
XI. EXECUTIVE SUMMARY REPORT BY SPIRE

(Prepared for inclusion in this Prospectus)



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Dear Sir/Madam

Herbal Products Industry, Ganoderma Industry and the Direct Selling Industry

The following is an independent assessment of the Herbal Products Industry, Ganoderma Industry and the Direct Selling Industry in Malaysia prepared by Spire Research Sdn Bhd for inclusion in the Prospectus of DXN Holdings Bhd dated 28 August 2003 in relation to its listing on the Main Board of the Kuala Lumpur Stock Exchange.

1. INDUSTRY OVERVIEW

1.1 Malaysian Economy

The Malaysian economy has remained resilient despite an external environment marked by heightened uncertainty and the impact of Severe Acute Respiratory Syndrome ("SARS") on regional economies in the final part of the quarter. Real gross domestic product growth of the Malaysian economy in the first quarter of 2003 was within expectations. Economic activity expanded at an annual rate of 4.0% compared with 1.3% in the corresponding period last year. Expansion was positive in all sectors. Growth in the first quarter was largely supported by domestic demand, underpinned by stronger public sector spending. Export performance remained strong in several sectors, reinforcing domestic demand. Expansion of monetary aggregates, especially M1, reflected the strong domestic demand. Further growth in bank lending and stronger expansion was seen in loans to small businesses.

Growth in the first quarter was marked by continued expansion across all sectors of the economy with the main impetus emanating from the manufacturing and services sectors. The manufacturing sector expanded by 5.2%, supported by stronger growth in the domestic-oriented industries and expansion in the export-oriented industries. This was reflected in the higher capacity utilisation rate in the sector of 82%. Export-oriented and domestic-oriented industries operated at 83% and 80% respectively.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

On the regional front, the SARS impact has been adverse on specific sectors including the retail, travel and tourism-related sectors. The recent downward revisions on regional outlook reflect the varying impact of SARS among countries in the region. In response, the Governments in the region have announced economic relief packages to mitigate the impact of SARS. It is largely expected that the regional growth would pick up in the second half of the year. In Malaysia, a stimulus package amounting to RM7.3 billion was introduced, incorporating 90 measures under 4 main strategies, aimed at alleviating the impact of SARS and strengthening economic activity.

As part of the package, the 3-month intervention rate was reduced by 50 basis points to 4.5%. Together with the other measures in the economic package to increase disposable income, it is expected to enhance the potential for supporting the growth prospects. The interest rate adjustment represents a pre-emptive measure intended to lend support to strengthen further the domestic growth potential in an environment of a more modest growth in the global economy. With economic fundamentals remaining strong and macroeconomic policy in place to support growth, Malaysia is well positioned to realise its underlying growth prospects.

(Source: Bank Negara Malaysia, Quarterly Report, 28 May 2003)

1.2 The Global Economy

The global economic outlook continues to be affected by the geopolitical and economic uncertainties and the adverse impact of sharply rising oil prices on private sector consumption and investment. Underlying growth, however, remains positive, supported by fundamentals. While growth would likely remain positive, the magnitude of this growth would depend largely on the influences arising from the geopolitical tensions in the Middle East and the impact on consumers and businesses in the major industrial economies. The immediate adverse effect has been the rising oil prices since the second quarter of 2002 to a 12-month high of USD34.99 per barrel on 7 March 2003.

Given the greater uncertainties, global economic growth is expected to remain modest in 2003. Growth will be supported by a moderate expansion in the US and Asian regional countries as growth prospects for Japan and the Euro area remain difficult. Under these circumstances, it is projected that world growth will expand modestly by 3.1% as compared to 3% in 2002 while world trade will increase by 3.5% to 4.5% in 2003. Growth in the major industrial countries as a group is estimated at 1.8% as compared to 1.6% in 2002.

Activity in the US is expected to be supported by the continued accommodative monetary policy, fiscal expansion, gains in productivity, low inflation, effect of inventory rebuilding and the upturn in the electronics cycle. Growth in the Euro area should pick up slightly, due to inventory build-up and the lagged effect of monetary easing. In Japan, growth continues to be hampered by long-standing domestic structural problems, including price deflation and subdued consumer demand, excess capacity and the weak financial sector. In the United Kingdom, growth is expected to be sustained by government spending and private consumer spending, supported by the wealth effect from the property market.

Meanwhile, for the Asian regional economies, policy flexibility, stronger fundamentals, continued growth in domestic consumption, fiscal stimulus, recovery in investment, improvement in exports and strengthening intra-regional trade are expected to sustain growth.

(Source: Bank Negara Malaysia, Annual Report 2002)

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)**1.3 The Herbal Products Industry**

Herbs have been traditionally used for centuries as remedies to cure ailments. In the last 20 years, multinational companies have conducted research and development ("R&D") on traditional herbs to develop various consumer products including medicinal herbs, food supplements, food products and non-food products such as those used in shampoos, soap, toothpaste, cosmetics and ointments. The global industry for herbal products is at the growth stage of its life cycle and is predicted to rise in the next 50 years. The World Health Organisation estimates the size of the global market for herbal products at USD80 billion (RM304 billion) in 2000 and is expected to grow to USD200 billion (RM760 billion) in 2008 and USD50 trillion (RM190 trillion) in 2050.^{1,2}

Global consumption for medicinal herbs grew from USD17.4 billion (RM67.5 billion) in 1997 to USD19.7 billion (RM74.9 billion) in 2002 and is predicted to expand to USD21.6 billion (RM82.1 billion) in 2006.^{3,4}

Europe is the largest consumer market for medicinal herbs and accounts for nearly 41% of the world sales. North America is the second largest consuming market at 22% and Japan at 14%. The combined consumption of medicinal herbs in Southeast Asia and East Asia accounts for 17% of the world's consumption while the rest of the world accounts for only 6%.⁵ The global market for medicinal herbs is fragmented and consists of many market players ranging in the thousands from the multinationals, local companies and the cottage industries. To name a few, major multinational companies include Amway Corp and Herbalife International Inc in US, Kanebo Ltd and Taisho Pharmaceuticals Ltd in Japan, Seven Seas Ltd and Vitabiotics Ltd in UK, Boehringer Ingelheim International GmbH and Engelhard Arzneimittel AG in Germany and Dabur India Ltd in India. These companies produce various medicinal herbs for general health, improvement in blood circulation, nutrient supplements and post-natal care.

Prospects for the export of herbal products from Malaysia are promising considering the size of the global market. Europe is expected to remain the largest market followed by Asia and North America.

Global sales forecast of medicinal herbs are as follows:

	2002	2003	2004	2005	2006
USD billion	19.7	20.2	20.6	21.1	21.6
RM billion	74.9	76.8	78.3	80.2	82.1

(Analysis by Spire Research Sdn Bhd)

¹ *Content in Herbal Market Must Rise*, Business Times, 24 April 2000

² *National Strategy to Boost Herbal Industry*, Business Times, 9 November 1999

³ *Herbal Remedies: A World Survey, World Market Overview*, Euromonitor, July 2001

⁴ 2002-2006 estimates by Spire Research Sdn Bhd

⁵ *Taiwan Could Make Global Medicine Market Inroads*, Taiwan Headlines (www.taiwanheadlines.gov.tw), 11 September 2001

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

1.3.1 The Malaysian Herbal Products Industry

The Malaysian herbal products industry can be categorised into products for remedies, fragrance and flavours, pharmaceuticals and nutraceuticals. Demand for herbal products in Malaysia is on a growth trend and has been increasing with consumption growing at 15%-20% per year, reaching RM4.5 billion in 2001 and is expected to continue on a growth trend in the long term.⁶

Herbal remedies account for 45% of the total sales followed by fragrance and flavours at 35% and pharmaceuticals and nutraceuticals at 20%. Furthermore a growing population with greater disposable income has seen consumption of health foods increase from RM38 million in 1994 to RM60 million in 1996 growing at approximately 20% per annum.^{6,7}

The historical consumption for herbal pharmaceuticals, nutraceuticals and health foods are as follows:

	1997 RM million	1998 RM million	1999 RM million	2000 RM million	2001 RM million	2002 RM million
Pharmaceuticals and Nutraceuticals	625	720	830	950	900	1,060
Health Food	70	85	105	125	150	180

(Analysis by Spire Research Sdn Bhd)

Malaysia which has one of the oldest rainforests in the world, ranks 7th in terms of biodiversity with 1,200 identified medicinal herbs.⁸ While there are no shortages in supply to meet Malaysia's growing demand for herbal products, the domestic industry is still at its infancy stage and the gap in demand has to be met by imports. Malaysia's local industry consists mainly of small to medium size enterprises with little technical and R&D capabilities or possess internationally recognised Good Manufacturing Practice ("GMP") certifications to be accepted by countries in Europe and North America.

As a result, initiatives have already been undertaken by Malaysian government agencies such as Malaysian Industry Government Group for High Technology ("MIGHT"), Forest Research Institute of Malaysia ("FRIM") and Malaysian Agriculture Research and Development Institute ("MARDI") and universities to conduct further scientific research on Malaysia's herbs. MIGHT has already initiated efforts to explore prospects of commercially developing the local herbal industry and in 2001 MARDI was allocated RM7 million to conduct R&D activities on local herbs.

Local manufacturing in the herbal industry is either labour or capital intensive. Manufacturing processes in the cottage industry and smaller companies tend to be more labour intensive while manufacturing processes of larger companies such as DXN are more capital than labour intensive. Though capital investment is higher among companies which are dependent on machineries in their manufacturing processes, they have the advantage of achieving economies of scale to manufacture at a lower cost per unit with a higher rate of production. Companies such as DXN have a larger production capacity to cater for increased production to accommodate business growth and expansion.

⁶ *Boost for the Herbal Industry*, Business Times, 12 July 2001

⁷ *Tapping Multi-Billion Ringgit Herbal Industry*, Borneo Post, 11 August 1999

⁸ *Going Global with Herbal Products*, The Star, 24 June 2001

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

There is a low barrier to market entry and exit for cottage based industries since many of these herbal products can be manufactured using simple but labour intensive manufacturing processes. However such simple processes lack economies of scale, has limited capacity for production and products are of lower quality since no R&D is conducted. Without economies of scale and being labour intensive, most of the cottage-based industries may not be sustainable in the medium to long term.

However barriers to market entry are higher for capital-intensive manufacturing. The barriers to entry increases further for manufacturing operations, such as DXN, that places continuous emphasis on R&D and new product development since it involves additional capital expenditure and operational cost. Maintaining manufacturing standards according to GMP standards increases the barriers to entry even further due to high capital and operational costs. Though the barriers to entry are high, manufacturing companies such as DXN that places emphasis on R&D, product development and manufacturing according to GMP standards have the following advantages:

- Have a lower a manufacturing cost per unit due to the economies of scale and are therefore more profitable;
- Automation provides opportunities for such companies to expand production to meet demand and grow their business;
- Provides opportunities to develop new products which have mass consumer appeal or market potential; and
- Maintain the quality of its product to gain not only wide consumer acceptance but also regulatory approval from importing countries.

Local Malaysian market players include medium sized companies, a larger number of small enterprises and an even larger number of cottage-based industries. These locally manufactured products are sold either through direct selling or the retail outlets. Some of the players in the market selling various types of herbal products besides the DXN Group include Amway Holdings Bhd ("Amway"), CNI Enterprise Sdn Bhd ("CNI"), Shuang Ho Enterprise Sdn Bhd, Hai-O Marketing Sdn Bhd, Lion Best Sdn Bhd, Brilliant Point Sdn Bhd, Gano Excel Enterprise Sdn Bhd ("Gano Excel"), Malaysian Rainforest Sdn Bhd, INS Enterprise Sdn Bhd and SMC Freemaker Sdn Bhd.

Consumption of herbal products including medicinal herbs and supplements in Malaysia is expected to grow at 15-20% per annum. With more scientific and medical research studies conducted on herbs in Malaysia and worldwide to boost consumer confidence, demand for herbal products is expected to increase. Consumption of health food is also forecast to grow at 20% per annum driven by demand for better health from consumers and greater disposable income.⁹ Since Malaysia relies on imports to fill the gap in domestic demand, there are opportunities for Malaysian companies to locally produce herbal products provided R&D is conducted to exploit the country's large biodiversity. However the success for any Malaysian company would depend on its ability to improve its technical capabilities and R&D.

⁹ Analysis by Spire Research Sdn Bhd

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Forecast consumption of pharmaceuticals and nutraceuticals and health foods in Malaysia are as follows:

	2002 RM million	2003 RM million	2004 RM million	2005 RM million	2006 RM million
Pharmaceuticals and nutraceuticals	1,060	1,240	1,460	1,715	2,015
Health foods	180	215	260	310	370

(Analysis by Spire Research Sdn Bhd)

However DXN has taken steps and made progress in developing its R&D capabilities to exploit opportunities in the market. It has established an R&D team to formulate and develop new products and has also sought technical assistance from Malaysian Palm Oil Board, MARDI and FRIM in its R&D activities. As a result of DXN's R&D efforts high quality products that have mass consumer appeal are being regularly introduced into the market.

Prospect and Outlook in the International Markets. Prospects for the export of herbal products from Malaysia are promising considering the size of the global market. Europe would still remain the largest market followed by Asia and North America. A share of just 1% of the global market from Malaysian exports in 2006 would result in RM821 million in foreign exchange earnings to the country.

Forecast of global sales of medicinal herbs are as follow:

	2002	2003	2004	2005	2006
US\$ billion	19.7	20.2	20.6	21.1	21.6
RM billion	74.9	76.8	78.3	80.2	82.1

(Source: 2003 based on forecast by Euromonitor; 2002 estimate and 2004-2006 forecasts from Spire based on 1997-2001 average annual growth of 2.3% from Euromonitor. Exchange rate of US\$1.00 to RM3.80)

Even in the competitive international market, Malaysia has a competitive advantage with its unique biodiversity of which some are indigenous to Malaysia. However Malaysia's obstacle in exploiting this international market has been the lack of R&D especially among smaller Malaysian companies to develop herbal products that are of international standards. Furthermore many of these companies have not sought GMP certification required for exports to countries in Europe and North America. However DXN has exploited opportunities in the international market by conducting R&D to develop products that are of international standards and obtaining GMP certification for exports.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

1.3.2 The Ganoderma Industry

Ganoderma Lucidium also known as Lingzhi (in Chinese) or Reishi (in Japanese) has been used in traditional Chinese medicine for centuries for treatment of a variety of diseases. Ancient Chinese medical literature describes the Ganoderma mushroom as being good for the heart, memory, intellect and longevity. The mushroom is also used in traditional Chinese medicine to treat coronary diseases, bronchial asthma, insomnia, impotence, hay fever, dizziness, stomach ulcers and depression.¹⁰ However availability of the mushroom was limited since cultivation was difficult. Successful commercial cultivation only became possible in 1971 from successful trials conducted at the University of Kyoto. As a result, the Ganoderma mushroom is now cultivated in East Asia and South-East Asia.¹¹

Though ancient Chinese medical literature mentions the various health benefits and medicinal properties of the Ganoderma mushroom, modern scientific and medical studies only began in the last 20 years. Professor Shigeru Aiji and his team from the Department of Pharmaceutics at Kinki University, Japan, were one of the pioneers in conducting modern scientific research studies on the Ganoderma mushroom. Ever since, universities and research institutions mainly in China, Japan, Korea and to a lesser extent in the US have been conducting scientific and medical research studies on the Ganoderma mushroom.

Numerous research studies from various universities and research institutions have been conducted to understand the active ingredients that provide the medicinal properties of this mushroom. Studies indicate the mushroom contains the ingredients polysaccharides, organic germanium, triterpenoids, adenosine, LZ-8 and various amino acids and minerals. Studies conducted in China and Japan also indicate that the mushroom extract when consumed in the right quantities, inhibits blood platelet aggregation, lowers blood pressure and low density lipoproteins, relieves pain, induces wound healing, possesses immune stimulating properties and induces anti-inflammatory effects.^{12,13}

The Ganoderma mushroom is mainly cultivated in China, Korea, Taiwan, Japan, Thailand, US, Malaysia, Vietnam, Indonesia and Sri Lanka, which are also the major consuming countries of the Ganoderma mushroom. Total global production of Ganoderma in 1997 was 4,300 tonnes with China being the largest producer producing 3,000 tonnes.¹⁴ The remaining 1,300 tonnes were produced mainly in Korea, Taiwan, Japan, Thailand, US, Malaysia, Vietnam, Indonesia and Sri Lanka.¹⁵

Estimated historical global production of the Ganoderma mushroom in dry tonnes is as follows:

	1997	1998	1999	2000	2001
China	3,000	3,200	3,400	3,650	3,800
Outside China	1,300	1,400	1,500	1,650	1,800
Total	4,300	4,600	4,900	5,300	5,600

(Analysis by Spire Research Sdn Bhd)

¹⁰ *Medicinal Mushroom* by Kenneth Jones, Healthy & Natural Journal, December 2000

¹¹ *Ganoderma's Current Status in the World and its Cultivation* by Yoshiya Hasegawa, Kyotan Bussan (www.kyotan.com), September 1997

¹² *Cultivation of Ganoderma Lucidium and its Medicinal Value* by Teo Sun Soon, Kyotan Bussan (www.kyotan.com), September 1997

¹³ *The Potential of Herbal Products for Nutraceutical and Pharmaceutical Development* by Dr John Wilkinson, Presented at the International Business Communications (IBC) Fifth Annual Conference, August 1999

¹⁴ *Ganoderma's Current Status in the World and its Cultivation* by Yoshiya Hasegawa, Kyotan Bussan (www.kyotan.com), September 1997

¹⁵ *Analysis by Spire Research Sdn Bhd*

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Although China accounts for 70% of the world's production, its export is less than 5% of its total production. A number of its manufacturing facilities do not possess internationally recognised GMP certifications for acceptance in international markets.¹⁶ In Malaysia, the DXN Group produced 70 tonnes of Ganoderma mushroom and accounted for 1% of the global production in 2001. Based on the global production excluding China (since production is mostly for domestic consumption), the Group's production therefore accounts for approximately 4% of the global production outside China in 2001.

The largest consumer market for the Ganoderma mushroom is East Asia with China as the largest market followed by Japan, Korea and Taiwan. Their combined consumption in 2001 accounted for 92% of the world's consumption.¹⁷ Outside East Asia, the major consumer markets are Vietnam, Thailand, Malaysia, Indonesia and the US.¹⁸ Global consumption of the Ganoderma mushroom grew at an annual average of 7% per annum from 1997 to 2001.¹⁹ Demand for the Ganoderma mushroom is mainly as food supplements, an ingredient in cooking or consumed in tablet, capsule or tea bag form. Pure pharmaceutical grade extracts of the Ganoderma mushroom are used to treat various diseases by health institutions in China and Japan. The Ganoderma mushroom is also added into alcoholic and non-alcoholic beverages, cosmetics, personal care and household products.

Estimated historical global consumption of the Ganoderma mushroom dry tonnes is as follows:

	1997	1998	1999	2000	2001
China	2,900	3,100	3,300	3,550	3,700
Outside China	1,400	1,500	1,600	1,750	1,900
Total	4,300	4,600	4,900	5,300	5,600

(Analysis by Spire Research Sdn Bhd)

Outside of China, there has been no global shortage or excess in supply and demand of the Ganoderma mushroom and demand growth for the Ganoderma mushroom has been balanced by supply. Malaysia's share of the global production of the Ganoderma mushroom outside China increased from 2% in 1997 to 6% in 2001. Prior to the mid-1990s, cultivation of the Ganoderma mushroom was limited to a few small farms producing low yields. Larger scale commercial farming only began after the mid-1990s and production increased from 30 tonnes in 1997 to 100 tonnes in 2001.²⁰

Historical Malaysian production and consumption of the Ganoderma mushroom dry tonnes is as follows:

	1997	1998	1999	2000	2001	2002
Production outside China	1,300	1,400	1,500	1,650	1,800	1,950
Malaysian Production	30	40	55	75	100	120
Malaysian Consumption	20	23	26	30	35	40

(Analysis by Spire Research Sdn Bhd)

¹⁶ *Traditional Medicine in China*, by Anthony Pang, World Market Research Centre (www.wmrc.com), August 2002

¹⁷ Analysis by Spire Research Sdn Bhd

¹⁸ *Ganoderma's Current Status in the World and its Cultivation* by Yoshiya Hasegawa, Kyotan Bussan (www.kyotan.com), September 1997

¹⁹ Analysis by Spire Research Sdn Bhd

²⁰ Analysis by Spire Research Sdn Bhd

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Local consumption increased from 20 tonnes in 1997 to 35 tonnes in 2001.²¹ Consumption of Ganoderma mushroom is mainly in the form of health food supplements in capsules or tablets, herbal drinks, beverages, household products and health food supplements in cooked foods. Traditional purchases of the mushroom (in various forms) were mainly through the traditional Chinese medicine shops. During the last 5 years direct selling companies were the major contributors to the increase in sales and consumer usage of Ganoderma mushroom. However, sales through western-style pharmacies is relatively limited due to the lack of promotion.

Though Malaysia's consumption of the Ganoderma mushroom is expected to grow at 15% per annum in the next 5 years, the domestic market remains limited in size and the greatest prospects for domestic production lie in the export markets. Although China cultivates and produces 70% of the world's Ganoderma mushroom, its current position to become a leader in markets outside China remains limited because its production is mainly for domestic consumption.

Growing research and consumer interest in the US and Europe on the medicinal properties of the Ganoderma mushroom would represent potential markets if local regulatory requirements could be met. Markets such as India represent another potential market since the mushroom is known in Ayurvedic medicine but cultivation remains limited in the country.

Future global demand for the Ganoderma mushroom is expected to rise in future years providing opportunities for the Group to exploit the international markets especially outside China. The Group has the production capacity to meet demand in the international market and has obtained the internationally recognised GMP certification required for export to many countries especially in Europe and North America.

1.4 Malaysian Direct Selling Industry

The direct selling industry is one of the fastest growing businesses in the world with global sales estimated at RM312 billion in 2000.²² Direct selling can be categorised into multilevel marketing ("MLM") and single level marketing ("SLM"). Distributors in MLM schemes receive commissions from their direct sales and a percentage of commissions from sales of other distributors they recruit. However, distributors in SLM schemes only receive commissions for their own sales.

Historical total sales of the direct selling industry and the number of licensed direct selling companies in Malaysia are as follows:

	1997	1998	1999	2000	2001	2002
Sales (RM billion)	3.2	3.8	4.2	4.5	3.0	3.8
Number of direct selling companies	750	665	765	712	410	410

(Source: Direct selling industry sales figure from Personal Money, October 2002 Edition)

²¹ Analysis by Spire Research Sdn Bhd

²² *Direct Selling Meet to be Held Soon*, The Star, 5 November 2001

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Imposition of strict government regulations and higher paid-up capital requirements for direct selling companies caused many less established and smaller direct selling companies to cease operations. As a result, the number of direct selling companies declined from 712 in 2000 to 370 by May 2002.^{23,24} The reduction in the number of less established direct selling companies would provide opportunities for the more established companies to fill the void left by the smaller companies. Products marketed by direct selling companies are either locally manufactured or imported. While most household products and personal care products are locally manufactured, most of the food supplements and medicinal herbs are imported. However, the industry does not face any vulnerability in supply from such imported products since substitutes are readily available.

There are 3 major direct selling associations in Malaysia i.e. Direct Selling Association of Malaysia, Direct Selling Distributors Association of Malaysia and the Malaysian Direct Selling Distribution Association. Most of the MLM and SLM companies belong to either one of the three associations and their members include Malaysian and multinational companies. DXN Marketing Sdn Bhd (“DMSB”), which conducts MLM activities in Malaysia, is a member of the Direct Selling Association of Malaysia. Besides the DXN Group, other established MLM companies include Amway, CNI, Lion Best Sdn Bhd, Hai-O Marketing Sdn Bhd, Gano Excel, SMC Freemaker Sdn Bhd, Brilliant Point Sdn Bhd, Shuang Ho Enterprise Sdn Bhd, Nu Life International Sdn Bhd and INS Enterprise Sdn Bhd.

Direct selling companies need not apply for annual licences to carry out business as they are now only required to pay the yearly RM500 fee. Direct selling companies which conduct trade overseas will enjoy a 20% tax exemption as part of an incentive by the Government to boost the sale of local food and herbal products. The Government has relaxed the policy on licensing for direct selling companies to stimulate the growth of the industry.

Opportunities would be made available for Malaysian direct selling companies to venture abroad to promote their range of products in markets such as Vietnam, China, India, the US and Europe with the signing of ASEAN Free Trade Agreement (“AFTA”) and the World Trade Organisations (“WTO”) Trade Agreement. Malaysia has a large biodiversity and potential to develop its local herbs for the international markets and direct selling via MLM and SLM represents an effective distribution channel. This is evident from the growth in sales of products based on the Ganoderma mushroom in Malaysia, Indonesia and the Philippines, which were driven by direct selling. Besides Malaysia, the direct selling industry is also a growing industry in many parts of the world and the DXN Group has taken the opportunity to export its products through MLM.

As an MLM company, one of DXN’s marketing strategies is to broaden its market by expanding its network of distributors. As at [16 August 2003] DXN had a total of [283,547] active distributors located mainly in Asia-Pacific and the US of which [22,155] are in Malaysia. Broadening its network of distributors has provided opportunities for DXN to gain wider market access in Malaysia and in the international markets. Further, having a wide distributor network reduces the risk of dependence on a few distributors.

1.4.1 Competitive Environment in the Direct Selling Industry

There were 410 direct selling companies in 2001 with Amway being the largest direct selling company in Malaysia accounting for 12.7% share of the direct selling market. In comparison, the DXN Group accounted for 2.6% of the market share in 2001. However, DXN Group’s market share was above the average market share of 0.2% based on total industry revenue in 2001.

²³ Ministry of Domestic Trade and Consumer Affairs (www.kpdnhq.gov.my), August 2002

²⁴ *Network Marketing*, The Edge Magazine, 14 August 2002

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

1.4.2 Government Legislation on Direct Selling

The Malaysian direct selling industry is regulated by the Direct Sales Act 1993 (“DSA”) enforced by the Ministry of Domestic Trade and Consumer Affairs. The objective of the DSA is to protect consumer rights and stipulates that only licensed direct selling companies are allowed to conduct such activities. Subsidiary legislations under the DSA are the Direct Selling Regulations 1993 and the Direct Selling Orders (Exceptions) 1993.

In May 1999 and August 2001, the Ministry of Domestic Trade and Consumer Affairs introduced new conditions and regulations for licensing of direct selling companies and their operations which includes, inter alia, the following:

- (i) Not more than 30% stake holding of locally incorporated companies is to be owned by foreign based companies;
- (ii) Increase in product price would require prior approval from the Ministry of Domestic Trade and Consumer Affairs.
- (iii) Direct selling companies are refrained from misleading its members (distributors) through promises of high or excessive bonuses.
- (iv) Incentives paid to its members are to be based on sales volume and not on number of members recruited while stock loading is prohibited.
- (v) Prospective members must be given 10 days to decide whether to join a direct selling scheme.
- (vi) The direct selling company must buy back the products (provided in good condition) if its members decide to cancel their participation in the scheme.

DMSB has complied with all the relevant government regulations and requirements on MLM activities enforced by the Ministry of Domestic Trade and Consumer Affairs.

1.4.3 Government Legislation on Sales of Health Supplements

The Control of Drugs and Cosmetics Regulation gazetted in June 1984 and enforced by the Ministry of Health saw the beginning of regulatory controls on pharmaceuticals including traditional or herbal medicines. The Ministry of Health stipulates that any traditional medicine used as an indigenous medicine must be registered with the Malaysian Drug Control Authority (“DCA”) prior to marketing. The Malaysian DCA has set control parameters for traditional medicine when submitting for registration such as moisture content, contamination from microbes, uniformity of weight, disintegration of tablets and capsules. Furthermore these products must be safe for human consumption and the content of heavy metals and pesticides must be within acceptable limits set by the Malaysian DCA. Under the Malaysian Medicines (Advertisement of Sale) Act 1956, traditional medicines are not allowed to claim that their products are capable of treating diabetes, epilepsy, asthma, cardiovascular diseases, improvements in kidney function and used as contraceptives.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Direct selling companies are required to seek approval from the Malaysian DCA, Food Quality Control Division or Medical Practice Division under the Ministry of Health for products categorised as food supplements or for medical treatments before marketing. Manufacturers of these herbal products are also required to obtain a licence from the Malaysian DCA prior to manufacturing. The DXN Group has complied with all government regulations and requirements in the manufacture and marketing of products classified as pharmaceuticals by the Ministry of Health.

2. PROSPECTS, STRATEGIES AND FUTURE PLANS**2.1 Prospects**

Herbs are used in a diverse range of products including conventional and traditional medicine, prescription and over the counter drugs, ointments, food supplements, food and food additives, personal care products and fragrance. Demand for herbal products is expected to rise from RM304 billion in 2000 to RM190 trillion in 2050 and in Malaysia demand is expected to grow by 15-20% per year from RM4.5 billion in 2001.^{25,26} For DXN, the industry for herbal products represent potential growth prospects not only in Malaysia but also in the international market.

Though not widely consumed, there is growing interest in the US and Europe on the medicinal properties of the Ganoderma mushroom. While China cultivates 70% of the world's production, it is mainly destined for its domestic market. Outside of China and East Asia, DXN is one of the largest cultivators of the Ganoderma mushroom since it has developed techniques to commercially cultivate the mushroom on a large scale under tropical conditions. Consumption has been growing at an annual average of 7% per annum and there is potential for DXN to tap into other markets through its range of health food supplements which contain extracts of the Ganoderma mushroom. DXN also has the required GMP certification to manufacture and export health food supplements overseas.

The key success factor leading to the growth of the direct selling industry in Malaysia and in other countries is the minimal investment required to become distributors to sell mass consumer goods manufactured by direct selling companies. Strict regulations and requirements imposed by the Malaysian Ministry of Domestic Trade and Consumer Affairs has caused a significant reduction in the number of direct selling companies from 712 in 2000 to 370 as of May 2002. As a result, more established direct selling companies such as DXN can take this opportunity to fill in the gap in the market to establish a higher market share.

Impact of the AFTA and the WTO Agreement

DXN is optimistic on market opportunities arising from the coming into effect of AFTA in 2003 and the WTO in 2005. These two agreements would reduce or abolish import tariffs for many categories of products traded between countries which are members of AFTA and WTO. One of the main benefits arising from the above is the lower cost of exports to the importing country. However, reduction or removal of import tariffs would also increase competition to the local industries, which were once protected by import tariffs. The reduction of import tariffs would enable DXN to price its products more competitively and remove trade barriers through high import tariffs imposed by countries to protect their local industry. With the advent of AFTA and WTO, DXN's market in Malaysia would also face competition from cheaper imports. However, the Board of Directors of DXN is of the view that the impact on DXN should not be significant as DXN's products are already being sold at prices on par or lower than its competitors. Further, the Group has already established a well-placed distribution network throughout Malaysia and overseas to efficiently distribute its products.

²⁵ *Content in the Herbal Market Must Rise*, Business Times, 24 April 2000

²⁶ *Boost for the Herbal Industry*, Business Times, 12 July 2001

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Competition and Maintaining the Competitive Edge

DXN competes with numerous multinational and domestic companies in Malaysia and in the international markets in the herbal products, Ganoderma mushroom and direct selling industries. Further, the herbal products industry is fragmented consisting of a large number of cottage based producers. The success of multinational companies lies in the development of long-term strategies in investment and continuing efforts to develop their products and markets while domestic companies tend to place less emphasis on such investments and efforts resulting in limited business growth and are at higher risk from their competitors.

The products manufactured and marketed by DXN can be substituted with products manufactured and marketed by multinational companies, domestic companies and cottage based producers. In recognition of the potential threat of substitute products, DXN has increased its efforts to identify and seize available market opportunities in this competitive business environment. Some of the measures undertaken by DXN are:

- Creating brand awareness and loyalty,
- Product development,
- Market development,
- Competitive pricing of products,
- R&D and QC, and
- Efficiency in manufacturing.

Brand awareness and loyalty. The Company's investment and efforts to develop brand awareness have been successful, resulting in increased consumer confidence and loyalty towards the DXN brand and products while differentiating DXN's products from its competitors' substitutes. Measures undertaken by DXN in brand building are:

- Emphasis on product quality to instil customer confidence and satisfaction in DXN's products;
- Emphasis on well-designed product packaging to create a positive image towards the DXN brand and its products;
- Leverage on its wide network of distributors to directly create awareness and educate the consumers on the DXN brand and its products;
- Maintain an informative corporate website (www.dxnmalaysia.com) on the organisation, its corporate philosophy and range of products;
- Distribute well designed corporate and product brochures with informative literature to its distributors and customers;
- Conduct regular seminars and training sessions to educate and update its stockists and distributors on corporate events and products; and
- Organise regular tours to its farm and factory complex for its distributors and customers to educate and instil confidence on the DXN brand and its products.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Product Development. DXN's products are not categorised as luxury products but regularly used mass consumer products and are therefore less sensitive to a decline in sales during an economic downturn. However as mass consumer products, they are subject to competition from the various substitutes available in the market. To mitigate the threat of substitutes, DXN has undertaken various measures, amongst others, such as developing a brand image to instil customer confidence and retain customer loyalty.

DXN realises the importance of product diversification to reduce the risk of depending on a few products. DXN continuously through its R&D efforts formulates and develop new products that have commercial potential in the Malaysian and international markets. One of its major successes was the introduction of its "3-in-1" Lingzhi Coffee in 1999 which accounted for 40% of the Group's sales in FYE2002.

DXN's product diversification and development strategy is to differentiate its products from its competitors or other substitute products. The greater the differentiation, the lower the risk of substitution thus providing DXN a competitive edge. This is evident from its Ganoderma based "3-in-1" Lingzhi Coffee and Ganozhi soap where there is only one major competitor i.e. Gano Excel. To the best of the knowledge of the Directors of DXN, there are currently no other competitors for its Ganoderma based Ganozhi shampoo, toothpaste and Cocoshi cocoa beverage.

Market Development. DXN believes that overdependence on a single geographical market would expose the Group to a greater risk of competition. Therefore the best growth prospects would be to expand its customer base in Malaysia and also in the international markets. DXN has since expanded and developed its markets throughout Peninsular Malaysia and East Malaysia and also into countries outside Malaysia.

To expand its market in Malaysia, DXN has established branch operations and stockists located throughout Malaysia to efficiently distribute its products to its distributors. To develop a wide customer base, existing distributors are encouraged to recruit new distributors through an attractive incentive scheme. Besides commission on distributors' sales, distributors are also rewarded with additional incentives for achieving sales targets. Distributors are also updated with product knowledge and skills training through regular seminars.

Similar strategies are adopted in other countries to recruit new distributors but amended to suit the local government regulatory requirements. Similar strategies are also adopted to update distributors on product development and skills training. DXN has established overseas country offices to facilitate the growth of its international business. The main responsibilities of its country offices abroad are to efficiently manage the local operations and develop the local market.

Competitive Pricing. DXN's pricing strategy is to be competitively priced while maintaining the quality of its products. By maintaining a competitive pricing strategy, DXN expects to be able to:

- Discourage potential competitors from developing similar substitute products; and
- Provide alternatives for consumers to purchase DXN's products as a cheaper but suitable substitute.

DXN's pricing strategy has allowed DXN to expand its market and grow its business with competitively priced products while protecting its markets and taking an aggressive position towards its competitors.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

The comparison between the pricing of DXN's products and the average selling price ("ASP") of similar competitors' products is as follows:

DXN Product	Price Comparison of DXN's Products vs. ASP of the Competitors
Ganoderma supplements in capsule and tablets	30% less
"3-in-1" Lingzhi Coffee	On par
Ganozhi Toothpaste	10% less than other herbal toothpaste
Morinzhi Juice	On par
Ganozhi Shampoo	20% less than other herbal shampoo
Ganozhi Soap	10% less
Spica Tea in teabag form	20% less

(Analysis based on average selling price of substitute products from Amway, CNI, Gano Excel, Malimas Healthcare, INS Enterprise Sdn Bhd, Total Life, Forever Living Products and Hai-O Marketing Sdn Bhd)

However DXN believes that competitive pricing should not be at the expense of product quality by purchasing cheaper raw materials to reduce the product cost. One of the objectives of a competitive pricing strategy is to achieve larger sales volume thereby improving the economies of scale in manufacturing which subsequently reduces the manufacturing cost per unit thus improving profitability.

R&D and QC. DXN emphasises on R&D to maintain its competitive edge and growth prospect. As the initial phase of product development begins at the R&D stage, the R&D department is responsible for conducting trials to develop new product formulations. After the successful formulation of new products, the R&D department liaises with the production personnel to develop the manufacturing process before the actual commencement of commercial production of the new products. As part of product development, the R&D department is also responsible for developing commercially viable cultivation techniques for new sources of plant raw materials that could be processed into existing or new products. As part of DXN's product development strategy, the R&D Department continuously seeks technical collaboration and assistance from government research institutions.

DXN believes that customer satisfaction towards its products will subsequently lead to customer loyalty and positive association towards the brand resulting in brand loyalty. High quality products combined with a competitive pricing strategy encourage customer loyalty with repeat purchases and mitigate the risk of threat of substitutes from its competitors. Further, existing customers who are satisfied can attract new customers by way of "word of mouth". DXN's health food supplements also bear the mark of quality as it carries GMP certification for health food supplements thus providing the Group with opportunities to expand its market into countries that require GMP certification.

Efficiency in Manufacturing. DXN has undertaken relevant measures to ensure efficiency and economies of scale in manufacturing and consistency in product quality. Economies of scale offer the advantage of manufacturing at a lower cost per unit when manufacturing in large volumes. This enables DXN to maintain a competitive pricing strategy and consistency in the quality of its products. DXN's current machinery and equipment are capable of manufacturing a wider range of products than its existing product range. With this ability, DXN is capable of capturing new market opportunities by manufacturing new products that have commercial potential.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Impact from an Economic Downturn

DXN targets the mass consumer market with a range of consumer products that are regularly used by the average consumer. DXN's product is targeted at the mass consumer market and therefore its business is not dependent on or vulnerable to the purchasing decisions of a few major customers. Since DXN's products are mass consumer products it is less affected by an economic downturn, in comparison with luxury goods or industrial products. In the current global economic slowdown affecting Malaysia, companies such as DMSB which are involved in the marketing of mass consumer products have been less affected than companies involved in the marketing of luxury goods. The Group has managed to sustain its business and maintain its profitability during the current economic slowdown.

DXN's products are competitively priced against similar products from other direct selling companies but nevertheless are sold at slight premiums above similar products sold at the traditional retail outlets. Therefore in an extreme and prolonged economic slowdown, options are available to consumers to purchase cheaper consumer products from the retail outlets. In order to minimise any adverse impact of DXN's business growth as a result of a prolonged economic slowdown, DXN has undertaken the following proactive measures:

- Maintain a strategy of recruiting and increasing the number of distributors to expand its distribution network;
- Seek and develop new markets outside Malaysia to reduce any adverse impact to its overall business due to an economic slowdown in any of the countries which it markets to;
- Develop and market new consumer products to reduce any impact of a decline in sales of its existing products; and
- Maintain a low manufacturing cost per unit to sustain its competitive pricing strategy while maintaining profitability.

With these strategies in place, DXN believes that it is more resilient and less vulnerable towards any adverse impact of a prolonged economic downturn and has managed to maintain and grow its business during the current economic slowdown.

Contribution towards Economic Growth

The MLM industry in Malaysia is estimated to have contributed RM5.4 billion to Malaysia's economy in 2001. The MLM industry not only provides employment but also provides opportunities for many people seeking a secondary source of income to become distributors for MLM companies. The attractiveness of MLM to those who act as distributors is the low cost of investment and lower level of business risk compared to starting a business on their own. DXN as a MLM company provides such opportunities for its [22,155] active distributors in Malaysia seeking a secondary source of income to supplement their existing income.

DXN also contributes towards Malaysia's economic growth via the export of its Malaysian manufactured products. The Group has successfully established its business operations and recruited distributors in countries outside Malaysia and has created demand for its Malaysian manufactured products. The Group's export activities have and are expected to contribute towards Malaysia's foreign exchange earnings. Further, DXN has vide its R&D activities created added value on exploiting Malaysia's flora resources by carrying out research on the indigenous plants resources to develop formulations and new manufacturing processes with the objective to develop new consumer products that have potential for growth in the Malaysian and export markets.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

2.2 Future Plans

While DXN would continue with its current competitive pricing strategy, building brand awareness, product and market development, R&D efforts and maintain QC, it has also established future plans for its product and market development, utilisation of natural resources and training programmes for its stockists and distributors to enhance their knowledge on the Group's products.

Product Development

DXN's objective is to introduce at least one new product into the market each year. These products would initially be formulated and developed by its R&D Department and assessed for its commercial viability. DXN has successfully introduced the Cocoshi cocoa beverage in July 2002 and the GL Spread and Morinzyme fruit drink in September 2002.

The Group's current and future plans in R&D are focused on developing new products that have market potential and researching commercially viable cultivation techniques. Current R&D activities in Malaysia that are in progress include:

- (i) Experimental cultivation of the Morinda Citrifolia fruit and Roselle fruit to determine the commercial viability of planting the fruit trees;
- (ii) Experimental cultivation of Cordycep fungus;
- (iii) Trials on the viability of cultivating the Ganoderma mushroom using bio-fermentation techniques under a closed environment in the laboratory;
- (iv) Development of Spirulina in powder form;
- (v) Development of a pineapple jam with Mycelium extracts which is expected to be launched by September 2003;
- (vi) Formulation of a higher fibre chocolate which is expected to be launched by January 2004;
- (vii) Development of skin care and cosmetic products such as lipstick, deodorant and facial foam with Ganoderma extracts which is expected to be launched in February 2004; and
- (viii) Development of a health tea with Tongkat Ali extracts which is expected to be launched in June 2004.

Current R&D activities in Indonesia that are in progress include:

- (i) Experimental cultivation to determine the commercial viability of cultivating Ganoderma mushroom and Mycelium; and
- (ii) Experimental cultivation to determine the commercial viability of cultivating shiitake mushrooms and Matsutake mushrooms.

XI. EXECUTIVE SUMMARY REPORT BY SPIRE (CONT'D)

Market Development

DXN's marketing philosophy of "One World, One Market" views the world as one market and therefore seeks to develop and expand its international markets further. DXN views the US and Europe as potential markets to develop because of the large population and high disposable income. DXN expects to develop its market in the US by establishing branch offices in major cities across those countries and to establish new stockists and distributors to distribute its products. In the European market, Cyprus would be used as the gateway to enter and develop the European market by initially targeting the East European market. DXN has also established a subsidiary in Mexico and a branch office in Canada to expand its North American market. DXN intends to take advantage of e-commerce and has already established e-commerce purchases in the US for its distributors. DXN also has plans for DXN Cyprus to develop an e-commerce website for purchases from its European customers.

Utilisation of Natural Resources

DXN also plans to maximise utilisation of Malaysia's plant biodiversity by conducting R&D trials to test the viability of cultivating some of these plants such as Roselle and *Morinda Citrifolia* on a commercial scale. If proven to be commercially viable, these plant resources would be cultivated on a larger scale and used as raw materials to develop a wide range of products. DXN is also conducting R&D trials to determine the suitability of using rice chaff as an alternative organic substrate to cultivate the Ganoderma mushroom.

Training DXN's Stockists and Distributors

DXN believes in the continuous training of its stockists and distributors through a series of training programmes. In this regard, DXN regularly organises tours to its farm and factory complex in Jitra, Kedah, to educate its stockists, distributors as well as consumers. Furthermore DXN will also conduct training sessions for its stockists and distributors through seminars and training programmes in Malaysia and overseas to develop their professional and entrepreneur skills.

Spire Research Sdn Bhd has prepared this report in an independent and objective manner and care to ensure the accuracy and completeness of the report. It is our opinion that the report represents a true and fair assessment of the industries within the limitations of, among others, secondary statistics and information, and primary market research. Our assessment is for the overall industries and may not necessarily reflect the individual performance of any company. We do not take any responsibilities for the decisions or actions of the reader(s) of this document. This report should not be taken as a recommendation to buy or not to buy the shares of any company or companies.

Yours sincerely,



Khalzuri Yazid
Director
Spire Research Sdn Bhd

XII. DIRECTORS' REPORT

(Prepared for inclusion in this Prospectus)



德信控股有限公司
DXN HOLDINGS BHD. (363120-V)

(formerly known as DXN HOLDINGS SDN. BHD.)

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22 August 2003

The Shareholders
DXN Holdings Bhd

Dear Sir/Madam,

On behalf of the Directors of DXN Holdings Bhd ("DXN"), I report after due inquiry that during the period from 28 February 2003 (being the date to which the last consolidated audited financial statements of DXN and its subsidiaries ("Group") have been made up) to 16 August 2003 (being a date not earlier than fourteen days before the issue of this Prospectus):

- (a) the business of the Group, in the opinion of the Board of Directors, has been satisfactorily maintained;
- (b) in the opinion of the Board of Directors, no circumstances have arisen subsequent to the last audited financial statements of the Group which have adversely affected the trading or the value of the assets of the Group;
- (c) the current assets of the Group appear in the books at values which are believed to be realisable in the ordinary course of business;
- (d) since the last audited financial statements of the Group, there has been no default or any known event that could give rise to a default situation, in respect of payments of either interest and/or principal sums in relation to any borrowings in which the Directors of DXN are aware of;
- (e) no contingent liabilities have arisen by reason of any guarantees or indemnities given by the Company or any of its subsidiaries; and
- (f) save as disclosed in Section X of this Prospectus, there have been no changes in the published reserves or any unusual factors affecting the profits of the Group since the last audited financial statements of the Group.

Yours faithfully
For and on behalf of
the Board of Directors of DXN

Dr. Lim Siow Jin
Executive Chairman/Chief Executive Officer

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