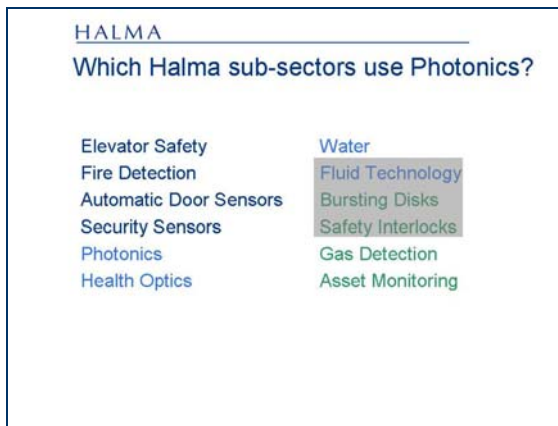


Summary of Photonics presentation by:
Adam Meyers, Executive Director

6 May 2009

“Halma held an Innovation and Technology Exposition at Sandown Park, UK, attended by analysts and investors.

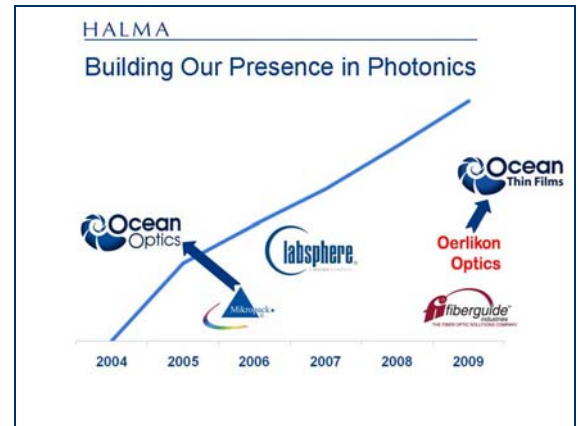
Adam Meyers, one of Halma plc's Executive Directors with responsibility for the Health Optics and Photonics businesses presented an in-depth look at Halma's Photonics businesses. He started by reviewing which of Halma's subsectors use photonics in their products.



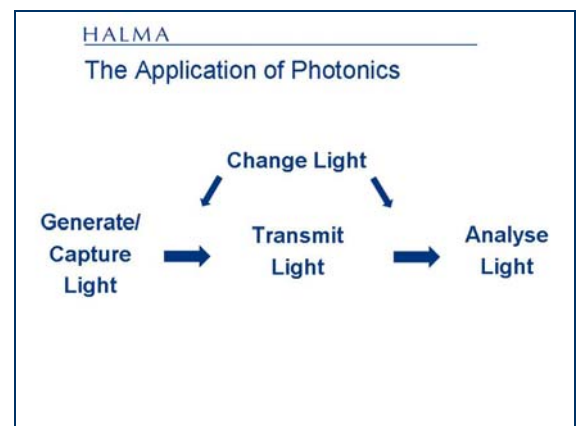
In Infrastructure Sensors, our Fire detectors, Security sensors, Automatic door sensors and Elevator safety products all use a variety of optical technologies. In Health and Analysis, our Water products, Health Optics products and our Photonics businesses use light and optics within their products. In our Industrial Safety sector both our Gas detection and Asset Monitoring businesses use optics and imaging technologies.

What exactly is photonics?

Photonics is the science of generating, controlling and detecting light. A more complete definition would include the practical application of light and optics. Photonics is a series of enabling technologies and critical devices used to allow somebody to solve a problem. For Halma it means matching the science of photonics with engineered solutions for customer applications.



In 2004, we purchased Ocean Optics a leading photonics business based in Florida, US . As with all Halma acquisitions, we were comfortable with Ocean's technology having already used photonics through our existing Water quality testing instrument company, Palintest. Since 2004, we have acquired four further Photonics businesses and spent £52m in acquisitions to generate a sub-sector within the Health and Analysis group of companies that delivers approximately £55m of turnover. About half of this turnover came with the acquisitions and the other half was generated via organic growth during this time. All the companies are based in the USA except Mikropack (Germany).



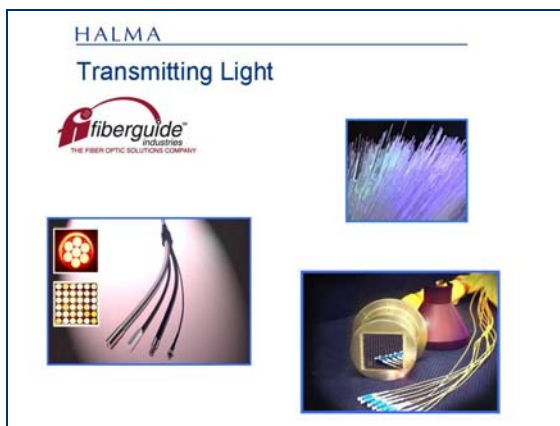
We have products that **generate and capture light, transmit light** and **analyse light**. Along the way it is very important to select or **change**

light to deliver certain optical characteristics. We have a full range of technologies which allow us to make practical use of the science of photonics and to engineer product solutions for specific customer needs.



Mikropack makes products that **generate light**. Materials react in a specific way when struck with different wavelengths of light. You need a light source which is specifically designed for your application – this is Mikropack's core expertise.

Labsphere is the world leader in **capturing light** for subsequent analysis. Their core product is hollow sphere internally coated with highly reflective material - in fact, the industry calls this device a "Labsphere". It is used to homogenize the light for analysis. An example of a recent customer application is in the US flashlight industry where leading manufacturers wanted help designing a standard test method to measure the output of a flashlight. Labsphere developed the full system and industry standard test method.

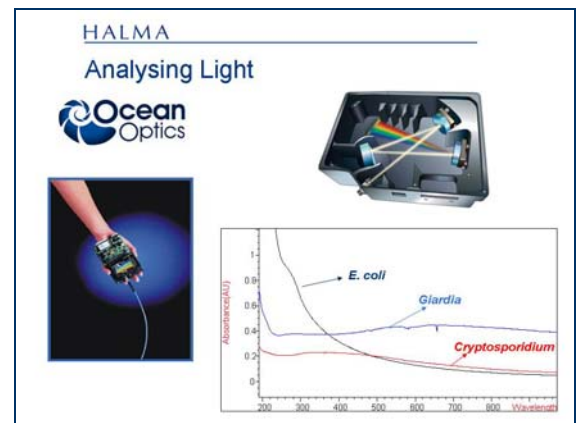


Fiberguide's fibre optic products **transmit light**. These are highly specialized fibres with specialized sheathing or coatings including

metals such as aluminium or gold for strength or high temperature applications. Fiberguide manufacture the raw fibre, and produce assemblies and arrays.



Ocean Thin Films (OTF) which incorporates our most recent acquisition, Oerlikon Optics, are the experts at **changing light**. They deposit a coating to impart certain optical characteristics on glass or plastic, creating components like filters which select specific light wavelengths. OTF coatings have a wide range of applications including colour wheels for projecting light and reflectance coating for surgical lamps. Recently, OTF have used their technology developed for theatrical lighting to develop a device called the Color Bug - designed to measure the high quality light output from lighting fixtures. The Color Bug will remotely measure light and transmit the result to an iPhone, allowing the technician to make any adjustments immediately. As far as we know this will be the first photonics application to be available for the iPhone.



Ocean Optics Inc. (OOI), makes products that **analyse light**. Everything reacts when it's hit by light; it reflects the light, emits energy, absorbs the light or does a combination of all three. A spectrometer creates a graph or spectrum which

acts like a fingerprint of the way light interacts with a target sample. Each spectrum 'fingerprint' is unique to that sample. Applications include identifying the presence of bacteria in water producing spectral curves which are unique to different contaminants.

OOI pioneered the miniature spectrometer market and is the clear market leader in the field of miniature spectroscopy. Prior to OOI 'putting a spectrometer in your hand', spectrometers were large laboratory based instruments and the sample had to be taken to the analyser in a lab. OOI's innovation has brought spectrometers to the sample.



OOI's newest spectrometer – a device called JAZ – is a modular stackable spectrometer meant to be taken out into the field so the customer can 'stack' the spectrometer, the battery, communications capabilities and light source for their particular configuration. Labsphere also produce products which analyse light. New regulations call for changes in the way SPF is measured in sunscreens and cosmetics, particularly at higher SPF levels. Labsphere developed the UV 2000 to address the needs of sunscreen and cosmetics manufacturers.

Labsphere also contributed to a joint collaboration between Halma's photonics companies to produce a device which measures the tint on spectacles. The software to run this instrument was created by engineers in our Shanghai office.



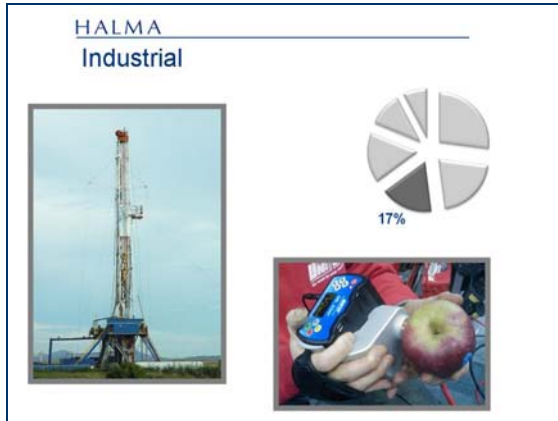
Our Photonics technologies are used in a wide range of markets, many of which have grown rapidly in recent years. As these markets mature, we are becoming more selective to ensure we increasingly operate in markets with the right long term growth drivers - particularly as we have multiple potential channels via our other Halma subsector businesses.



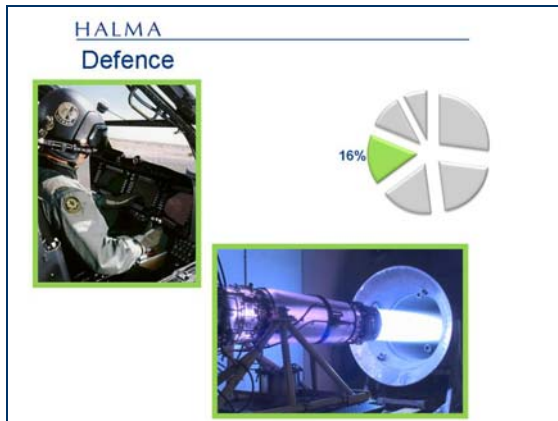
Science and Research is our largest market segment where we allow customers to take the analyser out into the field. The top picture shows our JAZ spectrometer in an oceanography application and on the bottom is an example of measuring light efficiency in a greenhouse.



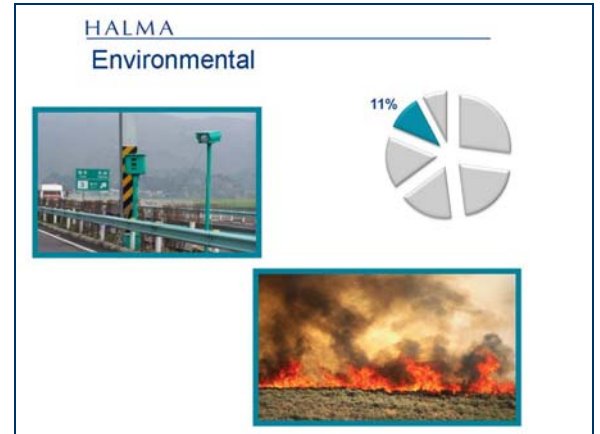
Examples of **medical** applications include a fibre optic cable for laser delivery in a cosmetic surgery application. Our products also can be used in clinical diagnostics for the analysis of blood where we supply components that provide a critical function within a larger instrument.



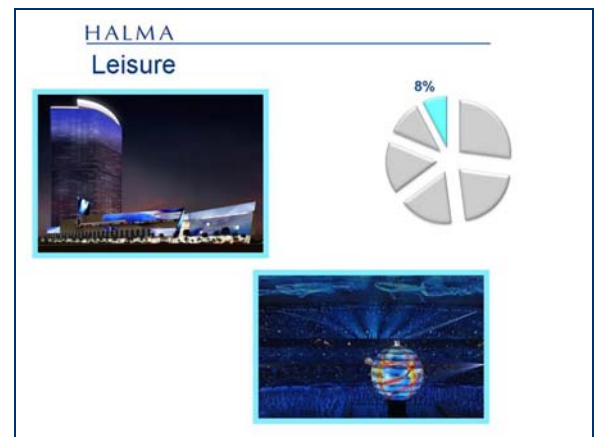
Industrial applications is our most diverse segment. Examples include a down-hole application for oil drilling – putting the fibre down the hole to analyse what is being drilled through. Another is using a spectrometer in the field to grade the sweetness of an apple.



Defence applications include avionics where we put coatings on cockpit displays to ensure that the pilot can clearly read the display whilst wearing night vision goggles. Another application uses fibre optics to measure the output of a jet engine.



In the **Environmental** market segment, recent examples include pollution and emissions monitoring in Beijing prior to the summer Olympics. These devices can measure both the local air quality and the emission levels traced to specific vehicles. Our spectrometers are also used to analyse forest fire combustion in the western United States, detecting not only the presence of fire but specifically what is burning - looking for toxic chemicals or defining the fuel so the response can be appropriately targeted.



In the **Leisure** market we've been selected to provide the underwater lighting to the Fontainebleau Casino and hotel in Las Vegas. And if you saw the opening ceremonies for the Beijing Olympics, you'll have seen light produced by several hundred of our SeaChanger colour lighting fixtures.

Our photonics markets are diverse but have many of the market drivers which are common across the Halma group.

HALMA

Halma Growth Drivers

- Growth and aging of population
- Demand for energy and water resources
- Increasing demand for healthcare
- Increasing regulation and rising expectations of health and safety
- New technology

In addition to operating in many 'demand driven' markets, our photonics businesses also enjoy strong barriers to entry. Much of our technology has intellectual property attached to it either in the form of patents or scientific and manufacturing knowhow. Although our businesses have many opportunities for collaboration, each of them have retained the Halma operational characteristics of separate management teams and separate operations. This allows them to innovate and grow within their chosen niches. Since acquisition, we have invested heavily in these businesses on expanded facilities, advanced optical coating equipment and expansion into China.

HALMA

Creates New Challenges

- Higher growth with more technology risk
- Managing resources versus revenue growth
- Cultural aspects

Whilst our photonics businesses have made a strong contribution to our organic growth in recent years, they have also presented us with some new challenges.

For example, photonics has raised the level of technology in Halma. Higher technology risk can sometimes lead to delays in the commercialization of new products. This happened in the past year and, as we stated in our February trading update, we had to take action to correct the situation.

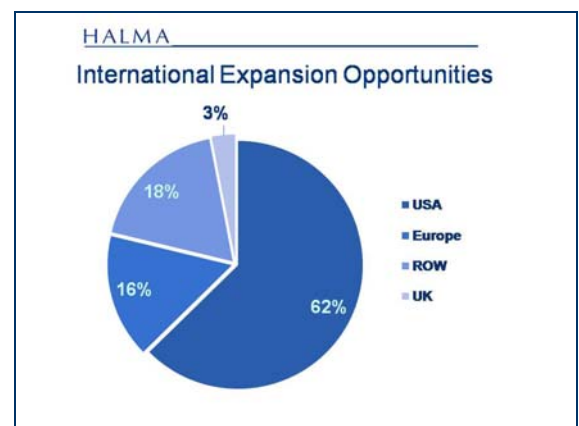
On the cultural side, historically Halma companies have been engineering led and photonics businesses often have many more scientists than engineers. As engineers, our task is to target their scientific knowledge into value creating products.

HALMA

Photonics Strategy

- Electro-Optical components (light sources, transmittance, light analysis and coatings)
- Niche application-focused systems
- Growth through:
 - International Expansion
 - New product development
 - Acquisition

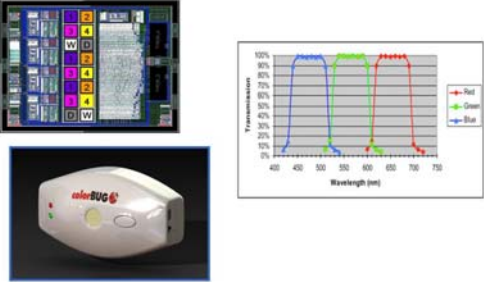
Strategically, we are focussing on creating a market leading position for the supply of critical components for our customer's product, system or process. We will continue to design and develop systems for niche applications where we are not competing with our customers.



The US is our largest market, which is not surprising since most photonics systems companies are primarily based in the US. We have been working to grow our business outside the US. A good example of this is in China, where Ocean Optics were among the first to use the Halma Hub in Shanghai in 2006. Currently we have almost 20 people in China and sales of Photonics products to Asia have grown from almost nothing to more than \$4 million in less than 3 years. In the coming months, two of our photonics companies will be opening manufacturing facilities in China for the first time. The development of new technology and new products will continue to be the cornerstone of our growth strategy.

HALMA

NPD - Evolving Technologies



Earlier in my presentation I mentioned the Color Bug product which is a great example of evolving technology for new applications in markets. First developed for the theatrical lighting industry, we are now using the Color Bug technology to develop application specific sensors with potential applications in the medical industry.

HALMA

NPD - Disruptive Technologies



A potential 'next step' could be to put a filter on individual pixels on a camera chip to combine the imaging capability of a camera with the analytical capability of a spectrometer in one product.

Potential applications of this technology include detecting e-coli on apples during the usual quality control process. Another application could be in the security field, identifying the identity of unknown personnel in the field using a handheld or portable rapid identification system. Whilst we still have considerable work to do to make these commercially viable products, the long term potential to introduce disruptive technologies into new markets clearly exists.

HALMA

Growth Through Acquisition

- Fragmented therefore opportunities exist
- Continue to be highly selective
- Focusing on adjacent technologies
- Value not cost
- Halma end markets
- Technologies we understand (or can)

We are continuing to look for acquisitions. The photonics industry is quite fragmented although we must continue to be highly selective in what we pursue. We look for products that provide real value to our customers and are not sold mainly based on their cost to manufacture. Our acquisition activity will continue to focus on core Halma markets and technologies that we can understand.

HALMA

Summary

- Photonics fits within Halma
- Enabling technologies
 - Internally
 - externally
- Good growth opportunities
 - Organic
 - Acquisition

In summary, you have seen how our photonics businesses fit within Halma and how our technologies can be (and are being) exploited both via internal and external collaboration. We can see growth prospects both organically (through international expansion and new product development) and through acquisitions.

CAUTIONARY NOTE. The information contained in this summary is believed to be correct at 6 May 2009. This document contains certain forward-looking statements. Forward-looking statements should be regarded with caution as by their nature such statements involve risk and uncertainties relating to events and circumstances that may occur in the future. Actual results may differ from those expressed in such statements, depending on the outcome of these uncertain future events. The content of presentations, including any forward-looking statements, is not revised after publication.