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This document is an admission document in relation to the AIM Market of the London Stock Exchange plc ("AIM").

The Directors of MicroFuze International plc, whose names appear on page 4, accept responsibility, individually and collectively, for the information contained in this document. To the best of the knowledge and belief of the Directors (who have taken all reasonable care to ensure that such is the case), the information contained in this document is in accordance with the facts and does not omit anything likely to affect the import of such information.

Application will be made for the whole of the ordinary share capital of MICROFUZE INTERNATIONAL PLC both issued and to be issued to be admitted to trading on AIM. AIM is a market designed primarily for emerging or smaller companies to which a higher investment risk tends to be attached than to larger or more established companies. A prospective investor should be aware of the risks of investing in such companies and should make the decision to invest only after careful consideration and, if appropriate, consultation with an independent financial adviser.

The rules of AIM are less demanding than those of the Official List. It is emphasised that no application is being made for admission of these securities to the Official List. The London Stock Exchange plc has not examined or approved the contents of this document. The Ordinary Shares are not dealt in on any other recognised investment exchange and no other such applications have been or are intended to be made.

It is expected that Admission will become effective and dealings in the Ordinary Shares will commence on AIM on 13 February 2006.

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## MICROFUZE INTERNATIONAL PLC

*(Incorporated in England and Wales with Registered Number 5541602*

*ISIN GB00B0TBGQ14*

**Placing of 25,121,110 new Ordinary Shares**

**At 10p per share and**

**Admission to trading on AIM**

**Nominated Adviser**

**Nabarro Wells & Co. Limited**

**Broker**

**Nabarro Wells & Co. Limited**

**Share capital immediately following Admission**

Authorised		Ordinary Shares of £0.0015 each	Issued and fully paid	
Amount	Number		Amount	Number
£1,500,000	1,000,000,000	£223,682	149,121,110	

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The Placing Shares will on Admission rank in full for all dividends or other distributions declared, made or paid on the ordinary share capital of the Company after the date of this document and will rank *pari passu* in all respects with all the Ordinary Shares which will be in issue on completion of the Placing.

Nabarro Wells & Co. Limited, which is authorised and regulated by the Financial Services Authority, is acting as Nominated Adviser and Broker for the Company in relation to the Admission and Placing, and will not be responsible to any other person for providing the protections afforded to its customers or for providing advice in relation to the Placing or Admission or the contents of this document or any matter referred to herein. Nabarro Wells & Co. Limited has not authorised the contents of any part of this document.

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**EXPECTED TIMETABLE OF EVENTS**

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Publication of this document	7 February 2006
Admission and commencement of dealings on AIM	13 February 2006
Settlement of Placing Shares through CREST	13 February 2006
Despatch of definitive share certificates in respect of the Placing Shares to Placees by no later than	27 February 2006

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**PLACING STATISTICS**

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Placing Price per Ordinary Share	10 p
Number of Placing Shares	25,121,110
Number of Ordinary Shares in issue following the Placing	149,121,110
Percentage of the enlarged share capital subject to the Placing	16.8%
Market capitalisation following Admission at the Placing Price	£14,912,111
Estimated gross proceeds of the Placing	£2,512,111
Estimated net proceeds of the Placing	£2,262,111

**DIRECTORS, SECRETARY AND ADVISERS**

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Directors	Duncan Clegg ( <i>Non - Executive Chairman</i> ) Douglas Parrish ( <i>Chief Executive Officer</i> ) Timothy Wall ( <i>Financial Director</i> ) Peter Marks ( <i>Non – Executive Director</i> )
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Reporting Accountants	Moore Stephens 14 <sup>th</sup> Floor 607 Bourke Street Melbourne Victoria 3000, Australia
Solicitors to the Company UK	Ronaldsons 55 Gower Street London WC1E 6H
Solicitors to the Company Australia	Oakley Thompson & Co Level 17 500 Collins Street Melbourne Vic 3000, Australia
Principal Bankers	HSBC Bank Plc 39 Tottenham Court Road London W1T 2AR
Registrars	Share Registrars Limited Craven House West Street Farnham Surrey GU9 7EN

## DEFINITIONS

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In this document, unless the context requires otherwise, the words and expressions set out below shall bear the following meanings.

“Act”	the Companies Act 1985, as amended
“Admission”	admission of the Ordinary Shares in issue following the Placing to trading on AIM becoming effective in accordance with Rule 6 of the AIM Rules
“AIM”	the AIM Market of the London Stock Exchange
“AIM Rules”	the rules of AIM as published by the London Stock Exchange
“Company” or “MicroFuze”	MicroFuze International plc
“Consideration Shares”	80,000,000 Ordinary Shares issued in consideration for the whole of the issued share capital of MIL pursuant to the Share Purchase Agreement, further details of which are set out in paragraph 5.4 of Part VII of this Document
“Directors”	the directors of the Company
“Group” or “MicroFuze Group”	the Company and its subsidiaries
“Licence”	the licence granted to TUI by BWXT Y-12 L.L.C. under an agreement dated 18 January 2001 (as amended on 15 October 2004), a summary of the major provisions of which is set out in paragraph 5.3 of Part VII of this Document
“Licensor”	BWXT Y-12 L.L.C., a company which is currently a contractor to the US Department of Energy and which, as agent for the US Department of Energy, holds a 10 per cent. interest in TUI
“London Stock Exchange”	London Stock Exchange plc
“Official List”	the Official List of the United Kingdom Listing Authority
“Ordinary Shares”	ordinary shares of £0.0015 each in the capital of the Company
“MicroFuze Technology”	comprises a microwave diffusion treatment known as microwave pack cementation. This diffusion treatment is used for creating new alloys at the surfaces of metals and metal

	products. The MicroFuze Technology is described in further detail in this Document
“MIL”	MicroFuze International Limited ACN 112 542 015, a company registered in Victoria, Australia
“Placees”	the subscribers for Placing Shares pursuant to the Placing
“Placing”	the placing of the Placing Shares at the Placing Price pursuant to the Placing
“Placing Price”	10p per Ordinary Share
“Placing Shares”	the 25,121,110 new Ordinary Shares being issued by the Company pursuant to the Placing
“Shareholders”	holders of Ordinary Shares
“Rowan Technology”	Rowan Technology Group
“TGH”	means Tesla Group Holdings Pty Limited ACN 092 199 052, a private company registered in Victoria, Australia
“TUI”	means Tesla USA, Inc. a corporation organised and existing under the laws of the State of Delaware
“US Patent”	means an invention entitled “Metallic Diffusion Process and Improved Article Produced Thereby”, patented in the United States by the United States Department of Energy

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## GLOSSARY OF TECHNICAL TERMS

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“Alloys”	mixtures of metals that have better performance than constituents alone
“Anodizing”	a process used to improve corrosion resistance of aluminium and aluminium-based alloys
“Boronizing”	boronizing is a thermochemical surface treatment in which boron atoms are diffused into the surface of a workpiece to form borides with the base material
“Cadmium Plating”	a cadmium electroplating process which protects iron and steel
“Carburizing”	the absorption of carbon atoms by a metal at high temperatures (it may remain dissolved, or form metal carbides)
“Chemical Deposition”	the creation of coating by exposing the base metal to water-based solution of certain chemical reactants with or without the presence of electric
“Chemical vapour deposition” or “CVD”	chemical reactants are in vapour form and usually involve high temperatures
“Chrome plating”	a finishing treatment utilizing the electrolytic deposition of chromium
“Cladding”	application of, in this case, a stainless steel coating to a lower-alloy steel by means of pouring, welding, or coating to increase corrosion resistance at a lower cost than using stainless steel exclusively
“Coating”	the coating whereby a coating is applied over the substrate
“Coefficient of thermal expansion”	the fractional change in length or volume of a material resulting from a given change in temperature
“Cool plasma”	a process by which metals are diffused using microwave plasma at relatively low temperatures
“Corrosion resistance”	corrosion resistance is whereby the substrate is enhanced to protect against an environment
“Electroplating”	the process of putting a metallic coating on a metal or other conducting surface by using an electric current. It is used to improve the appearance of materials, for protection against corrosion

“Exfoliation”	a specific form of corrosion that travels along the grain boundaries parallel to the surface. Exfoliation corrosion is associated with sheet, plate and extruded products and usually initiates at unpainted or unsealed edges or holes of susceptible metals
“Galling”	a severe form of adhesive wear which occurs during sliding contact of one surface relative to another
“Galvanizing”	a corrosion protection technique applied only to mild steel, cast iron, and steel alloys in which workpieces are immersed in liquid zinc at 500 degrees Celsius. A zinc/iron alloy is formed at the surface of the workpiece giving it an adherent coating of zinc to protect from oxidation
“Heat Treatment”	altering the properties of steel by subjecting it to a series of temperature changes to increase the hardness, strength, or ductility of steel so that it is suitable for additional applications
“Hexavalent Chrome”	hexavalent chromes are off-gases caused by electroplating. hexavalents have been shown to produce lung cancer an often fatal disease
“Ion Deposition”	a form of metal coating utilising a beam of charged ions of the desired element being fired at the recipient metal
“Laser Cladding”	this process uses a laser to deposit a layer of material onto a substrate. The deposited layer can have a different composition, and subsequently properties, to the underlying material. This potentially has a range of applications in a number of areas, in particular the aerospace and automotive industries
“MDT”	microwave diffusion treatment
“Microwave applicator”	a specifically designed chamber of aluminium or stainless steel construction. The chamber can be sealed and is connected via a wave guide to a magnetron
“Nickel Plating”	a very common form of electrolytic deposition that is generally used as an undercoating for subsequent deposits
“Nitriding”	a surface hardening process that is applied only to certain types of steel. This process creates a finish that is the hardest surface attainable using heat treatment processes



“Nitrocarburizing”	any of several processes in which both nitrogen and carbon are absorbed into the surface layers of a ferrous material at temperatures below the lower critical temperature and, by diffusion, create a concentration gradient. Nitrocarburizing is performed primarily to provide an anti-scuffing surface layer and to improve fatigue resistance
“Over-the-pack”	microwave diffusion carried out in microwave vessel but not covered with the pack (donor metal)
“Pack”	a discrete combination of donor materials and excipients that surrounds the material to be diffused
“Pack Cementation”	creates an alloy in the surface by thermochemical diffusion from a powder that surrounds the item
“Physical Vapour Deposition” or “PVD”	deposition of thin films by physical means, as opposed to chemical vapour deposition. This is most often used for deposition of metals. The most common form of PVD is sputtering, in which a metal target is exposed to a plasma made from gas like argon which is not chemically reactive. The excited gas atoms hit the target and knock off metal atoms which deposit onto a wafer placed below, building up the desired metal film
“Shot Peening”	a carefully controlled process of blasting a large number of hardened spherical or nearly spherical particles (shot) against the softer surface of a part. Each impingement of a shot makes a small indentation in the surface of the part, thereby inducing compressive residual stresses, which are usually intended to resist fatigue fracture or stress-corrosion cracking
“Spalling”	the flaking or separation of a sprayed coating
“Substrate”	a material on which an adhesive-containing substance is spread for any purpose, such as bonding or coating
“Surface modification”	surface modification is whereby the surface of the substrate is adjusted for a particular purpose

## EXECUTIVE SUMMARY

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**This Executive Summary is derived from the full text of this document and should be read in conjunction therewith.**

MicroFuze owns, through its 85 per cent. owned subsidiary TUI, a licence to exploit a patented process referred to as Microwave Diffusion Treatment (“MDT”).

MicroFuze’s business model is to establish itself as a commercially focused microwave technology company specializing in the surface treatment of metals and other minerals. Specifically, MicroFuze intends to offer a range of surface engineering solutions to, inter alia, the power generation, automobile and general manufacturing industries. The Directors of MicroFuze believe that parts, components and accessories used in these industries and which require hardening, lubricity, wear resistance and corrosion protection are particularly likely to benefit from the application of the Company’s diffusion processes.

In addition, MicroFuze seeks to launch new applications of emerging technologies for rapid commercialisation. The technology is based on microwave-driven diffusion of donor metals into target components. The MicroFuze technology base comprises two MDTs for processing alloys: microwave pack cementation, which is ready for commercialisation; and cool plasma processing, which is in the early stages of development.

Microwave pack cementation involves diffusing chrome into mild steel stainless steel, cast iron, and high carbon steels. MicroFuze has expanded the pack cementation to include the following innovative technologies:

- The ability to carry out diffusion treatments outside the pack itself as well as in air, creating a capability for over-the-pack processing and perhaps making it possible to carry out processing in remote locations.
- A method for imparting a non-stick surface on metals.

The cool plasma technology, which is the early stages of development and as yet has not been tested commercially, which if successful could be used for heat treating and creating metal and gas diffusion layers at the surfaces of metals and products, primarily inside small internal diameters..

The obvious short term market opportunities are those existing markets where the benefits of MDT offers an advantage in processing speed, which includes all the existing markets for pack cementation, nitriding, carburizing, etc. One of the most critical issues facing heat treating in the future may be the energy cost. The Directors believe that MDT is an answer to the high energy cost of heat treating.

The Company has raised £2,512,111 conditionally on Admission to enable it to pursue its commercialisation of the MicroFuze Technology and continue product development.

## PART I INFORMATION ON THE COMPANY

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### INTRODUCTION AND HISTORY

MicroFuze owns, through its 85 per cent. owned subsidiary TUI, a licence to exploit a patented process referred to as Microwave Diffusion Treatment (“MDT”). This is used to create a variety of surface alloys by microwave diffusion. The MicroFuze Technology base comprises two different MDTs (pack cementation and cool plasma technology) for processing alloys, which are used for creating new alloys at the surfaces of metals and metal products.

Pack cementation, which is the original application under the grant for the Licence of the MicroFuze Technology and which the Directors believe is ready for commercialisation, involves diffusing chrome into mild steel and was extended to include diffusing chrome into stainless steel, cast iron, and high carbon steels. Thereafter TUI has developed product-specific applications using the MicroFuze Technology. In addition MicroFuze has expanded the pack cementation to include the following innovative technologies:

- The ability to carry out diffusion treatments outside the pack itself as well as in air, creating a capability for over-the-pack processing and perhaps making it possible to carry out processing in remote locations.
- A method for imparting a non-stick surface on metals.

Subsequently the Company has been developing, testing and experimenting in the processes and procedures for MDT. The processes and procedures developed by MicroFuze are not set out in the US Patent, but are key trade secrets and know-how of the Company. The Directors believe that these trade secrets and know-how will enable the Company to move towards early commercialisation.

With this combination of developments MicroFuze has moved well beyond the old packed bed metallizing treatments. The MicroFuze methods offer the advantages of faster, cleaner and cheaper processing, reduced energy usage, and the ability better to engineer the surface through the use of other alloying elements and combinations of elements.

These advancements have been made possible through TUI’s own microwave processing facility in Chattanooga, Tennessee. Such development microwave is currently located at the Material Technology Centre at Alstom Power Inc.’s facility. The microwave development processing facility has benefited from direct access to high quality surface engineering expertise and materials testing facilities, provided by a major gas and coal fixed power generation company, Alstom Power Inc.

During 2005, MIL acquired the assets of TGH. As a consequence of its acquisition of TGH, MIL acquired an 85% holding in TUI. TUI has been granted the Licence by the Licensor, which is currently a contractor for the US Department of Energy. The Licence provides for the non-exclusive commercialisation in the United States and exclusive commercialisation in the rest of the world of an invention entitled “Metallic Diffusion Process and Improved Article Produced Thereby” invented by M. Stanley Morrow, Donald E. Schechter and Harley A. Grant, which is patented by the United States Department of Energy (“US Patent”). The Licence is subject to commercial milestones which are reviewed annually and the exclusivity provisions are reviewed every three years, with the next review due in January 2007. At this time there are no other licences granted in respect of the US Patent in the United States. MIL is applying

for patent protection in Australia, Canada, China, Europe, Japan, Mexico, Singapore and South Korea. The Licensor, as agent for the US Department of Energy, holds a 10% interest in TUI. The remaining 5% interest in TUI is held by Arapahoe Holdings, L.L.C. Arapahoe Holdings, L.L.C. is a company associated with Mr Harley A. Grant who is a co-inventor of the invention.

The Directors understand that the US Department of Energy at present has not granted a licence to any other party, nor has any current intention to do so. To date TUI, as the sole licensee, has been the sole developer of applications under the patented technology and therefore is the sole owner of the intellectual property related to such applications. The Directors consider that this provides the Group with a significant competitive advantage compared with other potential licensees, given that TUI has developed significant know-how and trade secrets since the date of License grant in 2001. In addition, the US Department of Energy has indicated to the Directors that it desires to see this technology successfully and quickly commercialised.

#### **BUSINESS**

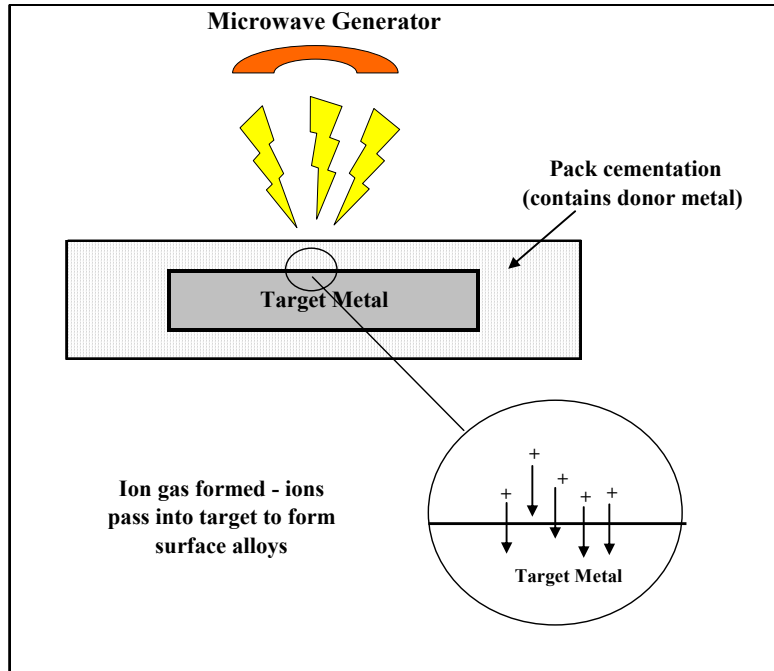
MicroFuze's business model is to establish itself as a commercially focused microwave technology company specializing in the surface treatment of metals and other minerals. Specifically, MicroFuze intends to offer a range of surface engineering solutions to, inter alia, the power generation, automobile and general manufacturing industries. The Directors of MicroFuze believe that parts, components and accessories used in these industries and which require hardening, lubricity, wear resistance and corrosion protection are particularly likely to benefit from the application of the Company's diffusion processes.

MicroFuze intends to supplement its current development microwave with microwaves for commercial development in the United States and Australia. The Company's business plan provides for the establishment of a total of five microwave processing facilities by the end of 2007. These facilities will be designed to accommodate specific processing requirements, but with sufficient flexibility in order to meet a broad range of surface engineering services.

In addition to the above the Company also intends to pursue opportunities to sub-license the MicroFuze Technology. In the sub-licensing model the Company proposes to charge sub-licensing fees and royalty fees at commercial rates. The Company also intends to establish joint ventures with key strategic and commercial partners to co-develop client focused surface treatment technologies.

#### **PRODUCTS PROCESSES AND TECHNOLOGY**

MicroFuze specialises in the development of metal enhancement technologies. Its commercial focus is to replace existing costly, environmentally unsound metals treatment processes with its cleaner and lower cost technology. In addition, MicroFuze seeks to launch new applications of emerging technologies for rapid commercialisation. The technology is based on microwave-driven diffusion of donor metals into target components. The following diagram shows the fundamental principle of MDT.



The MicroFuze technology base comprises two MDTs for processing alloys: microwave pack cementation, which is ready for commercialisation; and cool plasma processing, which is in the early stages of development. Further details of both processes are set out below.

### **Microwave pack cementation**

The purpose of pack cementation is to create an alloy in the surface of an item by thermochemical diffusion from a powder that surrounds the item and acts as the source of the element to be diffused in. This type of process is most commonly used to create surface alloys with chromium (Cr) for corrosion resistance, usually in steels; aluminium (Al) for hot oxidation resistance, usually in aircraft engine alloys; or boron (B) for wear resistance, usually in steels. However, other elements can be used, such as cerium (Ce) for corrosion resistance, or combinations of elements such as titanium (Ti) and B to form hard TiB<sub>2</sub> precipitates.

MicroFuze has a worldwide license for the microwave diffusion alloying method developed at Oak Ridge National Lab (ORNL) in the US. The basic technology is described in the original US patent (No. 6,554,924) assigned to BWXT Y-12 LLC of Oak Ridge, TN, and in a paper titled "A New Microwave-Driven Pack Cementation Coating Process", which was contained in an Oak Ridge National Laboratory report (Materials Science and Engineering: Seed Money, Project No. 3210-2031).

The technology is a form of pack cementation: the MicroFuze process uses microwaves to heat the pack rather than heating both component and pack in a standard furnace. In the conventional pack cementation process the item to be treated is packed in a powder containing a halide such as ammonium chloride and an inert material such as aluminium oxide, mixed with a source of Cr (or other metal powder), and heated at 800-1100°C (bright red heat) for several hours. The chloride produces chlorine gas, which reacts with the Cr to form a volatile chloride that lands on the component surface, where it breaks apart into Cr and Hydrogen Chloride ("HCl"). The Cr diffuses in to form a Cr-rich surface, from

which Cr diffuses into the underlying metal, leaving a modified nearsurface region up to 0.020 inches deep, making it possible for example to produce a “stainless steel” surface on a carbon steel substrate.

In the MicroFuze process, by contrast, microwaves drive the diffusion by heating the pack directly, which in turn heats the component by infrared radiation. The data obtained by ORNL shows that not only does this method heat the components much more rapidly than conventional radiant heating, but it also appears to enhance the diffusion process itself, creating the same diffusion layer at a lower temperature or a deeper layer at the same temperature. In addition, microwave diffusion technology is more amenable to combining alloying elements for diffusion, and carrying out processes that combine the diffusion of a carbide former (vanadium, titanium, etc) with a nitrogen- or carbon-containing gas, for the treatment of steels and other alloys that cannot normally be nitrided or carburized. Such a treatment is a version of current commercial processes used to carbonitride low alloy steels.

### **Cool plasma processing**

This technology is in the early stages of development and as yet has not been tested commercially. In this technique microwaves are used to break down the gas in the vicinity of the metal source into a plasma, which is a mixture of ions and electrons. The source is placed near the surface to be treated so that the plasma heats the component while metal or gas atoms passing through the plasma land on the surface of the component and diffuse into the material to form a surface compound or alloy. The method can be used to create surface alloys or to nitride or carburize the material. (These types of gas treatments are currently done in processes such as ion (or plasma) nitriding, by heating in a gas or a plasma created by electrically biasing the items to be treated.) Since the products to be treated must be heated from room temperature, the much faster heating provided by microwave plasma processing could offer the advantage of faster cycle times and cheaper treatment. However, the cool plasma technique is thought to be primarily useful only for small areas, particularly internal diameters.

### **CAPABILITIES AND ADVANTAGES**

The primary advantages of MDT compared with other heat treatments are:

- **Rapid heating.** Microwave heating rates are much higher, reducing processing time and cost.
- **Surface heating only.** Heat is supplied to the surface and diffuses into the bulk. This permits large objects to be treated without bringing the entire part to high temperature. This uses less energy and in some cases may make it possible to preserve the temper of the part as a whole while taking the surface to a higher temperature, thus widening the range of alloys and tempers that can be treated. However non-equilibrium heating of large items (especially those that are complex shapes or thin-walled) can cause warpage.
- **More rapid diffusion.** Oak Ridge data shows what appears to be faster diffusion than one would obtain with conventional diffusion treatments at the same temperature. If proved correct then the MicroFuze technology permits treatment either at lower temperature or for shorter times. This would reduce time and hence cost, and would make it possible to treat some alloys that cannot be treated by normal thermal methods without destroying the temper, thus opening up a larger potential market.
- **Cleaner processing.** The major disadvantages of pack processing are the time involved in packing and unpacking, and disposal of the used pack, which some heat treaters are worried may contain toxic hexavalent chromium (Cr6+) compounds. According to data provided to MicroFuze by ORNL, no measurable Cr6+ has been detected from the MDT process. This if replicated in a production environment would make the process cleaner, cheaper, and less cost-driven by environmental and

health regulations. The pack process does however emit chlorine gas, HCl and metal chloride vapours, but all of these can be trapped by commonly-used and inexpensive systems to prevent emission into the air.

- **More efficient energy use.** Depending on the process and the type of furnace used, conventional heat treaters either keep the furnace on all the time (usually done for in-air treatments), or the furnace is loaded, started from cold and recooled before being emptied (usually done for inert atmosphere or vacuum heat treating). In the first case, the majority of the energy goes into replacing heat leaking from the furnace, while in the second, the majority of the energy goes into heating the furnace and replacing heat lost during the heating cycle. MDT puts the heat where it is needed – directly into the pack and the surface of the part for maximum efficiency and minimum energy cost.

As a diffusion treatment MicroFuze Technology has several advantages over the current coating and cladding processes, including:

- **Avoidance of spalling.** A diffusion treatment creates a surface with a different chemistry that is an integral part of the substrate. Thus it cannot delaminate or spall as coatings often do.
- **Dimensional tolerance.** Diffusion treatments usually have a negligible effect on dimensions such as bearing diameters, which avoids having to redesign the part to accept the MDT treatment. The downside of this is that MDT cannot be used for rebuilding worn components. In addition the diffusion treatments, especially of steels, involve temperatures above 800°C, which results in growth and dimensional changes, and may create distortion.
- **Minimal precleaning.** Most coatings and surface treatments require meticulous cleaning to ensure high quality. MDT can be done with minimal cleaning, to remove gross contamination only. This makes the process inherently more reliable (since cleaning problems are the primary source of coating failures), eliminates the cost of complex cleaning lines and processes, and greatly reduces the wastewater volume.
- **Adhesion.** Coating adhesion is one of the primary issues with any coating system. As a diffusion layer, MDT avoids adhesion problems.
- **Coefficient of Thermal Expansion (CTE) mismatch.** When coatings are used in high temperature applications the difference in thermal expansion between substrate and coating can cause the coating to crack or spall during heating or cooling. This can, in turn, cause fatigue and corrosion problems. Diffusion alloys avoid this problem because they form a surface alloy that grades into the underlying material.
- **Strain-related cracking and fatigue.** When subjected to cyclic strain, coatings sometimes crack or delaminate. This should not happen with a diffusion treatment such as MDT. The downside of this is that, since the surface layer is integral, a crack that starts in the surface can more readily penetrate directly into the underlying material, causing premature failure.
- **Fatigue debt.** Many coatings (such as hard chrome plate, weld coatings, or plasma sprays) have tensile internal stress, which causes the coatings to crack and reduces the fatigue life of the component (i.e. creates a fatigue debt). This is a major problem in the aircraft industry. Because the diffusion depth is much greater than the thickness of a typical coating, MDT avoids the creation of a highly stressed layer and therefore should not cause a fatigue debt.

- **Internals.** With the exception of chemical vapour deposition (and to a lesser extent electroplating and electroless plating), coating internal diameters and complex shapes is always difficult. For those cases where microwaves can be used in IDs, packed bed MDT has a significant advantage over most coatings.

### MARKET POTENTIAL AND COMMERCIAL APPLICATIONS

#### Microwave Pack Cementation

The obvious short term market opportunities are those existing markets where the benefits of MDT offers an advantage in processing speed, which includes all the existing markets for pack cementation, nitriding, carburizing, etc. One of the most critical issues facing heat treating in the future may be the energy cost. The Directors believe that MDT is an answer to the high energy cost of heat treating.

Thus, the immediate markets for MDT pack processing are:

- Chromizing of turbine blades, heat exchanger and boiler tubes and other power generation and industrial equipment subject to corrosion and wear. Additional chromizing applications currently under trial include:
  - Rollers for the weaving industry.
  - Fasteners exposed to highly corrosive environments such as coal fired power plants. This type of treatment might also be used in place of cadmium (Cd) and zinc (Zn) plate for aerospace and other industrial fasteners.
  - Cast parts for various industries, such as automotive.
- Aluminizing of turbine blades and other products subject to high temperature oxidation.
- Boronizing of industrial equipment subject to wear, such as pumps and industrial manufacturing tools.

These are only the traditional pack cementation process markets, which have been shrinking because of their lengthy process times and the environmental concerns over disposal of the used pack. With faster heating and processing times MDT would make these traditional processes more competitive, and they would be more competitive still if the process proves to be significantly cleaner.

Modern heat treatment companies with a fresh outlook on the industry and a less time- and energy-intensive process are likely to find additional applications and markets for diffusion metallizing. For example MicroFuze has successfully diffused boron and tungsten together (co-diffusion) for power industry pipes and tubing used inside fluid bed boilers. These boiler environments are becoming more challenging as the quality of fuel is reduced and emission standards are strengthened, creating a need for harder, corrosion-resistant surfaces that will not spall or delaminate. Boron and silicon have also been co-diffused. Metal borides are usually hard and erosion-resistant materials, while boron oxides are good solid lubricants. Co-diffusion of boron with other elements offers a potentially powerful means of creating surfaces engineered with hard metal boride precipitates and lubricious oxides, simultaneously reducing both wear and friction. This type of treatment could extend the life and improve the performance of a wide range of industrial products, including such widely used items as gears.

MicroFuze has also been testing the concept of diffusing rare earths such as cerium into aluminium and magnesium alloys. Magnesium alloys are widely used for gearbox housings in helicopters.



With the addition of the other MDT processes, over-the-pack diffusion treatment and cool plasma treatment, as well as the introduction of other alloying elements to the pack process, the long term potential of MDT is much broader than the market represented by today's pack processing. It includes a wide range of surface alloying and compounding diffusion treatments where MDT can offer faster processing, lower energy cost, or lower processing temperatures.

It is clear that the use of a packed bed in an enclosed chamber is a limitation of the MDT process. The Directors believe that the MDT works in air, and that the process can produce a diffusion coating well outside the pack itself. Assuming that the process can be successfully converted to an over-the-pack technique, and especially if it can be done safely and effectively in air, the market potential would be considerably higher. One major application of chrome plating is the production of hydraulic rods for hydraulic actuators in vehicles and industrial machinery and equipment. Other possibilities for broader markets or unique solutions to engineering problems might also be opened up by over-the-pack processing. These include diffusion treatment of lower temperature materials such as Al and Mg alloys for wear and corrosion resistance. Separation of the pack from the item being treated would make the process more flexible for this type of product. A possible major application for this type of treatment could be creating hard, oil-reactive surfaces on the insides of cylinders in aluminium automobile engines. This would eliminate the cylinder liner, saving both weight and volume, both of which are important for fuel efficiency.

Carburizing is a major industrial heat treating process used for almost all industrial gears and bearings. However, the older pack carburizing is seldom used, having given way to gas carburizing. A microwave over-the-pack carburizing approach, if proved viable, combined with the rapid heating cycle and efficient energy usage afforded by MDT, could make it competitive in this large and important market.

Corrosion protection on the exteriors of tubes is frequently needed for industrial plant such as boilers and heat exchangers used in power plants and other industries. This is often provided at present by packed bed chromizing. However MicroFuze reports having developed a method for moving a tube through an applicator, using the microwaves for rapid heating, and so permitting very long tubes to be processed in a compact piece of equipment. This has potential for improving heat exchangers, chemical piping and oil industry tubing. Abrasion and corrosion protection of the interiors of tubes and pipes is also a serious issue for industries such as oil and gas, power, chemical processing, waste disposal, geothermal energy, etc. Coating inside pipes is always difficult, and a method for doing so reliably and cleanly could be very valuable. If this could be done successfully by any of the MDT methods, as the Directors believe it might, then it would have markets in a broad range of industries.

### **Cool plasma**

Cool plasma MDT technology is presently less developed than the packed bed technology, but the Directors believe it offers the possibility of treating the interiors of tubes and items such as valve bodies or hydraulic cylinders. For these types of niche applications the process could compete not only in metallizing, but also in the markets of carburizing, nitriding, nitrocarburizing and carbonitriding if the technology proves scalable, uniform and of low-distortion. This technology will be further developed and tested during 2006.

## **POTENTIAL BUSINESS APPLICATIONS**

### **Prospective customers**

The Group is currently targeting the following sectors and multinational businesses:

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*Automotive*

BMW (brake rotors)  
General Motors (turbo housings)

*Chemical*

Du Pont (spindles)

*Defence*

US Department of Defense (cannon)  
ADI Limited (rifles)  
Australian Submarine Corporation (pumps)

*Power generation*

Southern Company (boiler fixture) (Georgia Power)  
Alstom Power, Inc (boiler tubes)  
Tennessee Valley Authority (boiler tubes)

*Pulp and paper*

Babcock & Wilcox (liquor cooling exchange)

*Manufacturing*

Mohawk Carpets (rollers)  
SKF Bearings (bearing races)

Initial trials are being carried out with a number of these companies, and discussions are in progress to agree a basis for commencing trials with the others.

**Case study for customer application**

In an initial trial the MicroFuze Technology addressed the following component failure at a substantial US corporation. Following successful conclusion of the trial, the corporation has ordered further components from the Group.

Situation	▪ Large production facility in Georgia experienced hidden defects in final product caused by bent (not broken) components undetected
Problems	▪ Component was specifically designed from imported steel to provide precise fit and long wear ▪ Misalignment on installation, or damage to component, caused faulty operation ▪ Consequences were complete shutdown of line for up to 8 hours (US\$100,000) plus refunds to customers, plus marketing impact

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Solutions	<ul style="list-style-type: none"> <li>▪ Cheaper steel, easier to diffuse, was microwaved to similar hardness, and made more brittle</li> <li>▪ Damaged or misaligned parts broke or failed to seat properly and failure was noticed instantly</li> </ul>
Result	<ul style="list-style-type: none"> <li>▪ Savings on parts cost, down time, and recall costs</li> <li>▪ Avoid further diminution of reputation</li> </ul>

**Solutions**

The Directors believe that the MicroFuze Technology can provide a solution to the following failures that have been brought to their attention.

TYPE	APPLICATION
Chrome Plating Failure	US Army Infantry “Shoot Droop” - Inside diameter of artillery loses chrome plate protections
Corrosion – Coating Failure	Alston Power, Inc – High heat, chemically charged fluid bed boilers - corrosion of critical parts
Erosion – Coating Failure	Babcock & Wilcox – Heat exchangers in black liquor vat - Failure of surface plate and studs
Low-lubricity – Increased wear, early failure	Hardchrome Industries – Tool steels - High cost of parts and opportunity costs of failure

**BUSINESS AND REVENUE MODELS**

Initially, the Group intends to establish a relatively small number of its own microwave production units, where processing can be carried out for customers, with the components being shipped on to the customers’ plant for further manufacturing and assembly. For customers with high volume needs, it will most probably be more cost effective to set up microwave production facilities on their own premises. A number of revenue models are therefore possible, as follows:

- Batch Processing** - Revenue charged on a per part / per job / per hour basis / per contract basis
- Long-term contract** - revenue based on 1) above, plus percentage of productivity improvements, increased plant utilisation
- Sub-Licensing** - grant of sub-licence to leaders in specific industry sectors, based on upfront payments, minimum yearly amounts and royalty payments
- Joint Ventures** - specific joint ventures for specific applications – MicroFuze contributes IP technical support, and funds, partner contributes plant, supervision, marketing and working capital : profits shared based on % split
- Sales of Equipment & Supplies** - Design, build, maintenance of tailored applicators and magnetrons matched to client requirements (OEM) – Proprietary powders for processing

## **BUSINESS ROLLOUT**

The Directors have formulated the following plan for the development of the business and establishment of the resources and infrastructure necessary for its implementation:

### **Commercial Facilities**

- First production unit deployed – US Q2 2006
- First production unit deployed – Australia Q2 2006
- Additional production units deployed by Q4 2006

### **Contracts / Arrangements**

- Batch processing contacts entered – Q1, 2006
- Processing & JV's entered into with up to five multi-national corporations – by Q4 2006
- Acquisition of complementing technologies – Q2 – Q4 2006

### **Personnel**

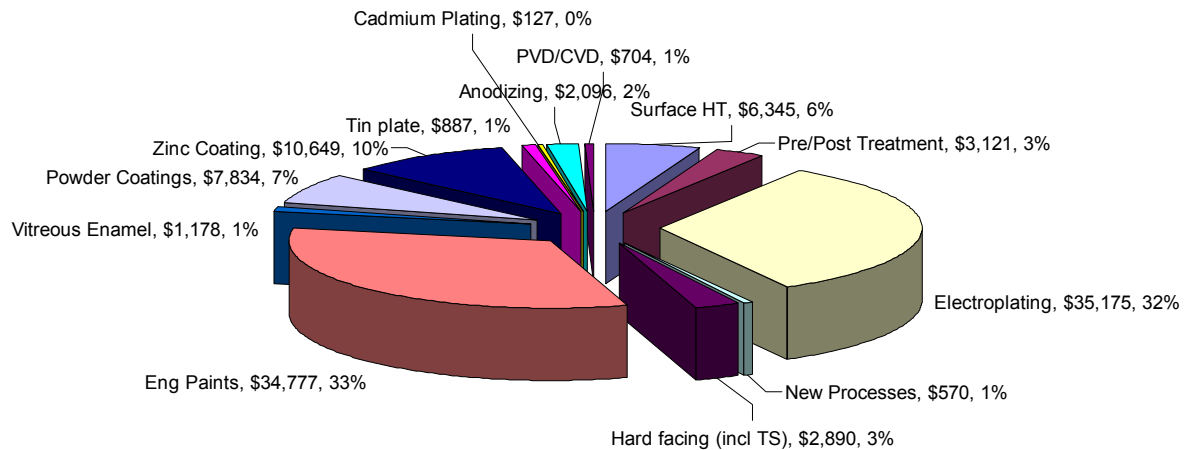
- Recruitment of marketing / new business development team by Q2 2006
- Management team in place – UK, US & Australia during Q2 2006

## **MARKETS AND COMPETITION**

The area of coatings and surface treatments is very broad and encompasses almost all industrial and most consumer products on the market today. Treatments are most commonly used to improve wear, abrasion, oxidation or corrosion resistance, but they are also used for a vast number of other purposes such as catalysis, ultra-violet light protection, thermal barriers, light reflection and absorption, creating non-stick surfaces, improving the sticking of adhesives and paints, and decoration. These various surface treatments include:

- The traditional metallizing processes (aluminizing, boronizing and chromizing) with which pack MDT competes directly.
- Gas and plasma nitriding, carburizing and nitrocarburizing, which are used for creating hard surfaces in steels.
- Traditional coating and electroplating, such as galvanizing (zinc coating), and plating with chrome, cadmium, nickel, and other metals. Many of these processes are under environmental attack because of their toxic air emissions and wastes or their danger to workers.
- Modern coating technologies such as thermal spray, chemical and physical vapour deposition and laser cladding.

The total worldwide surface engineering market is estimated at approximately US\$106 billion, of which the largest market shares are for engineering paints and electroplating, the latter being dominated by zinc plating (galvanizing). The breakdown is shown in Figure 1 below.



*Figure 1. Annual value (millions of US dollars) and percentage of world market for various surface engineering technologies.*

The segments in which MDT would compete include Surface Heat Treating, Hard Facing, and a small part of Electroplating (some wear and corrosion coatings). In total these three markets have a value of about \$44 billion worldwide, of which Heat Treating – the primary market for MDT – is worth about \$6 billion.

With the current technology MDT is the treatment of small to moderate size components (up to two or three feet). With the current processing temperature it is most suitable for treating high-temperature alloys such as those used in turbine engines, or low alloy steels, which do not require heat treating afterwards. For these components MDT can produce wear and corrosion resistant surfaces, and thus competes primarily with other heat treatments such as nitriding, carburizing, and nitrocarburizing, and some of the wear resistant coatings such as hard chrome plate, nickel plate and some thermal spray materials. It does not compete with thick chrome plate used for repair and rebuild or with most of the thermal spray, PVD and CVD coatings.

By extending the technology to include over-the-pack and cool plasma methods there is a potential for the Group to compete directly with widely used processes such as nitriding, carburizing, and nitrocarburizing, which are used for wear resistance. If over-the-pack methods can be scaled successfully they may become suitable for large area coating of production alloy sheet and plate in the mill, although gaining acceptance for them in this type of basic steel, aluminium and other alloy production will present a strong marketing challenge. While it is not likely to compete successfully with standard galvanizing, which is one of the cheapest and most widely used corrosion treatments, the technology may compete well with other types of corrosion treatments that must usually be applied after the product has been fabricated, including some chromate treatments that are under severe pressure because of environmental and health concerns.

In commercialising the Group’s technologies, the Directors’ strategy is to target high added value product types within the Group’s segment of the market.

**DIRECTORS AND SENIOR MANAGEMENT****BOARD OF DIRECTORS*****Robert Duncan Clegg (Non - Executive Chairman) (62)***

Mr Clegg was appointed a non-executive member of the MicroFuze board on 22<sup>nd</sup> November 2005. He is Chairman of Low & Bonar plc, a specialist materials manufacturer, Premier Bionics Limited, a biotechnology company and Vice Chairman of The Port of London Authority. He was previously an executive director of Lazard Brothers & Co Limited where he specialised in corporate finance. He is a member of the Cook Society, which encourages business connections between Australia and the United Kingdom, and member of the Court of the Company of Watermen and Lightermen.

***Douglas William Parrish (Chief Executive Officer) (57)***

Mr Parrish has more than 20 years experience as an executive for various private and public companies including more than five years at board level. He has a strong operational background in resources and logistics and has spent 14 years in building businesses. His extensive experience includes strategic planning, corporate restructurings, government and industrial relations, financial management, new business development and implementation of commercial and operational plans.

***Timothy Lawlor Wall (Financial Director) (29)***

Mr Wall holds a Bachelor of Commerce degree from the University of Western Australia. He is an Associate of the Institute of Chartered Accountants of Australia with over 7 years corporate and financial accounting experience. After spending 3 years working in Corporate Services for the Horwath Group in Australia he has spent the last 4 years performing various Financial Management roles in London. Most recently he was involved in establishing the London Office of Global Education Management Systems (GEMS) and performing an ongoing corporate accounting function. He currently acts as Company Secretary for another AIM listed company, Cordillera Resources Plc, as well as performing other corporate advisory roles.

***Peter Ashley Marks (Non – Executive Director) (50)***

Mr Marks has over 20 years experience in corporate finance, capital raisings venture capital management and securities regulation. For the last 15 years he has specialised in capital raisings (for listed and unlisted companies), underwritings and IPO's. He has served as an executive at Lazard Brothers and Co., Ltd in London as well an Associate Director of McIntosh Securities Ltd (now a part of Merrill Lynch Australia) and as Director of Corporate Finance at Barings Securities (Australia) and Burdett Buckeridge & Young (BBY) in the Melbourne office. He has been the Head of the Companies Division at the Australian Stock Exchange (Melbourne Branch) and Director of Equity Capital Markets Group at KPMG Corporate Finance (Australia). Since early 2001, he has been as executive director of Peregrine Corporate Ltd, a Melbourne based boutique investment house and major shareholder in MicroFuze International plc.

**SENIOR MANAGEMENT*****Kaylan Holmes (General Manager TUI) (47)***

Mr Holmes is a successful entrepreneur, owning and managing a network of service providers in South Eastern USA. He manages TUI and has 3 years experience with the development and early commercialisation of the MicroFuze Technology. He has fostered strong relationships with BWXT Y-12 L.L.C., contract laboratories and independent testers for trials in the United States, as well as various potential end-users. His expertise includes general and financial management, strategic planning and program implementation.

***Harley Grant (Consultant and Technical Advisor) (57)***

Mr Grant is a recognised expert in metallurgical processes, having over 20 years experience as a technical analyst in the Materials Technology Centre of Alstom Power Inc. More recently, he has assumed ownership of Applied Thermal Coatings Inc., a large surface engineering facility specialising in conventional diffusion, servicing the power generation, pulp and paper industries. He is co-inventor of the technology protected by the US Patent and holds a 5% shareholding in TUI. He currently works as technical consultant to the product development programme at the MicroFuze facility in Chattanooga.

***Don Schechter, (Product Development Manager) TUI (67)***

Mr Schechter has almost 30 years experience at the United States Department of Energy's Oak Ridge National Laboratories. He has devoted the last five years to the microwaving of metals. His industry expertise is in fusion, molecular energy generation and plasma coating. He is co-inventor of the technology protected by the US Patent and a recognised expert on the application of the technology. He is contracted to TUI to develop the supporting intellectual property for the technology. He has a degree in Physics and Mathematics.

***Jeff Henry, (Technical Consultant) (58)***

Mr Henry has been a director of the Materials Technology Centre, Alstom Power Inc., for the past five years. Prior to being a director, he acted as Metallurgical Services Laboratory and Technical Manager as well as Chromizing Operation Manager for Alstom. He is a recognised expert on metals failure analysis and treatment, a member of the American Society of Mechanical Engineers (ASM) and serves on the Boiler and Pressure Vessel Code committee of the ASM. He has an intricate knowledge of diffusion processes through in-house applications at Alstom for over 20 years, and has closely monitored the development of alternative microwave processes since 2001. He provides consulting services to TUI on matters concerning metals behaviour and control of changes during processing.

**REASONS FOR THE PLACING AND FOR ADMISSION**

The Directors recognise that the Company's business strategy and expansion plans depend largely upon its ability to raise working capital. They believe that the Placing and Admission will enable the Company to achieve its objectives, which are as follows:

- pursue the Company's commercialisation of the MicroFuze Technology;
- continue product development;
- establish commercial microwave processing facilities in the United States and Australia;
- further protect the Company's intellectual property; and
- provide general working capital for the Company.

The Directors consider that Admission will:

- enhance the Company's status and overall profile in its markets;
- assist the Company in raising additional equity capital should this be required for the further development of the Company's business;
- enable the Company better to recruit and retain key personnel; and
- provide liquidity for investors through the ability to buy and sell Ordinary Shares.

### **ADMISSION TO AIM AND DEALINGS IN ORDINARY SHARES**

Application has been made for the Ordinary Shares to be admitted to trading on AIM. Dealings in the Ordinary Shares are expected to commence on 13 February 2006.

#### **CREST**

The articles of association of the Company permit the Company to issue shares in uncertificated form in accordance with the Uncertificated Securities Regulations 2001. The Directors have applied for the Ordinary Shares to be admitted to CREST with effect from Admission. Accordingly, settlement of transactions in the Ordinary Shares following Admission may take place in the CREST system if the relevant Shareholders wish.

CREST is a voluntary system and holders of Ordinary Shares who wish to receive and retain certificates will be able to do so.

#### **DETAILS OF THE PLACING**

The Placing Shares will represent 16.8 per cent of the issued share capital following Admission. At the Placing Price, the Company will be valued at £14.9 million. Net proceeds of the Placing receivable by the Company will (after the expenses of the Placing) amount to approximately £2.3 million.

The Placing Shares, following allotment, will rank equally in all respects with the Existing Ordinary Shares including in respect of any dividends and distributions paid or made in respect of the Ordinary Shares.

It is expected that definitive documents of title to the Placing Shares will be delivered by Share Registrars Limited, the Company's registrars, to those Shareholders who so request by first class post, not later than 14 days after the date of Admission. Placing Shares issued to any Shareholder who does not request a definitive certificate will be registered within the CREST system.

#### **USE OF PROCEEDS**

The net proceeds of the Placing receivable by the Company are expected to amount to approximately £2.3 million and are intended to be used for operating business expenditure for sales and marketing activities, for the appointment of a global sales and marketing team and for general working capital for the Company.

#### **LOCK-IN AND ORDERLY MARKET ARRANGEMENTS**

At Admission the Directors and persons connected with them will own 3,875,000 Ordinary Shares representing 2.6 per cent. of the issued share capital following Admission. The Directors, Trilakes Enterprises Pty Ltd, Lampam Pty Ltd and Horsford Limited have undertaken to the Company and to Nabarro Wells & Co. Limited that they will not sell or dispose of, except in certain circumstances, any of their respective interests in Ordinary Shares at any time before the first anniversary of Admission.

In addition the holders of a total of 63,101,346 Ordinary Shares (representing 42.3 per cent. of the issued share capital) have undertaken to the Company and to Nabarro Wells & Co. Limited that they will for the 12 months immediately following Admission effect a sale only through the brokers for the time being of the Company and will only do so following consultation with the broker in relation to any such disposal and further that any such disposal will be made in such a manner as such broker may reasonably require with a view to maintaining an orderly market in the Ordinary Shares.



## **DIVIDEND POLICY**

The Directors do not envisage declaring a dividend in the short to medium term. Initially, positive net cash flows will be re-invested in the development of the Group's business. However, if or when sufficient distributable reserves are available the Directors will consider paying dividends.

## **CORPORATE GOVERNANCE**

The Directors intend that the Company will comply with the main provisions of the Combined Code in so far as they are practicable for a company of its size. The Company has appointed two non-executive directors with relevant sector experience.

An Audit Committee, comprising the non-executive Directors, has been established by the Company to operate from Admission. The Audit Committee will be chaired by Duncan Clegg and will meet at least twice each year. The Audit Committee will be responsible for ensuring that appropriate financial reporting procedures are properly maintained and reported on and for meeting with the Group's auditors and reviewing their reports on the accounts and the Group's internal controls.

The Company has in addition established a Remuneration Committee, comprising the non-executive Directors, to operate from Admission. The Remuneration Committee will also be chaired by Duncan Clegg. The Remuneration Committee will be responsible for reviewing the performance of the executive Directors, setting their remuneration, determining the payment of bonuses, considering the grant of options under any share option scheme and, in particular, the price per share and the application of performance standards which may apply to any such grant.

The Board has also considered the guidance issued by the Institute of Chartered Accountants in England and Wales (commonly known as the Turnbull Report) concerning the internal requirements of the Combined Code. The Board intends regularly to review key business as well as financial risks facing the Group in the operation of its business.

The Company will operate a share dealing code for Directors on the basis set out in the Listing Rules.

## **SHARE OPTIONS**

To motivate the Directors, key employees and consultants to the Company, the Board intends in due course to adopt an appropriate option scheme or schemes to authorise the Company to issue options. Any options issued pursuant to such a scheme will not exceed 20 per cent. of the total share capital in issue from time to time without the Board having first obtained the consent of the Shareholders. In order to secure the services of certain key individuals, with some of whom discussions are currently in progress, the Directors intend to allot options representing up to 5.4 per cent. of the issued share capital immediately following admission at the Placing Price within a period of six months following Admission. Thereafter, share options will be granted at no less than the market price at the time of grant.

The Company has issued 9,000,000 options, equivalent to 6.0 per cent. of the issued share capital following Admission, to the Directors. The options are exercisable at the Placing Price at any time up to the fifth anniversary of Admission.

The Company has issued 3,700,000 options, equivalent to 2.5 per cent. of the issued share capital following Admission, to Nabarro Wells & Co. Limited. The options are exercisable at the Placing Price at any time up to the fifth anniversary of Admission.

#### **BONUS INCENTIVE SCHEME**

The Company intends to adopt a discretionary bonus scheme by which bonuses are paid to Directors, employees and consultants and used by the recipients to subscribe for Ordinary Shares at par value, subject to performance criteria which have yet to be determined. A total of up to 10 per cent. of the issued share capital immediately following Admission will be made available for this purpose. The amount of any bonus payable to employees under this scheme will be subject to approval by the Remuneration Committee.

#### **DIRECTORS' AUTHORITY TO ALLOT SHARES**

The Shareholders have passed resolutions on 28 October 2005 details of which are set out at paragraph 2.3 of Part VII of this document, granting the Directors general authority to allot 333,333,333 Ordinary Shares and disapplying the statutory pre-emption rights in respect of the whole of such allotment. Such resolution authorises and empowers the Directors to issue the Placing Shares and to issue Ordinary Shares subscribed for pursuant to the proposed share option schemes and bonus incentive scheme referred to above without further Shareholders approval. Taking into account the shares in issue on Admission, the resolution authorises and empowers the Directors to issue a further 184,212,223 Ordinary Shares other than pre-emptively, representing approximately 123.5 per cent. of the issued share capital following Admission.

#### **EMPLOYEES**

As at the date of this Document, the Group has a total of 9 employees and consultants including the two executive Directors.

#### **TAXATION**

Information regarding taxation is set out in paragraph 8 of Part VII of this Document. These details are intended only as a general guide to the current tax position under UK taxation law. If an investor is in any doubt as to his or her tax position he or she should consult his or her own independent financial adviser immediately.

## PART II RISK FACTORS

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**AN INVESTMENT IN THE COMPANY IS SPECULATIVE AND INVOLVES A HIGH DEGREE OF RISK.**

**In addition to the other relevant information in this Document, the Directors consider the following risk factors to be of particular relevance to the Group's activities and to any investment in the Company. It should be noted that this list is not exhaustive and that other risk factors may apply. Any one or more of these risks could have a material adverse effect on the value of the Company and should be taken into account in assessing the Group.**

### **The Group**

The Company is a recently formed company with a limited operating history upon which prospective investors may base an evaluation of its likely performance.

### **Commercialisation**

When scaled up to full commercial size, the applications might not retain all of the favourable characteristics shown in laboratory testing. Additionally, on scaling up the applications may prove uneconomic.

### **Uncertainty of market acceptance**

There can be no assurance that the Company's technologies will be adopted in the timetable required by the Company's marketing budget. Also there is no certainty that the Company will be able to maintain a competitive position or that the Company will have adequate financial and human resources to maintain the rate of product development required by the markets in which the Company operates.

### **Speed of market acceptance**

Companies with innovative products often overestimate the speed of market acceptance of their products. The rate of market penetration by smaller companies in markets dominated by larger suppliers is often quite protracted as it is often difficult to achieve marketing recognition.

### **Limited management capabilities**

While the management team consists primarily of experienced professionals, there is no certainty that the Company has sufficient managerial resources to execute its business plan.

### **Competition**

While the Directors believe that the Company has developed a unique process, there is no certainty that it will be able to adequately protect its technology or that competition will not develop or even supersede the Company's process and prevent the realisation of the Company's business plan. The pending patent applications may not be allowed or competitors may successfully challenge the validity or scope of any future issued patents. The pending patents will be limited to enforcement in the countries in which they are issued. The pending patents alone may not provide the Company with any significant competitive advantage and third parties may develop technologies that are similar or superior to the Company's technology and which avoid infringement of the pending patents.

**Infringement of Intellectual Property rights**

Third parties could claim that the Company's current or future technologies or products infringe or misappropriate their patent or other proprietary rights. Although the Directors do not believe that the Company is currently infringing or misappropriating any proprietary rights of others, legal action claiming infringement or misappropriation could be commenced against the Company at any time, and the Company may not prevail in such litigation given the complex technical issues and inherent uncertainties in such litigation. Any claims, with or without merit, could result in costly litigation and operating changes, which could adversely affect the business of the Company, financial condition and operating results and may force the Company to enter into royalty or licensing agreements, which may not be available on terms acceptable to the Company; to indemnify customers or obtain replacement products or functionality for customers; to significantly increase development efforts and resources to redesign products as a result of these claims; and to discontinue the sale of some or all of the Company's technologies or products.

**Product Liability**

Disputes and claims may arise from the Company's licensees' customers due to defective workmanship, non-adherence to product specifications or delay in delivery of orders. There can be no assurance that there will not be any claims from customers resulting from defective workmanship, non-adherence to product specifications or delay in delivery of orders that can be fully recovered from the Company's suppliers. If such events occur, The Company's profit margin will be adversely affected.

**Exposure to fluctuations in raw material cost**

Any major natural catastrophes including earthquakes, typhoons or floods may cause a decrease in the supply of raw materials thereby resulting in an increase in cost of raw materials. As a result, the Company's operations may be affected. There can be no assurance that any increase in the cost of these raw materials can be passed on to customers. Therefore, significant price increases in raw materials may lead to lower profit margins, resulting in lower earnings.

**Dependence on key personnel**

The Company has a small management team and the loss of any key individual could adversely affect the Company's business.

**Economic and political risk**

The proposed operations of the Company will be in a number of foreign jurisdictions where there may be a number of associated risks over which it will have no control. These may include economic, social or political instability or change, terrorism, hyperinflation, currency non-convertibility or instability, changes of laws affecting foreign ownership, government participation, taxation, working conditions, rates of exchange, and exchange control.

**Litigation**

Legal proceedings may arise from time to time in the course of the Company's business. The Directors cannot preclude that such litigation may be brought against the Company in future from time to time or that it may be subject to any other form of litigation.

**Currency risk**

The expenditures made by the Company are subject to exchange rate fluctuations and any potential income may become subject to exchange control or similar restrictions.

**Additional requirements for capital**

Substantial additional financing will be required if the Company is to achieve its objectives of becoming a substantial commercial operation. No assurances can be given that the Company will be able to raise the additional finance that it may require for its anticipated future operations. Any additional equity financing may be dilutive to Shareholders and debt financing, if available, may involve restrictions on financing and operating activities. There is no assurance that additional financing will be available on terms acceptable to the Company or at all. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations or anticipated expansion incur financial penalties and reduce or terminate its operations.

**Uninsured risks**

The Company may become subject to liability for hazards that cannot be insured against or against which it may elect not to be so insured because of high premium costs. Furthermore, the Company may incur a liability to third parties (in excess of any insurance cover) arising from damage or injury.

**Market perception**

Market perception of the Company may change, potentially affecting the value of investors' holdings and the ability of the Company to raise further funds by the issue of further Ordinary Shares or otherwise.

**AIM and liquidity of the Ordinary Shares**

AIM is not the Official List. The Ordinary Shares will not be listed on the Official List. Notwithstanding that Admission becomes effective and dealings commence in the Ordinary Shares, this should not be taken as implying that there will be a liquid market for the Ordinary Shares. An investment in the Ordinary Shares may thus be difficult to realise.

Investors should be aware that the value of the Ordinary Shares may be volatile and may go down as well as up. Investors may, on disposing of Ordinary Shares, realise less than their original investment or may lose their entire investment. The Ordinary Shares may, therefore, not be suitable as a short-term investment. In addition, the market price of the Ordinary Shares may not reflect the underlying value of the Company's net assets. The price at which the Ordinary Shares will be traded and the price at which investors may realise their Ordinary Shares will be influenced by a large number of factors, some specific to the Company and its proposed operations, and some which may affect the business sectors in which the Company operates. Such factors could also include the performance of the Company's operations, large purchases or sales of the Ordinary Shares, liquidity or the absence of liquidity in the Ordinary Shares, legislative or regulatory changes relating to the business of the Company and general economic conditions.

**Possible volatility of the price of the Ordinary Shares**

Following Admission the market price of the Ordinary Shares could be subject to significant fluctuations due to various factors and events, including any regulatory or economic changes affecting the Company's operations, variations in the Company's operating results developments in the Company's business or its competitors, or to changes in market sentiment towards the Ordinary Shares. The Company's operating results and prospects from time to time may be below the expectations of market analysts and investors. In addition, stock markets from time to time suffer significant price and volume fluctuations that affect the market prices for securities and which may be unrelated to the Company's operating performance. Any of these events could result in a decline in the market price of the Ordinary Shares.

**Taxation framework**

This document has been prepared in accordance with current UK tax legislation, practice and concession and interpretation thereof. Such legislation and practice may change and the current interpretation may therefore no longer apply.

**Forward looking statements**

Certain statements within this Document, including those in the part of this Document under the heading "Information on the Company", may constitute forward looking statements. Such forward looking statements involve risks and other factors which may cause the actual results, achievements or performance of the Company to be materially different from any future results, achievements or performance expressed or implied by such forward looking statements. Such risks and other factors include, but are not limited to, general economic and business conditions, changes in government regulation, currency fluctuations, the Company's ability to develop its existing brands and licenses, competition, changes in development plans and the other risks described in this Part II. There can be no assurance that the results and events contemplated by the forward looking statements contained in this Document will, in fact, occur. These forward looking statements are correct only as at the date of this Document. The Company will not undertake any obligation to release publicly any revisions to these forward looking statements to reflect events, circumstance or unanticipated events occurring after the date of this Document except as required by law or by regulatory authority.

**General**

The risks noted above do not necessarily comprise all those potentially faced by the Company and are not intended to be presented in any assumed order of priority.

**Although the Directors will seek to minimise the impact of the Risk Factors, investment in the Company should only be made by investors able to sustain a total loss of their investment. Investors are strongly recommended to consult an investment adviser authorised under the Financial Services and Markets Act 2000 who specialises in investments of this nature before making any decision to invest.**

**PART III  
COMPETENT THIRD PERSON REPORT**

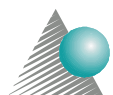
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*LINKING GLOBAL TECHNOLOGIES WITH MARKETS*

**COMPETENT THIRD PERSON  
REPORT – MICROFUZE  
MICROWAVE PROCESSING  
TECHNOLOGY**

**Report to:  
Doug Parrish  
MicroFuze International plc**

**Project #: 1246CTPR  
Report: Final  
Date: November 8, 2005**



**ROWAN TECHNOLOGY GROUP**

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## **EXECUTIVE SUMMARY**

MicroFuze is bringing to market a microwave technology for creating surface alloys in metals by diffusion, broadly referred to as Microwave Diffusion Treatment (MDT). The technology can take several forms:

- ❑ The initial form is packed bed metallizing. This is a version of the packed bed metallizing treatments that have been in commercial use for many years – chromizing, aluminizing and boronizing – in which microwaves are used to heat the pack, which in turn heats the surface of the items to be treated.
- ❑ The company also reports that they have demonstrated the ability to carry out diffusion treatments outside the pack itself as well as in air, creating a capability for over-the-pack processing and perhaps making it possible to carry out processing in remote locations.
- ❑ Extending the treatment options further, the company has developed a method for treating long tubes and pipes by moving the tube slowly through the treatment zone of a compact reactor.
- ❑ In addition to diffusion of the standard alloying elements, chromium, aluminium and boron, MicroFuze reports diffusion of cerium and combinations of elements such as boron with tungsten or silicon.
- ❑ The company is also involved with a “cool plasma” technology in which microwaves are used to create a plasma. The plasma heats the metal surface of the item being treated, while the diffusing material travels through the plasma and into the surface. The primary use of this technology appears to be the treatment of internal diameters of tubes and pipes.

With this combination of developments MicroFuze has moved well beyond the old packed bed metallizing treatments. The MicroFuze methods offer the advantages of faster, cleaner and cheaper processing, reduced energy usage, and the ability to better engineer the surface through the use of other alloying elements and combinations of elements.

The immediate markets for MDT lie in taking market share from existing, older types of packed bed diffusion treatments, such as chromizing of heat exchanger tubes, chromizing and aluminizing of turbine blades, and boronizing of low alloy steel parts for the automotive industry. Metallizing is part of the US\$6 billion worldwide Heat Treating market.

However, the real market potential will most likely lie in leveraging the unique capabilities outlined above into new markets and applications for diffusion treatments, allowing MicroFuze to enter the much broader US\$44 billion worldwide market for Heat Treating, Hard Facing and Electroplating. The potential markets could include abrasion and corrosion treatment of internal and external surfaces of piping for the oil, gas and chemical industries, treating automotive aluminium engine blocks for wear resistance, applying wear and lubricious coatings to gears (a long-standing industry need), creating non-stick surfaces on cookware, and applying rare earth corrosion treatments to aluminium and magnesium components for the aerospace and automotive industries (which could improve the market penetration of magnesium alloys). In addition it may be possible and cost effective to apply treatments to metal forms in production, such as sheet steel or aluminium plate for corrosion resistance or hydraulic cylinder rod for wear resistance (to replace hard chrome plate). An over-the-pack carburizing treatment could also be envisaged, which would be faster than standard gas and plasma carburizing treatments. It is even possible that photocatalytic surfaces could be applied to production architectural glass to create scratch-resistant self-cleaning windows. It may also be possible to use the process in air to coat the surfaces of storage tanks or rebalance the chemistry of weld joints.

MDT will, of course, only penetrate those markets where it provides a reliable, cost-effective treatment that confers a market advantage on the treated products, offering advantages such as faster treatment



times, lower treatment costs, energy savings or less environmental impact. It will not find applications where it competes with treatments that are cheaper, cleaner or better meet customer needs. While it is unlikely that all of the markets and applications noted above will work out, it is equally likely that many others will prove viable that we have not considered. Given the conservative nature of the engineering industry, successful development of markets for MicroFuze processes will entail developing a thorough understanding of its capabilities and limitations for different industries, combined with a realistic long-term vision for the technology and aggressive market development to find those applications that will provide the best long-term growth opportunities that leverage the unique characteristics of the process.

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Rowan Technology Group understands that the intention of this report is to provide information for the purpose of raising capital, and we consent to its use for this purpose.

Disclaimer: The analysis, data and opinions contained in this report are based on information provided by the client, together with other relevant public documents providing technical and market information. While every effort has been taken to ensure its accuracy, given the limited nature of this information and the uncertainties inherent in the development of technologies and their markets, the completeness and accuracy of this report cannot be guaranteed. Consequently, while provided as an aid to potential investors, it should not, by itself, be relied upon for financial decision-making.

## COMPETENCY STATEMENT

[Rowan Technology Group](#) is a company specializing since 1990 in the technology and markets for surface treatment and coating processes. Rowan's President, Dr. Keith Legg, has over 30 years of experience in coatings and surface treatments, with degrees in Physics from the Universities of Lancaster and York in England, while Ralph Alexander, who also produced this report, has over 30 years of experience in the surface treatment arena following his degrees in Physics from the University of Western Australia and the University of Oxford, England.

We are well known internationally for our evaluations of coatings technologies and markets, as well as our extensive knowledge of replacements for older technologies such as hard chrome and cadmium plating and chromate materials used in surface treatment. Rowan Technology Group founded the US Department of Defense Hard Chrome Alternatives Team (HCAT) together with Bruce Sartwell of the US Naval Research Lab, and assists in running the program, including the maintenance of its web sites for data storage and team interaction. HCAT is the primary program in the world for replacing hard chrome plating by clean thermal spray processes, with military and commercial members in the US, Canada and Europe. We are a member of the US Joint Strike Fighter Environmental Safety and Health team, providing a range of consulting services on clean coating processes and materials, which helps to keep the aircraft green and reduce sustainment costs over its service life.

In our commercial work we advise major companies on clean alternatives to materials and coatings that are under pressure from environmental and health regulations in the US, Europe or elsewhere. In addition we have carried out many market analyses for companies wishing to market new materials and surface treatment technologies or to expand the markets for their current businesses. These projects include a due diligence investment analysis of a new coating technology for gas turbine applications, an investment analysis for nanomaterials, and a market evaluation of a thin-film coating process, which was incorporated in a business plan presented to prospective investors.

Rowan also has members in other disciplines and other parts of the world, through whom we carry out a broad range of consulting activities in advanced materials and products.

## 1. Microwave Materials Processing

### 1.1 Description of the technology

The MicroFuze technology base comprises two Microwave Diffusion Treatments (MDTs) for processing alloys:

1. Microwave pack cementation – used for creating new alloys at the surfaces of metals and metal products
2. Microwave “cool plasma” processing – This technology is in the early stages of development and as yet has not been tested, if successful it could be used for heat treating and creating metal and gas diffusion layers at the surfaces of metals and products, primarily inside small internal diameters.

**Microwave pack cementation** – The purpose of pack cementation is to create an alloy in the surface of an item by thermochemical diffusion from a powder that surrounds the item and acts as the source of the element to be diffused in. This type of process is most commonly used to create surface alloys with chromium (Cr) for corrosion resistance, usually in steels; aluminium (Al) for hot oxidation resistance, usually in aircraft engine alloys; or boron (B) for wear resistance, usually in steels. However, other elements can be used, such as cerium (Ce) for corrosion resistance, or combinations of elements such as titanium (Ti) and B to form hard TiB<sub>2</sub> precipitates.

MicroFuze has a worldwide license for the microwave diffusion alloying method developed at Oak Ridge National Lab (ORNL) in the US. The basic technology is described in the original US patent (No. 6,554,924) assigned to BWXT Y-12 LLC of Oak Ridge, TN, and in a paper titled “A New Microwave-Driven Pack Cementation Coating Process”, which was contained in an Oak Ridge National Laboratory report (Materials Science and Engineering: Seed Money, Project No. 3210-2031).

The technology is a form of pack cementation – a proven process that has been used for surface alloying in industry for many years. The MicroFuze process uses microwaves to heat the pack rather than heating both component and pack in a standard furnace. In the conventional pack cementation process the item to be treated is packed in a powder containing a halide such as ammonium chloride and an inert material such as aluminium oxide, mixed with a source of Cr (or other metal powder), and heated at 800-1100°C (bright red heat) for several hours. The chloride produces chlorine gas, which reacts with the Cr to form a volatile chloride that lands on the component surface, where it breaks apart into Cr and HCl. The Cr diffuses in to form a Cr-rich surface, from which Cr diffuses into the underlying metal, leaving a modified near-surface region up to 0.020 inches deep, making it possible for example to produce a “stainless steel” surface on a carbon steel substrate.

In the MicroFuze process, microwaves drive the diffusion by heating the pack directly, which in turn heats the component by infrared radiation. The data obtained by ORNL shows that not only does this method heat the components much more rapidly than conventional radiant heating, but it also appears to enhance the diffusion process itself, creating the same diffusion layer at a lower temperature or a deeper layer at the same temperature.

In addition, microwave diffusion technology is more amenable to combining alloying elements for diffusion, and carrying out processes that combine the diffusion of a carbide former (vanadium, titanium, etc) with a nitrogen- or carbon-containing gas, for the treatment of steels and other alloys that cannot normally be nitrided or carburized. Such a treatment is a version of current commercial processes used to carbonitride low alloy steels.

**“Cool plasma” processing** – In this technique microwaves are used to break down the gas in the vicinity of the metal source into a plasma, which is a mixture of ions and electrons. The source is placed near the surface to be treated so that the plasma heats the component while metal or gas atoms passing through the plasma land on the surface of the component and diffuse into the material to form a surface compound or alloy. The method can be used to create surface alloys or to nitride or carburize the material. (These types of gas treatments are currently done in processes such as ion (or plasma) nitriding, by heating in a gas or a plasma created by electrically biasing the items to be treated.) Since the products to be treated must be heated from room temperature, the much faster heating provided by microwave plasma processing offers the advantage of faster cycle times and cheaper treatment. However, the cool plasma technique is primarily useful only for small areas, particularly internal diameters.

## 1.2 Capabilities, advantages and limitations

The primary advantages of MDT compared with other heat treats are:

1. **Rapid heating:** Standard heat treating involves placing the parts into a hot furnace and waiting for them to equilibrate before processing (“soaking”), or placing in a cold furnace and slowly bringing the temperature up, by heating with gas or electricity. *Microwave heating rates are much higher, reducing processing time and cost.*
2. **Surface heating only:** Heat is supplied to the surface and diffuses into the bulk. This permits large objects to be treated without bringing the entire part to high temperature. *This uses less energy and in some cases may make it possible to preserve the temper of the part as a whole while taking the surface to a higher temperature, thus widening the range of alloys and tempers that can be treated.* Note, however, that non-equilibrium heating of large items (especially those that are complex shapes or thin-walled) can cause warpage.

3. **More rapid diffusion:** Oak Ridge data shows what appears to be faster diffusion than one would obtain with conventional diffusion treatments at the same temperature. If this is correct (and not merely a reflection of a higher surface temperature), then the MicroFuze technology permits treatment either at lower temperature or for shorter times. *This would reduce time and hence cost, and would make it possible to treat some alloys that cannot be treated by normal thermal methods without destroying the temper, thus opening up a larger potential market.*
4. **Cleaner processing:** The major disadvantages of pack processing are the time involved in packing and unpacking, and disposal of the used pack, which some heat treaters are worried may contain toxic hexavalent chromium ( $\text{Cr}^{6+}$ ) compounds. According to data provided to MicroFuze by ORNL, no measurable  $\text{Cr}^{6+}$  has been detected from the MDT process. If it is demonstrated in a production environment that the process produces no  $\text{Cr}^{6+}$  either in the pack or in the effluent, presumably MDT would not be subject to the increasingly strict regulations on hexavalent chrome emissions such as the new US OSHA  $\text{Cr}^{6+}$  PEL. If, in addition, at the end of its life the pack is also much cleaner than a traditional pack, the environmental and regulatory costs associated with its disposal might also be lower. *This would make the process cleaner, cheaper, and less cost-driven by environmental and health regulations.* Note, however, that the pack process emits chlorine gas, HCl and metal chloride vapours, but all of these can be trapped by commonly-used and inexpensive systems to prevent emission into the air.
5. **More efficient energy use:** Depending on the process and the type of furnace used, conventional heat treaters either keep the furnace on all the time (usually done for in-air treatments), or the furnace is loaded, started from cold and re-cooled before being emptied (usually done for inert atmosphere or vacuum heat treating). In the first case, the majority of the energy goes into replacing heat leaking from the furnace, while in the second, the majority of the energy goes into heating the furnace and replacing heat lost during the heating cycle. *MDT puts the heat where it is needed – directly into the pack and the surface of the part for maximum efficiency and minimum energy cost.*

As a diffusion treatment, MDT has certain advantages over clads and coatings:

1. **Avoidance of spalling:** A diffusion treatment creates a surface with a different chemistry that is an integral part of the substrate. *Thus it cannot delaminate or spall as coatings often do.*
2. **Dimensional tolerance:** *Diffusion treatments usually have a negligible effect on dimensions such as bearing diameters, which avoids having to redesign the part to accept the MDT treatment.* The downside of this is that MDT cannot be used for rebuilding worn components. (Note, however, that diffusion treatments, especially of steels, involve temperatures above the austenitizing temperature (800°C and up), which results in growth and dimensional changes, and may create distortion. This is not usually a concern for the lower temperature treatments such as nitriding.)
3. **Minimal precleaning:** Most coatings and surface treatments require meticulous cleaning to ensure high quality. MDT can be done with minimal cleaning, to remove gross contamination only. This makes the process inherently more reliable (since cleaning problems are the primary source of coating failures), eliminates the cost of complex cleaning lines and processes, and greatly reduces the wastewater volume.
4. **Adhesion:** Coating adhesion is one of the primary issues with any coating system. *As a diffusion layer, MDT avoids adhesion problems.*
5. **Coefficient of Thermal Expansion (CTE) mismatch:** When coatings are used in high temperature applications the difference in thermal expansion between substrate and coating can cause the coating to crack or spall during heating or cooling. This can, in turn, cause fatigue and corrosion problems. *Diffusion alloys avoid this problem because they form a surface alloy that grades into the underlying material.*
6. **Strain-related cracking and fatigue:** When subjected to cyclic strain, coatings sometimes crack

or delaminate. *This should not happen with a diffusion treatment such as MDT.* (The downside of this is that, since the surface layer is integral, a crack that starts in the surface can more readily penetrate directly into the underlying material, causing premature failure.)

7. **Fatigue debt:** Many coatings (such as hard chrome plate, weld coatings, or plasma sprays) have tensile internal stress, which causes the coatings to crack and reduces the fatigue life of the component (i.e. creates a fatigue debt). This is a major problem in the aircraft industry. *Because the diffusion depth is much greater than the thickness of a typical coating, MDT avoids the creation of a highly stressed layer and therefore should not cause a fatigue debt.* Note, however, that any heat treatment that changes the temper of the surface can result in a loss of fatigue strength, especially for high strength alloys used in aerospace.
8. **Internals:** With the exception of chemical vapour deposition (and to a lesser extent electroplating and electroless plating), coating internal diameters and complex shapes is always difficult. For those cases where microwaves can be used in IDs, packed bed MDT has a significant advantage over most coatings.

In summary, the primary capabilities and advantages of MDT are faster processing, elimination of coatings that can come off, and the ability to treat complex shapes and internals. The primary limitations and disadvantages of MDT are its high temperature, which limits the process to alloys and heat treatments able to withstand the temperature or that can be re-heat treated to restore their temper; and the inherent non-uniformity of microwave fields, which requires component or field manipulation. While modifying a surface rather than creating a coating is a strong advantage, its limitations are that it cannot be used to rebuild a damaged or worn component (a primary use of chrome plating), and it cannot be used for components that will see service temperatures near the diffusion temperature (as in some modern aircraft turbine engines). Pack cementation MDT processing is an excellent way of treating complex items, but it necessarily involves packing, unpacking, cleaning and pack disposal. Cool plasma processing avoids these pack issues, but is viable only for limited areas and is likely to be less uniform. Packing and unpacking can also be avoided with over-the-pack processing, in which the item to be treated is placed near, but not in the pack, thus avoiding the need to pack, unpack and clean the item. MicroFuze reports that they have already demonstrated success with over-the-pack diffusion and are committed to further development of the process, particularly for in-situ applications.

## 1.3 Competition

The area of coatings and surface treatments is very broad and encompasses almost all industrial and most consumer products on the market today. Treatments are most commonly used to improve wear, abrasion, oxidation or corrosion resistance, but they are also used for a vast number of other purposes such as catalysis, uv light protection, thermal barriers, light reflection and absorption, creating non-stick surfaces, improving the sticking of adhesives and paints, and decoration. These various surface treatments include

- ❑ The traditional metallizing processes (aluminizing, boronizing and chromizing) with which pack MDT competes directly
- ❑ Gas and plasma nitriding, carburizing and nitrocarburizing, which are used for creating hard surfaces in steels
- ❑ Traditional coating and electroplating, such as galvanizing (zinc coating), and plating with chrome, cadmium, nickel, and other metals. Many of these processes are under environmental attack because of their toxic air emissions and wastes or their danger to workers.
- ❑ Modern coating technologies such as thermal spray, chemical and physical vapour deposition and laser cladding.

With the current technology MDT is suitable for small to moderate size components (up to two or three feet), but not for large scale production of plate, sheet or rod product. With the current processing

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temperature it is most suitable for treating high-temperature alloys such as those used in turbine engines, or low alloy steels, which do not require heat treating afterwards. High alloy steels or non-ferrous alloys can be treated, but must usually be heat treated after microwave processing to bring the alloy back to the correct temper. For these components MDT can produce wear and corrosion resistant surfaces, and thus competes primarily with other heat treatments such as nitriding, carburizing, and nitrocarburizing, and some of the wear resistant coatings such as hard chrome plate, nickel plate and some thermal spray materials. It does not compete with thick chrome plate used for repair and rebuild or with most of the thermal spray, PVD and CVD coatings.

By extending the technology to include over-the-pack and cool plasma methods there is a potential for it to compete directly with widely used processes such as nitriding, carburizing, and nitrocarburizing, which are used for wear resistance (see Appendix 1). If over-the-pack methods can be scaled successfully they may become suitable for large area coating of production alloy sheet and plate in the mill, although gaining acceptance for them in this type of basic steel, aluminium and other alloy production will present a strong marketing challenge. While it is not likely to compete successfully with standard galvanizing, which is one of the cheapest and most widely used corrosion treatments, the technology may compete well with other types of corrosion treatments that must usually be applied after the product has been fabricated, including some chromate treatments that are under severe pressure because of environmental and health concerns.

There are two specific metal diffusion technologies with which MicroFuze MDT competes directly:

1. Dana's atmospheric microwave processing technology (AtmoPlas)<sup>1</sup> - This technology is a microwave plasma technology in which radiation from a microwave-generated plasma surrounding the component is used to heat it. Like MDT, the AtmoPlas process is faster than conventional diffusion and reduces energy use, with 95% of the microwave energy being absorbed. The technology, which is currently being scaled up, is being marketed for heat treating, brazing, carburizing, nitriding, and other heat treating applications. It is not currently being marketed as a surface alloy diffusion technology. Dana is a Tier 1 automotive supplier based in the US, and has been promoting this technology aggressively over the past year. Potential licensees for heat treating and carburizing applications include BMW, GE and Pratt & Whitney. While cool plasma technology could be used for similar treatments, its primary use is for the market niches of internal diameters and small areas, as we discussed above. Dana's technology does not compete directly with the MicroFuze technology, except in some limited applications.
2. Greenkote –The Greenkote technology<sup>2</sup> was purchased by Greenkote PLC, an Israeli company, from Summet Hi-Tech Coatings Ltd. The Greenkote process, which competes with the MicroFuze packed bed process, involves surrounding the product to be coated with a powder containing the materials to be diffused in, and rotating product and powder in a sealed container in a furnace held at 370-450°C. Material diffuses into the part from the powder in contact with its surface. The process is designed to create surface diffusion alloys such as Fe-Zn-Al. It can also create compound coatings such as TiN or carbides, presumably by adding nitrogen or hydrocarbon gas. This technology appears best suited to small items such as screws and other fasteners, but also appears to have been employed on larger components such as aircraft turbine blades, pump parts and extrusion dies. Because the treatment temperature is much lower than that used in the MicroFuze process, the thickness of the treated surface region (known as the case depth) is much less (100µm or less, but typically 30-40µm for Greenkote vs 200-300µm for MicroFuze). This thinner treated layer makes the Greenkote process less suitable for severe wear service. This means that, while the lower temperature of the Greenkote process makes it

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<sup>1</sup> Dana Corp., see, for example, US Patent Numbers 6,870,124 and 6,913,184.

<sup>2</sup> Greenkote LLC; see, for example, European Patent Application Number WO 2004/050942 and US Patent Application Number 2004/0105998.

useful for a wider range of alloys, the thinner diffusion layer restricts it to a narrower range of applications.

Greenkote currently operates a coating centre in Israel, and the company's business plan projects the establishment of two additional plants in Europe and one in North America over the next two years. The company's principals believe that they can gain market share from US heat treaters and coating companies, especially in the area of chrome replacement.

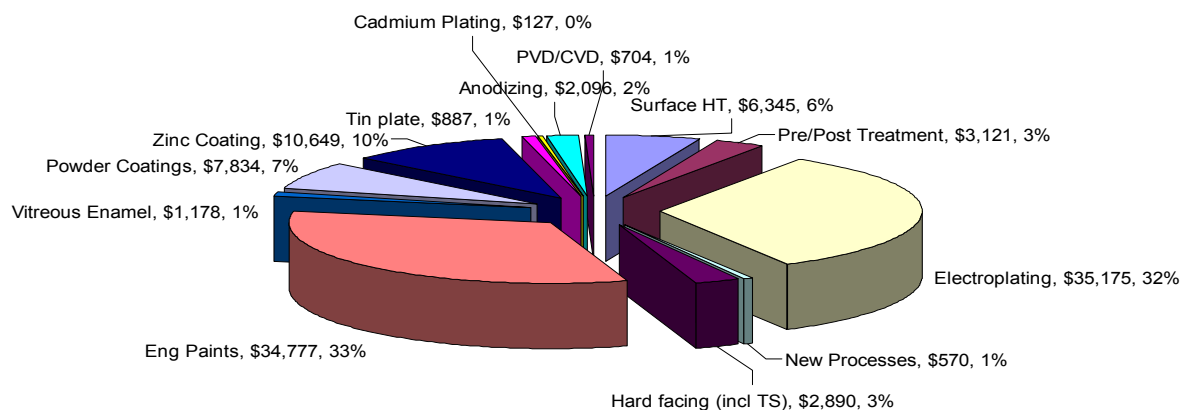
In April 2005 GreenKote made a share offering on the London Alternative Investment Market (AIM) for a £2 million capitalization, but does not appear to have been successful. Because of this, together with the technical limitations of the GreenKote process, we do not believe that GreenKote is likely to be a serious competitor for MicroFuze.

## 2. Market potential

Between them, the different MDT treatments span a range of potential applications and markets:

- ❑ MDT pack cementation is the closest to traditional thermal pack cementation technology, which is used for corrosion resistance treatment of items such as boiler tubes by chromizing, oxidation resistance treatment of turbine engine blades by chromizing and aluminizing, and wear resistance treating by boronizing.
- ❑ Over-the-pack MDT treatment has the potential for avoiding the limitations of pack processing and extending MDT to a wide variety of products, including alloy strip and plate.
- ❑ Cool plasma processing makes it possible to extend the range of MDT processes to internal diameters, which are difficult to process with most coatings and surface treatments.

The total worldwide surface engineering market is estimated at about US\$106 billion, of which the largest market shares are for engineering paints and electroplating, is the latter being dominated by zinc plating (galvanizing). The breakdown is shown in Figure 1.



(i) Figure 1. Annual value (millions of US dollars) and percentage of world market for various surface engineering technologies.

The segments in which MDT would compete include Surface Heat Treating, Hard Facing, and a small part of Electroplating (some wear and corrosion coatings). In total these three markets have a value of about \$44 billion worldwide, of which Heat Treating – the primary market for MDT – is worth about \$6 billion. Like any other technology, MDT would, of course, only gain market share in niches where it offers both a technical solution and a market advantage.



## 2.1 Short term market opportunities

The obvious short term market opportunities are those existing markets where the benefits of MDT offers an advantage in processing speed, which includes all the existing markets for pack cementation, nitriding, carburizing, etc.

Process	Markets
Heat treating (Total)	\$6,345 million worldwide
Aluminizing	Aircraft engine turbine blades
Chromizing	Heat exchanger and boiler tubes, turbine blades
Boronizing	Wear of carbon steels
Carburizing*	Wear of gears, industrial tools
Nitriding*	Wear of tubes, industrial products
Nitrocarburizing*, etc	Wear resistance, automotive
* Pack process modification needed to compete in these markets	

According to GE Totten, President of the International Federation for Heat Treatment and Surface Engineering<sup>3</sup> one of the most important issues in industrial heat treating is energy cost, with heat treaters putting reduction of energy usage, emissions, process times and costs at the top of their list of industry needs, and with uniformity and distortion a little further down the list. MDT is certainly an answer to the high energy cost of heat treating – a cost that is only likely to continue rising in the future. At this point it is too early to be certain how it will affect distortion and process uniformity, although with a properly designed, modern, well-controlled process it may be possible to improve substantially on the older furnace methods.

Thus, the immediate markets for MDT pack processing are:

- Aluminizing of turbine blades and other products subject to high temperature oxidation.
- Chromizing of turbine blades, heat exchanger and boiler tubes and other power generation and industrial equipment subject to corrosion and wear. Additional chromizing applications currently under trial include
  - o Rollers for the weaving industry
  - o Fasteners exposed to highly corrosive environments such as coal fired power plants. This type of treatment might also be used in place of cadmium (Cd) and zinc (Zn) plate for aerospace and other industrial fasteners.
  - o Cast parts for various industries, such as automotive.
- Boronizing of industrial equipment subject to wear, such as pumps and industrial manufacturing tools.

These are only the traditional pack cementation process markets, which have been shrinking because of their lengthy process times and the environmental concerns over disposal of the used pack. With faster heating and processing times MDT would make these traditional processes more competitive, and they would be more competitive still if the process proves to be significantly cleaner.

A modern heat treatment company with a fresh outlook on the industry and a less time- and energy-intensive process is likely to find additional applications and markets for diffusion metallizing. For example, MicroFuze reports that boronizing of stainless steel makes the surface essentially non-wettable – a requirement for a non-stick surface for cookware. Should testing prove this out, such a material would be far more durable than traditional PTFE-based coatings on cookware. Such a surface might also

<sup>3</sup> G.E. Totten, [“Heat Treating in 2020: What are the most critical issues and what will the future look like?”](#)

be useful in other industrial processes where sticking is an issue, such as zinc and aluminium diecasting, deep drawing of metals, and rolls and tooling used in the manufacture of plastics, foodstuffs and pharmaceuticals. Since boron compounds such as its nitride, carbide and oxide are known to be lubricious, while metal borides are generally very hard and erosion-resistant, surfaces into which boron is diffused could be made inherently wear-resistant and slippery. This could meet the need for lubricant-free components in sliding wear applications, and temporary bearing and gear operation in the absence of oil (a longstanding need in military helicopters).

Furthermore, MicroFuze reports having successfully diffused boron and tungsten together (co-diffusion) for power industry pipes and tubing used inside fluid bed boilers. These boiler environments are becoming more challenging as the quality of fuel is reduced and emission standards are strengthened, creating a need for harder, corrosion-resistant surfaces that will not spall or delaminate. Boron and silicon have also been co-diffused. Metal borides are usually hard wear- and erosion-resistant materials, while boron oxides are good solid lubricants. Co-diffusion of boron with other elements offers a potentially powerful means of creating surfaces engineered with hard metal boride precipitates and lubricious oxides, simultaneously reducing both wear and friction. A range of co-diffusion layers is possible, including molybdenum plus silicon to form molybdenum disilicide, titanium plus boron to form titanium diboride, and boron plus carbon to form boron carbide, all of which are extremely hard. This type of treatment could extend the life and improve the performance of a wide range of industrial products, including such widely used items as gears.

MicroFuze has also been testing the concept of diffusing rare earths such as Ce into Al and magnesium (Mg) alloys. Mg alloys are widely used for gearbox housings in helicopters and modern aircraft such as the Joint Strike Fighter (in which Australia is a partner), as well as many new automobile components, but they corrode very easily. Al alloys are used throughout aircraft for structural components, spars, and skins, as well as in naval vessels, but these alloys, too, are subject to severe corrosion, especially in salt water environments. The traditional corrosion treatments for these alloys have been chromates, which are now largely banned in Europe and other countries because they are carcinogenic. It is known that rare earth additions are strong corrosion inhibitors, and they are now being used in corrosion treatments and primers. It is not yet known if diffusion of these elements into the surface of Mg and Al components will accomplish the same thing, but if so MDT could prove to be a very cost-effective corrosion treatment for Al and Mg products. The MDT process would need to be adjusted so that it would work at the lower maximum temperatures that these alloys (especially those used for aircraft) can tolerate. It would also be necessary to apply the rare earths to final Al or Mg product shapes prior to their final heat treatments, provided there was sufficient thickness to permit the final surface finishing. This would make Mg components, especially, more viable for industrial, aerospace and automotive use and increase their market share.

The use of modern microwave heating together with over-the-pack methods, and developments such as the use of cerium and co-diffused metals take the MicroFuze technology well beyond the current metallizing market. This combination of capabilities places MicroFuze into a position where it has the potential to drive diffusion technology from its present limited applications into far more significant long term markets, as we describe in Section 2.2 below.

## **2.2 Long term market potential**

With the addition of the other MDT processes – over-the-pack diffusion treatment and cool plasma treatment, as well as the introduction of other alloying elements to the pack process, the long term potential of MDT is much broader than the market represented by today's pack processing. It includes a wide range of surface alloying and compounding diffusion treatments where MDT can offer faster processing, lower energy cost, or lower processing temperatures.

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## 2.2.1 Over-the-pack MDT technology

It is clear that the use of a packed bed in an enclosed chamber is a limitation of the MDT process. MicroFuze reports that the MDT works in air, and that the process can produce a diffusion coating well outside the pack itself. Assuming that the process can be successfully converted to an over-the-pack technique, and especially if it can be done safely and effectively in air, the market potential would be considerably higher. The immediate advantage of this modification of the technology is that it eliminates the need to pack and unpack the components, greatly reducing the process cycle time and reducing the need for post-process cleaning. However, it also makes the process more flexible and may even make it possible to carry out *in-situ* coating using a portable system.

With over-the-pack in-air treatment it may be possible to treat metal sheet, such as Al or steel, in the rolling mill. The metal temperature would probably already be high enough for diffusion at some point in the process before final rolling. The diffusion layer would survive the rolling process (although it would be thinned with the rest of the metal). The kinds of treatments that could be applied would include aluminizing and chromizing of steel for corrosion resistance (surface stainless), and perhaps creation of rare earth rich layers on Al and Mg plate and strip for corrosion resistance. An MDT layer would have the advantage of being able to survive subsequent metal-forming operations such as rolling, drawing and stamping, while making it unnecessary (or at least less important) for manufacturers to apply corrosion inhibiting coatings to the finished product. For this approach to gain market acceptance it must be shown to be cleaner than previous processes since traditional chromizing of steel sheet is perceived, in the US at least, to be environmentally unacceptable due to concerns over  $\text{Cr}^{6+}$ , a toxic air emission often produced by industrial processes that involve the use of chromium (including pack diffusion as we discussed earlier). MicroFuze states that analysis of off-gas and particulate residues by ORNL has failed to detect any  $\text{Cr}^{6+}$  from the MDT process.

A major application of chrome plating is the production of hydraulic rod for hydraulic actuators in vehicles and industrial machinery and equipment. If Cr or B were to be diffused in by an over-the-pack method, perhaps with the addition of nitrogen or carbon, prior to the final drawing or prior to the finish grind, it could provide a wear and corrosion resistant surface at a competitive price. This approach is conceptually similar to the Nitrotec nitrocarburizing process that used to be offered commercially by Quanex for production of hydraulic rod, and is still available from Nitrotec Corp. As the environmental and health pressure on chrome plating increases, this type of process that avoids the use of hexavalent chrome is likely to become increasingly competitive.

Other possibilities for broader markets or unique solutions to engineering problems might also be opened up by over-the-pack processing. These include diffusion treatment of lower temperature materials such as Al and Mg alloys for wear and corrosion resistance. Separation of the pack from the item being treated would make the process more flexible for this type of product. A possible major application for this type of treatment could be creating hard, oil-reactive surfaces on the insides of cylinders in aluminium automobile engines. This would eliminate the cylinder liner, saving both weight and volume, both of which are important for fuel efficiency.

Carburizing is a major industrial heat treating process used for almost all industrial gears and bearings. However, the older pack carburizing is seldom used, having given way to gas carburizing, which is quicker and cleaner. An over-the-pack carburizing approach, if proved viable, combined with the rapid heating cycle and efficient energy usage afforded by MDT, could make it competitive in this large and important market.

Corrosion protection on the exteriors of tubes is frequently needed for industrial plant such as boilers and heat exchangers used in power plants and other industries. This is often provided at present by packed bed chromizing. However, some tubes and pipes are very long. MicroFuze reports having developed a method for moving a tube through an applicator, using the microwaves for rapid heating, and so permitting very long tubes to be processed in a compact piece of equipment. This has potential for improving heat exchangers, chemical piping and oil industry tubing

Abrasion and corrosion protection of the interiors of tubes and pipes is also a serious issue for industries such as oil and gas, power, chemical processing, waste disposal, geothermal energy, etc. Coating inside pipes is always difficult, and a method for doing so reliably could be very valuable. If this could be done successfully by any of the MDT methods, as MicroFuze believes it might, then it would have markets in a broad range of industries.

With capabilities for processing both internal and external surfaces of tubes it may become cost-effective to use lower-cost alloys with diffused internal and external layers chosen to match different types of severe service requirements, in place of some of the expensive alloys used today in industries such as chemical processing and oil exploration.

Outside of metals applications, there may be opportunities in other areas such as glass production. It has recently been found that applying a titanium dioxide film to glass forms a photocatalytic layer that allows sunlight to break down soil and dirt and makes windows self-cleaning. Introduction of a surface diffused layer of TiO<sub>2</sub> during manufacture by over-the-pack methods may be a more cost-effective and durable alternative.

Because the process appears to work in air in an over-the-pack mode, MicroFuze has suggested the possibility of developing a portable MDT system that would permit heat treating to be done in localized areas or on industrial plant and product after final assembly. Obviously, as with any process used in the open air, it would be necessary to demonstrate compliance with environmental and worker safety regulations, which would include avoiding worker exposure to microwave radiation and process gases, and trapping of any toxic air emissions. However, if this could be done successfully it would open up new markets for MDT. For example, when products such as chemical, oil and gas piping, or chemical storage tanks are welded, the alloy chemistry is changed in the weld area. The loss of chrome or other alloying components in these areas can lead to premature corrosion or cracking. If a portable MDT system could be developed it might be possible to rebalance the chemistry and re-establish the proper corrosion resistance. Depending on the scale of the process, one might even imagine applying non-stick and corrosion treatments to storage tanks, or corrosion and abrasion treatments to *in-situ* items such as hydroelectric turbine blades, ships' rudders, and piping in petrochemical or pulp and paper plants.

### **2.2.2 Cool plasma MDT technology**

Cool plasma MDT technology is presently less developed than the packed bed technology, but according to its inventor it offers the possibility of treating the interiors of tubes and items such as valve bodies or hydraulic cylinders. For these types of niche applications the process could compete not only in metallizing, but also in the markets of carburizing, nitriding, nitrocarburizing and carbonitriding if the technology proves scalable, uniform and low-distortion.

## **2.3 Market trends**

The heat treating and coating markets tend to follow the overall world economy since they grow or shrink with demand for primary metals and engineered products. The heat treatment market in the UK, which had been slowly falling from a peak in 2001, has turned around and appears to be growing again by about 5-6% per year, a trend that is expected to be similar in the US.

There are several major trends in the heat treating and coatings industry:

1. Environmental imperatives are driving the industry toward cleaner processing methods and cleaner coatings (elimination of chromates and Cd for example).
2. Energy costs and regulatory requirements for reduction of emissions such as CO<sub>2</sub> (e.g. the Kyoto protocols) are driving the industry toward lower energy usage.
3. Demand for more reliable products and the ability to operate for longer in severe environments is driving the adoption of higher quality, more controllable processes.

4. An increasing percentage of primary metal production and manufacturing is being done in the far east and China. This means that coatings and surface treatments are also following this trend. This is true, not just for low technology items, but even for overhaul of aircraft and their engines, and similar high technology products, which often require the use of coatings and surface treatments.

Environmental issues and higher operating temperatures for aircraft engines have led users to move away from the older types of pack cementation. However, microwave processing, especially using over-the-pack methods, offers a way to maintain the advantages of surface alloying while greatly reducing processing complexity and time by eliminating the need to pack and unpack the product. Additional market advantage would be gained if the pack can be kept cleaner and easier to dispose of, which should be possible with the over-the-pack approach. The simplicity of the method over many other coating and surface processing techniques should enhance the probability of its broader adoption by industrial users.

The use of microwaves, which can be combined with shielding to prevent exposure of areas not required to be diffusion treated, makes the microwave method more flexible and applicable to a somewhat broader range of materials and products than older diffusion methods. It also makes it possible to reduce energy cost substantially for those items where only part of the product needs to be processed or where the surface of the part can be treated without heating the entire object.

The geographical locations of MicroFuze's plants in Australia and the US will allow the company to take advantage of both the large US market and the growing far eastern market.

### **3. Conclusions**

MDT is a heat treating technology that uses microwave energy to heat a pack (or in the cool plasma technology to create a plasma), which in turn heats the surface of the product. Metal atoms landing on the surface diffuse into the metal forming a surface alloy (and in some cases a surface compound) that may be tailored for wear and/or corrosion resistance.

MDT offers some distinct advantages over the existing packed bed metallizing technologies in use today in the areas of energy use, processing speed, and perhaps thickness of the diffusion layer. For heat treaters, reduced energy consumption is a major competitive advantage. MicroFuze reports that MDT is capable of over-the-pack processing, which would significantly reduce processing time and cost, in addition to being a significantly cleaner process than today's packed bed methods.

If accompanied by production process uniformity and a competitive cost, these advantages should allow it to take market share from the established metallizing treatments with which it directly competes – chromizing, aluminizing and boronizing. These processes are segments within the US\$6 billion worldwide heat treating market. The applications for the treatments include turbine blades, heat exchanger tubes and carbon steel components. MDT 's primary advantages in the existing marketplace are processing speed and cost.

However, the major potential for the technology is likely to come in opening up new markets for diffusion treatments. Its ability to do this will be governed by the company's success in two primary technology enhancements:

1. Novel diffusion species and combinations of species
2. Novel processing methods, including over-the-pack processing and in-air processing.

The most common diffusion species are Cr, Al and B. However, the process could be used to diffuse cerium for corrosion resistance in aluminium alloys, for example. In addition the combination of boron or silicon with various metal species is potentially a potent approach for engineering surfaces, since it offers a unique capability for creating a very desirable combination of high wear resistance and low friction.

MicroFuze has reported being able to create diffusion layers in areas not directly in contact with the pack (opening the potential for over-the-pack processing), and being able to carry out the process in air. Both

of these capabilities would simplify the present process and reduce treatment time and cost. They may even make it possible to carry out treatments in the field for equipment used in such areas as refinery and chemical plants, pipelines, storage tanks and other exterior structures. Driven by a company with fresh ideas, the combined advantages of over-the-pack and in-air processing with microwave heating could therefore expand the reach of the technology well beyond the markets in which pack cementation is used today, allowing the technology to compete more widely in the overall Surface Hard Facing, Surface Heat Treating and a portion of the Electroplating markets, which together are worth about US\$44 billion worldwide.

Future applications for the technology could include such markets as treatment of metal sheet for corrosion resistance, production of hydraulic rod, corrosion resistant treatments for aluminium, wear resistant treatments for aluminium car engines, and corrosion resistant treatments for magnesium that could significantly improve its market penetration. Other areas that appear to offer some promise are non-stick coatings for cookware, and wear and lubricity treatments for gears and bearings.

Cool plasma technology appears capable of treating the interiors of tubes and hollow products – a capability that is often needed but difficult to achieve with most clean treating and coating technologies.

In summary, microwave diffusion, in its various forms, offers a way to carry out surface treatments in a less energy-intensive and much faster process than the older pack cementation technologies in use today. Its technical capabilities could be translated into significant market growth outside today's metallizing market.

## **APPENDIX 1. RELEVANT LITERATURE**

### **Document 1. Microwave Metallizing - ORNL report.**

This document is a report from Oak Ridge National Lab on the microwave metallizing process that they developed and patented. It describes the process and includes data on what the authors describe as microwave-enhanced diffusion.

### **Document 2. ORNL Patent #6,554,924 – Metallic diffusion process and improved article produced thereby.**

This is a copy of the patent for the microwave diffusion process licensed by MicroFuze from Oak Ridge National Lab.

### **Document 3. Microwaves in industrial heating.**

This is a reprint from Industrial Heating magazine summarizing some of the advances in microwave heating and the uses to which it is being put. It includes drying, firing and sintering of materials, and processing of metals, ceramics and glasses.

### **Document 4. Heat treating market to 2020.**

This paper, by George Totten, President of the International Federation for Heat Treatment and Surface Engineering, discusses the needs of the heat treating industry, principle among which are distortion and quality control, energy cost, modeling and simulation, and methods and materials for quenching.

### **Document 5. Metallizing for corrosion resistance in advanced absorption cooling.**

This report describes the use of chromizing as a means of providing sufficient corrosion resistance for the surfaces of low cost steels to make high-efficiency absorption chillers a practical means of air conditioning cooling that saves electricity. Although the technology described is fluidized bed chromizing, microwave chromizing would be an obvious (and probably more cost-effective) option.

### **Document 6. Carburizing with Dana's Atmoplas process.**

This is a paper presented by Dana Corp to the Society of Automotive Engineers in 2005 describing the use of their microwave-driven Atmoplas process to carburize steels. Although the Atmoplas process competes with the MicroFuze MDT, it is clear that a faster and more efficient carburizing process for gears and other components has significant industrial potential. A MicroFuze pack or over-the-pack carburizing method could be a strong competitor to the Atmoplas process for these types of items.

### **Document 7. Greenkote process – US patent application #2004-0105998 A1.**

This US patent application describes the GreenKote process, which is a process for metallizing based on an older Sherardizing process that competes with the MicroFuze MDT process. It is done at a lower temperature, resulting in a thinner diffusion layer. Since it requires the powdered metal to be diffused to be in contact with the surface of the product, the powder or product must be tumbled or agitated so as to constantly bring fresh powder into contact with all the areas of the surface.

**PART IV  
ACCOUNTANTS' REPORT ON THE COMPANY**

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**MOORE STEPHENS**

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The Directors,  
MicroFuze International plc  
Floor 5,  
22 Arlington Street,  
London SW1A 1RD

7 February 2006

The Directors,  
Nabarro Wells & Co. Limited,  
Saddlers House,  
Gutter Lane,  
London EC2V 6HS

Dear Sirs,

**MICROFUZE INTERNATIONAL LIMITED**

We report in connection with the admission document issued by MicroFuze International plc ("the Company") dated 7 February 2006 ("the Admission Document"). In accordance with our instructions, we report on the financial information set out below relating to MicroFuze International Limited ("the Company"). This financial information has been prepared for inclusion in the Admission Document.

**Basis of Preparation**

The Company was incorporated in Australia on 18 January 2005 as an unlisted public company. On incorporation, the Company had authorised share capital of \$3 AUD divided into 3 Ordinary Shares of \$1 AUD each, which were fully paid on issue.

On 22 September 2005, the Company entered into an agreement, to acquire the principal asset of Tesla Group Holdings Proprietary Limited, this involved the purchase of 85% of the issued share capital of Tesla USA Incorporated, a company incorporated in the United States, in consideration for the issue of 38.5 million Ordinary Shares of MicroFuze International Limited, at an issue price of \$0.06 AUD per share.

The financial information set out below is based on the audited financial statements of the Company for the period from incorporation to 30 June 2005, drawn up in accordance with financial reporting standards promulgated by the Australian Accounting Standards Board and the Australian Corporations Act 2001.

The financial statements have been independently audited by Moore Stephens Melbourne, and an unqualified audit report was issued in accordance with the Corporations Act 2001.

*Partners*  
Stephen L. Adrian  
Steven A. Allan  
Grantham C. Beeston  
Marco S. Carlei  
Jean-Claude Cesario  
Ian K. Kearney

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*A member of the Moore Stephens International Limited Group of Independent Firms  
A separate partnership in Victoria*

Daren I. J. McDonald  
Kevin W. Neville  
Stephen J. O'Flynn  
Robin C. Pennell  
S. David Pitt  
Grant M. Sincok  
Jonathan C. Thomas



The Company has not declared or paid any dividends since incorporation. No financial statements for the Company, or its subsidiary undertaking, have been prepared or presented to the members of the Company, or its subsidiary undertaking, in respect of any period since 30 June 2005.

The financial information does not constitute statutory accounts within the meaning of the Australian Corporations Act 2001 or Section 240 of the UK Companies Act 1985 (as amended).

### **Responsibility**

The directors of the Company are responsible for preparing the financial information on the basis of preparation set out in note 1 to the financial information and in accordance with the financial reporting standards as promulgated by the Australian Accounting Standards Board.

It is our responsibility to form an opinion on the financial information set out below as to whether the financial information gives a true and fair view for the purposes of the Admission Document, and to report our opinion to you.

### **Basis of Opinion**

We conducted our work in accordance with the Statements for Investment Reporting issued by the Auditing Practices Board in the United Kingdom. Our work included an assessment of evidence relevant to the amounts and disclosures in the financial information. It also included an assessment of significant estimates and judgements made by those responsible for the preparation of the financial information and whether the accounting policies are appropriate to the Company's circumstances, consistently applied and adequately disclosed.

We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial information is free from material misstatement, whether caused by fraud or other irregularity or error.

### **Opinion**

In our opinion, the financial information gives, for the purposes of the Admission Document, a true and fair view of the state of affairs of the Company as at 30 June 2005 and of its results, cash flow and changes in equity for the period then ended, in accordance with the basis of preparation set out in Note 1 to the financial information and in accordance with the financial reporting standards of Australia as promulgated by the Australian Accounting Standards Board, as described in Note 1 to the financial information, and has been prepared in a form that is consistent with the accounting policies adopted in the Company's latest audited accounts.

### **Declaration**

For the purposes of paragraph (a) of Schedule Two of the AIM Rules, we are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and contains no omission likely to affect its import. This declaration is included in the Admission Document in compliance with Schedule Two of the AIM Rules.

Yours faithfully,

Moore Stephens  
Chartered Accountants

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**Financial Information**

**STATEMENT OF FINANCIAL PERFORMANCE  
FOR THE PERIOD ENDING 30 JUNE 2005**

	Notes	2005 \$
Other revenues from ordinary activities	2	223
Administration expenses		(7,575)
Travel & Entertainment Expenses		(4,633)
Loss from ordinary activities before income tax expense		(11,985)
Income tax expense relating to ordinary activities	3	-
Loss from ordinary activities after related income tax expense		(11,985)
Total changes in equity other than those resulting from transactions with owners as owners		(11,985)
Basic earnings per share (dollars per share)	6	(3,995)
Diluted earnings per share (dollars per share)	6	(3,995)

**STATEMENT OF FINANCIAL POSITION  
AS AT 30 JUNE 2005**

	Notes	2005 \$
<b>CURRENT ASSETS</b>		
Cash assets	7	100,728
Receivables	8	102,635
<b>TOTAL CURRENT ASSETS</b>		203,363
<b>TOTAL ASSETS</b>		203,363
<b>CURRENT LIABILITIES</b>		
Payables	9	215,345
<b>TOTAL CURRENT LIABILITIES</b>		215,345
<b>TOTAL LIABILITIES</b>		215,345
<b>NET ASSETS</b>		(11,982)
<b>EQUITY</b>		
Contributed equity	10	3
Retained profits	11	(11,985)
<b>TOTAL EQUITY</b>		(11,982)

**STATEMENT OF CASH FLOWS  
FOR THE PERIOD ENDING 30 JUNE 2005**

	<b>Notes</b>	<b>2005</b>
		\$
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Payments to suppliers		(7,987)
Interest received		223
Net cash provided by (used in) operating activities	12a	(7,764)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
(Loans to other entities)		(102,108)
Net cash provided by (used in) investing activities		(102,108)
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds for the issue of shares		210,600
Net cash provided by (used in) financing activities		210,600
Net increase in cash held		100,728
Cash at 18 January 2005		-
Cash at 30 June 2005		100,728

**NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2005**

**Note 1 Statement of Significant Accounting Policies**

The financial report is a general purpose financial report that has been prepared in accordance with Accounting Standards, Urgent Issues Group Consensus Views and other authoritative pronouncements of the Australian Accounting Standards Board and the Corporations Act 2001.

The financial report covers MicroFuze International Limited as an individual company. MicroFuze International Limited is a public company, incorporated and domiciled in Australia.

The financial report has been prepared on an accruals basis and is based on historical costs and does not take into account changing money values or, except where stated, current valuations of non-current assets. Cost is based on the fair values of the consideration given in exchange for assets.

The following is a summary of the material accounting policies adopted by the Company in the preparation of the financial report. The accounting policies have been consistently applied, unless otherwise stated.

**a. Income Tax**

The Company adopts the liability method of tax-effect accounting whereby the income tax expense is based on the profit from ordinary activities adjusted for any permanent differences.

Timing differences which arise due to the different accounting periods in which items of revenue and expense are included in the determination of accounting profit and taxable income are brought to account as either a provision for deferred income tax or as a future income tax benefit at the rate of income tax applicable to the period in which the benefit will be received or the liability will become payable.

Future income tax benefits are not brought to account unless realisation of the asset is assured beyond reasonable doubt. Future income tax benefits in relation to tax losses are not brought to account unless there is virtual certainty of realisation of the benefit.

The amount of benefits brought to account or which may be realised in the future is based on the assumption that no adverse change will occur in income taxation legislation and the anticipation that the company will derive sufficient future assessable income to enable the benefit to be realised and comply with the conditions of deductibility imposed by the law.

**b. Cash**

For the purpose of the statement of cash flows, cash includes:

- cash on hand and at call deposits with banks or financial institutions, net of bank overdrafts; and
- investments in money market instruments with less than 14 days to maturity.

**c. Revenue**

Revenue from the sale of goods is recognised upon the delivery of goods to customers.

Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets.

Dividend revenue is recognised when the right to receive a dividend has been established. Dividends received from associates and joint venture entities are accounted for in accordance with the equity method of accounting.

Revenue from the rendering of a service is recognised upon the delivery of the service to the customers.

All revenue is stated net of the amount of goods and services tax (GST).

**d. Goods and Services Tax (GST)**

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

**e. Comparative Figures**

Where required by Accounting Standards comparative figures have been adjusted to conform with changes in presentation for the current financial year.

**Note 1 Statement of Significant Accounting Policies (cont')**

**f. Impact of Adoption of Australian Equivalents to International Financial Reporting Standards**

The Company is preparing and managing the transition to Australian Equivalents to International Financial Reporting Standards (AIFRS) effective for the financial years commencing from 1 January 2005. The adoption of AIFRS will be reflected in the Company's financial statements for the year ending 30 June 2006. On first time adoption of AIFRS, comparatives for the financial year ended 30 June 2005 are required to be restated. The majority of the AIFRS transitional adjustments will be made retrospectively against retained earnings at 1 July 2004

The Company's accounting team has assessed the significance of the expected changes and is preparing for their implementation. The impact of the alternative treatments and elections under AASB 1: First Time Adoption of Australian Equivalents to International Financial Reporting Standards has been considered where applicable.

The Directors are of the opinion that the key material differences in the Company's accounting policies on conversion to AIFRS and the financial effect of these differences, where known, are as follows. Users of the financial statements should note, however, that the amounts disclosed could change if there are any amendments by standard-setters to the current AIFRS or interpretation of the AIFRS requirements changes from the continuing work of the Company's accounting team.

**(i) Income Tax**

Currently, the Company adopts the liability method of tax-effect accounting whereby the income tax expense is based on the accounting profit adjusted for any permanent differences. Timing differences are currently brought to account as either a provision for deferred income tax or future income tax benefit. Under AASB 112: Income Taxes, the Company will be required to adopt a balance sheet approach under which temporary differences are identified for each asset and liability rather than the effects of the timing and permanent differences between taxable income and accounting profit.

**(ii) Derivative Financial Instruments**

MicroFuze International Limited does not currently recognise derivative financial instruments in the financial statements. AASB 139: Financial Instruments: Recognition and Measurement requires a change to the method of accounting for derivative financial instruments and hedging activities so that they are recorded in the financial statements. AASB 1 provides an election whereby the requirements of AASB 139 dealing with financial instruments are not required to be applied to the first AIFRS comparative year and the first time adoption of this standard will apply from 1 July 2005. The Company has decided that it will adopt this election and will not restate comparative information for the financial year ending 30 June 2005.

On transition to AIFRS the Company believes that there will be no cumulative financial effect on the reported profit and equity as at 30 June 2005.

<b>Note 2: Revenue</b>	<b>Notes</b>	<b>2005</b>
		\$
Operating activities		
- interest received	2a	223
Total Revenue		<u>223</u>
a. Interest revenue from:		
- other persons		<u>223</u>
Total interest revenue		<u>223</u>

**Note 3: Income Tax Expense**

a. The prima facie tax on profit from ordinary activities before tax is reconciled to the income tax as follows:

Prima facie tax payable on profit from ordinary activities before income tax at 30% (2004:30%)	(3,536)
Losses carried forward	<u>3,536</u>
Income Tax Expense	<u>-</u>

b. The Directors estimate that the potential future income tax benefit at 30 June 2005 in respect of tax losses not brought to account is:

Losses carried forward	<u>3,536</u>
------------------------	--------------

This benefit for tax losses will only be obtained if:

- i. the Company derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deductions for the losses to be realised,
- ii. the Company continues to comply with the conditions for deductibility imposed by tax legislation, and

- iii. no changes in tax legislation adversely affect the Company in realising the benefit from the deductions for the losses.

The Company has no franking credits available at year end.

	Notes	2005
		\$

**Note 4: Directors' and Executives' Remuneration**

**Names and positions held of Company Directors and Specified Executives in office at any time during the financial year are:**

**Directors**

- Peter Marks (appointed 18/01/05)
- Douglas Parrish (appointed 18/01/05)
- Peter Hardy (appointed 18/01/05)

**Specified Executives**

There are no Specified Executives

Since incorporation, the Company has not remunerated its Directors or Specified Executives for their services and does not currently have any remuneration policy.

**Note 5: Auditors' Remuneration**

Remuneration of the auditor of the company for:

- |                                              |  |              |
|----------------------------------------------|--|--------------|
| - auditing or reviewing the financial report |  | <u>2,500</u> |
|----------------------------------------------|--|--------------|

**Note 6: Earnings per Share**

**a. Reconciliation of Earnings to Net Profit or Loss**

Earnings used in the calculation of basic EPS		(11,985)
Dividends on converting preference shares		-
Earnings used in the calculation of dilutive EPS		<u>(11,985)</u>

**b. Weighted average number of ordinary shares outstanding during the year used in calculation of basic & diluted EPS**

3

**Note 7: Cash Assets**

Cash at bank		<u>100,728</u>
		<u>100,728</u>

Reconciliation of Cash:

Cash at the end of the financial year as shown in the statement of cash flows is reconciled to items in the statement of financial position as follows:

Cash		<u>100,728</u>
------	--	----------------

	Notes	2005 \$
<b>Note 8: Receivables</b>		
CURRENT		
Other debtors	8b	524
Sundry debtors		3
Amounts receivable from:		
- director related entities		102,108
		<u>102,635</u>

**Note 9: Payables**

CURRENT		
Unsecured liabilities		2,245
Trade creditors		2,500
Sundry creditors	9a	210,600
Loan to shareholders		<u>215,345</u>

(a) These represent monies received for share applications where the shares were not due to be issued until after 30 June 2005.

**Note 10: Contributed Equity**

3 fully paid ordinary shares	10a	3
<b>a. Ordinary shares</b>		
At the beginning of the reporting period		-
Shares issued during the year		-
- 3 shares on 18 January 2005		3
At reporting date		<u>3</u>
		No
At the beginning of reporting period		
Shares issued during year		
- 18 January 2005		3
At reporting date		<u>3</u>

(a) Ordinary shares participate in dividends and the proceeds on winding up of the Company in proportion to the number of shares held

At shareholders meetings each ordinary share is entitled to one vote when a poll is called, otherwise each shareholder has one vote on a show of hands.



	Notes	2005
		\$
<b>Note 11: Retained Profits</b>		
Retained profits at the beginning of the financial year		-
Net profit attributable to the members of the Company		(11,985)
Retained profits at the end of the financial year		<u>(11,985)</u>

**Note 12: Cash Flow Information**

**a. Reconciliation of Cash Flow from Operations with Profit from ordinary activities after Income Tax**

Profit from ordinary activities after income tax		(11,985)
Changes in assets and liabilities:		
(Increase)/decrease in trade and term debtors		(524)
Increase/(decrease) in trade creditors and accruals		4,745
Cash flows from operations		<u>(7,764)</u>

**Note 13: Events subsequent to Reporting Date**

In September 2005, the company completed a capital raising, issuing 3,555,315 ordinary shares at \$0.06 to raise \$213,019, with 1:1 free attaching options exercisable at \$0.04 on or before 7 July 2006. The options were exercised in October 2005.

In September 2005, the company finalised an Asset Sale Agreement with Tesla Group Holdings Limited (Tesla) in which the company acquired the assets of Tesla, issuing 38,500,000 ordinary shares at \$0.06, raising \$2,310,000. In September 2005, the company issued 7,722,703 ordinary shares at \$0.06 in settlement of \$463,362 for services performed. The shares were issued to Peregrine corporate (5,000,000 shares); LSAF Trading (1,700,000); Douglas Parrish (1,000,000); and Farcam Pty Ltd (22,703 shares).

**Note 14: Related Party Transactions**

Transactions between related parties are on normal commercial terms and conditions no more favourable than those otherwise available to other parties unless stated.

Transactions with related parties:

*Director-related Entities*

Interest free loans to the value of \$210,600 were given to Tesla Group Holdings Pty Ltd during the year.

Tesla Group Holdings Pty Ltd is a director related entity to Mr Douglas Parrish. Subsequent to balance date, the Company finalised the acquisition of the assets of Tesla Group Holdings Pty Ltd.

**Note 15: Financial Instruments**

**a. Interest Rate Risk**

The Company's exposure to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in market interest rates and the effective weighted average interest rates on classes of financial assets and financial liabilities, is as follows:

	Fixed Interest Rate Maturing Weighted Average Effective Interest Rate	Floating Interest Rate \$	Non-interest Bearing \$	Total \$
Financial Assets				
Cash	2.75%	100,728	-	100,728
Receivables		-	102,635	102,635
Total Financial Assets		100,728	102,635	203,363
Financial Liabilities				
Payables		-	215,345	215,345
Total Financial Liabilities		-	215,345	215,345

**b. Credit Risk**

Financial assets, which potentially expose the Company to concentrations of credit risk, consist primarily of cash and receivables. The Company's cash and cash equivalents are placed with high credit quality financial institutions and receivables are presented net of any allowances for estimated doubtful receivables. Accordingly, the Directors believe the Company has no significant concentration of credit risk.

**c. Net Fair Values**

Cash, Receivables & Payables: The carrying amount approximates fair value due to their short term to maturity.

**Note 16: Company Details**

The registered office of the company is:

MicroFuze International Limited  
Suite 2  
1233 High Street  
Armadale Victoria 3143

The principal place of business is:

MicroFuze International Limited  
Suite 2  
1233 High Street  
Armadale Victoria 3143

**Note 17: Post Balance Date Events**

On the 22 September 2005, MicroFuze International Limited entered into an Acquisition agreement to acquire an interest in Tesla USA Incorporated, from Tesla Group Holdings Proprietary Limited.

Details of transaction:

MicroFuze International Limited issued 38.5 million ordinary shares, each valued at \$0.06, with a total value of \$2.31 million, in exchange for 85% of Tesla USA Incorporated.

Fair value of assets:

Share of net liabilities acquired	\$(495,000)
Loan to Tesla USA Inc	\$723,126
Plant & Equipment	<u>\$1,884</u>
Total assets acquired	<u>\$230,010</u>
Goodwill	<u>\$2,079,990</u>
Total Consideration	<u>\$2,310,000</u>

The Directors,  
MicroFuze International plc  
Floor 5,  
22 Arlington Street,  
London SW1A 1RD

7 February 2006

The Directors  
Nabarro Wells & Co. Limited,  
Saddlers House,  
Gutter Lane,  
London EC2V 6HS.

Dear Sirs,

**MICROFUZE INTERNATIONAL PLC**

We report in connection with the admission document issued by MicroFuze International plc (“the Company”) dated 7 February 2006 (“the Admission Document”). In accordance with our instructions, we report on the financial information set out below relating to the Company. This financial information has been prepared for inclusion in the Admission Document.

**Basis of Preparation**

The Company was incorporated in the United Kingdom on 19 August 2005 as a private limited company with the name Chrome Industries Limited. On 28 September 2005 it changed its name to MicroFuze International Limited. It re-registered as a public limited company on 30 November 2005. On incorporation, the Company had an authorised share capital of £1,000,000 divided into 1,000,000,000 Ordinary Shares of £0.001 each, of which 2 Ordinary Shares of £0.001 each were issued at par for cash. On 27 October, a further 1 Ordinary Share of £0.001 each was issued at par for cash.

On 28 October 2005, the authorised share capital was increased to £1,500,000, comprising 1,500,000,000 Ordinary shares of £0.001 each. On the same date, the authorised share capital was consolidated into 1,000,000,000 Ordinary shares of £0.0015 each, by consolidating every three Ordinary shares of £0.001 each into two Ordinary shares of £0.0015 each. On 28 October 2005, 24,999,998 Ordinary shares of £0.0015 each were issued for cash at par. On 15 November 2005, 18,000,000 Ordinary shares of £0.0015 each were issued for cash at a price of £0.02 each.

On 23 November 2005, the Company entered into an agreement, to acquire the whole of the issued share

*Partners*

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Steven A. Allan  
Grantham C. Beeston  
Marco S. Carlei  
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A separate partnership in Victoria*

Daren I. J. McDonald  
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S. David Pitt  
Grant M. Sincock  
Jonathan C. Thomas

capital of MicroFuze International Limited a company incorporated in Australia, in consideration for the issue of 80,000,000 Ordinary Shares of £0.0015 each in the Company at an issue price of £0.02 per share.

Save for the above transactions, the Company has not traded, has not made up any accounts for presentation to its members and has not declared or paid any dividends. For the purpose of the Admission Document, a balance sheet of the Company has been prepared as at 15 November 2005, the latest practicable date, which balance sheet has been audited by Moore Stephens LLP, London, and on which an unqualified opinion has been given.

The Company will incur expenses relating to the Admission as described in the Admission Document. These expenses are not accrued in the balance sheet as at 15 November 2005 set out below and, accordingly, no profit and loss account for the period from incorporation (19 August 2005) to 15 November 2005 is required to be presented.

The financial information does not constitute statutory accounts within the meaning of Section 240 of the Companies Act 1985 (as amended).

#### **Responsibility**

The directors of the Company are responsible for preparing the financial information on the basis of preparation set out in note 1 to the financial information and in accordance with the financial reporting standards promulgated by the Accounting Standards Board.

It is our responsibility to form an opinion on the financial information set out below as to whether the financial information gives a true and fair view for the purposes of the Admission Document and to report our opinion to you.

#### **Basis of Opinion**

We conducted our work in accordance with the Statements for Investment Reporting issued by the Auditing Practices Board in the United Kingdom. Our work included an assessment of evidence relevant to the amounts and disclosures in the financial information. It also included an assessment of significant estimates and judgements made by those responsible for the preparation of the financial information and whether the accounting policies are appropriate to the Company's circumstances, consistently applied and adequately disclosed.

We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial information is free from material misstatement, whether caused by fraud or other irregularity or error

#### **Opinion**

In our opinion, the financial information gives, for the purposes of the Admission Document, a true and fair view of the state of affairs of the Company as at 15 November 2005 in accordance with the basis of preparation set out in note 1 to the financial information and in accordance with the financial reporting standards of the United Kingdom as promulgated by the Accounting Standards Board.

#### **Declaration**

For the purposes of paragraph (a) of Schedule Two of the AIM Rules, we are responsible for this report as part of the Admission Document and declare that we have taken all reasonable care to ensure that the information contained in this report is, to the best of our knowledge, in accordance with the facts and



contains no omission likely to affect its import. This declaration is included in the Admission Document in compliance with Schedule Two of the AIM Rules.

Yours faithfully,

Moore Stephens  
Chartered Accountants

**Financial Information**  
**Balance Sheet as at 15 November 2005**

	Note	£'000
<b>Current assets</b>		
Cash at bank and in hand		397
		—
		397
		==
<b>Capital and Reserves</b>		
Share capital	2	64
Share premium account	3	333
		—
Total shareholders' funds		397
		==

**Notes to the financial information**

**1. Accounting Policies**

a) **Accounting Convention**

The financial information has been prepared under the historical cost convention, on the going concern basis, and in accordance with applicable International Financial reporting Standards.

**2. Called Up Share Capital**

	No.	£
<b>Authorised</b>		
Ordinary shares of £0.0015 each	1,000,000,000	1,500,000
	=====	=====
<b>Issued, allotted, called up and fully paid</b>		
Ordinary shares of £0.0015 each	43,000,000	64,500
	=====	=====

On incorporation the authorised share capital was £1,000,000 comprising 1,000,000,000 Ordinary shares of £0.001 each. On 28 October 2005, the authorised share capital was increased to £1,500,000, comprising 1,500,000 Ordinary shares of £0.001 each. On the same date, the authorised share capital was consolidated into 1,000,000,000 Ordinary shares of £0.0015 each, by consolidating every three Ordinary shares of £0.001 each into two Ordinary shares of £0.0015 each.

**3. Share premium account** £

The share premium arises as a result of the following issues of shares:

18,000,000 Ordinary shares of £0.0015 each at £0.02 per share	333,000
---------------------------------------------------------------	---------

333,000

**4. Post balance sheet events**

On 23 November 2005, the Company entered into an agreement to acquire the whole of the issued share capital of Microfuze International Limited, a company incorporated in Australia, in consideration for the issue of 80,000,000 Ordinary Shares of £0.0015 each in the Company at £0.02 per share.

On 3 February 2006 the Company granted options over 12,700,000 Ordinary shares of £0.0015 each exercisable at any time up to the fifth anniversary of Admission at a price of £0.10 per share.



**PART V**  
**ILLUSTRATIVE PRO-FORMA FINANCIAL INFORMATION**

On 22 September 2005, MicroFuze International Limited entered into an Acquisition agreement to acquire a controlling interest in Tesla USA Incorporated. The following pro forma financial information, which is for illustrative purposes only, is to show what the results of the enlarged MicroFuze International Group for the year ended 30 June 2005 (being the last completed financial year of Tesla USA Inc.) might have been had the acquisition taken place at the beginning of that period. In addition, the pro forma statement of net assets as at 30 June 2005 reflects the net proceeds of the Placing. The pro forma financial information has been compiled on the basis described below from the audited balance sheet of the Company as at 15 November 2005 as set out in Part IV, the audited financial statements of MicroFuze International Limited for the period ended 30 June 2005 as set out in Part IV, and the unaudited financial statements of Tesla USA Inc. for the year ended 30 June 2005, and includes the proceeds of the Placing less the estimated costs of Admission. Due to its nature, the pro forma financial information cannot give a complete picture of the intended financial position of the Group.

**Pro forma consolidated profit and loss account for the year ended 30 June 2005**

	<b>MicroFuze International plc (note 1) Au\$'000</b>	<b>MicroFuze International Limited (note 2) Au\$'000</b>	<b>Tesla USA Inc. (Note 3 ) Au\$'000</b>	<b>Pro forma Au\$'000</b>
Revenue	-	-	-	-
Expenditure	-	(12)	(942)	(954)
Loss before tax	-	(12)	(942)	(954)
Taxation	-	-	-	-
Loss on ordinary activities after related income tax expense	-	(12)	(942)	(954)
Foreign exchange	-	-	29	29
Total changes in equity other than those resulting from transactions with owners as owners	-	(12)	(913)	(925)

Pro forma consolidated net assets as of 30 June 2005

	MicroFuze International Public Limited Company (note 1) Au\$'000	Acquisition of MicroFuze International Limited (Note 2) Au\$'000	MicroFuze International Limited (note 3) Au\$'000	Tesla USA Incorporated (Note 4) Au\$'000	Post Year End acquisition (note 5) Au\$'000	Consolidation eliminations (note 6) Au\$'000	Placing (note 7) Au\$'000	Total Au\$'000
CURRENT ASSETS								
Cash assets	943	-	101	51	-	-	2,262	3,357
Intangible assets/Goodwill	-	-	-	-	2,080	1,502	-	3,582
Investment in Subsidiaries	-	3,800	-	-	(495)	(3,305)	-	-
Loans	-	-	-	-	723	(621)	-	102
Receivables	-	-	102	3	-	-	-	105
Other	-	-	-	-	2	-	-	2
<b>TOTAL CURRENT ASSETS</b>	<b>943</b>	<b>3,800</b>	<b>203</b>	<b>54</b>	<b>2,310</b>	<b>(2,424)</b>	<b>2,262</b>	<b>7,148</b>
NON-CURRENT ASSETS								
Property, Plant and Equipment	-	-	-	97	-	-	-	97
Other Assets	-	-	-	37	-	-	-	37
<b>TOTAL NON-CURRENT ASSETS</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>134</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>134</b>
<b>TOTAL ASSETS</b>	<b>943</b>	<b>3,800</b>	<b>203</b>	<b>188</b>	<b>2,310</b>	<b>(2,424)</b>	<b>2,262</b>	<b>7,282</b>
CURRENT LIABILITIES								
Payables	-	-	(215)	(24)	-	-	-	(239)
Related party loans	-	-	-	(621)	-	621	-	-
Other liabilities	-	-	-	(125)	-	-	-	(125)
<b>TOTAL CURRENT LIABILITIES</b>	<b>-</b>	<b>-</b>	<b>(215)</b>	<b>(770)</b>	<b>-</b>	<b>621</b>	<b>-</b>	<b>(364)</b>
<b>TOTAL LIABILITIES</b>	<b>-</b>	<b>-</b>	<b>(215)</b>	<b>(770)</b>	<b>-</b>	<b>621</b>	<b>-</b>	<b>(364)</b>
<b>NET ASSETS</b>	<b>943</b>	<b>3,800</b>	<b>(12)</b>	<b>(582)</b>	<b>2,310</b>	<b>(1,803)</b>	<b>2,262</b>	<b>6,918</b>
<b>TOTAL EQUITY</b>	<b>943</b>	<b>3,800</b>	<b>(12)</b>	<b>(459)</b>	<b>2,310</b>	<b>(1,803)</b>	<b>2,262</b>	<b>6,918</b>

**Basis of preparation:**

The above pro forma statement of net assets is based on the following:

**Note 1** – the balance sheet for MicroFuze International plc as set out in the accountants' report at Part IV, converted from £ sterling to Australian dollars at £1 = AUD 2.375, being the approximate rate ruling on 15 November 2005.

**Note 2** - the acquisition by Microfuze International plc of the whole of the issued share capital of Microfuze International Limited in consideration for the issue of 80,000,000 shares of £0.0015 each at a value of £0.02 per share.

**Note 3** - the financial information on MicroFuze International Limited set out in the accountants' report at Part IV.

**Note 4** – the column holds the unaudited financial figures for Tesla USA Inc as at 30 June 2005 (100% of the entity). The acquisition of an 85% interest in Tesla USA Inc by MicroFuze International Limited in consideration for the issue of 38.5 million ordinary shares in MicroFuze International Limited for an aggregate value of \$AUD 2.31 million. The results and net assets of Tesla USA Inc. are as per the unaudited financial statements of Tesla USA Inc. for the year ended 30 June 2005. The financial figures of Tesla USA Inc have been converted from USD to AUD, the balance sheet at the exchange rate for 30 June 2005 being 1 USD = 1.3132 AUD, opening balances for 1 July 2004 at 1.4308 and the profit and loss converted at the average exchange rate for the financial year ended 30 June 2005 being 1 USD = 1.33005 AUD. (Source [www.oanda.com](http://www.oanda.com)). Tesla USA Inc figures represent 100% of the entity's financial statement balances as at 30 June 2005, thus 15% of net assets figure is the property of the other owner, the Outside Equity Interest.

**Note 5** – adjustments to reflect the purchase of Tesla USA Inc. and related assets as at 22 September 2005 by MicroFuze International Limited pursuant to the acquisition agreement.

The Balances between the companies within the group do not eliminate entirely due to the acquisition occurring over two months after balance date.

The remaining goodwill has not been subject to impairment review, however will be at balance date.

**Note 6** – eliminations of intercompany investment and loan due to the acquisition on 22 September 2005 by MicroFuze International Limited and arising on the acquisition by Microfuze International plc (note 2 above).

**Note 7** – the proceeds of the Placing of 25,121,110 Ordinary Shares of £0.0015 each in the Company at a price of 10p per share, less estimated expenses of the Placing and Admission of £250,000.

**Note 8** – no adjustment has been made in respect of any trading results since 30 June 2005

The Directors,  
MicroFuze International plc,  
Floor 5,  
22 Arlington Street,  
London SW1A 1RD

7 February 2006

The Directors,  
Nabarro Wells & Co. Limited,  
Saddlers House,  
Gutter Lane,  
London EC2V 6HS

Dear Sirs,

**MicroFuze International plc (“the Company”)**

We report on the pro forma financial information (the “Pro forma financial information”) set out in Part V of the Admission Document dated 7 February 2006, which has been prepared on the basis described in the notes thereto, for illustrative purposes only, to provide information about how the acquisition of a controlling interest in Tesla USA Inc. and the placing of new shares might have affected the financial information presented on the basis of the accounting policies to be adopted by MicroFuze International plc in preparing the financial statements for the period ending 31 December 2006.

**Responsibilities**

It is the responsibility of the directors of the Company to prepare the Pro forma financial information in accordance with paragraph 20.2 of Annex I of the Prospectus Rules.

It is our responsibility to form an opinion, as required by paragraph 7 of Annex II of the Prospectus Rules as to the proper compilation of the Pro forma financial information and to report that opinion to you.

In providing this opinion we are not updating or refreshing any reports or opinions previously given by us on any financial information used in the compilation of the Pro forma financial information beyond that owed to those to whom those reports or opinions were addressed by us at the dates of their issue.

**Basis of Opinion**

We conducted our work in accordance with the Statements of Investment Circular Reporting Standards issued by the Auditing Practices Board in the United Kingdom. The work that we performed for the purpose of making this report, which involved no independent examination of any of the underlying financial information, consisted primarily of comparing the unadjusted financial information with the source documents, considering the evidence supporting the adjustments and discussing the Pro forma

*Partners*

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Steven A. Allan  
Grantham C. Beeston  
Marco S. Carlei  
Jean-Claude Cesario  
Ian K. Kearney

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Jonathan C. Thomas

financial information with the Directors of the Company.

We planned and performed our work so as to obtain the information and explanations we considered necessary in order to provide us with reasonable assurance that the Pro forma financial information has been properly compiled on the basis stated.

**Opinion**

In our opinion:-

- i) the Pro forma financial information has been properly compiled on the basis stated; and
- ii) such basis is consistent with the accounting policies of MicroFuze International plc.

Yours faithfully,

**Moore Stephens**

*Chartered Accountants*

**PART VI  
LEGAL OPINION ON INTELLECTUAL PROPERTY**

---

**John B. Hardaway III**  
Member  
Admitted in SC, TN

7 February 2006

TO WHOM IT MAY CONCERN:

Re: Patent Properties Licensed to TESLA USA Inc. by BWXT Y-12, LLC

Nexsen Pruet Adams Kleemeier LLC represents BWXT Y-12, LLC of Oak Ridge, Tennessee, USA, in certain intellectual property matters, including the filing, prosecution and maintenance of patent applications and patents for the invention entitled **Metallic Diffusion Process and Improved Article Produced Thereby**. Applications have been filed in the countries indicated on Schedule A attached hereto, with the relevant data and status of the patent property provided in each case.

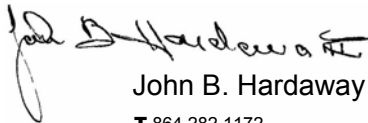
All of the patent properties are active and docketed to be maintained through the life of the patent, assuming the annual fees (annuities) are timely paid. All patent properties are currently in good standing. There have been no adverse decisions affecting the validity of any of the properties, nor have there been any allegations that practice of the technology represented by the patent properties would constitute an infringement of any third party rights of which we have been advised.

BWXT Y-12, LLC, is the owner of record of the stated patent properties and has informed us that TESLA USA Inc. of Chattanooga, Tennessee, USA, is duly licensed under the patent properties by BWXT Y-12, LLC.

We agree to having this letter included in the financial disclosure documentation for MicroFuze International plc.

Very truly yours,

Nexsen Pruet Adams Kleemeier, LLC



John B. Hardaway III

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Nexsen Pruet Adams Kleemeier, LLC  
**Attorneys and Counselors at Law**

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Greenville, SC 29603-0648  
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SCHEDULE A

<u>Country</u>	<u>Filed</u>	<u>Appl. No.</u>	<u>Issued</u>	<u>Patent No.</u>	<u>Status</u>	<u>Expiry</u>
United States	1/18/01	09/764,925	4/29/03	6,554,924	Issued	1/18/22
WIPO(1)	1/18/02	PCT/US02/01470	---	---	Nat Phase	1/18/22
Australia	1/18/02	202245282	---	---	Pending	1/18/22
Canada	1/18/02	2,433,876	---	---	Pending	1/18/22
China	1/18/02	02803894.0	---	---	Pending	1/18/22
Europe (2)	1/18/02	02713431.1	---	---	Pending	1/18/22
Japan	1/18/02	2002-564163	---	---	Pending	1/18/22
South Korea	1/18/02	2003-7009291	---	---	Pending	1/18/22
Mexico	1/18/02	PA/a/2003/006200	---	---	Pending	1/18/22
Singapore	1/18/02	200304137-3	10/29/04	98092	Issued	1/18/22
Hong Kong(3)	2/25/05	05101608.7	---	---	Pending	1/18/22

NOTES:

1. WIPO - The World Intellectual Property Organization is the United Nations agency that administers the Patent Cooperation Treaty (PCT). The listed PCT application has moved from the international phase of prosecution to the national phase of prosecution before the national patent offices of Australia, Canada, China, Japan, South Korea, Mexico and Singapore, and has moved to the regional phase of prosecution in Europe. Prosecution is now complete in Singapore where the national patent has issued.

2. Europe -All contracting countries of the EPC as of August 18, 2003 were designated when the application entered the regional phase of prosecution, with the exception of the extension countries. When the European patent grants, it can be validated in some or all of the following designated countries: Austria, Switzerland/Liechtenstein, Germany, Spain, France, Greece, Italy, Monaco, Portugal, Turkey, Belgium, Cyprus, Denmark, Finland, the United Kingdom, Ireland, Luxembourg, the Netherlands and Sweden.

3. Hong Kong - The application in Hong Kong is for a "standard" patent which is based on the corresponding Chinese application, and it is still in prosecution before the national patent office. Following patent grant in Hong Kong, the patent will be afforded the filing date of the Chinese application (1/18/02.)

**PART VII  
ADDITIONAL INFORMATION**

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**1. The Company.**

- 1.1 The Company is registered in England and Wales, having been incorporated on 19 August 2005 under the Companies Act 1985 (“Act”) with registered number 5541602 with the name Chrome Industries Limited. On 28 September 2005 the Company changed its name pursuant to a special resolution to MicroFuze International Limited.
- 1.2 The Company re-registered to a public limited company on 30 November 2005 under the name MicroFuze International plc.
- 1.3 The principal legislation under which the Company operates is the Act.
- 1.4 The Company has two subsidiaries, MIL and TUI.

**2. Share capital**

- 2.1 On incorporation, the Company had an authorised share capital of £1,000,000 divided into 1,000,000,000 ordinary shares of £0.001 each of which 2 were issued, fully paid, to the subscribers to the memorandum of association of the Company.
- 2.2 On 27 October 2005 the number of shares issued and fully paid was increased to 3 ordinary shares of £0.001 each.
- 2.3 On 28 October 2005 resolutions were passed, *inter alia*, increasing and consolidating the authorised share capital into £1,500,000 divided into 1,000,000,000 ordinary shares of £0.0015 each, authorising the Directors to allot relevant securities up to a maximum aggregate nominal value of £500,000 as if section 89(1) of the Act did not apply. In addition the Directors were authorised to grant options over a maximum of 50,000,000 ordinary shares of £0.0015 each.
- 2.4 On 28 October 2005 the number of shares issued and fully paid was increased to 25,000,000 Ordinary Shares of £0.0015 each by the issue of 24,999,998 Ordinary Shares for cash at par.
- 2.5 On 15 November 2005 the number of shares issued and full paid was increased to 43,000,000 Ordinary Shares of £0.0015 each by the issue of 18,000,000 Ordinary Shares for cash at 2p per share.
- 2.6 On 23 November 2005, following the acquisition of MIL, further details of which are set out in paragraph 5.4 of Part VII of this document, the number of shares issued and fully paid was increased to 123,000,000 Ordinary Shares of £0.0015 each by the issue of 80,000,000 Ordinary Shares to the shareholders of MIL by way of a share for share exchange.
- 2.7 On Admission the Company intends to allot a further 25,121,110 Ordinary Shares for cash at 10p per share pursuant to the Placing.



2.8 The authorised and issued share capital of the Company as it will be immediately following Admission are as follows:

Authorised		Ordinary Shares of	Issued and fully paid	
<i>Amount</i>	<i>Number</i>		<i>Amount</i>	<i>Number</i>
£1,500,000	1,000,000,000	£ 0.0015 each	£223,682	149,121,110

2.9 The Company has, conditional on Admission, granted options to its professional advisers to subscribe for 3,700,000 Ordinary Shares at 10p per Ordinary Share at any time up to the fifth anniversary of Admission.

2.10 The Ordinary Shares will rank *pari passu* in all respects including the right to receive all dividends and other distributions declared, made or paid on the Ordinary Shares from the date of this document.

2.11 Save as disclosed above and in connection with the Placing, no share or loan capital of the Company is proposed to be issued or is under option or is agreed conditionally or unconditionally to be under option.

2.12 Following Admission, the Ordinary Shares may be held in either certificated or uncertificated form.

2.13 Save as disclosed in this document:

- no share or loan capital of the Company has been issued or is proposed to be issued;
- no person has any preferential subscription rights for any share capital of the Company;
- no share or loan capital of the Company is under option or agreed conditionally or unconditionally to be put under option; and
- no commissions, discounts, brokerages or other special terms have been granted by the Company since its incorporation in connection with the issue or sale of any share or loan capital of the Company.

**3. Memorandum and articles of association**

3.1 In this paragraph 3, references to the “Statutes” are references to the Act and every other Act for the time being in force concerning companies and affecting the Company.

3.2 The principal objects of the Company are set out in full in clause 4 of the memorandum of association and include carrying on the business of a general commercial company.

3.3 The articles of association of the Company (the “Articles”) contain, *inter alia*, provisions to the following effect:

***General meetings***

***(a) Annual general meetings***

Each year the Company shall hold a general meeting as its annual general meeting (in addition to any other meetings in that year) and not more than fifteen months shall elapse between the date of one annual general meeting and that of the next. Annual general meetings shall be held at such time and place as may be determined by the Directors.

**(b) Extraordinary general meetings**

The Directors may convene an extraordinary general meeting of the Company whenever they think fit and extraordinary general meetings shall also be convened on such requisition, or in default may be convened by such requisitionists, as provided by the Act. Any meeting convened under this Article by requisitionists shall be convened in the same manner as nearly as possible as that in which meetings are to be convened by the Directors. If at any time there are not within the United Kingdom sufficient Directors capable of acting to form a quorum, the Directors in the United Kingdom capable of acting may convene an extraordinary general meeting in the same manner as nearly as possible as that in which meetings may be convened by the Directors.

An annual general meeting and any extraordinary general meeting called for the passing of a special resolution, shall be called by not less than 21 days' notice in writing; all other extraordinary general meetings shall be called by not less than 14 days' notice in writing. The notice shall be exclusive of the day on which it is served or deemed to be served and of the day for which it is given and shall specify the place, the day and hour of meeting and, in case of special business, the general nature of such business. The notice shall be given to all the members, other than those members who, under the provisions of these Articles or the terms of issue of the shares they hold, are not entitled to receive notice of the meeting, and to the Directors and to the Auditors. A notice calling an annual general meeting shall specify the meeting as such and the notice convening a meeting to pass a special resolution or an extraordinary resolution as the case may be shall specify the intention to propose the resolution as such.

***Transfer***

Title to and interests in securities of the Company may be transferred without a written instrument in accordance with statutory regulations from time to time made under the Statutes. Except as may be required by any procedures implemented pursuant to the Articles in accordance with the Statutes, all transfers of shares may be effected by transfer in writing in any usual or common form or in such other form as shall be approved by the Directors. The instrument of transfer shall be signed by or on behalf of the transferor and, if the shares being transferred are partly paid, by the transferee. The Directors may refuse to register any transfer of any share that is not fully paid and they may refuse to register the transfer of any share on which the Company has a lien. They may also refuse to register a transfer of any share in favour of more than four joint holders as transferees, a transfer in respect of more than one class of share and a transfer which has not been lodged at the Company's registered office or such place as the board may determine and which is not accompanied by the certificates for the shares to which it relates.

***Voting rights***

Subject to any special terms as to voting upon which any shares may be issued or may for the time being be held (as to which there are none at present) every member present in person or by proxy shall upon a show of hands have one vote and every member present in person or by proxy shall upon a poll have one vote for every share held by him. If any member, or any other person appearing to be interested in any shares in the capital of the Company held by such member, has been duly served with a notice under Section 212 of the Act and is in default for the period of 14 days from the date of service of such notice, the member shall, for so long as the default continues not be entitled to be present or to vote on any question, either in person or by proxy, at any general meeting of the Company or meeting of the holders of any class of shares of the Company or, upon any poll or to be reckoned in a quorum, or to exercise any other right or privilege conferred by membership in relation to general meetings of the Company or meetings of the holders of any class of shares of the Company.

***Dividends***

The profits of the Company available for distribution and resolved to be distributed shall be applied in the payment of dividends to the members in accordance with their respective rights and interests. No dividend may exceed the amount recommended by the Board of Directors.

***Unclaimed dividends***

Any dividend unclaimed after a period of 12 years from the date it became due for payment shall be forfeited and shall revert to the Company.

***Return of capital***

If the Company shall be wound up, the liquidator may, with the authority of an extraordinary resolution, divide among the members in kind the whole or any part of the assets of the Company and may determine how such division shall be carried out between members or classes of members.

***Variation of rights***

If at any time the capital is divided into different classes of shares all or any of the rights or privileges attached to any class may, subject to the provisions of the Act, be varied or abrogated either (a) in such manner (if any) as may be provided by such rights, or (b) in the absence of any such provision either with the consent in writing of the holders of three fourths of the nominal amount of the issued shares of the class or with the sanction of an extraordinary resolution passed at a separate meeting of the holders of the issued shares of that class.

***Changes in share capital***

The Company may by ordinary resolution increase its share capital, cancel any unissued shares, consolidate all or any of its share capital into shares of larger amount and subdivide its shares into shares of smaller amount. Subject to the provisions of the Statutes, the Company may by special resolution reduce its share capital, any capital redemption reserve and any share premium account in any manner authorised by law.

***Purchase by the Company of its own shares***

Subject to the provisions of the Statutes, the Company may purchase its own shares.

***Borrowing powers***

The Directors may exercise all the powers of the Company to borrow and, subject to the Statutes, to mortgage or charge its undertaking, property and uncalled capital and to issue debentures and other securities whether outright or as collateral for any debt, liability or obligation of the Company or of any third party.

***Directors***

- (a) Unless otherwise determined by ordinary resolution, the number of directors shall be not less than two and there shall be no maximum number of directors. Save as mentioned below, a Director shall not vote in respect of any contract, arrangement, transaction or any other proposal whatsoever in which he has an interest which is a material interest otherwise than by virtue of his interests in shares or debentures or other securities of or otherwise in or through the Company.
- (b) A Director shall (in the absence of some other material interest than is indicated below) be entitled to be counted in the quorum and to vote in respect of any resolution concerning any of the following matters namely:

- (i) the giving of any guarantee, security or indemnity to him in respect of money lent by or obligations incurred by him or by any other person at the request of or for the benefit of the Company or any of its subsidiary undertakings insofar as the Act permits; or
  - (ii) the giving of any guarantee, security or indemnity to a third party in respect of a debt or obligation of the Company or any of its subsidiary undertakings for which he himself has assumed responsibility in whole or in part under a guarantee or indemnity or by the giving of security; or
  - (iii) any proposal concerning an offer of shares or debentures or other securities of or by the Company or any of its subsidiary undertakings for subscription or purchase in which offer he is or may be entitled to participate as a holder of securities or in the underwriting or sub-underwriting thereof; or
  - (iv) any contract, arrangement, transaction or other proposal concerning any other body corporate in which he is interested, directly or indirectly and whether as an officer or shareholder or otherwise howsoever provided that he is not the holder of or beneficially interested in one per cent or more of any class of the equity share capital of such body corporate (or of any third body corporate through which his interest is derived) or of the voting rights available to members of the relevant body corporate (any such interest being deemed for the purpose of this Article to be a material interest in all circumstances); or
  - (v) any contract, arrangement, transaction or other proposal concerning the adoption, modification or operation of a superannuation fund or retirement, death or disability benefits scheme under which he may benefit and which has been approved by or is subject to and conditional upon approval by the Board of the Inland Revenue for taxation purposes or which does not accord to any Director as such any privilege or advantage not accorded to the employees to which such scheme or fund relates; or
  - (vi) any contract, arrangement, transaction or proposal concerning the adoption, modification or operation of any scheme for enabling employees including full time executive directors of the Company and/or any subsidiary to acquire shares of the Company or any arrangement for the benefit of employees of the Company or any of its subsidiaries under which the Director benefits in a similar manner to employees and which does not accord to any Director as such, any privilege or advantage not generally accorded to the employees to whom such scheme relates; or
  - (vii) any proposal concerning any insurance which the Company proposes to purchase and/or maintain for or for the benefit of any director or for the benefit of persons who include directors.
- (c) Where proposals are under consideration concerning the appointment (including fixing or varying the terms of appointment) of two or more directors to offices or employments with the Company or any company in which the Company is interested, such proposals may be divided and considered in relation to each director separately and in such cases each of the directors concerned (if not debarred from voting) shall be entitled to vote (and be counted in the quorum) in respect of each resolution except that concerning his own appointment.
- (d) If any question shall arise at any meeting as to the materiality of a director's interest or as to the

entitlement of any director to vote and such question is not resolved by his voluntarily agreeing to abstain from voting, such question shall be referred to the chairman of the meeting whose ruling in relation to any other director shall be final and conclusive except in a case where the nature or extent of the interests of the director concerned have not been fairly disclosed.

- (e) The directors shall be paid out of the funds of the Company by way of fees for their services as directors such sums (if any) as the directors may from time to time determine. The directors shall also be entitled to be repaid all reasonable travelling, hotel and other expenses incurred by them respectively in or about the performance of their duties as directors including any expenses incurred in attending meetings of the Board or of committees of the Board or general meetings and if in the opinion of the directors it is desirable that any of their number should make any special journeys or perform any special services on behalf of the Company or its business, such director or directors may be paid such reasonable additional remuneration and expenses therefor as the directors may from time to time determine.
- (f) The directors may exercise all the powers of the Company to give or award pensions, annuities, gratuities and superannuation or other allowances or benefits to any persons who are or have at any time been directors of or employed by or in the service of the Company or of any company which is a subsidiary company of or allied or associated with the Company or any such subsidiary and to the wives, widows, children and other relatives and dependants of any such persons and may establish, maintain, support, subscribe to and contribute to all kinds of schemes, trusts and funds for the benefit of such persons or any of them or any class of them, and so that any director shall be entitled to receive and retain for his own benefit any such pension, annuity, gratuity, allowance or other benefit (whether under any such fund or scheme or otherwise) and may vote as a director in respect of the exercise of any of the powers conferred upon the directors, notwithstanding that he is or may be or become interested therein.

***Non-United Kingdom shareholders***

There are no limitations in the Articles on the rights of non-United Kingdom shareholders to hold, or to exercise voting rights attached to, the ordinary shares. However, non-United Kingdom shareholders are not entitled to receive notices of general meetings unless they have given an address in the United Kingdom to which such notices may be sent.

***CREST***

CREST is a paperless settlement system enabling securities to be evidenced otherwise than by a certificate and transferred otherwise than by a written instrument. The Articles are consistent with CREST membership and, amongst other things, allow for the holding and transfer of shares in uncertificated form.

***Restrictions on changes in control, mergers, acquisitions or corporate restructuring of the Company***

There are no provisions in the Articles that would have the effect of delaying, deferring or preventing a change in control of the Company or that would operate only with respect to a merger, acquisition or corporate restructuring involving the Company.

***Ownership threshold requiring public disclosure***

There are no provisions in the Articles governing the threshold above which shareholder ownership must be disclosed. The Company is subject to the provision of the Statutes requiring public disclosure of shareholdings.

**4 Directors' and other interests**

4.1 The interests (all of which are beneficial unless stated otherwise) of the Directors and their immediate families and the persons connected with them (within the meaning of Section 346 of the Act) which have been notified to the Company pursuant to Sections 324 and 328 of the Act or are required to be disclosed in the Register of Directors' Interests pursuant to Section 325 of the Act in the issued share capital of the Company and the existence of which is known to, or could with reasonable due diligence be ascertained by, any Director as at the date of this document are as follows:

<i>Name</i>	<i>Number of Ordinary Shares before the Placing</i>	<i>Percentage of issued share capital before the Placing</i>	<i>Number of Ordinary Shares following the Placing</i>	<i>Percentage of issued share capital following the Placing</i>
Duncan Clegg	-	-	-	-%
Doug Parrish(note 1)	1,500,000	1.2%	1,500,000	1.0%
Tim Wall (note 2)	375,000	0.3%	375,000	0.3%
Peter Marks (note 3)	2,000,000	1.6%	2,000,000	1.3%

*Note 1 Mr Parrish's interest is registered in the name of Trilakes Enterprises Pty Ltd*

*Note2 Mr Wall's interest is currently a non-beneficial interest held in the name of Horsford Ltd. Mr Wall has an option to purchase the whole of the issued share capital of Horsford Ltd at any time from 1 November 2006 to 1 November 2015.*

*Note 3 Mr Marks's interest is held in the name of Lampam Pty Ltd, a company of which Mr Marks is the sole director and shareholder.*

In addition the Directors have been granted options over the following Ordinary Shares:

<i>Name</i>	<i>Number of options</i>	<i>Exercise price</i>	<i>Expiry date</i>
Duncan Clegg	1,500,000	10p	13 February 2011
Doug Parrish	4,000,000	10p	13 February 2011
Tim Wall (note 1)	2,000,000	10p	13 February 2011
Peter Marks	1,500,000	10p	13 February 2011

*Note 1 Mr Wall's interest is currently a non-beneficial interest held in the name of Horsford Ltd. Mr Wall has an option to purchase the whole of the issued share capital of Horsford Ltd at any time from 1 November 2006 to 1 November 2015.*

4.2 Save as disclosed above, none of the Directors nor any member of their respective immediate families nor any person connected with the Directors (within the meaning of Section 346 of the Act) has any interest, whether beneficial or non-beneficial, in any share capital of the Company.

4.3 There are no outstanding loans granted or guarantees provided by the Company to or for the benefit of any of the Directors.

4.4 Save as otherwise disclosed in this document, no Director has any interest, whether direct or indirect, in any transaction which is or was unusual in its nature or conditions or significant to the business of the Company taken as a whole and which was effected by the Company since its incorporation and which remains in any respect outstanding or unperformed.

- 4.5 Save as disclosed in paragraph 4.1, the Company is only aware of the following persons who, immediately following Admission, directly or indirectly, jointly or severally, hold or will hold 3 per cent or more of the ordinary share capital of the Company or exercise or could exercise control over the Company:

<i>Name</i>	<i>Number of Ordinary Shares before the Placing</i>	<i>Percentage of issued share capital before the Placing</i>	<i>Number of Ordinary Shares following the Placing</i>	<i>Percentage of issued share capital following the Placing</i>
LSAF Trading Pty Ltd	13,397,084	10.9%	13,397,084	9.0%
Farcam Pty Ltd (note 1)	13,119,266	10.7%	13,119,266	8.8%
The Bank of New York (Nominees) Limited (SPGP)	-	-	9,200,000	6.2%
Pacific Union Nominees Pty Ltd	8,085,000	6.6%	8,085,000	5.4%
Peregrine Corporate Limited (note 1)	7,499,995	6.1%	7,499,995	5.0%
Giltspur Nominees Limited	6,800,000	5.5%	6,800,000	4.6%
Alemena Investments Limited	6,600,000	5.4%	6,600,000	4.4%
Wyanna Pty Ltd	6,000,000	4.9%	6,000,000	4.0%
Korcula (BVI) Societe Anonyme	5,470,803	4.4%	5,470,803	3.7%
Cornhill Asset Management Limited	-	-	5,075,000	3.4%
Queensland M M Pty Ltd	5,000,001	4.1%	5,000,001	3.4%
Yarandi Investments Pty Ltd	4,890,804	4.0%	4,890,804	3.3%
City Select Ltd	4,400,000	3.6%	4,400,000	3.0%

*Note 1 Mr Marks is a director and owns 19% of the share capital of Peregrine Corporate Limited and Farcam Pty Limited. These companies have both entered into an orderly market agreement with the company (Refer 5..5).*

Save as disclosed above, the Company is not aware of any person who, immediately following Admission and the Placing will, directly or indirectly, be interested in 3 per cent. or more of the capital of the Company, or who, directly or indirectly, jointly or severally, exercises or could exercise control over the Company.

- 4.6.1 Trilakes Enterprises Pty Ltd, a company of which Doug Parrish is a sole director and shareholder, has executed a consultancy agreement dated 6 December 2005, which provides for a monthly fee of £15,000. Under the terms of the consultancy agreement Trilakes Enterprises Pty Ltd has undertaken to provide the services of Mr Parrish for such time as is necessary to carry out the business of the Company. The consultancy agreement is terminable on six months' notice.
- 4.6.2 Duncan Clegg has executed an appointment letter dated 7 December 2005, which provides for a monthly fee of £4,000. Under the terms of the appointment letter Mr Clegg shall be available for such time as is necessary to carry out the business of the Company. The appointment letter is terminable on three months' notice.
- 4.6.3 Horsford Limited, a company in which Tim Wall currently has a non-beneficial interest, has executed a consultancy agreement dated 7 December 2005, which provides for a monthly fee of £6,000. Under the terms of the consultancy agreement Horsford Limited

has undertaken to provide the services of Mr Wall for such time as is necessary to carry out the business of the Company. The consultancy agreement is terminable on three months' notice.

- 4.6.4 Lampam Pty Ltd, a company of which Peter Marks is a sole director and shareholder, has executed a consultancy agreement dated 18 November 2005, which provides for a monthly fee of £3,000. Under the terms of the consultancy agreement Lampam Pty Ltd has undertaken to provide the services of Mr Marks for such time as is necessary to carry out the business of the Company. The consultancy agreement is terminable on three months' notice.
- 4.7 Save as disclosed in paragraph 4.6 above, there are no contracts, existing or proposed, between any Director and the Company.
- 4.8 There is no arrangement under which any Director has agreed to waive future emoluments nor has there been any waiver of emoluments during the financial year immediately preceding the date of this document.
- 4.9 It is estimated that under the arrangements currently in force, the aggregate remuneration and benefits in kind to be paid to the Directors for the 12 months ending 31 December 2006 will be approximately £336,000
- 4.10 In addition to the directorships in the Company the Directors hold or have held the following directorships within the five years immediately prior to the date of this document:

<i>Name</i>	<i>Current Directorships</i>	<i>Past Directorships</i>
Duncan Clegg	Clegg & Company Ltd Low & Bonar PLC Low & Bonar Pension Trustees Limited Low & Bonar Pension Scheme (1986) Trustee Limited Lobex Limited The Port of London Authority Port of London Properties Limited Minorities Holdings Limited Dorney Lake Services Limited Dorney Lake Trust Company Eton College Limited Persia Petroleum Services plc Premier Bionics Limited	Glow Communications plc Aegon UK plc Cox Insurance Group plc Equity Insurance Group Limited CDCM Limited The Boat Race Company Limited The Go-Ahead Group plc
Doug Parrish	Trilakes Enterprises Pty. Ltd. Tesla Group Holdings Pty. Ltd	Pharmaction Technical Services Pty Ltd Pharmaction Manufacturing Pty Ltd Cottee Health Pty Ltd Cottee Pharmaceuticals Pty Ltd Cottee International Pty Ltd



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Tim Wall	Arlington Resources Plc Brinkley Mining Ltd Condor Resources Ltd St James's Mining Plc	Nippy Training Ltd
Peter Marks	Prana Biotechnology Limited Select Vaccines Limited Lampam Pty Ltd Lampam Properties Pty Ltd Etam Investments Pty Ltd Peregrine Properties Pty Ltd Farcam Pty Ltd Hepgenics Pty Ltd Privilege Holdings Pty Ltd Select – Tel Communications Pty Ltd Peregrine Corporate Ltd Premier Bionics Ltd Pulmosomix Pty. Ltd Medic Vision Pty Ltd	Panvax Ltd Oncomab Pty KPMG Corporate Finance (Aust) Pty Ltd Leveraged Investments Australia Pty Ltd

4.11 Doug Parrish was Managing Director for the Cottee group of companies (comprising the companies listed under his previous directorships in paragraph 4.10 above) until August 2003. The group was involved in the manufacturing of pharmaceuticals and health supplement products under contract to various retailers and distributors.

The board elected to place the companies into voluntary administration in August 2005, from which they never emerged as a result of the administrator's inability to secure product liability insurance cover. None of the directors or officers of the company were held responsible for the demise of the company.

4.12 Save as disclosed in paragraph 4.11 above none of the Directors has:

- any unspent convictions in relation to indictable offences;
- had any bankruptcy order made against him or entered into any voluntary arrangements;
- been a director of a company which has been placed in receivership, compulsory liquidation, creditors voluntary liquidation, administration, been subject to a company voluntary arrangement or any composition or arrangement with its creditors generally or any class of its creditors whilst he was a director of that company or within the 12 months after he ceased to be a director of that company;
- been a partner in any partnership which has been placed in compulsory liquidation, administration or been the subject of a partnership voluntary arrangement whilst he was a partner in that partnership or within the 12 months after he ceased to be a partner in that partnership;

- been the owner of any assets or a partner in any partnership which has been placed in receivership whilst he was a partner in that partnership or within 12 months after he ceased to be a partner in that partnership;
- been publicly criticised by any statutory or regulatory body (including recognised professional bodies); or
- been disqualified by a court from acting as a director of any company or from acting in the management or conduct of affairs of a company.

## **5 Material contracts**

The following contracts, not being contracts entered into in the ordinary course of business of the Company, have been entered into by the Company and are or may be material:

### **5.1 Nominated Adviser/Broker agreement**

An agreement dated 27 January 2006 between (1) Nabarro Wells & Co. Limited and (2) the Company under which Nabarro Wells & Co. Limited has agreed to act as the Company's nominated adviser for one year from Admission and thereafter, unless terminated by six months' written notice by Nabarro Wells & Co. Limited or the Company (the "Nominated Adviser Agreement"). Under the Nominated Adviser Agreement, the Company has agreed to pay a fee of £50,000 (plus VAT) on Admission, options over 3,700,000 Ordinary Shares and an ongoing nominated adviser fee of £20,000 per annum.

### **5.2 Licence**

A licence granted to TUI by BWXT Y-12 L.L.C. (the "Licensor") under an agreement dated 18 January 2001 (as amended on 15 October 2004) pursuant to which the Licensor granted: (a) the non-exclusive right and licence to manufacture, have made for licensee, import, use, sell or offer for sale the proprietary rights afforded by the US Patent in all fields of use with the right to sub-licence and to use the processes covered by those proprietary rights; and (b) the sole commercial right and licence to manufacture, have made for licensee, import, use, sell or offer for sale the US Patent in all fields of use with the right to sub-licence the proprietary rights arising from the US Patent in Australia, Canada, China, Europe, Japan, Mexico, Singapore and South Korea (this exclusivity may be limited during December 2006 and January 2007 if required by the Licensor to grant any right and licence in accordance with federal statutory or regulatory enactments) and to use the processes covered by those proprietary rights.

Conditions:

- (i) Any products manufactured by TUI from the use of the proprietary rights in the US Patent must be manufactured substantially in the United States;
- (ii) TUI must meet certain required commercial use provisions including net sales targets of Aus\$75,000 and Aus\$150,000 for years ending 31 December 2005 and 31 December 2006 respectively in relation to the proprietary rights under (a) above and Aus\$125,000 and Aus\$250,000 for those years in relation to the proprietary rights under (b) above as well as certain production, marketing and staffing requirements. If these requirements are not met the Licensor has the option to convert any exclusive licence under (b) above into a non-exclusive licence without the right to sub-licence;
- (iii) TUI must affix appropriate markings relating to the Licensor's proprietary rights to products

derived from those proprietary rights.

TUI has the right to grant sub-licences subject to the Licensor's approval and a minimum royalty rate.

A royalty of 3% of net sales and 3% of service fees is payable by TUI to the Licensor subject to an annual minimum of US\$5,000.

TUI is required to give notice of third party infringements to the Licensor under the Licence.

The Licensor gives warranties as to its rights to grant the rights and licences covered by the Licence.

The Licence shall continue until the expiry of the last of the proprietary rights referred to therein.

### 5.3 Share Purchase Agreement

An agreement dated 23 November 2005 between (1) the Company and (2) the shareholders of MIL (the "Vendors") pursuant to which the Company acquired the whole of the issued share capital of MIL ("MIL Shares") satisfied by the issue of the Consideration Shares.

Under the Share Purchase Agreement the Vendors gave warranties relating to their capacity to execute the Share Purchase Agreement and their right to sell the MIL Shares. In addition certain Vendors gave more extensive warranties in relation to MIL including, *inter alia*, regarding the Company's due diligence, the MIL Shares, MIL, litigation, financial and taxation matters, employment, contracts and intellectual property.

The Company made representations and warranties in relation to its power to enter into the Share Purchase Agreement.

### 5.4 Lock-in Agreements

The lock-in agreements between the Company, Nabarro Wells and each of the Directors and Trilakes Enterprises Pty Ltd, Horsford Limited and Lampam Pty Ltd and their connected persons, under which the Directors and their connected persons have agreed with Nabarro Wells not to dispose of any interest in Ordinary Shares in the Company for a period of 12 months from the date of Admission.

### 5.5 Orderly Market Agreements

The orderly market agreements between the Company, Nabarro Wells and each of Peregrine Corporate Ltd, Farcam Pty Ltd, Wyanna Pty Ltd, LSAF Trading Pty Ltd, Pacific Union Holdings Pty Ltd, Queensland M M Ltd, Giltspur Nominees Ltd (in relation to 5,000,000 Ordinary Shares only), Korcula (BVI) Societe Anonyme (in relation to 4,000,000 Ordinary Shares only) and Narrowsburg Holdings Ltd that they will for the 12 months immediately following Admission effect a sale only through the brokers for the time being of the Company and will only do so following consultation with the broker in relation to any such disposal and further that any such disposal will be made in such a manner as such broker may reasonably require with a view to maintaining an orderly market in the Ordinary Shares.

Save as disclosed above, there are no contracts (other than contracts entered into in the ordinary course of business) which have been entered into by the Company since its incorporation and which are or may be material.

**6 Litigation**

There are no legal or arbitration proceedings (including, to the knowledge of the Directors, any such proceedings which are pending or threatened by or against the Company) which may have or have had during the 12 months immediately preceding the date of this document a significant effect on the financial position of the Company.

**7 Working capital**

The Directors are of the opinion that, having made due and careful enquiry, the working capital available to the Company will, from the date of Admission, be sufficient for its present requirements, that is, for at least the next 12 months from the date of Admission.

**8 Taxation**

The following paragraphs are intended as a general guide only for shareholders who are resident and ordinarily resident in the United Kingdom for tax purposes, holding Ordinary Shares as investments and not as securities to be realised in the course of a trade, and are based on current legislation and HM Customs & Revenue practice. Any prospective purchaser of Ordinary Shares who is in any doubt about his tax position or who is subject to taxation in a jurisdiction other than the UK should consult his own professional adviser immediately.

**8.1 Taxation of Chargeable Gains**

For the purposes of UK tax on chargeable gains, the issue of Ordinary Shares pursuant to the Offer will be regarded as an acquisition of a new holding in the share capital of the Company. To the extent that a shareholder acquires Ordinary Shares allotted to him, the Ordinary Shares so allotted will, for the purpose of tax on chargeable gains, be treated as acquired on the date of allotment. The amount paid for the Ordinary Shares will constitute the base cost of a shareholder's holding; for individuals and certain trustees the amount paid for the Ordinary Shares subscribed may be eligible for taper relief. If a Shareholder disposes of all or some of his Ordinary Shares, a liability to tax on chargeable gains may, depending on his circumstances, arise.

**8.2 Loss Relief**

If an investor is an individual or an investment company, relief for losses incurred by that investor on disposal of the Ordinary Shares may be available under Sections 573 to 576 of the Income and Corporation Taxes Act 1988, against income of the same or prior year, or carried forward and set against gains in future tax years. The relief should be available provided the Company and the investor satisfy the relevant statutory requirements.

**8.3 Inheritance Tax**

Unquoted Ordinary Shares representing minority interests in trading companies such as the Company potentially qualify for 100 % business property relief which gives up to 100 % exemption from Inheritance Tax. Therefore, where an investor makes a lifetime gift of shares or dies while still owner of the shares, no inheritance tax will be payable in respect of the value of the shares, provided certain conditions are met. The main condition is that the investor held the shares for two years before the date of transfer or death.

**8.4 Stamp Duty and Stamp Duty Reserve Tax**

No stamp duty or stamp duty reserve tax ("SDRT") will generally be payable on the issue of the Ordinary Shares. Stamp duty and SDRT treatment will be as follows:

- in relation to the Placing Shares, no liability to stamp duty or SDRT will arise on their issue or on the issue of definitive share certificates by the Company (provided that the Placing Shares are not issued to, or to a nominee or agent for, a person whose business is or includes the provision of clearance services or issuing depository receipts);
- the transfer of Ordinary Shares outside the CREST system will generally be liable to stamp duty on the instrument of transfer at the rate of 0.5 % of the amount or value of the consideration given (rounded up to the nearest multiple of £5). Stamp duty is normally the liability of the purchaser or transferee of the Ordinary Shares. An agreement to transfer Ordinary Shares will generally be subject to SDRT at 0.5 % of the agreed consideration. If, however, within the period of six years of the date of the agreement or, in the case of a conditional agreement, the date on which it becomes unconditional, an instrument of transfer is executed pursuant to the agreement and stamp duty is paid on that instrument, any liability to SDRT will be repaid or cancelled. SDRT is normally the liability of the purchaser or transferee of the Ordinary Shares;
- no stamp duty or SDRT will arise on a transfer of Ordinary Shares into CREST for conversion into uncertified form, unless such transfer is made for a consideration in money or money's worth, in which case a liability to stamp duty or SDRT will arise, usually at the rate set out above;
- a transfer of Ordinary Shares effected on a paperless basis within CREST will generally be subject to SDRT at the rate of 0.5% of the amount or value or the consideration. CREST is obliged to collect SDRT from the purchaser of the Ordinary Shares on relevant transactions settled within the system; and
- where Ordinary Shares are issued or transferred: (i) to, or to a nominee for, a person whose business is or includes the provision of clearance services; or (ii) to, or to a nominee or agent for, a person whose business is or includes issuing depository receipts, stamp duty (in the case of a transfer only to such persons) or SDRT may be payable at a rate of 1.5% of the amount or value of the consideration payable or, in certain circumstances, the value of the Ordinary Shares or, in the case of an issue to such persons, the issue price of the Ordinary Shares.

Special rules apply to certain categories of person including intermediaries, market makers, brokers and dealers, and persons connected with depository arrangements and clearance services.

#### 8.5 Dividends and Other Distributions

Dividends paid by the Company will carry an associated tax credit of one-ninth of the cash paid. Shareholders resident in the UK receiving such dividends will be liable to income tax on the aggregate of the dividend and associated tax credit at the ordinary rate (10%) or the upper rate (32.5%). The effect will be that taxpayers who are otherwise liable to pay tax at only the lower rate or basic rate of income tax will have no further liability to income tax in respect of such a dividend. Higher rate taxpayers will have an additional tax liability (after taking into account the tax credit) of 22.5% of the aggregate of the individual and associated tax credit. Individual shareholders whose income tax liability is less than the tax credit will not be entitled to claim a repayment of all or part of the tax credit associated with such dividends. A UK resident

corporate shareholder should not be liable to corporation tax or income tax in respect of dividends received from the Company unless that company is carrying on a trade of dealings in shares. Trustees of discretionary trusts are liable to account for income tax at the rate applicable to trusts on the trust's income and are required to account for tax at a special rate, currently 32.5%. Persons who are not resident in the UK should consult their own tax advisers on the possible application of such provisions and on what relief or credit may be claimed for any such tax credit in the jurisdiction in which they are resident.

#### 8.6 General Taxation Information

These comments are intended only as a general guide to the current tax position in the UK as at the date of this document. The comments assume that Ordinary Shares are held as an investment and not as an asset of financial trade.

If you are in any doubt as to your tax position, or are subject to tax in a jurisdiction other than the UK, you should consult your professional adviser.

### 9. General

- 9.1 The total proceeds which it is expected will be raised by the Placing are £2,512,111 and the net proceeds after deduction of expenses are estimated at £2,262,111.
- 9.2 The accounting reference date of the Company is 31 December and the first audited accounts will be made up to 31 December 2006.
- 9.3 The expenses of and incidental to the Admission including registration and London Stock Exchange fees, professional fees and the costs of printing and distribution, are estimated to amount to approximately £125,000 (excluding VAT) together with £125,000 of commissions, all of which will be payable by the Company.
- 9.4 The Company has agreed to pay Narrowsburg Holdings Ltd of 118b Ballanorris Crescent, Ballabeg Arbory, Isle of Man, IM9 4EU a fee of £100,000 for consulting services, which will be settled by the issue prior to Admission of 1,000,000 new Ordinary Shares.
- 9.5 Save as disclosed in this document, no person (excluding professional advisers otherwise disclosed in this document and trade suppliers) has:
- 9.5.1 received, directly or indirectly, from the Company within 12 months preceding the date of this document; or
  - 9.5.2 entered into contractual arrangements (not otherwise disclosed in this document) to receive, directly or indirectly, from the Company on or after Admission any of the following:
    - (a) fees totalling £10,000 or more; or
    - (b) securities in the Company with a value of £10,000 or more; or
    - (c) any other benefit with a value of £10,000 or more at the date of Admission.
- 9.6 The financial information contained in Part IV of this document does not constitute full statutory accounts as referred to in section 240 of the Act.
- 9.7 Rowan Technology Group have given and not withdrawn their written consent to the issue of this document with the inclusion of their Report and references to their name in the form and

context in which they appear.

- 9.8 Nabarro Wells & Co. Limited has given and not withdrawn its written consent to the issue of this document with the inclusion of its name and references to its name in the form and context in which they appear.
- 9.9 Moore Stephens have given and not withdrawn their written consent to the issue of this document with the inclusion of their reports and references to their name in the form and context in which they appear.
- 9.10 Nexsen Pruet Adams Kleemeier have given and not withdrawn their written consent to the issue of this document with the inclusion of their legal opinion and references to their name in the form and context in which they appear.
- 9.11 Save as set out in this document, the Directors are not aware of any exceptional factors that have influenced the Group's activities.
- 9.12 The Placing has not been underwritten or guaranteed by any person.
- 9.13 Save as set out in this document, no commission is payable by the Company to any person in consideration of his agreeing to subscribe for securities to which this document relates or of his procuring or agreeing to procure subscriptions for such securities.
- 9.14 The Placing Shares will be issued at 10p per share, a premium of 9.85p per Ordinary Share above nominal value.
- 9.15 Save as disclosed in this document, no payment (including commissions) or other benefit has been or is to be paid or given to any promoter of the Company.
- 9.16 Save as disclosed in this document, there are no patents or other intellectual property rights, licences or particular contracts which are, or may be, of fundamental importance to the business of the Company.
- 9.17 Save as disclosed in this document, there are no investments in progress which are significant.

**10. Documents available for inspection**

Copies of the following documents will be available for inspection at the registered office of the Company at 55 Gower Street, London, WC1E 6HQ during normal business hours on any weekday (Saturdays and public holidays excepted) from the date of this document until at least 30 days after the date of Admission:

- 10.1 the memorandum and articles of association of the Company;
- 10.2 the Accountants' Report set out in Part IV of this document;
- 10.3 the consultancy agreements and letter of appointment referred to in paragraph 4.6 of this Part VII;
- 10.4 the material contracts referred to in paragraph 5 of this Part VII; and
- 10.5 the letters of consent referred to in paragraphs 9.6, 9.7 and 9.8 of this Part VII.

7 February 2006