Ecole Centrale in Paris. He has occupied different engineering and management positions within the Degussa Group including management of the Port Elisabeth and Burlington automotive catalyst plants. He became Senior Vice-President of the Precious Metals Group (PMG) in June 2002 and joined the Umicore Executive Committee following the acquisition of PMG.

Marc Van Sande, 51
Executive Vice-President
Supervising: Advanced Materials business group
Research

Marc Van Sande holds a PhD in Physics from the University of Antwerp as well as an MBA. He joined MHO, a predecessor company of Umicore in 1980, and held several jobs in research, marketing and production. In 1993 he was appointed Vice-President of the Electro-Optic Materials business unit and he was appointed to his present position in 1999.

5.3.4.3. Compensation of the "Comité de Direction/Directiecomité"

For the year 2002, an aggregate gross amount of EUR 2,667,000 was attributed to the members of the Executive Committee; of this amount, EUR 405,000 was variable pay relating to 2001 performance. For the members of the Executive Committee, benefits include an extra-legal pension scheme, which is non-contributory and based on length of service and compensation level.

During 2002, 36,500 stock options were allocated to the Executive Committee members as part of the variable compensation package, at an exercise price of EUR 48.15. In total, at the end of 2002, 406,600 stock options/warrants were outstanding in the name of the Executive Committee members, with exercise prices between EUR 30.50 and EUR 65.12. During 2002, the Executive Committee members exercised 4,000 options. As of 31 December 2002, the members of the Executive Committee (presently the "Comité de Direction/ Directiecomité") together hold a total of 132,400 shares.

5.3.5. Remuneration of the Auditors

The yearly remuneration of the auditors, decided by the Ordinary Shareholders Meeting of April 2002 amounts to EUR 284,700.

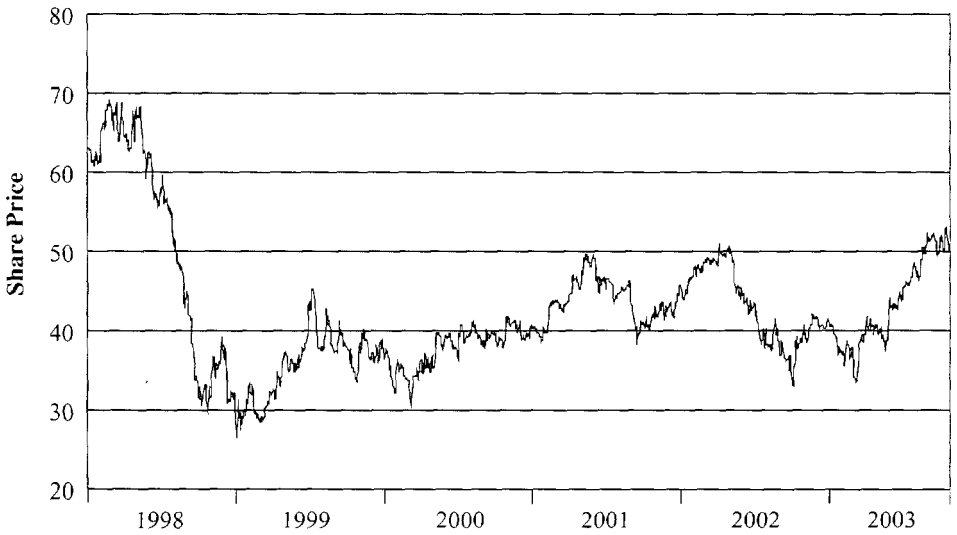
During 2002 the Company also requested the statutory auditor to provide assistance and advice on various issues. These included *inter alia* assistance with acquisition projects, job classification for clerical staff and preparation for the introduction of IFRS accounting standards. The fees paid to the statutory auditor for this work carried out in addition to its auditing assignment amounted to EUR 1,247,900.

The statutory auditor's mandate expires at the 2005 Ordinary Shareholders' Meeting

5.3.6. Share price history

Umicore's daily share price can be found at www.umicore.com or via the Euronext website www.euronext.com

Umicore Share Price 1 January 1998 – 27 October 2003



6. FINANCIAL INFORMATION

6.1. FINANCIAL DATA ON UMICORE(*)

6.1.1. Consolidated annual accounts 2000/2001/2002 – Cash flow statement over the last three years – Annex to the annual accounts 2002

Consolidated income statement

		2002	*2001*	*2000*
			(€ thousand)	
I.	Operating income	3,149,779	3,636,355	3,904,608
	A. Turnover	3,172,140	3,511,173	3,834,732
	B. Increase (decrease) in inventories of work in process finished goods and contracts in progress	(68,750)	79,518	22,149
	C. Fixed assets – own construction	6,799	4,965	2,541
	D. Other operating income	39,590	40,699	45,186
II.	Operating charges	3,072,132	3,515,095	3,754,644
	A. Raw materials and consumables	2,224,864	2,690,623	2,929,993
	1. Purchases	2,144,854	2,702,486	2,997,851
	2. (Increase) decrease in inventories	80,010	(11,863)	(67,858)
	B. Services and other goods	294,144	290,854	256,805
	C. Remuneration, social security charges and pensions	402,783	397,106	377,630
	D. Depreciation and amortisation of	120,890	118,976	122,174
	formation expenses and intangible and tangible assets	112,407	110,226	109,363
	consolidation differences	8,483	8,750	12,811
	E. Increase (decrease) in write-downs on inventories, contracts in progress and trade receivables	817	4,254	7,352
	F. Provisions for liabilities and charges: charged (amounts applied/released)	(12,069)	(22,080)	7,391
	G. Other operating charges	40,703	35,362	53,299
III.	Operating profit (loss) [1][3]	77,647	121,260	149,964
IV.	Financial income	81,193	121,716	63,137
	A. Income from financial fixed assets	1,970	9,126	7,330
	B. Income from current assets	2,881	6,342	10,829
	C. Other financial income	76,342	106,248	44,978
V.	Financial charges	97,821	139,668	78,382
	A. Interest and other debt charges	21,266	27,223	31,173
	B. Write-downs on current assets	1,644	2,822	438
	C. Other financial charges	74,911	109,623	46,771
	Net financial income (charge) [2]	(16,628)	(17,952)	(15,245)
VI.	Current profit (loss)	61,019	103,308	134,719

(*): established in accordance with Belgian GAAP

3 See comments and notes

	2002	2001	2000
		(€ thousand)	
VII. Extraordinary income	7,349	78,097	39,900
A. Write-backs on intangible and tangible fixed assets and consolidation differences	—	—	82
B. Write-backs on financial fixed assets	142	785	244
C. Write-backs of provisions for extraordinary liabilities and charges	2,665	2,156	433
D. Gain on disposal of fixed assets	3,190	73,153	34,473
E. Other extraordinary income	1,352	2,003	4,668
VIII. Extraordinary charges	26,991	48,407	36,215
A. Extraordinary depreciation and amortisation of	2,021	13,182	3,686
intangible and tangible assets	2,021	12,948	440
consolidation differences	—	234	3,246
B. Write-downs on financial fixed assets	3,357	767	6,171
C. Provisions for extraordinary liabilities and charges: amounts charged (amounts applied)	3,481	14,029	12,035
D. Loss on disposal of fixed assets	1,396	168	126
E. Other extraordinary charges	16,736	20,261	14,197
Extraordinary profit (loss) [3]	(19,642)	29,690	3,685
IX. Profit (loss) for the year before taxes	41,377	132,998	138,404
X. Income taxes[4]	3,238	10,416	10,338
XI. Profit (loss) of consolidated companies	38,139	122,582	128,066
XII. Group share in profit (loss) of companies included by the equity method [5]	15,140	12,907	13,463
Profit	15,140	12,907	13,463
Loss	—	—	—
XIII. Consolidated profit (loss)	53,279	135,489	141,529
XIV. Minority share in consolidated profit (loss)	4,887	19,478	5,412
XV. Group share in consolidated profit (loss) [6]	48,392	116,011	136,117

Appropriation Account	2002	2001	2000
		(€ thousand)	
Appropriation of Group share			
Transfer from (to) reserves	(19,204)	(85,811)	(104,064)
Remuneration of shareholders	(29,188)	(30,200)	(32,053)
Appropriation of minority share			
Transfer from (to) reserves	(4,887)	(19,478)	(3,022)
Remuneration of minority shareholders	—	—	(2,390)

Consolidated balance sheet after appropriation
at 31 December

	2002	2001	2000
		(€ thousand)	
ASSETS			
FIXED ASSETS	1,083,536	1,093,254	1,059,354
II. Intangible assets [7]	14,810	10,467	9,742
III. Consolidation differences [8]	102,016	93,997	84,359
IV. Tangible assets [9]	771,121	773,790	700,119
A. Land and buildings	204,331	204,669	201,151
B. Plant, machinery and equipment	455,008	390,394	397,611
C. Furniture and vehicles	23,795	23,714	22,235
D. Leasing and similar rights	12,171	13,146	13,758
E. Other tangible assets	1,951	5,271	2,327
F. Construction in progress and advance payments	73,865	136,596	63,037
V. Financial assets [10]	195,589	215,000	265,134
Investments included by the equity method	136,288	143,037	131,426
Unconsolidated investments	22,548	21,211	84,802
Amounts receivable	36,753	50,752	48,906
CURRENT ASSETS	1,199,900	1,449,195	1,452,782
VI. Amounts receivable after one year	1,990	1,079	1,200
A. Trade receivables	1,371	—	—
B. Other amounts receivable	619	1,079	1,200
VII. Inventories and contracts in progress [11]	663,836	827,952	728,978
A. Inventories	621,470	770,570	682,565
B. Contracts in progress	42,366	57,382	46,413
VIII. Amounts receivable within one year [12]	339,990	375,391	358,967
A. Trade receivables	265,028	288,693	256,971
B. Other amounts receivable	74,962	86,698	101,996
IX. Invested cash [13]	121,140	70,264	161,709
A. Own shares	70,884	30,736	72,899
B. Other investments and deposits	50,256	39,528	88,810
X. Cash at bank and in hand [14]	59,648	68,596	61,289
XI. Deferred charges and accrued income [15]	13,296	105,913	140,639
TOTAL ASSETS	2,283,436	2,542,449	2,512,136

	2002	2001	2000
		(€ thousand)	
LIABILITIES AND SHAREHOLDERS' EQUITY			
TOTAL SHAREHOLDERS' EQUITY	1,092,305	1,141,934	1,150,876
GROUP SHAREHOLDERS' EQUITY [16]	1,023,045	1,073,646	1,101,269
I. Capital	500,000	500,000	384,960
II. Share premiums	11,139	11,139	126,179
IV. Reserves	556,579	537,374	577,656
V. Consolidation differences	1,036	963	1,083
VI. Translation adjustments	(45,709)	24,170	11,391
MINORITY INTERESTS			
VIII. Minority interests [17]	69,260	68,288	49,607
PROVISIONS AND DEFERRED TAXES [18]	258,411	270,673	282,479
IX. A. Provisions for liabilities and charges	243,406	252,325	263,456
1. Pensions and similar obligations	97,328	111,852	131,091
2. Taxes	586	552	542
3. Major repairs and maintenance	19,188	17,161	16,131
4. Other liabilities and charges	126,304	122,760	115,692
B. Deferred taxes	15,005	18,348	19,023
CREDITORS	932,720	1,129,842	1,078,781
X. Amounts payable after one year [19]	92,876	153,841	206,578
A. Financial debts	87,370	146,106	198,734
B. Trade debts	74	74	288
D. Other amounts payable	5,432	7,661	7,556
XI. Amounts payable within one year [20]	733,699	814,023	705,881
A. Current portion of amounts payable after one year	85,746	56,876	62,214
B. Financial debts	140,571	197,349	146,319
C. Trade debts	233,272	280,709	300,462
D. Advances received on contracts	49,675	66,258	50,259
E. Taxes, remuneration and social security	92,085	91,678	97,258
F. Other amounts payable [21]	132,350	121,153	49,369
XII. Accrued charges and deferred income [22]	106,145	161,978	166,322
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	2,283,436	2,542,449	2,512,136

Consolidated income statement: comments and notes

[1] Operating results

The operating profit stands at €77.6 million, representing a decline of €43.7 million.

The analysis of the contributions made by the various operations to the Group's profit (loss) is as follows:

	2002	*2001*	*Change*
		(€ million)	
Operations			
Advanced Materials	17.8	32.8	–15.
Copper	9.7	13.0	–3.
Precious Metals	52.4	50.3	2.
Zinc	19.8	50.7	–30.
Technology & Services	8.2	7.8	0.
Diamonds	10.1	5.4	4.
Write-downs on inventories	–4.2	–4.6	0.
Corporate and other activities	(21.1)	(21.2)	0.
	92.7	134.2	–41.
of which profit shown by companies included by the equity method	15.1	12.9	–2.
	77.6	121.3	–43.

Note: XIV. INCOME STATEMENT

A. Analysis of turnover

	2002	*2001*
	(€ thousand)	
By activities:		
– Advanced Materials	354,556	364,774
– Copper	924,207	1,036,198
– Precious Metals	767,894	764,303
– Zinc	762,691	817,941
– Technology & Services	361,894	527,902
– Other	898	55
Total	3,172,140	3,511,173
By geographical areas of production:		
– Belgium	2,046,437	2,271,594
– France	303,332	334,958
– Germany	179,411	216,066
– Other European countries	405,507	394,436
– America	101,998	160,100
– Asia	123,616	123,193
– Africa/Oceania	11,839	10,826
Total	3,172,140	3,511,173

B. Average number of persons employed

1. Analysis by categories

	Consolidated companies	
	2002	*2001*
– Hourly-paid employees	4,218	3,958
– Monthly-paid employees	3,120	3,220
– Managerial staff	949	834
– Executives	51	52
Total	8,338	8,064

2. Analysis by geographical areas

	Consolidated companies				
	Hourly-paid	*Monthly-paid*	*Managerial staff*	*Executives*	*Total*
Belgium	2,685	1,168	492	7	4,352
France	825	446	182	2	1,455
Germany	—	68	7	1	76
Other European Countries	172	1,184	147	16	1,519
America	104	73	47	9	233
Africa/Oceania	107	19	10	4	140
Asia	325	162	64	12	563
Total	4,218	3,120	949	51	8,338

3. Analysis of remuneration, social security charges and pensions

	2002	2001
	(€ thousand)	
Personnel charges	387,186	368,572
Pensions and similar obligations	15,597	28,534
Total	402,783	397,106

[2] Financial results

The year closed with a net financial charge of €16.6 million against €17.9 million in 2001. The €1.3 million improvement reflects a €40.5 million decrease in financial income, which was offset by a €41.8 million decrease in financial charges.

The Group's consolidated financial income decreased by €40.5 million. This decrease mainly reflects the decrease in "Other financial income" (€–29.9 million), which was mainly generated by the combined impact of exchange differences and translation adjustments (€–28.2 million), the decrease in income from financial assets (€–7.1 million) and the decrease in income from current assets (€–3.5 million).

The decrease for 2002 in income from investment and current assets is mainly linked with the Sibeka group following the sale of its investments in natural diamonds and the repayment of the debt relating to the sale of Diamant Boart.

The Group's consolidated financial charges decreased by €41.8 million. This decrease reflects:

- the decrease in "Debt charges" on debts contracted by the Group (€–5.9 million)
- the decrease in "Write-downs on current assets" (€1.2 million)

and also:

- the decrease in "Other financial charges" (€34.7 million).

"Other financial charges" mainly consist of exchange differences and translation adjustments (€–37.8 million). Debt charges decreased owing to the Group obtaining lower interest rates on its loans and to the decrease in the total amount of indebtedness.

[3] Extraordinary results

The year closed with an extraordinary loss of €19.6 million against a profit of €29.7 million in 2001, i.e. a decrease of €49.3 million.

This decrease in the extraordinary results reflects the €70.7 million decrease in extraordinary income, less the €21.4 million decrease in extraordinary charges.

The Group's **extraordinary income** stands at €7.3 million and mainly comprises the following items:

	(€ million)
➢ capital gains realised on fixed assets	3.2
➢ write-backs of provisions for liabilities and charges including	2.7
➢ write-backs and provisions following the closure of Umicore Oxyde France	1.0
➢ other extraordinary income	1.4

The Group's **extraordinary charges** stand at €26.9 million and mainly comprise the following items:

- extraordinary depreciation and amortisation (€2.0 million) of which:
  - on tangible fixed assets 2.0
  - on consolidation differences –
- amounts written down on financial fixed assets (€3.3 million)
- provisions for extraordinary liabilities and charges net of amounts applied (€3.5 million) of which :
  - net provision for pensions and early retirement benefits –4.9
  - provision for miscellaneous liabilities and litigation 4.5
  - provision for the environment 3.9
- capital losses realised on fixed assets (€1.4 million)
- other extraordinary charges (€16.7 million)

Note: XIV. INCOME STATEMENT

C. Other extraordinary charges	*(€ million)*
Reorganisation costs (covered by provisions)	14.4
Reorganisation costs (not covered by provisions)	1.4
Miscellaneous	0.9
Total	16.7

[4] Income taxes

Taxes for the financial year stand at €3.2 million against €10.4 million in 2001. The following companies and sub-groups mainly account for the above taxes:

	(€ million)
➢ Umicore France and other French subsidiaries	–1.1
➢ Umicore Marketing Services-Sogem group	2.0
➢ Umicore Med, Bulgaria	–0.4
➢ Umicore USA	–0.6
➢ Umicore Italia	0.8
➢ Umicore (parent company)	–1.9
➢ Umicore Finance Nederland and other Dutch subsidiaries	1.4
➢ Umicore Australia	0.6
➢ Umicore Commercial Services	0.9
➢ other subsidiaries	1.5

Note: XIV. INCOME STATEMENT

D. Reconciliation of theoretical and effective tax charges	*(€ thousand)*
Theoretical tax charge:	16,621
➢ Dividends from non-consolidated companies (income already taxed)	(1,987)
➢ Untaxed fraction of capital gains	4,612
➢ Use of deferred tax assets from previous financial years and recoverable tax losses	(2,330)
➢ Impact of the financial year's loss	6,943
➢ Tax rate differences due to foreign tax rates	(6,560)
➢ Items taxed on other bases	(18,635)
➢ Sundry deductions and reinstatements	4,574
Effective tax charge as per income statement	3,238

[5] Share in the profit of companies included by the equity method

The Sibeka group (€15.6 million) accounts for the greater part of the profit realised by Group companies which are included by the equity method.

The €15.1 million profit booked in 2002 is higher than the equivalent profit for 2001 (€12.9 million).

The Thai company, Padaeng Industry, which was included by the equity method with effect from 1 July 2000, contributed a loss of €–0.6 million.

Analysis of the profit of companies included by the equity method:

	2002	*2001*
	(€ million)	
Operating profit	21.0	22.4
Financial loss	(0.6)	(2.1)
Extraordinary loss	(3.7)	(6.3)
Taxes	(1.6)	(1.0)
	15.1	12.9

[6] Consolidated results

The fully consolidated companies posted a **profit for the year** of €38.1 million (€122.6 million in 2001), i.e. a decline of €84.4 million.

The profit shown by companies included by the equity method, which stands at €15.1 million against €12.9 million in 2001, i.e. an increase of €2.2 million should be added to the above profit.

The €15.6 million profit shown by the Sibeka group's synthetic diamond operations accounts for the greater part of the profit generated by the companies included by the equity method.

The analysis of the **consolidated profit** is as follows:

	2002	*2001*
	(€ million)	
Consolidated companies' profit	38.1	122.6
Share in profit of companies included by the equity method	15.1	12.9
	53.2	135.5
Minority share in profit	–4.9	–19.5
Group share in profit	48.3	116.0

Consolidated balance sheet: comments and notes

[7] Intangible fixed assets *(+4,343)*

Intangible fixed assets increased owing to acquisitions and own production (€7.1 million) exceeding the amortisation booked for the year (€3.0 million).

Investments during the year included the acquisition of licences and software (amortisation over 3 years). The new projects in progress will be amortised over 5 years.

Note: VIII. STATEMENT OF INTANGIBLE FIXED ASSETS

	Concessions, patents, licences, goodwill	*Software*	*Other intangible assets*	*Total*
		(€ thousand)		
a) Acquisition value				
At the end of the preceding financial year	16,892	27,833	3,250	47,975
Movements				
➢ change in scope of consolidation	195	34	69	298
➢ acquisitions	127	860	4,382	5,369
➢ own construction	—	—	958	958
➢ disposals	—	—	—	—
➢ retirals	(3)	(107)	(412)	(522)
➢ transfers	—	3,940	(3,138)	802
➢ translation adjustments	(21)	(83)	(8)	(112)
➢ sub-total movements	298	4,644	1,851	6,793
At the end of the financial year	17,190	32,477	5,101	54,768
b) Amortisation and write-downs				
At the end of the preceding financial year	11,466	25,503	539	37,508
Movements				
➢ change in scope of consolidation	(4)	10	—	6
➢ amounts charged	820	2,124	71	3,015
➢ disposals	—	—	—	—
➢ cancellations	—	(107)	(412)	(519)
➢ transfers	—	—	(1)	(1)
➢ translation adjustments	(2)	(47)	(2)	(51)
➢ sub-total movements	814	1,980	(344)	2,450
At the end of the financial year	12,280	27,483	195	39,958
c) Net book value				
At the end of the preceding financial year	5,426	2,330	2,711	10,467
At the end of the financial year	4,910	4,994	4,906	14,810
[8] Consolidation differences				*(+8,019)*

The increase in consolidation differences carried under assets can be broken down as follows:

	(€ million)
➢ change in the scope of consolidation	
– GM Metals	5.4
– Unaxis Materials AG	11.9
	17.3
➢ amortisation booked for the financial year	
– operating charges	–9.4
– extraordinary charges	—
	–9.4
➢ translation adjustments	0.1
	8.0

Note: XII. STATEMENT OF CONSOLIDATION DIFFERENCES

	Positive differences	*Negative differences*
	(€ thousand)	
Net book value		
At the end of the preceding financial year	93,997	963
Movements		
➢ change in scope of consolidation	17,303	1,010
➢ ordinary amortisation charges	(9,398)	(915)
➢ extraordinary amortisation charges	—	—
➢ other movements	114	(22)
➢ sub-total movements	8,019	73
At the end of the financial year	102,016	1,036
[9] Tangible fixed assets		*(–2,669)*

Industrial investments, including own production, totalled €145.8 million of which €76.9 million at n.v. Umicore s.a., Belgium, €20.8 million at Umicore France, €32.6 million at Umicore Med, Bulgaria, €2.9 million at Galva 45 and €1.6 million at Umicore Germanium USA.

At Umicore Med, Bulgaria, the modernisation of installations and their adaptation to European environmental standards was finalised in 2002.

An amount of €109.4 million was booked to cover ordinary depreciation and €2 million to cover extraordinary depreciation.

Changes in the scope of consolidation had a net impact of €11.9 million.

Translation adjustments mainly linked to the fall in value of the USD against the € had a net impact of €–42.7 million.

Note: IX. STATEMENT OF TANGIBLE FIXED ASSETS

	Land and buildings	*Plant, machinery and equipment*	*Furniture and vehicles*	*Leasing and similar rights*	*Other tangible assets*	*Construction in progress and advance payments*
			(€ thousand)			
a) Acquisition value						
At the end of the preceding financial year	429,996	1,330,686	96,016	19,600	152,302	136,596
Movements						
➢ change in scope of consolidation	4,121	10,750	2,283	49	14	67
➢ acquisitions	4,322	44,035	6,432	35	340	84,723
➢ own construction	435	2,908	579	—	—	1,920
➢ disposals	(1,902)	(4,306)	(5,943)	(54)	(990)	(361)
➢ retirals	(2,716)	(7,681)	(1,702)	(225)	(20,174)	—
➢ transfers	21,914	113,951	3,329	(221)	1,061	(140,837)
➢ translation adjustments	(11,699)	(39,469)	(2,244)	(246)	(72)	(8,243)
➢ sub-total movements	14,475	120,188	2,734	(662)	(19,821)	(62,731)
At the end of the financial year	444,471	1,450,874	98,750	18,938	132,481	73,865
b) Depreciation and write-downs						
At the end of the preceding financial year	225,327	940,292	72,302	6,454	147,031	—
Movements						
➢ change in scope of consolidation	826	3,099	1,386	17	8	—
➢ amounts charged	20,022	77,264	9,597	823	3,713	—
➢ write-backs	—	(7)	—	—	—	—
➢ disposals	(146)	(3,852)	(5,164)	(31)	(417)	—
➢ cancellations	(2,385)	(6,886)	(1,641)	(225)	(19,847)	—
➢ transfers	1	(224)	227	(108)	106	—
➢ translation adjustments	(3,505)	(13,820)	(1,752)	(163)	(64)	—
➢ sub-total movements	14,813	55,574	2,653	313	(16,501)	—
At the end of the financial year	240,140	995,866	74,955	6,767	130,530	—
c) Net book value						
At the end of the preceding financial year	204,669	390,394	23,714	13,146	5,271	136,596
At the end of the financial year	204,331	455,008	23,795	12,171	1,951	73,865
of which:						
– land and buildings				12,077		
– plant, machinery and equipment				94		
[10] Financial fixed assets						*(19,411)*

The changes in financial fixed assets reflect the following factors:

	(€ million)
– €–6.75 million change in participating interests included by the equity method, which breaks down as follows:	
➢ change in scope of consolidation and capital increase (decrease)	
Padaeng Industry (acquisition of further shares)	0.33
Umicore Oxyde UK (change of method)	0.76
Unimet (change of method)	0.93
➢ sales to third parties	—
➢ (net) result realised	15.14
➢ dividend distribution	–6.35
➢ translation adjustments	–17.56
	–6.75
– €+1.34 million change in non-consolidated participating interests, which breaks down as follows:	
➢ acquisitions from third parties and capital increase	
– Rezinal	+3.35
– Union Zinc Russia	+0.10
– Umicore Strub Suisse	+1.71
– Umicore Strub Slovakia	+0.56
– Umicore Marketing Services Taiwan	+1.27
– Sopave	+0.70
	+7.69
➢ sales to third parties and capital decrease	
– Galva 08	–0.32
– Sonaca	–0.24
– Two Six	–0.51
– Oil Tanking (Bulgaria)	–0.34
	–1.41
➢ amounts written down	
– Sigen	–2.68
– Pangaea	–0.27
	–2.95
➢ reversals of amounts written down (due to disposals or surplus to requirements)	+0.03
➢ transfers and changes in the scope of consolidation	
– Umicore Specialty Chemicals Arab (USA)	–2.50
– Umicore Marketing Services – Shanghai	–0.16
– Pangaea	+1.63
	–1.03
➢ translation adjustments	–0.99
TOTAL	+1.34

– €–14 million change in amounts receivable, which breaks down as follows:

	(€ million)
➢ repayments	–31.11
➢ new receivables	+15.15
➢ change in scope of consolidation	+0.39
➢ transfers	+2.37
➢ amounts written down	–0.41
➢ reversals of amounts written down	+0.11
➢ translation adjustments	–0.50
	–14.00

Note: X. STATEMENT OF FINANCIAL FIXED ASSETS

	(€ thousand)
a) Investments included by the equity method	
At the end of the preceding financial year	143,037
Movements	
➢ change in scope of consolidation	1,694
➢ acquisition of further shares	326
➢ dividends paid	(6,348)
➢ profit (loss) for the financial year	15,140
➢ translation adjustments	(17,561)
➢ sub-total movements	(6,749)
At the end of the financial year	136,288

	Acquisition value	*Write-downs*
b) Non-consolidated investments		
At the end of the preceding financial year	56,284	(35,073)
Movements		
➢ change in scope of consolidation	(2,823)	168
➢ acquisitions and capital increase	7,693	—
➢ disposals and capital decrease	(1,643)	228
➢ write-downs	—	(2,925)
➢ write-backs	—	2
➢ transfers and other charges	1,799	(168)
➢ translation adjustments	(2,098)	1,104
➢ sub-total movements	2,928	(1,591)
At the end of the financial year	59,212	(36,664)
Net book value		
At the end of the preceding financial year	—	21,211
At the end of the financial year	—	22,548

	Acquisition value	*Write-downs*
c) Amounts receivable		
At the end of the preceding financial year	54,291	(3,539)
Movements		
➢ change in scope of consolidation	393	—
➢ additions and acquisitions	15,140	—
➢ write-downs and write-backs	—	(291)
➢ repayments and disposals	(31,473)	361
➢ transfers	2,367	—
➢ translation adjustments	(749)	253
➢ sub-total movements	(14,322)	323
At the end of the financial year	39,969	(3,216)
Net book value		
At the end of the preceding financial year		50,752
At the end of the financial year		36,753

[11] Inventories and contracts in progress .. .. *(–164,116)*

The following companies mainly account for the decrease in inventories and contracts in progress:

	(€ million)
➢ n.v. Umicore s.a.	–93.81
➢ Umicore France	–4.89
➢ Umicore Marketing Services – Sogem group	–55.26
➢ Umicore Engineering	–13.54
➢ Umicore Commercial Services	+9.26
➢ Umicore Med, Bulgaria	–16.12
➢ Umicore Italia	+3.18
➢ change in scope of consolidation	+9.80
➢ other companies (decrease in inventories)	–6.43
➢ other companies (increase in inventories)	+3.69
	–164.12

As Sogem is a trader its inventories can fluctuate sharply from one year end to the next depending on the level of transactions outstanding.

It should be remembered that since 1992 the Group has valued its metal inventories on an annual LIFO basis in view of the nature of its activities and the problems entailed by stock-taking.

The Group's metal inventories are valued at €319.7 million on a LIFO basis and have a market value of €479.2 million.

[12] Amounts receivable within one year .. .. *(–35,401)*

Trade receivables decreased by €23.7 million mainly due to the following factors:

	(€ million)
– change in the scope of consolidation	+7.54
– Group companies (increase)	+9.39
– Group companies (decrease)	–40.59

The portfolio of trade receivables due from third parties funded by means of securitisation amounted to €159.6 million for the Umicore Group at 31 December 2002 of which €23.6 million were deferred and carried under "Other receivables".

At 31 December 2001 the portfolio of trade receivables due from third parties funded by means of securitisation amounted to €156.5 million, of which €26.5 million were deferred and carried under "Other receivables".

The net impact of trade receivables funded in this way was €6.0 million higher at 31.12.2002 than at 31.12.2001, giving rise to a corresponding decrease in the amount of trade receivables not funded by means of securitisation.

Other receivables decreased by €11.7 million, which includes the deferred purchase price (€23.6 million) of the securitised receivables.

[13] Invested cash .. .. *(+50,876)*

The increase in invested cash mainly reflects the combined effect of the following factors:

➢ **own shares** .. .. **+40,148**

In 1999 Umicore decided to buy back its own shares in accordance with statutory limits and conditions.

This decision was renewed for the last time at the Extraordinary General Meeting held on 21 December 2001.

The following acquisitions of own shares were effected:

	No. of shares	*Amount in €*
31.12.1999	241,488	7,651,208.93
Acquisitions 2000 (net)	1,808,160	65,247,586.47
31.12.2000	2,049,648	72,898,795.40
2001		
Acquisitions (net)	1,888,045	84,829,324.65
Removal (securities lending)	–25,000	–915,116.00
	1,863,045	83,914,208.65
Cancellation extraordinary general meeting 30/3	–1,617,515	–62,754,380.15
Cancellation extraordinary general meeting 21/12	–1,400,000	–63,338,816.63
Movements 2001	–1,154,470	–42,178,998.13
VVPR strips	—	16,025.00
Position at 31.12.2001	895,178	30,735,832.27
2002		
Acquisitions (net)	937,217	40,569,017.29
Exercise of option	–40,700	–1,319,836.30
Cancellation 2002	—	—
	896,517	39,249,180.99
Reinstatement of securities lending 2001	25,000	915,116.00
Transfer of VVPR strips	—	–16,025.00
Movements 2002	921,517	40,148,271.99
Position at 31.12.2002	1,816,695	70,884,104.26

These shares are not included in the dividend distribution and the corresponding coupon has been cancelled.

An unavailable reserve for the same amount has been set aside.

The loan of 65,000 shares effected with Dexia Bank as part of the Stock Option Plan management arrangements is carried under "Own shares" – Amounts due from third parties for own shares held. The VVPR strips valued at €16,025 have been transferred to "Other investments" – shares.

➢ **other investments** **+10,728**

The position of other cash investments was as follows:

	(€ million)
➢ Umicore, Belgium	13.15
➢ Umicore Financial Services	28.14
➢ Umicore USA	1.83
➢ Umicore Australia	4.01
➢ Umicore Marketing Services – Sogem group	1.90
➢ other subsidiaries	1.23
	50.26

[14] Cash at bank and in hand *(–8,948)*

At the end of the financial year cash at bank and in hand stood at €59.65 million, which breaks down as follows:

	(€ million)
➢ Umicore, Belgium	+5.47
➢ Umicore Financial Services	+5.63
➢ Umicore France	+2.12
➢ Umicore Italia	+4.26
➢ Umicore Norway	+2.33
➢ Umicore Marketing Services – Sogem group	+14.39
➢ Umicore Med, Bulgaria	+2.35
➢ Umicore Shanghai	+1.04
➢ Umicore Canada	+2.47
➢ Umicore Commercial Services	+1.98
➢ Umicore Cobalt Products	+1.58
➢ Umicore Materials AG	+3.23
➢ Metall Dinslaken GmbH	+1.68
➢ other subsidiaries	+11.12
	+59.65

[15] Deferred charges and accrued income *(–92,617)*

The items carried under this heading stood at €13.29 million which breaks down as follows:

	(€ million)
➢ Umicore, Belgium (parent)	+3.07
➢ Umicore France	+1.79
➢ Umicore Cuivre et Zinc	+1.15
➢ Umicore Marketing Services – Sogem group	+5.61
➢ other subsidiaries	+1.67
	+13.29

The significant decrease in 2002 (€92.6 million) resulted primarily from the offsetting at Umicore, Belgium, between exchange gains and losses resulting from the marking to market of forward exchange contracts and the exchange gains and losses on commercial contracts (€64.20 million).

[16] Shareholders' equity *(–50,601)*

Changes in Group shareholders' equity are analysed in section XI. of the Notes to the Consolidated Accounts.

They can be summarised as follows:

	(€ thousand)
➢ profit for the year (Group share)	+48,392
➢ consolidation differences	+73
➢ translation adjustments	–69,879
➢ dividend distribution	–29,187
	–50,601

The capital of n.v. Umicore s.a., Belgium, of €500 million is represented by a total of 22,600,000 shares of which 1,816,695 are held by the parent company (own shares).

The change in translation adjustments (€69.9 million) made when consolidating foreign companies is mainly due to the depreciation of the US dollar against the €(consolidation currency), in particular at Umicore Med, Bulgaria (€28.35 million), Umicore USA (€10.31 million) and Sibeka (€10.85 million).

The increase in the consolidation differences carried under liabilities (€+73 thousand) is due to:

	(€ thousand)
➢ amortisation for the period (operating)	–915
➢ change in the scope of consolidation	+1,010
➢ translation adjustments	–22
	+73

Umicore has decided to propose to the Annual General Meeting of Shareholders that a pre-tax dividend of €1.40 be paid on the shares not held by Umicore, i.e. 20,848,305 shares (€29.19 million).

This amount will be amended to make allowance for the number of its own shares held by Umicore on 9 April 2003, the date of the Annual General Meeting of Shareholders.

With effect from 26 March 1999, all the VVPR shares were converted into ordinary shares with a coupon strip attached. Coupon No. 5 from the VVPR shares entitled holders to a strip of coupons (a total of 2,185,163 strips were issued) and coupon No. 5 from the ordinary shares was cancelled.

Note: XI. STATEMENT OF SHAREHOLDERS' EQUITY

	Capital	*Share premiums*	*Reserves*	*Consolidation differences*	*Translation adjustments*	*Total*
			(€ thousand)			
At the end of the preceding financial year	500,000	11,139	537,374	963	24,170	1,073,646
Movements						
➢ capital increase	—	—	—	—	—	—
➢ remuneration of shareholders	—	—	(29,187)	—	—	(29,187)
➢ change in translation adjustments	—	—	—	—	(69,879)	(69,879)
➢ change in consolidation differences	—	—	—	73	—	73
➢ profit (loss) for the financial year	—	—	48,392	—	—	48,392
At the end of the financial year	500,000	11,139	556,579	1,036	(45,709)	1,023,045

[17] Minority interests *(+972)*

The increase in the minority shareholders' share of the Group's equity mainly reflects the following changes:

	(€ million)
➢ minority shareholders' share in the profit for the year	+4.89
➢ dividend paid to minority shareholders (2001)	–1.57
➢ proposed dividend payment for 2002 to minority shareholders	—
➢ capital increase and acquisitions of additional shares in Umicore Med, Bulgaria, and Pacific Rare Metals, The Philippines	+0.75
➢ translation adjustments	–3.10
	+0.97

[18] Provisions for liabilities and charges and deferred taxes *(–12,262)*

The changes in the various types of provisions are analysed in section XVIII. of the Notes to the Consolidated Accounts.

They can be summarised as follows:

		(€ million)
➢ amounts charged in the financial year		71.48
of which as operating charges	42.78	
of which as financial charges	1.35	
of which as extraordinary charges	24.88	
of which as deferred tax charges	2.47	
➢ amounts applied in the financial year		–68.71
of which as operating charges	–47.25	
of which as extraordinary charges	–21.40	
of which as deferred tax charges	–0.06	
➢ amounts released in the financial year		–13.97
of which as operating income	–7.60	
of which as extraordinary income	–2.67	
of which as deferred tax charges	–3.70	
➢ change in scope of consolidation		+2.10
➢ translation adjustments		–2.88
➢ other changes		–0.28
		–12.26

The various types of provisions registered the following changes in the course of the financial year:

➢ pensions and similar obligations	–14.52
➢ taxes	+0.03
➢ major repairs and maintenance	+2.03
➢ other liabilities and charges	+3.54
➢ deferred taxes	–3.34
	–12.26

The decrease in provisions for pensions and similar obligations (€–14.52 million) reflects the net result of the amounts charged, applied and released in the course of the financial year. The decrease mainly affects n.v. Umicore s.a. due to payment made under early retirement plans.

Furthermore, the impact of the change in valuation rules noted in appendix VI.a., "Accounting principles and valuation rules" – item 13 – Provisions for pensions – is €4.5 million, both on the operating results (profit) and on the provisions (decrease).

Provisions for major repairs and maintenance increased by €2.03 million.

These provisions, which mainly cover the cost of carrying out regular maintenance work on the furnaces and cell houses, fluctuate according to maintenance cycles and to investments and disposals effected.

Provisions for other liabilities and charges increased by €3.54 million, reflecting the amounts charged, applied and released in 2002 and the impact of the changes in the scope of consolidation (€+1.8 million).

On the environmental front n.v. Umicore s.a. concluded an agreement with the Flemish Regional Authorities in 1997 on the rehabilitation of its industrial sites, spread over a period of 10 years. A joint working

party was set up to compile a detailed inventory of the work to be carried out and to determine priorities, and also to find optimum solutions for long-standing pollution problems.

The studies will be used as a basis for drawing up a concrete plan of action with OVAM (the Flemish regional waste authority) and for prioritising objectives.

Finalisation of the rehabilitation plan was delayed due to problems in interpreting the agreement, and no increase in provision occurred in 2002.

Provisions for other liabilities and charges also include a provision for restructuring (€7.8 million), mainly covering the social plans for activities which ceased in 2002.

	(€ million)
➢ Umicore, Belgium (Overpelt)	3.8
➢ Umicore France	1.9
➢ Umicore Oxyde France	2.1
	7.8

The Umicore Group's environmental provisions included under "Other provisions for liabilities and charges" at 31 December 2002 can be broken down as follows:

	(€ thousand)
➢ covering ponds	38,107
➢ cleaning up the soil	19,224
➢ rehabilitating sites	19,102
➢ waste treatment	14,362
➢ studies	298
➢ miscellaneous	1,536
	92,629

The decrease in the provision for deferred taxes (€3.34 million) mainly reflects the situation at Umicore Med, Bulgaria (€2.62 million), and the decrease in deferred taxes at Umicore France (€1.66 million).

The provision for deferred taxes set aside by Umicore Med, Bulgaria, in accordance with Group rules, which are based on IAS 12, was estimated on the basis of the company's special tax position at the time of acquisition. This position was confirmed in the course of the 2002 financial year.

Note: XVIII. STATEMENT OF PROVISIONS AND DEFERRED TAXES

	Pensions and similar obligations	*Tax charges*	*Major repairs and maintenance*	*Other liabilities and charges*	*Deferred taxes*
			(€ thousand)		
Net book value					
At the end of the preceding financial year	111,852	552	17,161	122,760	18,348
Movements					
➢ change in scope of consolidation	134	—	—	1,837	127
➢ charged	13,250	35	16,539	39,191	2,468
➢ applied	(22,959)	—	(11,845)	(33,848)	(59)
➢ released	(4,674)	(1)	(2,163)	(3,426)	(3,704)
➢ transfers	(279)	—	—	—	—
➢ translation adjustments	4	—	(504)	(210)	(2,175)
➢ sub-total movements	(14,524)	34	2,027	3,544	(3,343)
At the end of the financial year	97,328	586	19,188	126,304	15,005
[19] Amounts payable after one year					*(–60,965)*

The decrease in amounts payable after one year breaks down as follows:

	(€ million)
➢ transfer of the current portion	–83.89
➢ repayment effected in 2002	–23.52
➢ new loans contracted	+41.26
➢ amounts written down	—
➢ change in scope of consolidation	+7.91
➢ translation adjustments	–2.74
➢ subsidies	–0.25
➢ transfer	+0.27
	–60.96

Note: XIII. STATEMENT OF AMOUNTS PAYABLE AFTER ONE YEAR (excluding investment grants)

A. Analysis by maturity dates	*n+2*	*n+3*	*n+4*	*n+5*	*n+6 to 10*	*n+11 to 15*	*Total*
				(€ thousand)			
Unsubordinated debentures	30	36	37	37	31	—	171
Leasing and similar obligations	21	—	—	—	—	—	21
Credit institutions	51,170	15,837	713	19,339	119	—	87,178
Other financial debts	—	—	—	—	—	—	—
sub-total financial debts	51,221	15,873	750	19,376	150	—	87,370
Trade debts	74	—	—	—	—	—	74
Other amounts payable(excl. €2.49 million of investment grants)	2,932	—	—	—	—	—	2,932
Total	54,227	15,873	750	19,376	150	—	90,376

B. Analysis of financial debts by currencies[1]	*EUR*	*Other European currencies*	*USD*	*Other*	*Total*
Unsubordinated debentures	171	—	—	1,151	1,322
Leasing and similar obligations	—	21	—	5	26
Credit institutions	147,221	164	24,157	—	171,542
Other financial debts	—	—	—	—	—
Total financial debts	147,392	185	24,157	1,156	172,890

(1) Including current portion of financial debts (€85.51 million)

[20] Amounts payable within one year .. .. *(–80,324)*

Amounts payable within one year mainly comprise financial debts, trade debts and amounts due in respect of taxes, wages and social security.

The current portion of amounts payable after one year increased by €28.87 million owing to the following:

	(€ million)
➢ repayment of loans	–56.61
➢ transfer from amounts payable after one year (current portion)	+83.89
➢ change in scope of consolidation	+0.25
➢ new loan	+2.18
➢ miscellaneous	–0.84
	+28.87

Financial debts decreased by €56.78 million and trade debts by €47.44 million.

[21] Other debts .. .. *(+11,197)*

Other debts payable within one year (€132.3 million) increased by €11 million, reflecting, in particular, that portion of trade receivables which was securitised at the end of November 2002 and collected in December (€89 million, up by €8 million compared with 2001) and which will be refunded to the financial institution in charge of the securitisation operation at the time December's balance is calculated, which is scheduled for the middle of January.

Table summarising short-term and long-term financial debts

	Total		*Credit institutions*	
	2002	*2001*	*2002*	*2001*
		(€ million)		
Long-term debts				
Unsubordinated debentures	0.17	0.18	—	—
Leasing	0.02	0.03	—	—
Credit institutions	87.18	145.90	87.18	145.90
Other debts	—	—	—	—
	87.37	146.11	87.18	145.90
Current portion of long-term debts				
Unsubordinated debentures	1.15	2.38	—	—
Leasing	0.05	0.03	—	—
Credit institutions	84.36	54.21	84.36	54.21
Trade debts	0.13	0.14	—	—
Other debts	0.06	0.11	—	—
	85.75	56.87	84.36	54.21
Short-term debts				
Credit institutions	138.46	184.09	138.46	184.09
Other non-bank	2.11	13.26	—	—
	140.57	197.35	138.46	184.09
TOTAL	313.69	400.33	310.00	384.20
Repayment of debts				
Within the year	226.32	254.43	222.63	238.30
Between 1 and 5 years	87.37	145.90	87.37	145.90
After 5 years	—	—	—	—
TOTAL	313.69	400.33	310.00	384.20

Long-term debts with credit institutions, including the current portion of such debts, account for 99.1% of total debts. 85.82% of these long-term debts were contracted in €.

The average interest rate at the year end for long-term floating-rate loans in € was 3.76%.

The weighted average residual maturity of long-term financial debts at the year-end was 2.4 years.

Short-term financial debts (€138.46 million) are mainly denominated in €.

The average interest rate for short-term financial debts was 1.69% for the USD and 3.21% for the €.

Current borrowing requirements are covered by short-term credit lines, either confirmed or unconfirmed, in USD, € and other currencies.

These are multi-purpose credit lines which can be used in the form of advances, overdrafts, acceptances, etc.

In addition, the Umicore Financial Services Coordination Centre has at its disposal short-term financial resources for issuing commercial paper up to an amount of €125 million, of which €63.77 million were in use at 31.12.2002.

[22] Accrued charges and deferred income . . . . . *(–55,833)*

At Umicore these items comprise treatment charges to be incurred on material to be toll treated. These charges have already been invoiced to customers but have not been booked to income as the treatment has not yet been carried out. They decreased from €23.84 million at the end of 2001 to €23.11 million at the end of 2002.

The value of metals which had been invoiced but not delivered increased by €26.95 million from €14.74 million to €41.69 million.

"Accrued charges and deferred income" also include the potential loss resulting from the revaluation of exchange positions at n.v. Umicore s.a. (€0.05 million) and the result of marking to market of metal positions (€6.38 million) and forward exchange contracts at Umicore Financial Services (€0.61 million).

The significant fall in potential loss due to the revaluation of exchange positions is mainly due to the offsetting carried out in 2002 (€64.19 million), booked under "Deferred charges and accrued income".

Note: XV. RIGHTS AND COMMITMENTS NOT REFLECTED IN THE BALANCE SHEET

	2002	*2001*
	(€ thousand)	
Guarantees constituted by third parties on behalf of the Group	41,878	63,771
Guarantees constituted by the Group on behalf of third parties	57,801	54,866
Guarantees constituted by the Group on own assets and for own account	868	448
Guarantees received	31,957	23,203
Property and securities held by third parties in their own names but at the Group's risk	47,643	76,903
Commitments to acquire and sell fixed assets	—	9
Forward contracts:		
➢ Commodities purchased (to be received)	321,774	326,628
➢ Commodities sold (to be delivered)	474,284	640,698
➢ Currencies purchased (to be received)	1,498,222	1,896,524
➢ Currencies sold (to be delivered)	1,498,843	1,899,872
Property and securities of third parties held by the Group	88,188	231,453
Miscellaneous rights and commitments	26,972	15,158

Note: XVII. FINANCIAL RELATIONS WITH DIRECTORS

	(€ thousand)
Aggregate amount of remuneration attributed in the financial year to the directors or executive officers of the consolidating company by reason of their offices in said company, its subsidiaries and its affiliated companies, including the retirement allowances attributed, for the same reason, in the financial year to former directors or executive officers	1,245

Statement of consolidated cash flows and comments

	2002	2001	2000
		(€ million)	
Operating activities			
Consolidated profit (loss) (Group share)	48.39	116.01	136.12
Minority interests in consolidated profit (loss)	4.89	19.48	5.40
Profit (loss) of companies included by the equity method, net of dividends received	(8.79)	(8.46)	(3.74)
Depreciation of tangible fixed assets	111.41	119.34	104.29
Amortisation of intangible assets and consolidation differences	11.50	12.82	21.47
Amortisation of investment grants	(0.54)	(0.66)	(1.02)
Write-downs (write-backs) on amounts receivable	—	—	—
Write-downs (write-backs) on financial fixed assets	4.21	(0.02)	5.73
Increase (decrease) in provisions for liabilities and charges	(11.20)	(14.14)	16.31
(Gain) loss on disposal of fixed assets	(0.82)	(72.01)	(34.11)
Cash flow	159.05	172.36	250.45
(Increase) decrease in working capital requirements for operations	177.53	(21.02)	39.68
Impact of changes in scope of consolidation and translation adjustments on working capital requirements and on net cash and equivalents	(6.03)	14.58	(16.48)
Transfers of current assets and current liabilities and other movements	(2.36)	(3.35)	(2.43)
NET CASH PROVIDED BY (USED IN) OPERATING ACTIVITIES [23]	**328.19**	**162.57**	**271.22**
Investing activities			
Acquisitions and own production of tangible fixed assets	(144.33)	(173.37)	(103.81)
Acquisitions and own production of intangible fixed assets	(6.33)	(4.67)	(0.62)
Acquisitions of financial fixed assets (consolidated)	(37.02)	(35.95)	(35.65)
Acquisitions of additional shareholdings in Group companies	(0.36)	(2.54)	(0.30)
Acquisitions of financial assets	(7.69)	(7.09)	(4.98)
New loans extended	(16.20)	(1.86)	(1.83)
Sub-total acquisitions	(211.93)	(225.48)	(147.19)
Disposal of tangible fixed assets	5.98	5.31	9.77
Disposal of intangible fixed assets	0.01	0.12	0.02
Disposal of consolidated financial investments	0.38	0.02	25.38
Disposal of financial fixed assets	1.41	140.64	30.24
Repayment of loans	35.92	2.47	2.93
Sub-total disposals	43.70	148.56	68.34
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES [24]	**(168.23)**	**(76.92)**	**(78.85)**
Financing activities			
Capital increase	—	—	—
New loans	43.73	3.27	35.72
Own shares	(40.15)	(83.93)	(65.25)
Repayment of loans	(72.63)	(62.95)	(52.85)
Dividends paid to Umicore shareholders	(30.20)	(31.76)	(29.99)
Dividends paid to minority shareholders by fully consolidated subsidiaries	(1.57)	(2.85)	(1.69)
NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES [25]	**(100.82)**	**(178.22)**	**(114.06)**
INCREASE (DECREASE) IN NET CASH AND EQUIVALENTS [26]	**59.14**	**(92.57)**	**78.31**
Net cash and equivalents: opening position	(89.22)	3.79	(74.79)
Change in scope of consolidation and transfers on opening position	(0.58)	(0.44)	0.27
Net cash and equivalents: closing position	(30.66)	(89.22)	3.79

Definitions

The Umicore Group's statement of cash flows shows the difference between actual amounts received and amounts disbursed in the course of the financial year and provides an analysis of these amounts on the basis of operating, investing and financing activities.

Operating activities should be understood in the broadest sense of the word, i.e. also including cash flows linked to debt servicing and financial products (financial income), extraordinary items which are not linked to investment transactions and also income taxes. The cash flow from operating activities is calculated on the basis of the net profit (indirect method):

- by eliminating from this profit the charges and income:
  - which do not have an impact on cash flows, such as depreciation, provisions, write-downs, etc.
  - which are linked to investment transactions (such as the proceeds from the sale of fixed assets);
- by taking into account the difference in operational working capital requirements.

The difference in operational working capital requirements represents the difference between current assets and current liabilities, excluding cash at bank and in hand and financing, where necessary re-stated to allow for the impact of changes in the scope of consolidation and exchange rates, plus items more specifically linked to investing activities.

Financing activities comprise the various changes in loans and debts at more than one year (repayments of loans and new loans) and other cash movements pertaining to permanent funds, such as capital increases or decreases and dividends paid either to minority shareholders by fully consolidated subsidiaries, or to the company's shareholders.

The change in the net cash position includes changes in liquid financial assets, i.e. short-term cash investments, available assets and short-term financial debts.

Comments

[23] Increase in the cash flow from operating activities

The cash flow from operating activities stands at €159.05 million for the Group, i.e. a decline of €13.31 million compared with 2001.

The positive change in operational working capital requirements (€177.53 million), the impact of the changes in the scope of consolidation and translation adjustments (€–6.03 million) and other changes (€–2.36 million) resulted in an increase in the cash flow of €169.14 million, i.e. a positive difference in the cash flow from operating activities for the 2002 financial year of €328.19 million (against €162.57 million in 2001 and €271.22 million in 2000).

[24] Investing activities

Investing activities for 2002 stand at €211.93 million, against €225.48 million in 2001. This figure was offset in part by disposals of intangible, tangible and financial investments totalling €43.70 million against €148.56 million in 2001, i.e. a negative net position of €–168.23 million.

This mainly reflects the following transactions:

	(€ million)	
➢ continuation of major investments in tangible assets in Belgium and abroad		144.37
➢ acquisition of interests in consolidated companies and companies included by the equity method including acquisition of		37.02
– Umicore Materials AG	20.70	
– GM Metals	6.08	
– Hunan Fuhong Zinc	5.50	
– Umicore Indium Products	2.50	
– Umicore SP MAT USA	1.07	
– Pacific Rare Metals Industries	1.17	
➢ acquisition of additional interests in Group companies		0.36
– Padaeng	0.33	
– other	0.03	
➢ acquisition of financial assets		7.69
– Rezinal	3.35	
– Umicore Strub	2.27	
– Umicore Taiwan	1.27	
– Sopave	0.70	
– Union Zinc Russia	0.10	
➢ sale of financial fixed assets		1.41
➢ including sale of:		
– Galva 08	0.32	
– Sonaca	0.24	
– Two Six	0.51	
– Oil Tanking	0.34	
➢ repayment of loans		35.92

[25] Financing activities

The new loans at more than one year contracted with financial institutions in 2002 i.e. €43.73 million, less repayments of existing loans, i.e. €–72.63 million, the acquisition by n.v. Umicore s.a. of its own shares, i.e. €–40.15 million and dividend payments to shareholders of €–31.77 million give a negative net balance of €–100.82 million.

[26] Change in net cash flow

The positive net change (€59.14 million) in the Group's cash flow in 2002 is mainly due to the change in working capital requirements in comparison with 31 December 2002.

The combined effects of the decrease in inventories (€–164.17 million), amounts receivable (€–35.40 million) and amounts payable (€–80.32 million) are responsible for the reduction in working capital requirements.

The position can be summarised as follows:

	(€ million)
➢ net cash provided by operating activities	328.19
➢ net cash used in financing activities	–100.82
➢ net cash used in investing activities (2002)	–168.23
Positive net change in cash flow	+59.14

Analysis of net change

	Change	*2002*	*2001*
		(€ thousand)	
Short-term financial debts	56,778	–140,571	–197,349
Other invested cash	10,728	50,256	39,528
Cash at bank and in hand	–8,948	59,648	68,596
	58,558	–30,667	–89,225
Adjustment of opening position	582	582	—
	59,140	–30,085	–89,225

Notes to the 2002[1] consolidated financial statements

I. Criteria for determining the consolidation methods

Full consolidation is used for subsidiaries in which the consolidating company holds a de facto or de jure controlling interest.

Proportional consolidation is applied to subsidiaries held and managed jointly by a limited number of shareholders.

The equity method is used for associated companies over which one or more of the companies included in the scope of consolidation exert a significant influence.

I.bis. Changes in the scope of consolidation

In 2002 the main changes in the scope of consolidation were the full consolidation of the Umicore Materials companies.

A summary table stating the impact of the various changes on the balance sheet and the income statement is included in the notes to the accounts.

The following changes occurred with regard to the consolidated companies:

1. Acquisitions and additions to the scope of consolidation

1.1. Full consolidation

➢ Umicore Materials (Unaxis)

- Umicore Materials AG 100%
- Umicore Materials Netherlands 100%
- Umicore Materials USA 100%

These companies are active in thin film products based on precious metals, indium and other special metals.

➢ GM Metals, France 100%

This company is active in the zinc alloy recycling process.

➢ Hunan Fuhong Zinc International, China 100%

This company is the first Chinese producer of fine zinc powder for use in anti-corrosion paint.

➢ Pacific Rare Metals, The Philippines 67%

This company is active in the production of chemicals such as cobalt sulphate and nickel oxides and carbonates.

➢ Other companies acquired 100%

- Umicore Specialty Chemicals Arab (acquired in December 2001 – consolidated in 2002)
- Umicore Indium Products

These companies were fully consolidated in 2002 in accordance with the Group's accounting principles.

(1) The numbering of these notes reflects the provisions of the Royal Decree of 25 November 1991 pertaining to holding companies' accounts

1.2. Capital increase and change in the percentage interest held

In the course of the 2002 financial year Umicore carried out the following additional share purchases:

	2002
Umicore Med, Bulgaria (in 2001: 99.73%)	99.77%

1.3. Companies included by the equity method

➢ Padaeng Industry, Thailand

By acquiring shares on the stock market, n.v. Umicore s.a. increased its participating interest in Padaeng Industry from 46.05% to 46.56%.

➢ Umicore Oxyde UK (in liquidation) and Unimet (reduced operation), which were fully consolidated, were included by the equity method in 2002.

2. Disposals and exclusion from the scope of consolidation

The Umicore Group did not record any significant disposals or exclusions from the scope of consolidation in 2002.

INCOME STATEMENT MOVEMENTS

Impact of the year's acquisitions on the results for 2002

		GM Metals	*Pacific Rare Metals*	*Umicore Materials*	*Umicore Indium Products*	*Hunan Fuhong Zinc*	*TOTAL*
				(€ thousand)			
I.	Operating income	9,814	916	29,538	1,581	7,593	49,442
II.	Operating charges	(9,340)	(994)	(26,923)	(2,019)	(7,240)	(46,516)
III.	Operating profit (loss)	474	(78)	2,615	(438)	353	2,926
IV.	Financial income	1	23	118	—	—	142
V.	Financial charges	(108)	(188)	(656)	—	(48)	(1,000)
	Net financial income (charge)	(107)	(165)	(538)	—	(48)	(858)
VI.	Pre-tax current profit (loss)	367	(243)	2,077	(438)	305	2,068
VII.	Extraordinary income	2	—	—	—	—	2
VIII.	Extraordinary charges	(5)	—	—	—	(6)	(11)
	Extraordinary profit (loss)	(3)	—	—	—	(6)	(9)
X.	Income taxes	(213)	—	5	—	(75)	(283)
XI.	Profit (loss) of consolidated companies	151	(243)	2,082	(438)	224	1,776
XII.	Group share in profit (loss) of companies included by the equity method	—	—	—	—	—	—
XIII.	Consolidated profit (loss)	151	(243)	2,082	(438)	224	1,776
XIV.	Minority share in consolidated profit (loss)	—	333	—	—	—	333
XV.	Group share in consolidated profit (loss)	151	90	2,082	(438)	224	2,109

BALANCE SHEET MOVEMENTS

Impact of the year's acquisitions on the results for 2002

	GM Metals	*Pacific Rare Metals*	*Umicore Materials*	*Umicore Indium Products*	*Hunan Fuhong Zinc*	*TOTAL*
			(€ thousand)			
Intangible assets	9	—	36	53	180	278
Consolidation differences	5,393	—	11,946	—	—	17,339
Tangible assets	986	2,369	2,836	1,649	1,528	9,368
Financial assets	2	387	—	—	27	416
Amounts receivable after one year	—	—	—	—	—	—
Inventories and contracts in progress	926	288	7,042	385	1,165	9,806
Amounts receivable within one year	1,057	201	5,578	416	3,467	10,719
Invested cash	2	—	—	—	—	2
Cash at bank and in hand	(6,078)	(860)	(14,273)	(2,503)	(2,721)	(26,435)
Deferred charges and accrued income	11	4	219	—	9	243
TOTAL ASSETS	**2,308**	**2,389**	**13,384**	**—**	**3,655**	**21,736**
Capital	—	—	—	—	—	—
Share premiums	—	—	—	—	—	—
Reserves	—	—	—	—	—	—
Consolidation differences	—	766	—	—	243	1,009
Translation adjustments	—	43	201	—	177	421
Minority interests	—	821	—	—	—	821
Provisions and deferred taxes	—	—	2,097	—	—	2,097
Amounts payable after one year	414	—	7,498	—	—	7,912
Amounts payable within one year	1,894	603	3,286	—	3,226	9,009
Accrued charges and deferred income	—	156	302	—	9	467
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	**2,308**	**2,389**	**13,384**	**—**	**3,655**	**21,736**

II.a. Main fully consolidated subsidiaries and sub-groups

The list of the main subsidiaries and sub-groups given below relates to fully consolidated companies, except where otherwise stated.

The estimated aggregate value of the non-consolidated subsidiaries and sub-groups is of the order of 1 per cent of the estimated aggregate value of the holdings in the subsidiaries and sub-groups.

A full list of the companies referred to in Article 165, II to V, of the Royal Decree of 30 January 2001 pertaining to the consolidated accounts of companies will be deposited at "Centrale des Bilans", a department of the National Bank of Belgium. A copy may be obtained free of charge from the company's head office on request.

NAME	*HEAD OFFICE/COUNTRY*	*VAT or National No.*	*% interest 2002*
Umicore Bau Systeme[1]	Essen (Germany)	DE119.658.667	99.68
Umicore Fininco	Luxembourg (GD Luxembourg)	NA	100
Umicore Immo	Brussels (Belgium)	BE451.899.046	100
Metall Dinslaken	Dinslaken (Germany)	DE119.066.058	100
Umicore Italia	Milan (Italy)	IT10.022.420.151	100
Umicore Shanghai[2]	Shanghai (China)	NA	75
Sibeka (pre-consolidated) and its main subsidiaries:	Brussels (Belgium)	BE403.202.373	80.44
➢ Syndianed	Amsterdam (Netherlands)	NA	80.44
➢ Syndiabel	Brussels (Belgium)	NA	80.44
Sogem and its subsidiaries	Brussels (Belgium)	BE402.964.625	100
Umicore Engineering	Louvain-la-Neuve (Belgium)	BE422.631.473	100
Umicore Finance Nederland and its subsidiaries:	Amsterdam (Netherlands)	NA	100
➢ Maastrichtsche Zinkwit Maatschappij	Eygelshoven (Netherlands)	NL007.269.183B01	100
➢ Umicore Nederland (sub-group)	Eijsden (Netherlands)	NL007.269.183B01	100
➢ Laura	Eygelshoven (Netherlands)	NL008.863.301B01	100
Umicore South Africa	Rynfield (South Africa)	100	
Umicore Cuivre et Zinc	Liège (Belgium)	BE402.343.924	100
Umicore Canada	Toronto (Canada)	100	
Umicore Inc. and its subsidiaries	Delaware (USA)	99.94	
Umicore Finance Luxembourg	Luxembourg	(GD Luxembourg)	100
Umicore France and its main subsidiaries (sub-groups):	Bagnolet (France)	FR10.342.965.001	100
➢ GM Metals	Le Vigeant (France)	FR66.348.788.738	100
➢ Umicore Finance France	Bagnolet (France)	FR23.775.673.049	100
➢ Umicore Oxyde France	La Ciotat (France)	FR68.379.283.146	100
➢ Umicore Portugal	Porto (Portugal)	PT502.367.059	100
Umicore Finance Belgium and its subsidiaries	Brussels (Belgium)	NA	100
Umicore Financial Services	Brussels (Belgium)	BE428.179.081	96.79
Umicore Korea	Cheonan (South Korea)	100	
Umicore Med	Pirdop (Bulgaria)	99.77	
Umicore Bulgaria	Sofia (Bulgaria)	100	
Umicore Commercial Services	Fribourg (Switzerland)	100	
Umicore Norway	Larvik (Norway)	NCN 967337897MVA	100
Umicore Australia	Victoria (Australia)	NA	100
Umicore Malaysia	Johor (Malaysia)	NA	100
Umicore Materials AG	Balzers (Liechtenstein)	NA	100
Hunan Fuhong Zinc	Xingcheng	NA	100

(1) Formerly Altenberg Zinc

(2) Formerly Shanghai Blue Lotus

VI.a. Accounting principles and valuation rules

On 13 February 2003 the Board of Directors approved an amendment to the valuation rules for calculating provisions for pensions (see item 13 below).

1. Restatements and eliminations

Application of consistent accounting rules and valuation methods within the Group allows the accounts of consolidated companies to be presented on the same economic basis and requires individual company accounts to be restated in accordance with the accounting principles set out below.

After summing up the balance sheet and profit and loss accounts, restated as necessary, inter-company balances and losses or gains resulting from inter-company operations within the Group are eliminated.

2. Gains or losses of interest

A gain or a loss is recorded when there is a reduction in the interest held in a consolidated company following an increase in capital. When, in the same circumstances, the Group increases its holding a consolidation difference is recorded.

3. Translation of assets and liabilities expressed in foreign currencies

Assets and liabilities expressed in foreign currencies are translated at the official exchange rates at the end of the financial year. For Belgian companies the rule applies to items which are not expressed in euro; in the case of foreign companies, it applies to items expressed in a currency other than that used in their financial statements.

Losses or gains resulting from these translations as well as exchange differences realised on operations in the financial year are recorded in the income statement.

4. Translation of financial statements of foreign companies and branches

Balance sheets and income statements of foreign companies and branches are translated into euro using the official exchange rates at the end of the financial year and the average rates for that year, respectively. Differences resulting from these translations are debited or credited to shareholders' equity; the Group share in these differences is shown in the "Translation adjustments" component of consolidated shareholders' equity.

5. Financial year end

The consolidated accounts are prepared as at 31 December, the financial year end of the parent company and of most of the consolidated companies. For companies whose financial year ends between 30 September and 31 December, the annual accounts are used without adjustment; when the financial year end is before 30 September, intermediate financial statements as at 31 December are drawn up for consolidation purposes.

6. Intangible and tangible fixed assets

Fixed assets are shown at their historical cost less accumulated depreciation and amortisation, calculated over the estimated economic life of the assets concerned, using the straight-line or declining balance method.

The economic lives used are as follows:

➢ Land	non-depreciable
➢ Buildings:	
– Industrial buildings	20
except industrial complexes	15
– Other buildings (offices, laboratories, etc.)	40
– Infrastructure works, such as roads and railways	15
– Fixtures, fittings and improvements to buildings	10
➢ Plant, machinery and equipment	10
– except furnaces	7
– except small equipment	5
➢ Furniture and vehicles:	
– Computer equipment	3 to 5
– Furniture and office equipment	5 to 10
– Vehicles	5
– Mobile handling equipment	7
➢ Other tangible fixed assets :	
– Houses and residential buildings	40

Acquisitions are recorded at cost price, together with capitalised interest expenses. Repairs and maintenance are charged to the income statement. Assets acquired under leasing contracts are recorded as fixed assets at their purchase price; the lease payments made are recorded in the income statement as depreciation and financial charges.

7. Consolidation goodwill

When a company is consolidated for the first time, a difference arises between the cost of the shares and the related share in the company's equity. This difference is usually attributable to unrealised gains or losses on the assets and liabilities of the acquired company, or to the expected future profitability of the investment.

With effect from 1 January 1988, the main differences resulting from revaluing the related assets and liabilities are added to/deducted from the relevant items of the balance sheet, and amortised, written down or written back in the income statement according to the rules applying to these items. Any residual intangible difference is recorded in the consolidated balance sheet as "Consolidation differences" and is amortised by the straight-line method over a period not exceeding 20 years.

This period is determined on the basis of a prudent assessment of the economic life of this intangible asset taking into account the time required to recover the additional price which was paid and not applied.

Additional or exceptional amortisation may be booked in cases where it is no longer economically justified to continue to carry the consolidation goodwill as an asset.

8. Financial fixed assets

In the consolidated balance sheet, investments consolidated by the equity method are recorded at the value of the share in the equity determined according to the consolidation rules, rather than at the book value in the holding company's books.

Holdings in non-consolidated companies comprise long-term investments which give a decisive or significant influence on, or enable business relations to be established with, the companies concerned, but do not meet the consolidation criteria.

They are recorded at acquisition cost, excluding any balance of capital uncalled. When the assessment shows a lasting impairment of value, the value of the investment is written down accordingly.

9. Inventories

Inventories are recorded at the historical cost obtained by applying the valuation method which is most appropriate to each business line within the Group.

Consumables and supplies are carried at cost, withdrawals being booked on the basis of a weighted average. An appropriate write-down is booked where turnover is slow or there is an impairment of value.

Metals – primary materials, production in progress and finished products – which are covered, in particular on the international metal exchanges, continue to be carried at their purchase price.

Other metals which are not covered by this system are valued according to the annual LIFO method, allowing for the specific nature of the activities in question and the problems posed by stock-taking.

At the end of the financial year the value of these inventories is written down to bring their book value into line with their market price.

Up to 31 December 2000 amounts written down in this way were only written back if the inventories in question were realised in full or in part. With effect from 1 January 2001 amounts written down are systematically written back if the market price is higher than the book value previously recorded.

Inventories in other sectors of activity are valued on the FIFO (first in, first out) basis or, where this is not applicable, according to the average weighted cost method, calculated over a period which does not exceed the average stocking period.

Withdrawals are booked according to either method.

The cost price of purchased goods includes the net acquisition price plus related expenses. For finished goods and work in process, the cost price includes the direct production costs and a share of the indirect production costs.

10. Contracts in progress

The cost price of long-term contracts is determined in the same way as work in process; interest charges incurred directly to finance such contracts may be included.

Long-term contracts are valued using the percentage-of-completion method.

11. Amounts receivable and amounts payable

Amounts receivable and amounts payable are recorded at nominal value. When they are expressed in a foreign currency, they are recorded at the euro equivalent based on the exchange rate on the day of acquisition. At the end of the financial year, they are valued using the closing exchange rate of that year. With respect to amounts receivable, the rules for recording impairment of value are similar to those applicable to securities.

12. Invested cash

This heading comprises term deposits with credit institutions and securities acquired as market opportunities arise, or as temporary re-investment of excess cash.

They are recorded at acquisition cost, or at stock exchange value for listed securities and estimated value for unlisted securities if these values are lower than the acquisition price.

13. Provisions for pensions

Responsibility for pensions due under the various mandatory retirement schemes to which employers and employees contribute is generally assumed by specialised institutions independent of the company. The contributions due for the financial year are charged to the income statement for that year.

Supplementary retirement plans which generate obligations for the companies concerned are covered by provisions determined according to actuarial calculations based on end-of-career salary forecasts (the "projected benefit obligation" method).

Amendment approved by the Board of Directors on 13 February 2003 relating to the 2002 consolidated accounts "The amortisation of actuarial profits and losses, where these exceed 10% of either the Projected Benefit Obligation value or the value of the assets of the plan at the beginning of the financial year (whichever being the

highest), shall be directly booked for the full 100% to the result for the period, with effect from the 2002 financial year."

This arrangement replaces the previous spread over the whole average remaining life of the beneficiaries under the plan. It also complies with the FAS 87 standard applied by the Group to date.

14. Company taxation

In the consolidated accounts, deferred taxes are recorded on all temporary differences resulting from charges and income which are included in, or excluded from, the book profit or loss of a given financial year but which should be deducted from, or added to, the tax basis of the financial year during which the differences are reversed. The liability method is applied. This means that deferred taxes are calculated on the basis of the latest enacted tax rate on the last day of the financial year. On this date, for each tax entity in the scope of consolidation, the tax assets and liabilities on all temporary differences are offset. The individual balances are then offset, and only the net balance of deferred tax liabilities is recorded in the balance sheet.

VI.b. Exchange rates used to draw up the consolidated accounts

		Closing rates		*Average rates*	
		2002	*2001*	*2002*	*2001*
		€	€	€	€
SWISS FRANC	CHF	0.68852	0.67435	0.68166	0.66212
POUND STERLING	GBP	1.53728	1.64339	1.59051	1.60847
AMERICAN DOLLAR	USD	0.95356	1.13469	1.05798	1.11669
AUSTRALIAN DOLLAR	AUD	0.53891	0.57870	0.57561	0.57747
CANADIAN DOLLAR	CAD	0.60423	0.71038	0.67413	0.72124
DANISH CROWN	DKK	0.13461	0.13447	0.13458	0.13419
NORWEGIAN CROWN	NOK	0.13745	0.12576	0.13315	0.12425
BULGARIAN LEV	BGN	0.51161	0.51380	0.51301	0.51330
YEN (100)	JPY	0.80392	0.86708	0.84696	0.91954
RAND	ZAR	0.11100	0.09588	0.10101	0.12973
HONG KONG DOLLAR	HKD	0.12228	0.14551	0.13556	0.14319
KOREAN WON (100)	KRW	0.08040	0.08609	0.08470	0.08651
HUNGARIAN FORINT	HUF	0.42321	0.40716	0.41166	0.38970
CHINESE YUAN	CNY	0.11513	0.13569	0.12774	0.13493
THAI BAHT	THB	0.02211	0.02539	0.02460	0.02511
MALAYSIAN RINGGIT	MYR	0.25099	0.29839	0.27917	0.29382
PHILIPPINES PESO	PHP	0.01785	—	0.02047	—

Litigation and major events

➢ Environment-related risks

In 1997 Umicore signed an agreement with OVAM (Flemish Regional Waste Authority) with a view to finding a solution to the problem of long-standing pollution at the industrial sites which were still in operation in Flanders. Under this agreement, Umicore was first to carry out a study on a voluntary basis to identify the risks. This initial phase was completed in 2000.

The second phase, which included detailed studies, was completed in 2001.

During the summer of 2002, the rehabilitation plan was declared to be in compliance by the Flemish environmental authorities.

Umicore's proposals were based on the conclusions of the soil rehabilitation committee composed of independent experts and chaired by a representative of the minister.

However, as the declaration of compliance contained a number of additions and technical interpretations which were not initially anticipated, Umicore has appealed to the Council of State.

Umicore expects to start some of the work on a voluntary basis in 2003 on sites or parts of sites for which there is an existing agreement with OVAM on the rehabilitation plan.

In addition Umicore booked in 2002 a provision of EUR 2.9 million for the rehabilitation programme on its Angleur site (Wallonia).

In France a risk inventory for all the Group's industrial sites had to be carried out in accordance with a ministerial decree. The aim of this first phase was to classify industrial sites in terms of the degree of risk for the environment.

The risk inventory for the Viviez site was forwarded to the DRIRE (Environment Ministry) in 2001. Risk inventories for the Auby and Calais sites were completed in 2002 and forwarded to the DRIRE.

➢ Barclays/Enron dispute

Barclays Physical Trading Ltd. has served a summons on Umicore to obtain delivery of 11,000 tonnes of copper under the terms of a contract initially concluded with Enron, which Enron then transferred to Barclays, as is current practice among traders.

The summons served by Barclays is based on the fact that Umicore did not deliver the metal specified in the contract; in the summons Barclays stated it had paid the agreed amounts to Enron.

Umicore did not receive any payment, either from Enron or from Barclays, contrary to what was stipulated in the contract.

As a result, the customary conditions of sale on this market were not met (delivery of metals against payment) and Umicore did not effect delivery.

This position was supported by the company's legal advisers, and no provision was booked in respect of this dispute at 31 December 2002.

However, at the request of Barclays, the Antwerp court ordered the seizure of 6,250 tonnes of available copper, though without ruling on the substance of the case.

Umicore is now awaiting the outcome of the legal proceedings, which are currently delayed by translation problems.

Metal and currency hedging

Fluctuations in metals prices, particularly zinc, copper and precious metals, and currency exchange rates can have a significant impact on the company's results.

Of all the metals produced by Umicore zinc is by far the most sensitive to fluctuations.

1. Transactional cover

The Group applies the rule of systematically hedging against transactional risk, in other words, the risk of the price of the metal or the currency exchange rate fluctuating between the time the price is fixed and the time the transaction is settled. Spot and forward contracts are used to cover metals and currencies.

2. Structural cover

In addition to the transactional risks, the Group is also exposed to the structural risks inherent in metals and currencies. As far as metals are concerned, this risk derives mainly from the impact that the price of the metal has on treatment and refining costs and also on the bonus (surplus metal recovered from materials supplied for treatment).

Although no systematic policy exists for hedging against this type of risk, the Group has taken out limited cover. Since most of Umicore's revenue is denominated in USD and the majority of its operations are located outside the USD zone (particularly in Europe), any change in the USD exchange rate against the euro will also have a significant impact on the Group's results.

These structural risks are reflected in the following estimated sensitivity rates (where there is no cover):

➢ Zinc: a variation in the zinc price of USD 100 per tonne gives rise to a variation in EBIT of USD 16 to 18 million on an annual basis.

- Copper: a variation in the copper price of USD 100 per tonne gives rise to a variation in EBIT of USD 3 to 5 million on an annual basis.

- USD: a variation in the USD/EUR exchange rate of 1 cent gives rise to a variation in EBIT of EUR 4 to 5 million on an annual basis.

The Group continued to implement the hedging policy it adopted in 1999 with a view to fixing its USD exposure by means of forward sales.

In addition to the hedging transactions already carried out in 2000 and 2001 for the years 2002, 2003 and 2004, the Group took advantage of the strong performance of the US dollar in the first half of 2002 against the euro to set up in 2002 additional hedging arrangements for 2003, 2004 and 2005.

As a result the dollar risk hedging programme for the years to come can be summarized as follows:

- 2003: 100% risk cover at an average rate of 0.93 USD/EUR

- 2004: 100% risk cover at an average rate of 0.91 USD/EUR

- 2005: 25% risk cover at an average rate of 0.98 USD/EUR.

Historical data

CONSOLIDATED BALANCE SHEET AT 31.12

	1998	*1999*	*2000*	*2001*	*2002*[1]
			(€ thousand)		
ASSETS	**2,406,296**	**2,425,467**	**2,512,136**	**2,542,449**	**2,283,436**
Intangible assets	28,880	14,486	9,742	10,467	14,810
Consolidation differences	110,790	88,447	84,359	93,997	102,016
Tangible assets	642,253	677,123	700,119	773,790	771,121
Financial assets	240,291	245,620	265,134	215,000	195,589
Fixed assets (adjusted)	**1,022,214**	**1,025,676**	**1,059,354**	**1,093,254**	**1,083,536**
Amounts receivable after one year	6,696	2,434	1,200	1,079	1,990
Inventories and contracts in progress	729,384	645,433	728,978	827,952	663,836
Amounts receivable within one year	505,322	496,356	358,967	375,391	339,990
Invested cash	48,752	71,305	161,709	70,264	121,140
Cash at bank and in hand	54,306	64,142	61,289	68,596	59,648
Deferred charges and accrued income	39,622	120,121	140,638	105,913	13,296
Current assets	**1,384,082**	**1,399,791**	**1,452,782**	**1,449,195**	**1,199,900**
LIABILITIES AND SHAREHOLDERS' EQUITY	**2,406,296**	**2,425,467**	**2,512,136**	**2,542,449**	**2,283,436**
Group equity	927,091	989,740	1,101,269	1,073,646	1,023,045
Minority interests	35,025	47,287	49,607	68,288	69,260
Total equity	**962,116**	**1,037,027**	**1,150,876**	**1,141,934**	**1,092,305**
Provisions and deferred taxes	**255,284**	**262,758**	**282,479**	**270,673**	**258,411**
Financial debts payable after one year	303,322	240,874	198,734	146,106	87,370
Other amounts payable after one year	6,530	6,918	7,844	7,735	5,506
Long-term liabilities	**309,853**	**247,792**	**206,578**	**153,841**	**92,876**
Financial debts payable within one year (including current portion of long-term financial debts)	315,641	229,233	208,533	254,225	226,317
Other amounts payable within one year	465,924	530,121	497,348	559,798	507,382
Accrued charges and deferred income	97,479	118,536	166,321	161,978	106,145
Current liabilities	**879,044**	**877,890**	**872,202**	**976,001**	**839,844**

CONSOLIDATED INCOME STATEMENT

		1998	*1999*	*2000*	*2001*	*2002*
III.	Operating profit (loss)	(21,536)	72,613	149,964	121,260	77,647
	Net financial income (charge)	(5,745)	(19,048)	(15,245)	(17,952)	(16,628)
VI.	Current profit (loss) before taxes	(27,281)	53,565	134,718	103,308	61,019
	Extraordinary profit (loss)	(14,242)	23,481	3,685	29,690	(19,642)
IX.	Profit (loss) for the year before taxes	(41,523)	77,046	138,404	132,998	41,377
X.	Income taxes	(11,059)	(4,905)	(10,338)	(10,416)	(3,238)
XI.	Profit (loss) of consolidated companies	(52,582)	72,141	128,066	122,582	38,139
XII.	Group share in profit (loss) of companies included by the equity method	4,927	15,826	13,463	12,907	15,140
XIII.	Consolidated profit (loss)	(47,655)	87,967	141,529	135,489	53,279
XIV.	Minority share in consolidated profit (loss)	3,492	18,655	5,412	19,478	4,887
XV.	Group share in consolidated profit (loss)	(51,147)	69,311	136,117	116,011	48,392

(1) 2002 based on the appropriation of the provisional result

6.1.2. Press release Half Year Results 2003

20 August 2003

Half Year Results 2003

Highlights of the first half 2003

- EBIT slightly increases to € 49.4 million (+ €0.7 million)
- **Advanced Materials:** Significant improvement in results
- **Copper:** Weak markets continue to impact results
- **Precious Metals:** Continued strong performance
- **Zinc:** Acceptable results in tough markets
- PMG acquisition closed
- Continued strategic developments: IEQSA and EaglePicher Technologies acquisition, Traxys joint venture, copper carve out
- Outlook: Second half results will already benefit from PMG acquisition

Key Figures

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
EBIT	48.7	50.0	**49.4**
EBITDA	113.6	124.1	**111.3**
Operating cash flow	89.2	69.9	**59.3**
Net consolidated profit, Group share	21.1	27.3	**27.9**
Net consolidated profit before extraordinary items and inventory write-downs, Group share	34.0	36.9	**37.3**
Net consolidated profit before extraordinary items, inventory write-downs, goodwill amortization, Group share	38.6	40.8	**42.0**
Earnings per share (EPS) (€)[1]	0.93	1.21	**1.23**
EPS adjusted before inventory write-downs (€)[2]	1.51	1.63	**1.65**
EPS adjusted before inventory write-downs and goodwill amortization	1.71	1.80	**1.86**
Net financial debt	241.0	132.9	**288.9**

(1) Treasury shares not deducted

(2) Before extraordinary items

Definitions are included in the "2003 Half Year Report", available on www.umicore.com.

GENERAL OVERVIEW

*Contributions to EBIT**	*H1 2002*	*H2 2002*	***H1 2003***
		(€ million)	
Advanced Materials	15.7	17.1	**21.7**
Copper	0.7	9.0	**1.3**
Precious Metals	26.2	26.3	**23.3**
Zinc	12.2	9.0	**10.9**
Inventory write-backs (write-downs)	(0.4)	(3.8)	**0.6**
Corporate and Investments	(5.8)	(7.6)	**(8.4)**
Total	**48.7**	**50.0**	**49.4**
* including operating profit of companies consolidated by equity method	9.1	11.9	11.8

- EBIT was at €49.4 million and earnings per share (before extraordinary items and inventory write-downs) was €1.65. This represented a slight improvement on the figures for the same period in 2002 and provided further evidence of the company's ability to produce acceptable results at the low point of the economic cycle. The backdrop of a low zinc price and low copper treatment charges continued to weigh on the results of these businesses but the company benefited from an improvement in the performance of Advanced Materials and continued strength of the precious metals operations.

- The acquisition of PMG – announced in June – was completed on 31 July. This is the most significant acquisition ever for Umicore and is further evidence of the company's continuing shift towards more value added and technologically advanced materials.

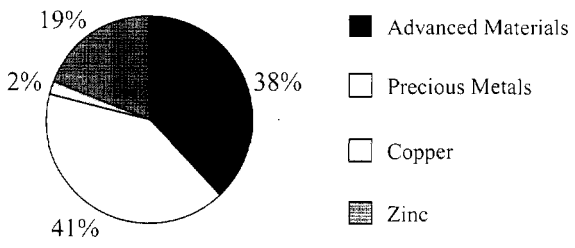
- Umicore's copper activities have been established as a separate legal entity – Umicore Copper nv/sa giving Umicore extra flexibility in the search for a value creating partnership within the European copper industry. As part of this process a restructuring was announced at the Olen site involving a workforce reduction of 127 full time equivalents.

- Further acquisitions were made – IEQSA and assets of EaglePicher Technologies which will improve Umicore's position in zinc value added products and advanced materials respectively.

- Creation of Traxys – a marketing joint venture with the Arcelor group which brings new opportunities for combined operations of Sogem and Considar and allows a streamlining of Umicore's international sales network.

- Further widening of Umicore's international shareholder base – among others through the sale of one million treasury shares. The Umicore share has outperformed the Bel 20 and the Dow Jones Non-Ferrous Index by 11% and 1% respectively (to 15 August). This represents the fifth consecutive year in which Umicore has outperformed the Belgian stock market.

Contributions to EBIT in %
(excluding Corporate & Investments and Inventory write-downs)

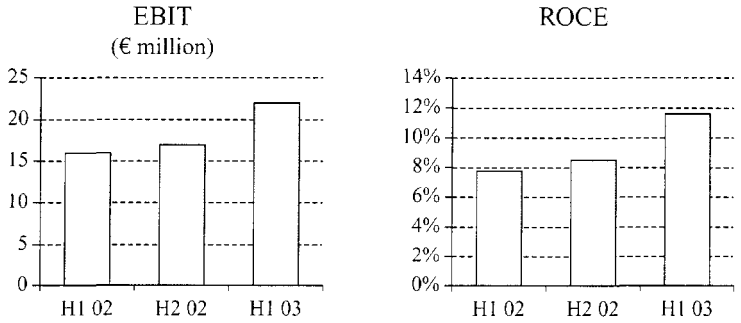


OVERVIEW BY DIVISION

ADVANCED MATERIALS*

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
EBIT	15.7	17.1	**21.7**
EBITDA	32.2	36.3	**36.5**
Added value	51.9	50.0	**62.8**
Turnover	189.1	165.5	**195.1**
Average capital employed	416.4	393.9	**373.0**
ROCE	7.8%	8.6%	**11.5%**
Capital expenditure	11.2	7.6	**7.9**

* Synthetic diamond figures included in EBIT, EBITDA, Average capital employed and ROCE



The overall demand for cobalt-related products was healthy. This was particularly the case for rechargeable battery materials, which continued to benefit from the market upturn which started in 2002. Certain businesses however continued to be affected by the situation in the telecommunications market, in particular germanium products for the optical fibres market.

➢ Specialty Oxides and Chemicals

Rechargeable Batteries – The pick-up in the market for rechargeable battery materials continued through the first half of 2003. This recovery, which started in 2002, has been driven by sales of mobile phones, which have been boosted by the successful introduction of new phone technology and design. In Asia in particular, consumers are changing their phones more frequently. Sales of battery materials have also been amplified by an increased offer of batteries to phone users (increasingly two batteries are purchased per phone), and the trend of increased consumer preference for laptop computers over desktops. The capacity increase at Umicore's lithium cobaltite plant in South Korea – initiated in response to increased customer demand – is expected to come on stream by the end of this year.

Ceramics and Chemicals – the business continued to perform well and was helped by its diversified product portfolio and extended geographical reach. Umicore has been able to increase its market shares and premiums showed a slight improvement. The recently acquired facilities in the USA and Philippines contributed to the good performance.

➢ Engineered Metal Powders

Primary Batteries – Sales and premiums for zinc powders for primary batteries remained healthy although sales in the European market slackened. Umicore maintained its strong position and market shares thanks to its level of product quality and customer service. Demand in Asia – particularly China – remained strong but competition increased. The production capacity at Umicore's Shanghai plant was doubled in the first half of this year.

Engineered Powders – the business continued to perform well. Cobalt powders for hard metals tools benefited from the improvement in the electronics, oil drilling and wood cutting sectors. In diamond tools Umicore successfully launched a new range of alloyed powders for different niche markets. China remains a growing market for both hard metal and diamond tools applications while the European market has remained

stable overall. Umicore's commercial partnership with HC Starck involving the recycling of cobalt materials continued to bring benefits.

The planned investment in Eurotungstene Poudres (ETP) will not go ahead, the controlling shareholder of ETP having decided to exercise its existing preemptive rights.

➢ Electro-Optic Materials

Substrates – Sales of germanium substrates for solar cells were lower as a result of decreased activity in the world's satellite programmes. Some project-driven pick-up in orders was evident towards the end of the first half. Further progress has been made in the development of germanium substrates for other opto-electronic and electronic applications. In this context a joint project between Umicore, Soitec and IMEC was announced in mid-July and a pilot line of larger diameter substrates (12") is being developed.

High-Purity Chemicals – Deliveries of germanium tetrachloride for optical fibres improved somewhat compared to the extremely low levels seen during 2002. It is the result of a slight increase in demand from cable manufacturers in the USA and Europe who have recommenced purchases following a long period of destocking. Deliveries of germanium dioxide were stable.

Optics – has been stable but overall pressure on premiums remains, due to increased levels of competition. There was a slight improvement in the finished laser optics segment. Demand for Umicore's promising chalcogenide glass for automotive night vision applications continued to increase.

In July Umicore reached an agreement to purchase germanium assets from US-based EaglePicher Technologies for USD 15 million. These assets relate to the production of germanium-based products primarily used in infra-red and fibre optics applications and provide Umicore with an important US manufacturing base for these materials.

➢ Thin Film Products

Demand from the electronics and optics industries was stable in the first half of 2003. A partnership was set up with Leybold Optics Germany, a major optics equipment manufacturer, for the development and sale of evaporation materials and targets relating to optics. Sales to the optical data storage market were somewhat lower than last year but Umicore was successful in the development of new products for the fast-growing market of rewriteable DVDs and for movie/entertainment applications.

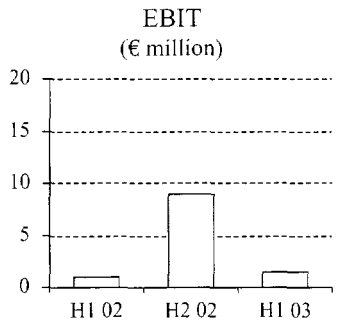
The indium activities recorded low levels of sales but there were indications of improvement towards the end of the second quarter.

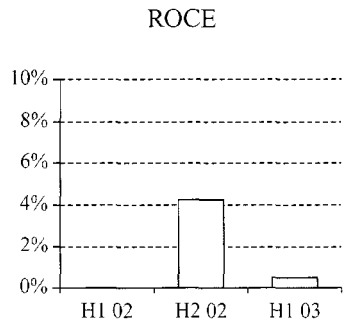
➢ Synthetic Diamonds

Megapode reported strong results for the period with sales volumes increasing for all product categories compared to the same period last year. Price pressure remained a feature of the market for diamond grit products. Consistent focus on growth and Megapode's cost structure continued to reap dividends with the company further consolidating its leadership position in its field.

COPPER

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
EBIT	0.7	9.0	**1.3**
EBITDA	15.9	25.3	**16.7**
Added value	41.1	50.8	**44.5**
Turnover	492.8	431.4	**439.4**
Average capital employed	438.2	413.8	**424.7**
ROCE	0.04%	4.1%	**0.4%**
Capital expenditure	23.4	19.9	**17.1**





Although the levels of LME copper stocks came down during the course of the first half of 2003, there was no significant improvement in the copper price which averaged USD 1,652/tonne during the period. Commercial conditions and availability of raw materials (both concentrates and scrap) remained tight. Aggressive buying by China continued to affect scrap availability, whereas mine closures and increased demand from Indian and Chinese smelters (which are able to settle very low treatment charges due to their protective domestic environment) negatively affected the availability and terms for copper concentrates. As a result, treatment and refining charges deteriorated further, impacting both the smelting and refining revenues of Umicore Copper.

The operational performance of the smelting activities at Pirdop fully met expectations and is on track to reach the planned annual production of 210,000 tonnes of anodes.

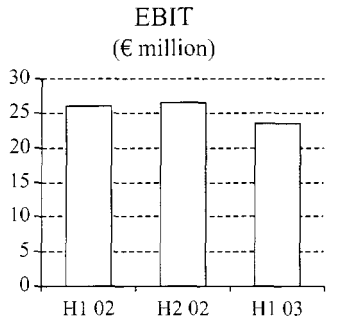
Production of cathodes at the Olen refinery was at a similar level to the first half of 2002. Sales volumes for copper wire rod were below the levels of the first half of 2002, primarily due to weak demand in Germany where the construction, communications and electrical industries remained subdued. Sales of wire rod in Italy held up better however, and sales of oxygen-free rod continued to grow. Europe-wide, premiums for wire rod were under pressure and deteriorated compared to last year. In cast products, Umicore was able to regain market shares in the cakes market with sales higher than the equivalent period in 2002. Overall conditions in the market for cakes and billets remain difficult.

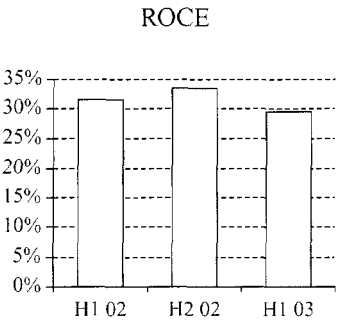
In May, Umicore acquired production facilities for copper nuggets from Climeta in France.

In preparation for possible consolidation moves within the European copper industry, Umicore decided to carve out of its copper activities in a fully owned subsidiary, Umicore Copper nv/sa. As part of this process a restructuring was announced at the Olen site involving a workforce reduction of 127 full time equivalents.

PRECIOUS METALS

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
EBIT	26.2	26.3	**23.3**
EBITDA	36.7	37.3	**33.3**
Added value	78.3	80.1	**74.9**
Turnover	431.8	336.1	**347.7**
Average capital employed	166.5	158.1	**160.3**
ROCE	31.5%	33.2%	**29.1%**
Capital expenditure	17.6	18.7	**12.4**





Umicore Precious Metals again demonstrated a robust performance, although results were slightly down on the previous year. During the first half the highlight was the successful start-up of the leaching and electrowinning plant. Precious metals prices experienced contrasting fortunes. Platinum strengthened while gold was stable and palladium and rhodium weakened further.

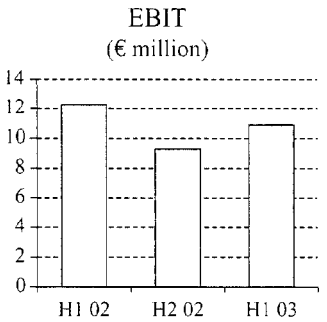
The operations at Hoboken were somewhat affected by the reduced supplies of raw materials. Availability of tankhouse slimes from the copper industry and residues from lead smelters were down, leading to increased competition in the market for these raw materials. In particular, the closure of several lead and zinc smelters resulted in changes in the flows of by-products from that industry, and affected the availability of certain types of feed. However, Umicore's flow sheet once again provided the appropriate flexibility to cope with this situation and to secure satisfactory levels of activity albeit with a variable mix of feed. Umicore also increased its intake of volumes of by-products from the zinc industry. This mainly included the treatment of zinc residues from the Balen plant, thereby contributing to the reduction of the waste stream from the zinc operations. Similar by-products from Umicore's Auby plant will also be processed by the end of this year. The low price of palladium and rhodium affected the availability of end-of-life materials such as electronic scrap and auto-catalysts as collectors waited for prices to rise. The downturn in the electronics industry has also meant reduced replacement of equipment and a consequent temporary reduction in e-scrap availability.

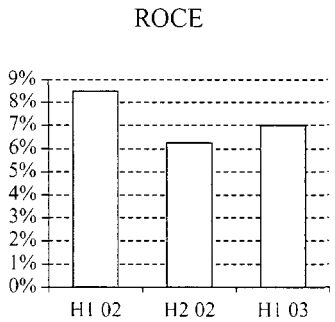
Continued improvements in productivity and process efficiency (the latter leading to further reductions in working capital) again provided a positive counterweight to the prevailing market conditions. The new leaching and electrowinning facility (LEW) was commissioned slightly ahead of schedule and is performing fully in line with expectations. This facility, representing an investment of €40 million, enables further improvements in process efficiency and reductions in working capital.

Umicore's precious metals operations will be further strengthened following the acquisition of PMG. Opportunities are evident in various areas, including operational efficiencies and metals management.

ZINC

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
EBIT	12.2	9.0	**10.9**
EBITDA	30.9	28.4	**28.6**
Added value	105.8	104.3	**110.0**
Turnover	388.9	373.8	**389.7**
Average capital employed	259.6	256.5	**276.0**
ROCE	8.4%	6.2%	**7.1%**
Capital expenditure	20.7	22.7	**23.0**





The average price of zinc for the first half of 2003 was even lower than for the corresponding period in 2002, at USD 780 per tonne vs USD 788 per tonne. Despite the closure of two European smelters and the announcement of closures or significant maintenance and production cutbacks at three others which led to some improvement in the market balance, the price weakness persisted in the first half.

➢ Zinc Smelting

Production from Umicore's smelters in Balen and Auby was in line with the first half of 2002. Treatment charges remained at unsatisfactory levels, but availability of secondary materials improved.

Energy costs at the Balen plant rose as a result of higher electricity prices and increased levels of taxation on energy consumption. Umicore, together with other industrial companies with operations in Belgium, carried out a vigorous information campaign to highlight concerns over energy taxation policy and its possible consequences on the competitiveness of Belgian industry. Lower taxation of electricity in France positively impacted the Auby plant and offset the situation in Balen to some extent. Sulphuric acid prices were significantly better than in 2002, thereby increasing revenues from this by-product.

Umicore has made a breakthrough in the treatment of its zinc flotation residues. Products from the Balen plant are now being treated at the Hoboken precious metals facility where silver is recovered. Processing of residues from the Auby plant will begin at Hoboken by the end of this year. This is in line with Umicore's aim to reduce the waste stream from its zinc smelting operations.

➢ Padaeng

Production and sales levels were in line with the equivalent period in 2002. The domestic Thai market strengthened compared to last year and accounted for a larger proportion of the company's overall sales. The proportion of alloys as a percentage of sales was also up despite poor demand from the die-casting sector in Asia. Padaeng's cost base was further improved by using a greater proportion of cheaper, lower grade silicate feed from the company's Mae Sod mine in Thailand and other sources in South East Asia. Exploration for more of these ore bodies in Thailand and Laos has continued. A major overhaul of the casting facility was carried out in April involving the installation of a new casting line for zinc alloys.

➢ Zinc Alloys and Chemicals

Zinc Oxide – production was down following the plant closures of 2002 but the restructuring of the last few years continued to bear fruit. The business line performed rather well as a result of the refocusing of its portfolio on the highest added value activities. The European zinc oxide market remained depressed, however, with significant imports of Asian zinc oxide at low prices.

Fine zinc powders – activity was stable compared to last year. The worldwide network of production units offers the expected flexibility in terms of deliveries to customers, as the business line experienced contrasting trends on the various continents for both sales and raw materials purchases. The performance of the recycling activities was slightly affected by lower revenues resulting from the low zinc price and the strength of local currencies against the dollar.

Die-casting and Galvanising – both business lines have benefited from the closure of two European smelters. The closures have led to higher premiums for LME grade zinc ingots and for other products. During the implementation of the maintenance programme at the Balen smelter in March, Umicore purchased 12,000 tonnes of zinc on the market in order to meet its commitments and the increased demand from customers in certain segments, as well as in order to help reduce the oversupply in the zinc market.

In the major European markets, demand for die-casting alloys was strong, whereas sales of die-casting alloys in Asia slowed.

➢ Building Products

The overall European market for building materials was down slightly, although the picture differed from country to country and overall premiums held up well. The continued depression in the German construction industry continued to affect sales in this market. The French and Benelux markets were steady. Sales to Southern Europe and other non-European countries improved and demonstrated the positive effects of ongoing development efforts in these markets.

Swiss transformer Strub, acquired in late 2002, has developed according to expectations and is a positive addition to Umicore's portfolio in the building materials business. Its geographic location in Switzerland and Slovakia and its product range of rainwater system accessories will enable Umicore to tap and develop the Southern and Eastern parts of the European market more effectively. Similarly, Peruvian IEQSA (in which Umicore has a 40% stake) continued to develop well with Umicore and IEQSA exchanging information on plant configuration and production optimisation. Finally, the commercial joint venture in Russia continued to perform well.

Further steps were taken in new product development during the period. The most noteworthy have been the development of a ribbed roofing system and profiles which have been specifically designed for use in

industrial roofing applications. The use of zinc as a material for industrial buildings is considered a growth area with plenty of potential.

CORPORATE AND INVESTMENTS

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
EBIT	(5.8)	(7.6)	**(8.4)**
EBITDA	(2.2)	(3.2)	**(3.8)**
Added value	19.6	20.3	**20.8**
Average capital employed	207.5	169.6	**140.7**
Capital expenditure	5.2	5.0	**5.8**

Umicore's corporate activities and investments will henceforth be grouped together in one reporting segment. This segment will include, among others, Umicore Marketing Services and Umicore Engineering, as well as the investment in Traxys.

Traxys

In July 2003, Umicore and Arcelor International agreed to combine their commercial non-ferrous and ferro-alloys activities into a trading, marketing and distribution joint venture named Traxys. For Umicore this involved the activities that were primarily carried out by Sogem.

The joint venture creates a larger, global organisation with extended market coverage and a comprehensive geographical reach with more than 20 offices in main producing and consuming areas. Traxys will have the capability to serve a broad base of industrial customers and will offer a full range of commercial and financial services to customers in the minerals and metals industries. The aim of Traxys is to provide those services as a collaborative and transparent link between metals and raw materials producers and their clients.

Control and ownership of Traxys is shared equally between Umicore and Arcelor. In parallel to Traxys, which will focus on third party business, Umicore will continue to own and operate its successful international sales network – Umicore Marketing Services – which supports its industrial operations.

Review of group support functions

During the first half of 2003 Umicore embarked on a group-wide programme to assess and optimise the structure of internal support functions both at corporate level and within the business groups and units. The aim of this programme is to provide Umicore with a more focused and efficient array of support functions.

INTEGRATION OF PMG

The purchase of PMG was completed on 31 July 2003, after clearance from competition authorities. The acquisition will be consolidated from the beginning of August 2003.

The combined businesses have been reorganized into two areas – **Precious Metals Services and Precious Metals Products and Catalysts**. The former will consist of Umicore's currently reported precious metals refining and recycling business plus the precious metals refining and metals management operations of PMG. The latter will focus on downstream products based on precious metals including automotive catalysts.

Specific working groups have been created to detect and implement all possible synergies and design the most efficient organisational structure for the combined group. Special emphasis is being put on working capital reductions for which a target of €60 million has been set for achievement by year end.

The two most senior executives of PMG, Martin Hess and Pascal Reymondet, have joined the Executive Committee of Umicore.

LONG-TERM FUNDING PLANS

Consolidated net financial debt stood at €289 million as at 30 June 2003, compared to €133 million at the end of 2002 and €241 million as at 30 June 2002, corresponding to a gearing (net debt/net debt + equity) of 21%. This reflects an increase in working capital requirements, including seasonal effects, and some non-recurring cash out flows.

Total net financial debt after the PMG acquisition now stands at approximately €900 million, corresponding to a gearing (net debt/net debt + equity) of 46%. Umicore targets raising equity through a Public Offering for an amount of €125 million to €150 million. The offering is envisaged for the fourth quarter and existing shareholders would benefit from a Priority Allocation.

OTHER

Share buy-back

As of 30 June 2003, Umicore owned 7.86% of its share capital (1,777,274 shares).

Umicore sold a block of one million shares at the end of July 2003 to a financial intermediary, which subsequently placed the shares with a limited number of institutional investors in Europe. This operation took place in the context of the long-term funding plans of the Group. At 18 August 2003 Umicore owned 3.4% of its share capital (775,899 shares).

Extraordinary and non-recurring items

Provisions and asset write-downs were recorded for the closure of nickel hydroxide production facilities in Canada as well as for some assets of the zinc oxide business.

Provisions will likely be set aside in the second half of the year in relation to the carve-out of the copper business and the related restructuring measures, as well as in relation to the current negotiations with the Flemish authorities with respect to a comprehensive solution for historical pollution in Flanders.

Currency hedging

Umicore benefited from a USD/EUR exchange rate of about 0.93 fixed in 2002 as part of the Company's hedging programme. The same rate will apply in the second half of the year. The exposure of 2004 is hedged at an average forward rate of 0.91 USD/EUR and 25% of the exposure of 2005 at a rate of 0.98 USD/EUR.

OUTLOOK

For the second half, Advanced Materials should continue to benefit from sustained demand for rechargeable batteries and a slight recovery in the demand for substrates. No further volume growth is expected in Zinc, but the business should benefit somewhat from an improved cost performance and hopefully better market terms. In Copper, however, there is no sign yet of a recovery in demand, and the deterioration of market terms will continue to affect returns in the second half.

The focus in Precious Metals Services will be to start the implementation of the synergies that were identified in the course of the PMG acquisition process. Cost synergies should start to accrue to the bottom-line in 2004, while part of the envisioned working capital reductions will be realized by the end of this year. The Hoboken plant is expected to maintain its high level of performance in the second half. For Precious Metals Products and Catalysts, Umicore expects a stable operating performance, despite the slowdown which is observed in the automotive sector. The contribution to EBIT of the former PMG activities for the last five months of the year is expected to exceed €30 million.

Overall, Umicore expects EBIT for the full year to be in the range of €125 to 130 million (vs €98.7 million in 2002) and the Group share in net income before extraordinary items to reach approximately €80 million (vs €68.3 million in 2002).

Forward looking statements

This presentation contains forward-looking information that involves risks and uncertainties, including statements about Umicore's plans, objectives, expectations and intentions. Readers are cautioned that forward-looking statements include known and unknown risks and are subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond the control of Umicore. Should one or more of these risks, uncertainties or contingencies materialize, or should any underlying assumptions prove incorrect, actual results could vary materially from those anticipated, expected, estimated or projected. As a result, neither Umicore nor any other person assumes any responsibility for the accuracy of these forward-looking statements.

ANNEXES – Financial statements

Consolidated income statement*

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
Turnover[1]	1,663.7	1,508.4	**1,480.2**
Operating profit	39.6	38.0	**37.6**
Net financial income (charge)	(5.7)	(10.9)	**(9.3)**
Current profit	33.9	27.1	**28.3**
Extraordinary profit (loss)	(12.6)	(7.0)	**(9.5)**
Profit before taxes	21.3	20.1	**18.8**
Income taxes	(4.0)	0.8	**1.5**
Result from equity consolidated companies	6.1	9.0	**10.0**
Net consolidated profit	23.4	29.9	**30.4**
Group share	21.1	27.3	**27.9**
Minority share	2.3	2.6	**2.5**

(1) The turnover is influenced by currency and metal values without proportional impact on margins

Earnings

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
➢ Net consolidated profit (loss), Group share	21.1	27.3	**27.9**
EPS declared (€ per share)	*0.93*	*1.21*	*1.23*
➢ Net consolidated profit (loss) before extraordinary items, Group share	33.8	34.5	**37.9**
EPS adjusted (€ per share)	*1.49*	*1.53*	*1.68*
➢ Net consolidated profit (loss) before extraordinary items and inventory write-downs, Group share	34.0	36.9	**37.3**
EPS adjusted before inventory write-downs (€ per share)	*1.51*	*1.63*	*1.65*
➢ Net consolidated profit (loss) before extraordinary items, inventory write-downs and goodwill amortisation, Group share	38.6	40.8	**42.0**
EPS adjusted before inventory write-downs and goodwill amortisation (€ per share)	*1.71*	*1.80*	*1.86*

Consolidated statement of cash flows

	H1 2002	*H2 2002*	***H1 2003***
		(€ million)	
Operating cash flow	89.2	69.9	**59.3**[1]
Change in working capital	69.2	99.9	**(99.5)**
Net cash provided by (used in) operating activities	158.4	169.8	**(40.2)**
Capital expenditure	(77.1)	(73.6)	**(66.2)**
Acquisitions	(33.5)	(11.5)	**(5.9)**
Disposals	3.9	3.9	**5.4**
Loans	(1.6)	21.3	**(1.1)**
Net cash provided by (used in) investing activities	(108.4)	(59.9)	**(67.7)**
Change in long-term debts	25.1	(54.0)	**(0.1)**
Treasury shares	(23.3)	(16.8)	**(2.4)**
Dividends	(31.8)	0.0	**(64.4)**
Increase (decrease) in net cash and equivalents	20.0	39.1	**(174.9)**

(1) includes a non recurring cash out flow of €11 million related to the externalisation of certain pension plans.

Consolidated balance sheet

	30/06/01	*30/06/02*	***30/06/03***
		(€ million)	
Fixed assets	1,096.9	1,064.7	**1,082.0**
Intangible	106.6	117.3	**119.7**
Tangible	729.5	767.3	**760.0**
Financial	260.9	180.1	**202.3**
Current assets	1,721.7	1,419.7	**1,174.8**
Trade receivables	306.6	328.5	**276.8**
Other receivables	131.6	122.5	**127.9**
Inventories	819.2	707.7	**582.9**
Cash and invested cash	227.4	144.8	**148.8**
Deferred charges and accrued income	236.9	116.2	**38.4**
TOTAL ASSETS	**2,818.7**	**2,484.5**	**2,256.8**
Equity	1,234.6	1,111.4	**1,056.5**
Group equity	1,167.8	1,044.9	**1,021.8**
Minority interests	66.8	66.4	**34.7**
Provisions and deferred taxes	306.1	277.6	**235.3**
Long-term debt	210.9	174.3	**88.6**
Long-term financial debt	198.1	168.1	**83.3**
Other long-term debt	12.8	6.2	**5.3**
Current liabilities	1,067.0	921.1	**876.4**
Short-term financial debts	281.2	217.7	**354.3**
Trade debts	369.5	326.4	**264.4**
Other current liabilities	138.4	208.0	**186.3**
Accrued charges and deferred income	277.9	169.0	**71.3**
TOTAL LIABILITIES	2,818.7	2,484.5	**2,256.8**

In the absence of sufficiently detailed balance sheet information, and in line with article 107 section 3° of the Royal Decree dated 30 January 2001, Umicore's stake in the Traxys joint-venture was not consolidated as at 30 June 2003.

"The Statutory Auditor, PricewaterhouseCoopers – Reviseurs d'Entreprises, represented by Robert Peirce and Luc Discry – has carried out a limited review of the consolidated balance sheet at 30 June 2003 and of the

consolidated income statement relating to the first half of 2003, according to the standards of the "Instituut der Bedrijfsrevisoren/Institut des Reviseurs d'Entreprises". Considering their object, the checks of this review consisted principally of applying analytical procedures to financial data and making inquiries with management and were as such more restricted than those required for the yearly certification. The review did not reveal any element which would have called for significant corrections to be made to the figures of the financial statements in the half-yearly report."

6.2. ESTIMATED IMPACT OF THE ACQUISITION OF PMG ON THE BALANCE SHEET (in IFRS)

	PMG estimated acquisition impact 31/07/03 non-audited figures		
	(€ million)		
Assets			
Fixed assets	**287**		
Intangible assets		34	(1)
Tangible assets		235	(2)
Financial assets		17	(3)
Current assets	**804**		
Trade receivables		226	
Other receivables		78	(4)
Inventories		401	(5)
Cash & Invested Cash		99	(6)
Deferred charges and accrued income			
Total assets	**1,091**		
Liabilities			
Total shareholders' equity	**31**		
Group shareholders' equity			
Minority interests		31	(7)
Provisions and deferred taxes	**147**		(8)
Long-term debt	**25**		
Long-term financial debt		11	
Other long-term debt		14	
Current liabilities	**888**		
Short term financial debt		696	(9)
Trade debt		95	
Other current liabilities		69	
Accrued charges and differed income		27	
Total liabilities	**1,091**		

The opening balance sheet of the entities that were acquired on 31 July 2003 is being prepared in accordance with IFRS and is unaudited. It will be submitted to PricewaterhouseCoopers for audit by end of November 2003 and finalized by year-end. The estimates presented in this document are for illustrative purposes only and should not be aggregated with the existing consolidated balance sheet of Umicore as presented in Section 6.1., which was established in accordance with Belgian GAAP. These estimates were derived from preliminary unaudited individual balance sheets of the acquired entities as at 31 July 2003, which were prepared by OM Group in the context of the completion of the deal, in accordance with US GAAP, to which following restatements and bookings were applied in order to come up with the estimated consolidated impact of the acquisition on the balance sheet:

- aggregation of preliminary individual balance sheets
- recording of consolidation entries (elimination of investments, elimination of intercompany balances);
- recording of the financing of the acquisition by Umicore;

- recording of the estimated impact resulting from the adoption of IFRS, including the estimated impact of the purchase accounting entries recorded in accordance with the provisions of IAS 22 ("Business combinations"). Those restatements were limited to those where such conversion from US GAAP to IFRS were considered as material to the opening consolidated balance sheet;
- recording of additional adjustments resulting from specific provisions of the Purchase Agreement and from the results of the due diligence procedures performed by Umicore and its external advisors.

Deloitte & Touche has assisted Umicore in this process, as well as in the due diligence. This opening balance sheet is subject to further adjustments resulting from the finalization of the IFRS opening balance sheet, or reflecting restructuring measures which may be implemented as a result of the acquisition.

The estimates also take into account the findings of the extensive due diligence that Umicore conducted prior to completing the acquisition. The due diligence included a detailed review of the audited financial statements as at 31/12/2002 of the following entities, representing about 70% of total consolidated assets of the entities acquired:

- OMG AG & Co KG, Germany
- Allgemeine Gold -und Silberscheideanstalt AG, Germany
- OMG Brasil Ltda, Brazil, and its subsidiaries

Complemented by a limited review of the audited financial statements as at 31/12/2002 of the following entities representing another 23% of total consolidated assets of the acquired entities:

- OMG Automotive Catalysts (Pty) Ltd, South Africa
- OMG Precious Metals NJ, LLC, US (New Jersey)
- OMG Catalyst Canada Corp, Canada
- OMG Galvanotechnik, Gmbh, Germany
- Brazetech Gmbh, Germany
- ICT Co Ltd, Japan
- ICT USA
- Ordeg Co Ltd, South Korea

In addition, Umicore has controlled the physical stocktake of precious metals inventories which took place at the end of June 2003 in the following locations:

- Hanau, Germany
- Pforzheim, Germany
- Burlington, Canada
- South Plainfield, NJ, USA
- Guarulhos, Brazil
- Port Elisabeth, South Africa

The scope of these inventory controls covered about 98% of all precious metals inventory of the acquired entities.

Notes

(1) unallocated goodwill (including EUR 6 million corresponding to estimated acquisition costs) and patents.

(2) Property, plant and equipment valued at estimated fair market value, corresponding to net book values at the time of acquisition corrected in certain instances to reflect of a revised assessment of the useful life of the facilities.

(3) Equity value of non-consolidated participations in ICT Co Ltd, Japan, ICT USA, Ordeg Co Ltd, South Korea, and Cycleon S.A. France.

(4) Including VAT receivables and amounts due by OMG in accordance with provisions of the Purchase Agreement relating to the reimbursement by OMG of some liabilities (mainly recorded under the caption "other current liabilities") when these will be settled by Umicore. These payments and the corresponding refund by OMG will have no impact on the profit and loss statement, nor on the cash flows of the company.

(5) Including EUR 348 million of precious metals inventories (gold, silver, platinum, palladium and rhodium) and EUR 53 million of other inventories, such as consumables and spare parts.

(6) Corresponds to cash that was effectively in the acquired entities as at 31 July 2003, less acquisition costs.

The acquisition was made on a debt and cash free basis; the net cash position (i.e. cash less financial debt) amounted to approximately EUR 81 million as at the end of July 2003, which was paid as a closing price adjustment.

(7) Corresponds to minority interests in Umicore Automotive Catalyst (Pty) Ltd, South Africa (45%) and in Allgemeine Gold -und Silberscheideanstalt AG, Germany (9.2%).

(8) Including EUR 71 million of provisions for pension, early retirement obligations and other employee benefits. Such obligations were estimated using the following actuarial assumptions for Germany, which accounts for about 80% of total pension obligations: 5.25% discount rate for pensions and 4.75% for early retirement schemes; 3.2% gross salary increase, including 1.7% inflation.

(9) The acquisition bridge financing has been included in the short-term financial debt.

PMG hedges both the metal and currency components of its commercial supply and sales transactions, primarily through forward contracts, which constitute off balance sheet rights or commitments. PMG also enters into toll treatment and/or leasing arrangements, which result in off balance sheet restitution commitments or rights.

7. RECENT DEVELOPMENTS AS FROM 30 JUNE 2003

Copy of the press releases since June 2003

03 June 2003

Umicore acquires the Precious Metals Group activities of OMG for €643 million

OM Group ("OMG") of Cleveland, Ohio and Umicore of Brussels, Belgium, entered into a definitive agreement for the sale of OMG's Precious Metals Group ("PMG") to Umicore. Although the transaction remains subject to regulatory approvals, both companies anticipate a timely closing of the transaction.

This acquisition will make Umicore a pre-eminent actor in the global precious metals business and marks a major step in Umicore's strategy of expanding its activities towards more technology intensive materials. PMG is a leading global producer of autocatalysts, with industrial operations in Europe, North & South America, Asia and Africa. It is also active in precious metals refining, recycling and marketing and it holds strong positions in a wide range of precious metals based, value added materials, serving amongst others the electronics, jewellery, glass and pharmaceutical industries. Furthermore, PMG has made a significant investment in the development of fuel cell technology.

PMG has approximately 3500 employees. This acquisition is fully in line with Umicore's intent of providing "materials for a better life" based on core competences in metallurgy and materials science. The combination of PMG with Umicore's existing successful precious metals refining and recycling business will result in a number of significant short and medium term benefits.

PMG had annual sales of approximately €4.6 billion, or approximately €550 million excluding the value of contained precious metals and generated operating income of €83 million in 20021. The price for the acquisition of PMG has been agreed at €643 million.

1. About PMG

PMG, which was acquired by OMG in August 2001 from Degussa, is organised around a number of market focused business units.

Automotive catalysts:

PMG is one of the leading global manufacturers of automotive catalysts. In particular it holds the leading position in the growing market of catalysts for diesel engines. PMG, which holds a strong position in Europe, is increasing its penetration of the North American market.

Automotive catalysts are used to drastically reduce the emission of harmful exhaust gases and particulates from internal combustion engines and are already fitted on more than 90% of all new cars and light duty vehicles sold worldwide. Each catalyst comprises a fine ceramic or metallic honeycomb substrate coated with a thin layer of active chemicals and platinum group metals catalysts.

PMG strives to increase the performance of the catalysts in order to comply with ever more stringent environmental regulations, whilst at the same time minimising the cost of the emission control system, e.g. by reducing the content of the expensive platinum group metals. This requirement for increasingly sophisticated technology is met by PMG through its high level of expertise and close collaboration with its customers which include most major car manufacturers.

The autocatalyst market is growing faster than the global vehicle market, driven by the progressive implementation of emission regulations in all regions of the world, the multiplication of the number of catalyst "bricks" per vehicle and by the installation of catalysts on all categories of vehicles, including increasingly also heavy-duty diesel trucks.

Technical Materials, Jewellery & Electroplating, Precious Metals Chemistry:

Building on a long established capability in the refining and recycling of precious metals, PMG has developed a wide range of value added, precious metals based compounds and products. In many of these segments it has established strong global positions based on technological competence, close customer interaction and geographic proximity.

These divisions produce a wide range of materials for the jewellery, glass, chemical and electronics industries and various other industrial applications. Organic and inorganic compounds are produced for further

processing within the group, as well as for chemical and pharmaceutical catalysis applications. These businesses all have an international focus with industrial operations in Brazil, Germany, USA, Thailand, Japan, Austria, Italy and the Netherlands.

Fuel Cells:

PMG has invested significant amounts over the last few years towards establishing a technological base in the manufacturing of catalysts and components for fuel cells, and is recognised as a technological leader in the field of Proton Exchange Membrane Fuel Cells (PEMFC).

Metals Management:

The Metals Management unit provides the supply of precious metals and the risk management services for all of PMG's operations. Furthermore, Metals Management supplies a wide industrial client base with physical metals and risk management services.

2. Benefits of the transaction

Overall this transaction will allow Umicore to acquire a set of attractive businesses, strongly complementary to its existing Precious Metals and Advanced Materials activities. It marks a major step in its strategy to focus development on businesses where it can hold world leadership positions based on technological competence and close customer interaction, and to lessen its relative dependence on the commodity cycles. The combination of Umicore's activities in precious metals refining and recycling with PMG's refining, metals marketing, value added materials activities and technological skills will make Umicore a preeminent actor in the global precious metals business.

Short and medium term benefits from the transaction are expected to include:

– *Optimisation of refining and recycling operations:*

Making optimal use of Umicore's and PMG's precious metals refining assets will increase process efficiencies and reduce costs, leading to a strengthening of Umicore's competitive positioning and allowing the Company to further enhance its customer service capabilities.

– *Integration of metals management and marketing:*

By backing up PMG's successful precious metals marketing activity with the added production volumes from Umicore's Hoboken plant as well as with Umicore's financial standing, better margins and further growth in this activity are envisaged. PMG will also benefit in its sales effort from Umicore's extensive marketing network which has offices in over 20 locations worldwide.

– *Reduction in working capital needs:*

Optimisation of refining operations, increased process efficiencies and Umicore's proven discipline in working capital management are expected to allow a significant reduction of working capital in the combined business.

– *Strengthening of technology portfolio:*

Through PMG, Umicore will acquire an extensive technology portfolio and related intellectual property rights. PMG also has several projects at various stages of the development pipeline, fuel cells being the most prominent. The combined PMG and Umicore portfolio will allow the group to focus on a number of attractive growth opportunities.

– *Strong management resources:*

With its long tradition of technological and operational excellence, PMG brings with it a large group of talented people. PMG's broad geographical footprint will also allow Umicore to draw on an added pool of internationally experienced managers.

3. Financials

PMG's sales amounted to €4.6 billion in 2002. This figure includes the value of contained precious metals, which accounted for €4.1 billion. Product sales excluding precious metals were approximately €550 million in 2002.

As reported by OM Group, the acquired businesses posted an operating profit of €83 million in 2002. These figures are based on US GAAP.

The price for the acquisition has been agreed at €643 million on a debt and cash free basis. Umicore will assume PMG's pension liabilities amounting to some €57 million. The €643 million acquisition will be fully paid in cash and will initially be financed through a bank financing arranged by Fortis Bank. Following the closing of the transaction, Umicore is planning to raise long term financing in both the equity and debt markets to optimise its capital structure. Umicore expects to complete the overall refinancing operation within 9 to 12 months.

4. Integration

Umicore expects to gain all necessary regulatory approvals and close the transaction by the end of July 2003.

An integration plan has been prepared together with the management of PMG. This plan has been designed to facilitate a swift capturing of the expected benefits of the transaction, but also to preserve the unique strengths of PMG.

Upon closing Martin Hess and Pascal Reymondet, presently PMG executives respectively in charge of the autocatalysts business and the other PMG businesses, will join the Umicore Executive Committee. The main activities of PMG will be reported in Umicore's accounts under a separate business segment, Precious Metal Products. Umicore will separately report a Precious Metals Services segment, comprising Umicore's present precious metals refining and recycling operations in Hoboken, the PMG metals management unit and PMG's refining services business.

8 July 2003

JOINT PRESS RELEASE
UMICORE AND ARCELOR INTRODUCE TRAXYS

Luxembourg and Brussels, July 8th, 2003 – Umicore and Arcelor have agreed to combine their commercial non-ferrous and ferro-alloys activities into a trading, marketing and distribution joint venture named Traxys. Previously these activities have primarily been carried out by Sogem (for Umicore) and Considar (for Arcelor).

The combination of these complementary businesses will create a larger, global organisation with extended market coverage, and a comprehensive geographical reach with more than 20 offices in main producing and consuming areas.

Sogem's activities are mainly focused on base metals and related ores and concentrates while Considar's activities are primarily in bulk and noble ferro-alloys.

Traxys will have the capability to serve a broad base of industrial customers and will offer a full range of commercial and financial services to customers in the minerals and metals industries. Traxys will aim to provide those services as a collaborative and transparent link between metals and raw materials producers and their clients.

The core of Traxys will be formed from the various entities within the Considar group in New York and Luxembourg, along with Sogem's Brussels headquarters as well as agency and distribution activities in France and Spain.

Control and ownership of Traxys will be shared equally between Umicore and Arcelor. In parallel to Traxys, which will focus on third party business, both Umicore and Arcelor will continue to own and operate their respective international sales networks, which support their own industrial operations The transaction received the approval of the European anti-trust authorities on Friday, July 4th, 2003.

14 July 2003

IMEC, UMICORE and SOITEC study germanium as an alternative to silicon chips

The micro- and nano-electronics research centre IMEC (Leuven, Belgium) and leading materials specialists, Umicore and Soitec, have signed a co-operation agreement to meet the challenges posed by developing chip processing technologies with dimensions of less than 45 nanometers.

The standard chip processing technology uses silicon as its basic material. There is universal agreement that the physical limits of the miniaturised material layers and traditional transistor structures will soon be reached. Due to its attractive chemical and electrical properties, germanium has recently been discussed as a possible replacement for silicon.

The technology which is being developed in this partnership will use germanium as the basic material and will be suitable for high-speed applications in the computer and telecommunication market. The objective is the production of germanium-on-isolator (GeOI) substrates and the development of transistors on these substrates. The results of this co-operation will be applied in a new research programme at IMEC which aims to create a germanium-chip technology which is compatible with the latest standard chip manufacturing processes. This should provide a solution for the further miniaturisation of conventional chip technologies.

Each partner will contribute its own know-how and exchange data and results. Umicore, which has extensive experience in the marketing and development of germanium substrates, will be responsible for developing and producing germanium wafers with diameters of both 200mm and 300mm (the recent standard diameter for chip substrates). Soitec will apply its knowledge of fabrication methods, making use of its own Smart Cut™ process in order to transfer a germanium layer to make such a GeOI substrate. IMEC will apply its expertise in the latest chip processing steps and characterisation techniques to demonstrate the potential of GeOI for the further scaling of chip technologies below 45 nanometers. The complementary know-how of these three companies will make it possible to meet the challenges of developing miniaturised germaniumbased chip technologies.

23 July 2003

Umicore sells one million of its own shares

On Tuesday July 22 Umicore sold one million of its own shares previously held as treasury shares. These shares were sold as a block to a financial intermediary and were subsequently placed among a limited number of financial institutions throughout Europe.

This transaction has taken place in the context of the long term funding plans of Umicore as referred to at the time the acquisition of the Precious Metals Group of OMG was announced (June 3, 2003). Following this sale, Umicore owns just over 800,000 of its own shares representing some 3.5% of its issued capital.

23 July 2003

Umicore acquires certain germanium assets from EaglePicher Technologies

Umicore USA Inc. has acquired certain assets of EaglePicher Technologies' germanium products business, based in Quapaw, Oklahoma, for approximately USD 15 million in cash. These assets relate to the production of germanium-based products primarily used in infrared optics and fibre optics applications. The transaction does not involve any of EaglePicher's assets that are involved in the production of germanium substrates.

This acquisition fits into the global, worldwide growth strategy of Umicore's Advanced Materials business.

The newly acquired business (formerly EaglePicher Electro-Optic Materials) is to be known as Umicore Optical Materials USA Inc. It will be integrated into Umicore's Electro-Optic Materials business unit and will provide this business with a valuable, US-based production and sales platform.

01 August 2003

Umicore announces closing of PMG acquisition

Having received all necessary regulatory approvals, Umicore confirms the closing of its acquisition of OMG's Precious Metals Group (PMG) under the terms and conditions announced on 3 June 2003.

21 August 2003

New catalyst technology for diesel particulate filters from Umicore, improves the purification of diesel exhaust fumes

The Automotive Catalyst Division of Umicore (formerly Degussa/dmc^2/OMG), with its head office in Hanau-Wolfgang, has developed a new catalyst technology for diesel particulate filters. This technology can be used right across the whole range of diesel engines in both cars and commercial vehicles. Thanks to their innovative technology, these catalytically activated diesel particulate filters clearly reduce the emissions from current diesel engines, when compared to conventional filters without catalyst. They will initially be used in DaimlerChrysler's C-Class and E-class models with 4-cylinder diesel engines. For the first time a diesel vehicle from DaimlerChrysler will comply with the strict legislation for 2005 EU IV.

This technology further extends Umicore's technological leadership in this field, which began in 1989 with the introduction of the revolutionary dieselcatalyst.

Significant improvements in harmful emissions

The catalytically activated diesel particulate filters reduce harmful emissions contained in exhaust fumes from diesel engines, i.e. carbon monoxide (CO), hydrocarbons (HC) and diesel particulates, in particular those harmful emissions generated during the regeneration of diesel particulate filters due to soot burnup.

The active regeneration strategy for catalytically activated diesel particulate filters, developed jointly with DaimlerChrysler, makes it possible to guarantee filter regeneration without extra additives.

Up to now cars fitted with diesel particulate filters need an extra additive to promote filter regeneration. The disadvantage of the additive currently being used is that it causes extra ash build up in the diesel particulate filter and therefore, with increasing mileage accumulation, makes it necessary to clean the filter or even to replace it. The opportunity to be able to adapt the catalytically activated filter to various vehicle and engine characteristics, offers further potential.

Umicore Fuel Cell Division acquires Catalyst Patents from the Max-Planck-Institute (MPI)

Umicore's Fuel Cell Division, located in Hanau-Wolfgang, Germany, has acquired various protective rights related to a new fuel cell catalyst technology from German Max-Planck-Institute für Kohlenforschung (MPI) in Mülheim, Germany.

Based on a unique nano-technology process, the Max-Planck-Institute invented new methods and procedures for manufacturing high performance electrocatalyst materials with superior, stable precious metal dispersions even at high loading levels. Electrocatalysts are the core of Umicore's MEA (membrane-electrode-assembly) technology and thus are of primary importance for the lifetime, performance and cost efficiency of polymer electrolyte membrane fuel cells (PEMFC) and direct methanol fuel cells (DMFC).

The patent portfolio acquired by Umicore incorporates three US patents as well as their foreign counterparts in Europe, Canada and Japan. It is based on research and development work performed by Prof. M. Reetz and Prof. H. Boennemann in the field of catalysis and nano-technology, and offers broad protection for nano-sized precious metal colloids, for manufacturing methods as well as for precious metal colloid based fuel cell catalysts.

Those protective rights significantly strengthen Umicore's intellectual property position and fit well into the company's global fuel cell patent portfolio. Furthermore, they are in line with the ongoing research activities in the field of catalysis.

The Fuel Cell Division of Umicore is a global leader in the development and manufacturing of advanced components for fuel cell systems and operates the first production line for membrane electrode assemblies in Europe. Fuel cells have significant potential as an energy source in a number of stationary, mobile and automotive applications. Umicore is committed to developing new products that contribute to progress in energy technology, communication technology and environmental protection.

10 October 2003

Placement of 2 million Umicore shares by Suez

Umicore has taken note of the placement by Suez of 2 million Umicore shares through UBS.

Umicore was gratified to learn of the rapid over-subscription of the offer and especially of the high level of interest shown by North American investors. This indicates the recognition by the global investment community of the strategic development of the company.

Umicore welcomes an even broader shareholder base and anticipates that this will contribute to further improvement in the stock's liquidity.

7 November 2003

Quarterly update

GENERAL OVERVIEW

Umicore experienced an encouraging third quarter with good levels of business activity during the normally quieter summer months. The contribution of PMG (which is being consolidated from 1 August) has been fully in line with expectations. The Advanced Materials business group demonstrated a further improvement in its level of performance. Towards the end of the period the prices of zinc and copper also showed signs of recovery. Most of the Group's other businesses exhibited a continuation of the trends prevalent during the first half of 2003. Given these developments, Umicore anticipates that full year EBIT (including PMG from 1 August 2003) will reach approximately EUR 130 million.

During the third quarter much time and effort has been dedicated to ensuring the smooth integration of the PMG operations into the new company structure. Priority areas have been the establishment of a clear, unified management structure; the integration of precious metals refining and precious metals management operations; the reduction of working capital in the combined business and the application of a uniform set of financial controls and procedures. At the same time, the integration process has been designed to create minimum disruption to the on-going business activities. In terms of reporting segments, two new groups have been created: Precious Metals Services combines the precious metals refining operations of Umicore and PMG and also includes the expanded metals management business. Precious Metals Products and Catalysts incorporates all the other former PMG businesses (except Fuel Cells) and also includes Thin Film Products which was formerly part

of the Advanced Materials business group. Fuel Cells has been grouped within Research, Development and Innovation, which is included in the Corporate & Investment reporting segment.

The Advanced Materials business was strengthened by the acquisition of the EaglePicher germanium business and Umicore has also acquired a 40% stake in Ganzou Hongsheng Metallurgical and Chemical Company This further adds to Umicore's global leadership in the cobalt market.

On 22 July Umicore sold one million of its own shares previously held as treasury shares. These shares were sold as a block to a financial intermediary and were subsequently placed among a limited number of financial institutions throughout Europe. As at 31 October, Umicore owned 3.24% of its share capital (733,199 shares). Following the placement by Suez of two million Umicore shares in October, Umicore's free float has increased to 79%, which should result in an increased weighting in the Bel 20 Index.

ADVANCED MATERIALS

Engineered Metal Powders

The Engineered Powders business continued to perform well. The sales of cobalt powders for hard metals tools were particularly healthy, boosted by increasing demand from the electronics and oil drilling sectors. Demand for cobalt powders for diamond tools was subdued in Europe, while Asia remains a growing market for both hard metals and diamond tools applications.

Sales volumes and premiums for zinc powders suffered from reduced demand in the increasingly competitive European and US markets. In contrast, Umicore's Chinese operations performed well and the business was able to meet increased demand from its customers thanks to the successful capacity expansion finalised earlier this year.

In October Umicore finalized the acquisition of a 40% equity stake in Ganzhou Hongsheng Metallurgical and Chemical Company, a cobalt processor based in Ganzhou, China. Umicore already had a cobalt processing partnership with Hongsheng but this transaction is in line with Umicore's overall aim of increasing its presence in China. This transaction allows Umicore to further strengthen its leadership position in the global cobalt products market. Hongsheng has an annual capacity of more than 1,000 tonnes of cobalt products and employs some 540 people.

Specialty Oxides and Chemicals

The market for rechargeable battery materials remained very strong in the third quarter, driven by demand for applications using lithium ion batteries such as mobile phones and laptop computers. The capacity increase at Umicore's lithium cobaltite plant in South Korea to 2,500 tonnes per year will come on stream during the fourth quarter of 2003.

The Ceramics and Chemicals business performed well despite the normal seasonal slowdown in the summer months. The diversified product portfolio and extended geographical reach continued to aid the development of this business. The US facility continued to successfully widen its customer base during this period and also developed a new product – cobalt manganese oxide – for the ceramics industry based on the recycling of catalysts and also residues from the lithium cobaltite production facility in Korea. The plant in the Philippines completed a de-bottlenecking in its nickel refinery and increased its output of nickel specialties for the plating and catalyst industries.

Electro-Optic Materials

Although year-to-date sales of germanium substrates were well below the levels of 2002, the third quarter saw a continuation of the improved demand levels witnessed towards the end of the first half of 2003. Further work was done on the development of germanium substrates for electronic and opto-electronic applications.

Demand for germanium tetrachloride from fibre optic cable manufacturers improved slightly. Deliveries of germanium dioxide were stable.

The slight improvement seen in the finished optics segment in the first half continued into the third quarter. The integration of the activities acquired in the US (assets of EaglePicher Technologies) was implemented during the third quarter.

Synthetic Diamonds

Megapode performed well with increased sales volumes for all product categories compared to the same period last year. Price pressure remained a feature of the market for diamond grit products.

PRECIOUS METALS PRODUCTS AND CATALYSTS

Automotive Catalysts

The European and American automotive industries continue to show a contraction of overall sales volumes, albeit from historically high levels. In this environment, Umicore's Automotive Catalysts business unit was able to grow its volumes compared to the previous year and performed according to plan. The main factor contributing to this was the implementation of development plans in the US. The ramping up of the production capacity at the Burlington plant in Canada is proceeding according to plan.

The business unit has developed a new catalyst technology for diesel particulate filters (DPF). These catalytically activated diesel particulate filters reduce the emissions from current diesel engines. They comply with the strict legislation for 2005 EU IV and will initially be used by Daimler Chrysler. They will be the first commercially available catalysed DPF on the market.

Technical Materials

Although the technological strength of this business enabled it to grow its sales volumes year-on-year despite weak overall economic conditions, sales prices were lower. Sales of platinum engineered materials were driven by the growth in demand from LCD glass producers while the Asian market exhibited improved demand in the electronics sector. Sales of electrical contact materials benefited from development projects in China.

Jewellery and Electroplating

The general demand for jewellery is down in Europe but the jewellery business (which includes the Allgemeine subsidiary) benefited from increased demand from its customers – mainly large branded jewellery producers – for higher quality materials. In electroplating, sales volumes were stable.

Precious Metals Chemistry

This business unit produces precious metal compounds for various industries and homogeneous catalysts for bulk and specialty (e.g. pharmaceutical) industries. Sales volumes of homogeneous catalysts increased despite the slowdown in the main end-user sectors. A significant capacity expansion for homogeneous catalysts in Hanau has been completed and is now operational.

Thin Film Products

Demand from the electronics and optics industries was healthy, and the business unit was able to grow its sales volumes compared to the same period of last year. In optical data storage competition was fierce in main markets and sales volumes and margins were under pressure. In displays, a strong position is being developed in chromium products (Taiwan), but sales of indium products (USA, Providence) remained low.

PRECIOUS METALS SERVICES

The operations at Hoboken performed well, although they were again somewhat affected by the reduced supplies of raw materials. Arrivals of electronic scrap and automotive catalysts slowed down during the summer months and the general availability of these two sources of feed continues to be hampered by the fact that precious metals prices have not shown any significant positive evolution so far this year. The availability of by-products from the non-ferrous metals industry continued to be affected by the reduced activity levels in this industry in Europe. Despite these tight supply conditions, Hoboken was able to secure satisfactory levels of feed during the quarter and specific efforts have been made to further broaden the supply base – something that is made possible by the flexibility of the flowsheet.

The high level of process efficiency has again provided Umicore Precious Metals Services with a positive counterweight to the prevailing market conditions.

The study relating to the integration of PMG's refining activities in Hanau (Germany) into Precious Metals Services is making progress. A decision on the industrial configuration in refining is expected in the coming months. The unification of the metals management operations has already led to new opportunities and has aided the ongoing efforts to reduce capital employed in the combined business.

ZINC

The average zinc price for the third quarter of 2003 showed some improvement, at USD 836 per tonne vs USD 786 for the same period of last year.

Zinc Smelting

Production from Umicore's smelters in Balen and Auby was in line with last year. Market treatment charges remained unsatisfactory, although Umicore has continued to benefit from its long-term contracts policy. The availability of secondary materials improved and sulphuric acid prices were significantly better than last year.

As in the first half of the year, the higher energy costs in Balen – resulting from higher electricity prices and increased levels of taxation on energy consumption – were offset to some extent by lower taxation of electricity in France. Umicore, together with other industrial companies, has continued its information campaign to highlight concerns over energy taxation policy and its possible consequences on the competitiveness of Belgian industry.

Padaeng

The trends that were evident during the first half of the year carried through into the third quarter – the domestic Thai market remained strong and the proportion of alloys in overall sales was up year on year despite poor demand from the Asian die-casting sector.

Zinc Alloys and Chemicals

Significant imports of Asian zinc oxide at low prices meant that the European market for zinc oxide remained depressed. The business benefited from the refocusing of its portfolio on the highest added value activities.

In fine zinc powders, activity was stable, with the performance of recycling activities still slightly affected by lower revenues resulting from the low zinc price.

The continuous galvanising business benefited from the closure of European smelters in the first half of the year with volumes and premiums improving. Sales volumes increased in general galvanising products although levels of demand varied greatly in Europe from country to country. In the European market, overall demand for die-casting alloys remained healthy, whereas sales of die-casting alloys in Asia were affected as a result of fierce competition.

Building Products

The overall trend was in line with the first half of the year, with sales in Germany still suffering from the depression in the German building industry. The French market was stable, however, and the business unit was also able to take advantage of its improved product offering and increased geographical scope, as a result of the acquisitions of the past year. Management of the product and market portfolio also contributed to slightly better overall premiums for finished products. Improvements in the unit's productivity and cost base also continued to bear fruit.

COPPER

The lower levels of LME copper stocks led to an improvement in the copper price, which averaged USD 1,759 per tonne in the third quarter. Treatment and refining charges remained extremely depressed, however, as a result of the tightness on the concentrates market, with Indian and Chinese smelters still relying on their protective environment to settle very low treatment charges.

The smelting activities at Pirdop fully met expectations in terms of operational performance, and should exceed the planned annual production of 210,000 tonnes of anodes.

Production of cathodes at the Olen refinery was slightly ahead of last year. European demand remained subdued in all sectors, especially in the automotive and building industries. As a result, overall sales of copper wire rod were significantly lower than in the same period of last year. However, sales from the Italian operations were stable and sales of oxygen-free rod continue to grow. Sales of cast products were in line with the third quarter of 2002.

The carve-out of Umicore's copper activities in a fully owned subsidiary will be completed by year-end.

CORPORATE AND INVESTMENTS

Traxys

The new marketing and trading joint venture with Arcelor has got off to a positive start. The integration of the various elements in the venture has progressed rapidly.

Research, Development and Innovation

The R&D activities of Umicore have been regrouped to include centralised research and development efforts, the venture unit (formerly part of Advanced Materials), the Umagine innovation unit and Fuel Cells (formerly part of PMG).

In Fuel Cells, sampling and qualification activities at Umicore's main customers accelerated during the third quarter. Umicore also acquired patents relating to catalysis and nano-technology from the Max Planck Institute in Germany.

Other

In September Umicore announced its intention to stop the activities of its engineering division, Umicore Engineering, by year-end. The Group's net result for 2003 will include any non-recurring restructuring charges relating to this and also charges that have been, or will be, incurred concerning the integration of PMG and the restructuring at the Olen plant.

OUTLOOK

Given the contribution of PMG, the positive evolution in Advanced Materials and the improvement in the zinc price in recent weeks, Umicore now expects that full year EBIT will reach approximately EUR 130 million, including an expected contribution from the former PMG activities in excess of EUR 30 million (from 1 August 2003). Net after tax earnings before exceptional items will exceed EUR 80 million.

8. GLOSSARY

8.1 OFFERING GLOSSARY

All terms used in the Prospectus and written with a capital letter, whether used in singular or in plural, shall have the following meaning:

Additional Shares	the new shares in the Company, with VVPR strips, allotted under the Over-allotment Option.
Banking Day	a day that is a working day for banks in Belgium, excluding Saturdays.
Bookbuilding and Subscription Period	the period commencing on 10 November 2003 and ending on 19 November 2003 at 4:00 p.m., Brussels time, subject to early closing, during which binding offers are solicited from Institutional Investors in order to determine the Offer Price. This period will be open for at least five Banking Days.
Company	the "société anonyme" Umicore "naamloze vennootschap" having its registered office at rue du Marais, 31, Broekstraat at 1000 Brussels (Belgium).
Closing Date	the date on which the realisation of the capital increase for up to 2,400,000 new shares, as decided upon by the Board of Directors of the Company on 7 November 2003 will be established. This date will be published in the Belgian financial press together with the announcement of the Offer Price and the results of the Offering, and is expected to be at the latest on 25 November 2003.
Free Tranche	the tranche of the Offering to which all investors can subscribe, subject to the Investor Notices set out in the Prospectus.
Group	the Company and all its subsidiaries.
Institutional Investors	institutional and other investors referred to in Article 3, 2 of the Royal Decree of 7 July 1999 on the public character of financial transactions, and similar investors outside Belgium.
Listing Date	the date on which the new shares are admitted to the listing on the First Market of Euronext Brussels.
Joint Global Coordinators and Bookrunners:	Fortis Bank and KBC Securities.
Offer Shares	the ordinary shares of the Company with VVPR strips offered in the Offering, including the Additional Shares.
Offering	the offering decided by the Board of Directors of the Company on 7 November 2003 as described in the Prospectus.
Offer Price	the single subscription price for Retail and Institutional Investors for the Offer Shares determined after the Bookbuilding and Subscription Period, as published in the Belgian financial press two Banking Days after the closing of the Bookbuilding and Subscription Period and at the latest on 21 November 2003.
Order	any individual application of any investor to subscribe to Offer Shares.
Over-allotment Option	the option granted by the Company to the Joint Global Coordinators and Bookrunners to subscribe for up to 400,000 Additional Shares at the Offer Price, exercisable 30 days after the Closing Date, solely to cover over-allotments, if any.

Price Range	the minimum and maximum prices for the Offer Shares, which will be published in the Belgian financial press on 8 November 2003.
Private Placement	the Offering made to Institutional Investors in and outside Belgium.
Priority Allocation	the right of existing shareholders to participate in the Priority Tranche. For bearer shares this right is represented by coupon n° 11 of the existing shares in the Company. For registered shares, the Company will issue a certificate representing the right to Priority Allocation. Upon closing of the Bookbuilding and Subscription Period the coupons n° 11 and the certificates representing coupon n° 11 become null and void. The coupon n° 11 of the VVPR strips has no value and cannot be used to participate in the Priority Tranche.
Priority Allocation Ratio	the number of coupons n° 11 or certificates representing coupons n° 11, necessary to subscribe to one Offer Share in the Priority Tranche as published in the Belgian financial press on 8 November 2003.
Priority Tranche	the tranche in the Offering reserved to existing shareholders, subject to certain restrictions as mentioned in this Prospectus.
Prospectus	the present document as approved by the Banking and Finance Commission on 4 November 2003.
Public Offering	the Offering made to Retail Investors in Belgium.
Retail Investors	any retail investor who is not an Institutional Investor, subject to the selling restrictions mentioned in the Investor Notices as mentioned in this Prospectus.
Selling Agents	Fortis Bank, KBC Securities, KBC Bank, CBC Banque and Petercam.
Subscription Period	the period commencing on 10 November 2003 and ending on 19 November 2003 at 4:00 p.m., Brussels time, subject to early closing, during which binding offers are solicited from Retail Investors. This period will be open for at least five Banking Days.
Umicore	the Group, being the Company and its subsidiaries.
Umicore SA/NV	the Company as defined above.
Underwriters	Fortis Bank, KBC Securities, RBC Capital Markets, UBS Limited, Petercam SA/NV.
VVPR strips	the separate security representing the right for eligible shareholders to receive dividends at a Belgian withholding tax rate of 15%, instead of 25%, which will only be granted if the ordinary coupon is presented simultaneously with the VVPR strip. For bearer shares, this fiscal advantage is represented by the VVPR-strip; for registered shares, it is recorded in the shareholder register of the Company.

8.2 FINANCIAL GLOSSARY

EBIT	Operating profit (loss) of fully consolidated companies + Group share in operating profit (loss) from equity consolidated companies
EBITDA	EBIT + depreciation & amortisation + Group share in depreciation & amortisation from equity consolidated companies + metal inventory write-downs
Added value	Operating income less external operating costs (mainly raw materials and consumables and goods and services) = Operating profit (loss) + remuneration, social security charges and pensions + current depreciation/amortisation charges + write-downs
Return on Capital Employed (ROCE)	EBIT/total average capital employed, where EBIT is adjusted for certain financial items such as securitisation costs
Capital Employed	Total equity + net interest-bearing debt
Capital Expenditure	Investments in tangible and intangible assets
Cash Flow before Financing	Net cash provided by (used in) operating activities + Net cash provided by (used in) investing activities
Net Financial Debt	Long-term financial debt + short-term financial debt – cash & invested cash
EPS Declared	Net earnings, Group share/total number of outstanding shares (treasury shares not deducted)
EPS Adjusted	Net earnings before extraordinary items, Group share/total number of outstanding shares (treasury shares not deducted)
EPS Adjusted before Goodwill Amortisation:	Net earnings before extraordinary items and goodwill amortisation, Group share/total number of outstanding shares (treasury shares not deducted)
Price Earnings Ratio (PER)	Closing price/EPS Adjusted before inventory write-downs
Market Capitalisation	Closing price x total number of outstanding shares (treasury shares not deducted)

Advanced materials

Within Umicore, advanced materials are considered as materials with a high technological content, which are usually further processed by sophisticated methods, and/or which are used in high-tech applications.

Alkaline battery

Zinc-manganese dioxide primary (non-rechargeable) battery; the most popular premium primary battery, often used in electronics applications requiring heavy currents for long periods of time (i.e.: CD players, radios, etc.). Alkaline batteries can deliver 50-100% more total energy than conventional Carbon/Zinc batteries of the same size.

The zinc electrode is made of powder, while the electrolyte is alkaline (potassium hydroxide). Delivers 1.5 Volts.

Alluvial diamonds

Diamonds found in river beds or in sand/silt deposits of rivers

Anode/tankhouse slimes

A product which falls on the bottom of an electrolytic cell as anodes dissolve. In copper refining, the precious and non-soluble components of the anode are enriched in the anode slimes (e.g. silver, gold, selenium, lead).

Battery

A chemical reactor containing reactive and electrically conducting materials which react in a controlled manner to produce DC electricity.

Beam splitter

An optical device using controlled reflection that splits an incoming beam of light (photons) into 2 or more beams. A proportion of light would be reflected from the beam splitter while the rest would be transmitted through it unaffected.

Usually, a beam splitter is a piece of glass with optical coatings; the type of coating determines the ratio between transmission and reflection.

Billets

Round shapes produced from vertical casting for the subsequent transformation by extrusion into rods, bars, sections and mainly tubes.

Blank (optics)

In optics, a preform that is roughly shaped and is intended to be finished by further high precision processes.

Blanks (metallurgy)

Blank pieces of metal on which coins or medals are then stamped.

Blister

98% pure copper – product of smelting and converting of concentrates.

Brazing

The joining of two materials by means of another which has a melting point lower than that of either of the two parent metals. There are three types of brazing:

- Soldering, where the melting temperature is less than 450°C.
- Low Temperature Brazing, where the temperature of melting is between 450°C and 1000°C.
- High Temperature Brazing, where the melting temperature is greater than 1000°C.

Brown goods

Household electrical entertainment products.

By-product

A secondary or incidental product of a manufacturing process.

Cakes (copper)

Rectangular bars produced in the vertical copper casting process with variable lengths and a weight of up to 25 tonnes. Cakes are the starting material in rolling mills for the production of copper sheet, plate and foil.

Carbon black

An engineered compound used primarily in tyres and other mechanical rubber goods and as a pigment in printing inks, paints and plastics. It is also used as a carrier for PGM catalysts in PEM fuel cell electrodes.

Carboxylate

Metal carboxylates are organic compounds usually produced with inorganic metal compounds as precursors.

Catalyst

A catalyst is a substance that triggers, speeds up or slows down a chemical reaction but is chemically unchanged at the end of the reaction.

A catalyst that is in the same phase (usually liquid or gas solution) as the reactants and products is called a **homogeneous** catalyst.

A catalyst that is in a separate phase from the reactants is said to be a **heterogeneous**, or contact, catalyst. Contact catalysts are materials with the capability of adsorbing molecules of gases or liquids onto their surfaces. An example of heterogeneous catalysis is the use of finely divided platinum to catalyse the reaction of carbon monoxide with oxygen to form carbon dioxide. This reaction is used in catalytic converters mounted in automobiles to eliminate carbon monoxide from the exhaust gases. This type of catalyst also transforms the unburned hydrocarbons and nitrous oxides contained in exhaust gases into harmless water and carbon dioxide.

Cathodes

The metal deposited as a result of electrolytic refining. Cathodes are the final result of the refining process for zinc and copper and are of a purity level of more than 99.99%. They are the reference commodity on the world copper market and are priced on metals exchanges such as the LME (UK) and COMEX (USA).

Cemented carbide

Cemented Carbides or Hardmetals – A class of materials which consist of mixtures of one or more of the finely divided refractory metal carbides of tungsten, titanium, tantalum and vanadium embedded in a matrix of cobalt or nickel or iron by sintering. Widely used for cutting tools where for many applications they have replaced conventional high-speed steels.

Cemented carbides are wear resistant, withstand deformation, impact, heavy load, high pressure, corrosion and high temperature.

Cession

The assignment of rights of claim (in a leasing agreement for example the lessor assigns rights of claim to the lessee).

Chalcogenide glass

An infrared-transmitting glass consisting of substantial amounts of one of the chalcogens, tellurium, selenium, or sulphur and usually also contains germanium.

Compound semiconductor

A semiconductor consisting of two or more elements, such as gallium and arsenic (GaAs), indium and phosphorus (InP), silicon and carbon (SiC). It is different from silicon or germanium types, which consist of a single element.

Compound semiconductors have many advantages over the widespread silicon semiconductors. They are aimed at electronic

	and opto-electronic applications requiring the highest levels of performance.
Concentrates	The result of the concentration of valuable metals contained in ore and used as input material for smelting or leaching. Concentrates typically contain 30 – 60% of metal while ores only contain a few percent of metal at best.
Continuous cast wire rod	Semi-finished product which is the starting product for further processing into wire. Wire rod diameters range from 8 to 25 mm; the brand name of Umicore's wirerod is Contirod. Delivered in coils of 3-5 tonnes.
Continuous galvanising	Hot dip process in which steel strip is moved continuously through a molten zinc bath. A zinc coating, which protects the steel from corrosion, forms on both sides of the strip.
Copper anode	The casting of blister into a rectangular shape which is suitable to introduce into an electrolytic tankhouse for final refining into cathodes.
Crystal	A crystal is the solid form of a substance in which the atoms are arranged in a regular, repeating three-dimensional pattern.
Custom smelter	Copper, zinc or other metal plant that smelts concentrates purchased on the market and sells itself the resulting metal or which tolls concentrates (no purchase) and refines them into metal returned against a fee.
Diamond tools	Tools made of diamond particles embedded in a metal matrix, which often contains cobalt.
Die-casting	a process for producing strong accurate parts in large quantities, by forcing molten metal under pressure into a steel die.
Dopant	An element, usually called "impurity", incorporated in trace amounts into a semiconductor material (single crystal or epitaxial layer) to alter its electrical characteristics and establish its conductivity type (negative or positive) and resistivity.
Dross	The scum that forms on the surface or at the bottom of molten metal as a result of oxidation. Drosses are themselves treated in order to recover metals.
Electrocatalyst	A specialised heterogeneous catalyst that must be an electrical conductor in addition to being an active catalyst.
Electrogalvanising	Process in which a zinc coating is continuously applied to steel strip by means of electrolysis. The coating can be applied either to both sides of the strip or to one side only.
Electrolyte	A chemical compound (salt, acid, or base) that dissociates into electrically charged ions when dissolved in a solvent.
Electronic packaging	The technology of interconnecting semiconductors and other electronic devices to provide an electronic function.
Electroplating	Electroplating, also called Galvanotechnics after its inventor Luigi Galvani, is a process using electrical current in which one metal is coated with a film of another metal. The coating metal is removed from a chemical solution and deposited on the charged surface of the metal to be coated (electrolysis process).

	The thickness of the coating depends on the amount of current and the duration for which it is applied.
End-of-life product	A product that has reached the end of its functional life and which is available for recycling.
Epitaxial layer	A single crystal layer formed on top of a single crystal substrate, by means of the epitaxy process. An epitaxial layer, while having the same crystallographic characteristics as the substrate material, will typically have a different doping level and/or type than the substrate upon which it is formed. In some cases the epitaxial layer may be a completely different type of material than the substrate upon which it is grown.
Epitaxy	Process by which very thin layers of single crystal material are deposited onto a single crystal semiconductor substrate ; epitaxial growth occurs in such way that the crystallographic structure of the substrate is reproduced in the growing material. Epitaxial growth is usually performed by metal-organic chemical vapour deposition (MOCVD) or by a physical deposition process (MBE – molecular beam epitaxy).
Evaporation	The process of using heat (either an electric filament or an electron beam) and high-vacuum to vaporise a metal to be deposited on an object (a semiconductor wafer, a piece of glass, ...). The evaporating source material condenses on the surface of the cooler object, forming a thin film.
Evaporation materials	Materials to be deposited as thin films onto objects through an evaporation process.
Front-end	In semiconductor manufacturing, "front-end" refers to the fabrication process in which the integrated circuit is formed in and on the wafer. It differs from "back-end", which refers to the package assembly and test stages of production in semiconductor manufacturing. It includes burn-in and environmental test functions.
FSD	Full Size Deposit, a significant breakthrough developed by Mount Isa (Australia) to decrease the copper refinery costs.
Galvanising	A process for coating a protective layer of zinc to steel to prevent or inhibit corrosion.
General galvanising	A process in which fabricated steel articles are individually dipped into a bath of molten zinc. A zinc coating, which protects the steel from corrosion, forms on all surfaces.
GOI	Germanium-on-insulator.
Hard metals	A group of materials more commonly known as cemented carbides. See cemented carbides.
HDD	Heavy duty diesel – refers to heavy duty diesel engines used in vehicles such as lorries/trucks.
Hedging	A transaction entered into in order to offset the impact of adverse price movements of an asset (e.g. a metal or a currency).
Hydrometallurgy	The treatment of metal or the separation of metal from ores and ore concentrates by liquid processes, such as leaching, extraction, and precipitation (see leaching and electrowinning).

Infra-red	The long wavelength portion of the electromagnetic spectrum, just next to the visible red portion, whose wavelengths are invisible to the human eye (the range is approximately 780 nanometers and longer wavelengths). For reference, the visible spectrum is the region of the electromagnetic spectrum ranging from 400 to approximately 700 nanometers.
Infra-red optics	Optics transparent to infra-red light.
Inorganic compounds	Compounds not containing materials from living organisms, and/or not a hydrocarbon or a hydrocarbon derivative compound.
ISO	International Organisation for Standardization.
Kimberlite	Igneous rock formation in which diamonds may be formed.
Laser	Light Amplification by Stimulated Emission of Radiation. A light source producing, through stimulated emission, coherent, near monochromatic light. Lasers in fibre optics are usually solid-state semiconductor types.
Laser diode ("LD")	A semiconductor similar to an LED (light-emitting diode) but which produces coherent light. Diode lasers are small and efficient, which has led to their use in electronic devices such as compact disc players and pen-type laser pointers.
LD	See laser diode.
Leaching and electrowinning	Electrolytic refining process using chemical solution and an electric charge to refine a metal to its highest purity.
Leasing	Contractual arrangement whereby one party (usually in consideration of a rent / fee) conveys property to another party for a specified period of time.
LED	See light emitting diode.
LIFO	"Last in, first out" method of inventory valuation which assumes that the most recently purchased items are (theoretically) withdrawn from stock first so that the cost of goods sold is based on the cost of the most recent purchases, while the value of the closing inventory is based on the oldest items in inventory.
Light emitting diode (LED)	A solid-state lighting device. An LED is a compound semiconductor device that emits light when an electric current is applied.
Lithium cobaltite	Lithium cobalt dioxide. Used as cathode in lithium-ion batteries. Cobalt oxide is used as precursor in the production of lithium cobaltite, along with a lithium salt.
Lithium metal oxides	See lithium cobaltite. In this case, cobalt is totally or partially replaced by other metals (nickel, manganese, iron).
LME (London Metal Exchange)	The largest non-ferrous metal exchange in the world with the greatest turnover and warehouses around the world to stock undelivered metals.
LMPAs	See low melting point alloys.
Low melting point alloys (LMPAs)	Also called fusible alloys. A range of special alloys that melt at temperature below 250°C (below 30°C for some). Used in a wide range of applications, from fusible safety devices to lens blocking in

	optical devices and from specialised soldering to metal shaping processes.
Mark-to-market	Recording the price or value of a security, portfolio, account or inventory to reflect the current market value
Matte	Mixture of a metal with its sulphides, produced by primary smelting of the sulphide ores of copper, lead, or nickel. Mattes are then converted into purer metal (copper matte has a copper content of about 50-70% and is converted into blister at 98% purity).
MEMS	Micro-Electro-Mechanical-Systems. Devices containing extremely small mechanical elements, which are usually integrated together with electronic processing circuitry. These machines have moving parts smaller than the diameter of a human hair. They are manufactured with techniques similar to those used for the manufacture of the microchips (on the basis of silicon, SOI, wafers).
Nuggets (copper)	Chopped copper rod used mainly for plating.
OEM	Original equipment manufacturer: a company that designs and specifies products under its own company name and brand. Traditionally, OEMs design products, purchase components from suppliers, operate their own manufacturing plants, and handle sales, service and support activities, but many of those functions are being outsourced today.
Open position	An unhedged transaction.
Optical coating	Thin films deposited onto optic elements to improve or alter their optical properties.
Optical fibre	Dielectric material that guides light; optical waveguide. Optical fibres provide the transportation of optical signals or/and optical power over a certain distance for telecommunication and signalling purposes.
Opto-electronics	Products or systems combining electronics with optical sensitivity. Solar cells and LEDs are examples of opto-electronic devices.
Organic chemistry	A branch of chemistry dedicated to the study of the structures, synthesis, and reactions of carbon-containing compounds.
Organic compounds	Carbon-containing compounds.
Packaging	See electronic packaging.
PET plastics	PET stands for polyethylene terephthalate, a plastic resin and a form of polyester. PET is a popular package for food and non-food products. It is commonly used to package soft drinks, water, juice, cosmetics, etc.
PGM	Platinum Group Metal – platinum, palladium, rhodium, iridium, ruthenium, (osmium is a PGM but not part of Umicore's flow sheet).
Phosphor	A substance capable of emitting light when irradiated with particles of electromagnetic radiation.
Photodiode	A semiconductor diode that produces current in response to incident optical power (light). It is used as a detector in fibre optics.
Photovoltaics	Photovoltaics (PV), or solar cells as they are often known, are solid-state semiconductor devices that convert sunlight into direct current

	(DC) electricity. With the appropriate power conversion equipment, PV systems can produce alternating current (AC) compatible with any conventional appliances.
Plating	Coating a metal base with another metal.
Pre-alloys	Prepared mixture of two or more metals (often in powder form) which when molten form an alloy.
Precursor	Substance from which another is formed by chemical transformation.
Premium	Added-value over the contained metal price of a metal-containing material.
Primary battery	A battery designed to produce electric current through an electrochemical reaction that is not efficiently reversible. Hence the battery is discarded when the it has delivered all of its electrical energy.
Pyrometallurgy	An ore-refining process, such as smelting, dependent on the action of heat.
Rechargeable or secondary battery	A battery which, after discharge, may be restored to the fully charged state by the passage of an electrical current through the cell in the opposite direction to that of discharge. This type of battery usually can be recharged and reused hundreds of times.
Renewable energy	Energy derived from resources that are constantly replenished and will never run out. Types of renewable energy resources include moving water (hydro, tidal and wave power), thermal gradients in ocean water, biomass (organic matter that makes up plants), geothermal energy, solar energy, and wind energy. Municipal solid waste (MSW) is also considered to be a renewable energy resource. Hydrogen, which can be found in many organic compounds and in water, is considered as renewable energy as well. Most renewable energy comes either directly or indirectly from the sun.
Roasting furnace	A furnace in which finely ground ores and concentrates are roasted to eliminate sulphur or other elements or compounds; heat is provided by burning sulphur.
Salts	The term applied to substances produced by the reaction of an acid with a base, known as a neutralisation reaction. Salts are characterised by ionic bonds, relatively high melting points, electrical conductivity when melted or when in solution, and crystalline structure when in the solid state.
Secondary material	In this document 'secondary materials' refers to those by-products of industrial processes such as smelting and refining that are then available for further treatment/recycling. It also includes scrap from metal machining processes and from end-of-life materials.
Semiconductor	A material of crystalline structure (example: silicon or germanium) which has a conductivity lying between that of a conductor and an insulator and whose properties can be changed by orders of magnitude by the addition of controlled impurities, or dopants. These properties make it a good medium for the control of electrical current. It can be used as an electronic switch such as a transistor or a diode.

	Elemental semiconductors include antimony, arsenic, boron, carbon, germanium, selenium, silicon, sulphur, and tellurium. Silicon is the best-known of these, forming the basis of most integrated circuits (ICs). Compound semiconductors, which exhibit better performance than silicon, include gallium arsenide, indium phosphide, silicon carbide.
Shapes (copper)	Copper products or formats produced from cathodes by casting: billets, cakes and wire rod.
Sherardizing	A galvanizing process in which the metal to be coated is heated, with or without tumbling, in contact with zinc dust.
Single crystal	A material where the atoms form a periodic array. The atoms are arranged following this specific pattern throughout the entire piece of material.
Slab (zinc)	In market terms, a rectangular plate of metal (typically of 25kg), produced from remelted cathodes. They are the reference commodity on the world zinc market. and are priced on metals exchanges such as the LME (UK) and COMEX (USA).
Slag	A non-metallic residueresulting from the smelting of ore or metal. Lighter slag rises to the surface of molten metal, from where it is removed and often used in basic materials such as aggregate for concrete.
SOI	Silicon-on-insulator. A substrate that has a layer of single crystal silicon on top of an insulating layer, on top of additional silicon. SOI offers improved properties over standard silicon.
Solar cell	A solid-state semiconductor opto-electronics device that transforms sunlight into electric current. (cf photovoltaics)
Solid state lighting	The term "solid-state" refers to the fact that the light is emitted from a solid object – a block of semiconductor – by the movement of electrons, rather than from a vacuum tube, as in the case of incandescents and fluorescents. Unlike incandescent or fluorescent lighting, solid-state lighting creates light with virtually no heat. Solid-state lighting uses light-emitting diodes or LEDs as light sources.
Specialty metals	Generic name for metals that are rare and/or have very specific areas of application. Indium, selenium and tellurium are what Umicore refers to as the specialty metals it produces.
Speiss	An arsenic compound or a mixture of arsenic compounds resulting from the smelting of iron, cobalt, nickel, and copper ores. Speiss is further recycled to recover contained metals.
Sputtering	A thin film deposition process by which atoms and/or molecules are ejected from the surface of a target after bombarding it with ions, and are then deposited on a substrate. A wide range of substrates can be coated by sputtering (glass, plastic, metal, etc). Process suitable for the deposition of a wider range of materials than evaporation.
Sputtering target	The material source for a sputtering process, which has to be deposited onto a substrate. Targets are specially shaped to optimise deposition uniformity.
Substrate (for semiconductors)	A wafer that is the basis for subsequent processing operations in the fabrication of semiconductor devices or circuits.

Super alloy	An alloy, usually based on nickel, cobalt or iron, developed for high temperature service where relatively severe mechanical stressing is encountered and where high surface stability and oxidation resistance is frequently required.
Tankhouse	Facility for electrolytic refining of metal.
Thermal imaging	Also called infra-red imaging: The sensing and recording of the thermal energy emitted or reflected from the objects that are imaged. The detection of emitted infrared energy from both target and background, the conversion of the infrared wavelengths to the visual spectrum, and the presentation of the observed scene on a television monitor in real time. Thermal imaging allows one to see in total darkness and through mist or smoke without being blinded by the glare of the sun, muzzle flashes, flares or searchlights.
Thermistor	A device used to determine temperature. It changes its electrical resistance with a change in temperature.
Thin film	Films with thickness less than approximately 100 microns.
Treatment/refining charge	The fee a smelter/refiner charges its supplier to refine concentrates (treatment charge) or pre-refined metal (refining charge), usually expressed in USD/tonne of material (normally referred to as TC/RC.
Unwrought	Literally 'not worked'; in the context of this document, metal that has not been worked into a finished form.
Wafer	Thin circular slice of semiconductor material used in the manufacture of semiconductor devices and integrated circuits; cut from an ingot of single crystal semiconductor and further processed by grinding, polishing, cleaning.
WEEE	Waste Electronic and Electrical Equipment – European directive designed to tackle the fast increasing waste stream of electrical and electronic equipment within the EU through compulsory recycling.
Window	A piece of glass with plane parallel surfaces used to admit light into an optical system. Windows are often coated with antireflection coatings to reduce losses.
Zinc sheet	Zinc or an alloy of zinc (generally with small amounts of copper and titanium) rolled into thin sheets suitable for forming into roofing and cladding and other applications.

ANNEX

Copy for the subscriber

Limited Liability Company
rue du Marais 31
1000 Brussels

OFFERING FOR SUBSCRIPTION OF UP TO 2,400,000 NEW SHARES
Additionally, an Over-allotment Option has been granted to the Joint Global Coordinators and Bookrunners in respect of up to 400,000 new shares.

APPLICATION FORM
(to be completed in duplicate)

The undersigned (first name and last name) _____
residing at _____, _____, street, n° _____ having had the opportunity to read the Prospectus, declares to subscribe for Offer Shares at the price published in the press on 21 November 2003, as follows

☐ **Priority Tranche: exercising the rights to Priority Allocation represented by Coupon n° 11 of the ordinary shares in the Company attached to the shares**, the numbers of which are indicated on the attached list:

[1] ..... shares

☐ **Free Tranche: open to all investors**

[1] ..... shares.

The Offer Price, increased with the tax on stock exchange transactions (0.35%), if applicable, must be debited from my account N° ..... , on the payment date and at the latest on 25 November 2003.

I would like these Offer Shares:

☐ to be delivered to me as BEARER shares[2]
☐ to be REGISTERED IN MY NAME IN THE COMPANY SHARE REGISTER
☐ to be deposited in my securities account N° ..... with .....

I recognise that I have consulted the list with securities to which opposition has been made or threatened of forfeiture and I accept all the consequences of my tendering financial instruments that are recorded on such list, even if such recording would occur after my tendering of such financial instruments.

I will accept the allocation that may be applied. In the event of allocation, each form unless submitted by professional intermediaries, who are not Selling Agents, shall be considered to be an independent and separate application unless it is clearly specified thereon that it is a form grouping the application of several persons.

Done in duplicate, at ....., on 2003

The financial institution — The subscriber

☐ Tick where appropriate

1 Fill out the number of Offer Shares requested

2 According to current tax law, a tax of 0.2% is payable together with the cost for such physical delivery as mentioned in Chapter 3, section 3.7 of the Prospectus.

DEPOSIT FORM
of the coupons N° 11 from the Umi[illegible] shares
(the numerical order must [illegible] followed)

N°.	*Amount*	*N°.*	*Amount*	*N°.*	*Amount*
..... to	.....	Carried over	.....	Carried over	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
To be carried over	.....	To be carried over	.....	**Total**	.....

Copy for the financial intermediary

Limited Liability Company
rue du Marais 31
1000 Brussels

OFFERING FOR SUBSCRIPTION OF UP TO 2,400,000 NEW SHARES
Additionally, an Over-allotment Option has been granted to the Joint Global Coordinators and Bookrunners in respect of up to 400,000 new shares.

APPLICATION FORM
(to be completed in duplicate)

The undersigned (first name and last name) _____
residing at _____, _____, street n° _____ having had the opportunity to read the Prospectus, declares to subscribe for Offer Shares at the price published in the press on 21 November 2003, as follows

☐ **Priority Tranche: exercising the rights to Priority Allocation represented by Coupon n° 11 of the ordinary shares in the Company attached to the shares**, the number of which are indicated on the attached list:

[1] ..... shares

☐ **Free Tranche: open to all investors**

[1] ..... share.

The Offer Price, increased with the tax on stock exchange transactions (0.35%), if applicable, must be debited from my account N° ..... , on the payment date and at the latest on 25 November 2003

I would like these Offer Shares:

☐ to be delivered to me as BEARER shares[2]
☐ to be REGISTERED IN MY NAME IN THE COMPANY SHARE REGISTER
☐ to be deposited in my securities account N° ..... with .....

I recognise that I have consulted the list with securities to which opposition has been made or threatened of forfeiture and I accept all the consequences of my tendering financial instruments that are recorded on such list, even if such recording would occur after my tendering of such financial instruments.

I will accept the allocation that may be applied. In the event of allocation, each form unless submitted by professional intermediaries, who are not Selling Agents, shall be considered to be an independent and separate application unless it is clearly specified thereon that it is a form grouping the application of several persons.

Done in duplicate, at ....., on 2003

The financial institution _____ The subscriber

☐ Tick where appropriate

1 Fill out the number of Offer Shares requested

2 According to current tax law, a tax of 0.2% is payable together with the cost for such physical delivery as mentioned in Chapter 3, section 3.7 of the Prospectus.

DEPOSIT FORM
of the coupons N° 11 from the Umicore shares
(the numeric order must be followed)

N°.	*Amount*	*N°.*	*Amount*	*N°.*	*Amount*
..... to	.....	Carried over	.....	Carried over	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
..... to	.....	..... to	.....	..... to	.....
To be carried over	.....	To be carried over	.....	**Total**	.....

Umicore SA/NV
Registered office
Broekstraat 31 Rue du Marais
1000 Brussels
Belgium

Legal counsel

Counsel to Umicore SA/NV
Linklaters De Bandt
Rue Brederode 13
1000 Brussels
Belgium

Counsel to the Underwriters
Clifford Chance LLP
Avenue Louise 65, Box 2
1050 Brussels
Belgium

Printed by **St Ives Burrups** B726792/12128
London Paris Frankfurt Luxembourg New York Philadelphia Washington DC Hong Kong Tokyo