4. INFORMATION ON THE MGB GROUP

4.1 History

MGB was incorporated in Malaysia as a public limited company on 22 October 2003 under the Companies Act, 1965. It was established to become the investment holding company of MESB and MISSB in conjunction with the listing of the Company on the MESDAQ Market.

The core business activities of the MGB Group are carried out by MESB and MISSB, which together form the Group's expertise in the system integration of IBMS and ISMS. MESB, the core of the MGB Group, made its presence in the local market since 1984. Two engineering professionals, one of the co-founders of which is Dr Ng Tek Che, first established MESB as a small engineering firm in 1984 to provide IBMS services. Under the leadership of Dr Ng Tek Che, the Group Managing Director, who has more than 23 years of engineering experience, MESB has successfully expanded from a small outfit to one of the leading companies in IBMS and ISMS in Malaysia.

MESB is principally involved in the design, supply, installation, and maintenance of IBMS, ISMS, IBCM and e-project management of mechanical and electrical services. For close to two decades, MESB has played a pivotal role in the nation building by providing cost-effective state-of-the-art e-project management and system integration services for office buildings, shopping complexes, airports, oil refineries and manufacturing plants. Fundamental to this success is MESB's mission to continually exceed customers' increasing expectations. MESB focuses on building and integrating world-class technology to the market and is committed to continuously improve its quality, service and productivity.

Presently, MESB is an agent/distributor for certain products by principals such as Invensys Building Systems and NexWatch, which are amongst the world's leading companies in IBMS and ISMS. MESB was able to successfully enter into various distribution/dealer agreements with several international reputable hardware and software manufacturers over the years because of its commitment in providing quality products and services to its customers.

The MGB Group envisions itself to be an internationally recognised, leading engineering and technology solution provider. Foremost of the Group's corporate mission is to continuously seek new technologies to fulfil clients' needs and requirements, to develop strategic alliances with partners, which have the ability and technology to complement and enhance the Group's current expertise, and to improve the effectiveness of the quality management system.

In 1994, MESB received its first award from an international renowned principal, namely Westinghouse Security Electronics, Inc. USA (now known as NexWatch), as the Dealer of the Year. Subsequently, MESB has been receiving yearly awards from its international principals for excellence in performance as well as sales. In 2000, MESB received an award for Partner of the Year for Outstanding Regional Sales Performance 2000 – 2001 by Invensys Building Systems, Asia Pacific Partner Awards. In 2001, MESB achieved another milestone when it received the Enterprise 50 Award by Accenture, The Small and Medium Industries Development Corporation, RHB Bank and Business Times, as well as the Asia Pacific Dealer of the Year Award by NexWatch. In 2002, MESB was accredited ISO 9001:2000 by Lloyd's Registrars, UKAS, JAB. Further details on the key achievements and milestones of MESB are set out in Section 4.3.13 of this Prospectus.

MESB operates from its headquarters in Shah Alam and service centres/offices in Putrajaya, Kuching, Alor Setar and Kota Kinabalu.

In 1995, MISSB was incorporated to complement MESB's existing business activities. MISSB is principally engaged in the procurement of contracts in relation to engineering work specialising in the field of IBMS and ISMS, and sale of engineering equipment.

Share capital

As at the date of this Prospectus, the authorised share capital of the Company is RM50,000,000 comprising 500,000,000 Shares and the issued and paid-up share capital is RM21,254,000 comprising 212,540,000 Shares. The changes in the issued and paid-up share capital of MGB since its incorporation are as follows:

Date of allotment	No. of ordinary shares allotted	Par value RM	Consideration	Total issued and paid-up share capital RM
22.10.2003	20	0.10	Subscribers' shares	2
18.03.2004	212,539,980	0.10	Shares issued pursuant to the Acquisition by MGB at par	21,254,000

The principal activities of the Company's subsidiaries are as follows:

Subsidiaries	Date / Country of incorporation	% effective equity interest	Issued & paid-up capital RM	Principal activities
MESB	20.08.1984 Malaysia	100	3,000,000	System integration specialising in the field of IBMS and ISMS, e-project management of mechanical and electrical services, and supply of engineered systems
MISSB	25.01.1995 Malaysia	100	1,000	Procurement of contracts in relation to engineering work specialising in the field of IBMS and ISMS, and sale of engineering equipment

4.2 Restructuring Scheme

As an integral part of the listing and quotation for the entire issued and paid-up capital of the Company on the MESDAQ Market, the Company undertook a restructuring scheme, which was approved by the following:

- SC vide its letter dated 4 March 2004;
- (ii) BMSB vide its letter dated 5 March 2004;
- (iii) FIC vide SC's letter dated 4 March 2004; and
- (iv) MITI vide its letter dated 12 December 2003.

The restructuring scheme entails the following:

(i) Acquisition

On 17 March 2004, the Company entered into a Share Sale Agreement for the acquisition of 3,000,000 ordinary shares of RM1.00 each representing the entire issued and paid-up share capital of MESB from MCSB for a purchase consideration of RM21,253,998 which was fully satisfied by the issuance of 212,539,980 new MGB Shares at par.

Thereafter, on 22 March 2004, MESB transferred to MGB the entire equity interest in its wholly-owned subsidiary, namely MISSB, at book value for cash.

The purchase consideration of RM21,253,998 for the Acquisition was arrived at based on the aggregate adjusted audited NTA of MESB and MISSB as at 31 August 2003 of RM21,253,998, after adjusting for interim dividend paid/payable for the financial year ended 31 December 2003 amounting to RM4,925,599 to the vendor, MCSB, as follows:

Acquiree Company	Aggregate audited NTA as at 31 Aug 2003 RM'000	Dividend paid/ payable RM'000	Aggregate Adjusted audited NTA RM'000	Purchase consideration RM'000	Issuance of MGB Shares as consideration No. of Shares '000
MESB	26,180	(4,926)	21,254	21,254	212,540

The Acquisition was completed on 18 March 2004. Upon completion of the Acquisition as set out above, the issued and paid-up share capital of MGB increased from RM2 to RM21,254,000 comprising 212,540,000 Shares.

(ii) Public Issue

Following the completion of the Acquisition and in conjunction with the listing of MGB on the MESDAQ Market, the Company is implementing a public issue of 71,000,000 new Shares at an issue price of 21 sen each.

The Public Issue of a total of 71,000,000 new Shares representing approximately 25% of the enlarged share capital of MGB are to be issued to the following parties:

- 8,500,000 new Shares representing 3.0% of the enlarged issued and paid-up share capital are reserved for eligible employees and business associates of the MGB Group.
- 8,000,000 new Shares representing approximately 2.8% of the enlarged issued and paid-up share capital are reserved for application by Malaysian citizens, companies, cooperatives, societies and institutions to be allocated via ballot; and
- 54,500,000 new Shares representing approximately 19.2% of the enlarged issued and paid-up share capital will be placed with Malaysian investors by the placement agents.

Upon completion of the Public Issue, the issued and paid-up share capital of MGB will be increased from RM21,254,000 to RM28,354,000 comprising 283,540,000 Shares.

The Public Issue Shares, upon allotment and issue, shall rank pari passu in all respects with the other existing issued and paid-up ordinary shares of MGB including voting rights and dividends and/or distribution that may be declared subsequent to the date of allotment of the Public Issue Shares.

(iii) Listing and quotation

Pursuant to the Public Issue, MGB will seek admission to the Official List of BMSB and the listing of and quotation for the entire enlarged issued and paid-up share capital of MGB of RM28,354,000 comprising 283,540,000 MGB Shares on the MESDAQ Market.

4.3 Business Overview

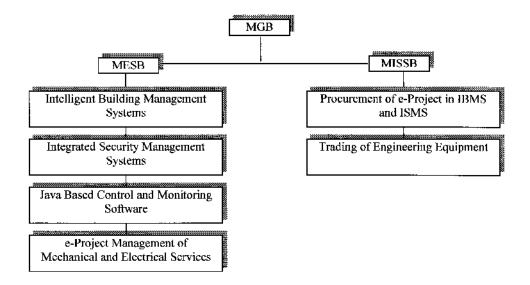
4.3.1 Principal Activities

MESB's current core business activity is principally in the design, supply, installation, and maintenance of the following:

- Intelligent Building Management System;
- Integrated Security Management System;
- Java Based Control Monitoring Software; and
- E-Project Management of Mechanical & Electrical Services.

The MGB Group, through MESB, specialises in the system integration of IBMS and ISMS that encompasses the system integration of all hardware and software required for the control and management of the entire building components including heating, ventilation and air conditioning, light, fire and security equipment that can be controlled from a single base location. The IBMS and ISMS represent a significant progress in technological advancements within the building technology arena. The overall goal is to reduce resource consumption, to increase safety and security, as well as to increase the comfort of the occupants.

The business activities of the MGB Group is depicted diagrammatically below.



MESB is a key player in the IBMS and ISMS industry that offers basic building automation or security equipment as well as high-end mechanical and electrical projects that require high technology and expertise in the system integration as well as the customisation of software. Both the IBMS and ISMS markets are growing in Malaysia and other countries. Even China has just recently announced that they are converting all their TV transmission signals to digital by 2005. What is more promising for the future is remote monitoring and integration of CCTV network through the IP surveillance technology. Insofar as the Directors of MGB are aware, there are several main drivers that are guiding the industry to adopt this technology and they are:

- the onset of network convergence of the CCTV, computers, alarms system and access control with the advance technology of biometrics;
- prevalent use of Internet and IP networking where almost any institution are connected online;
 and
- the efficiency of the system as it saves time and travel cost.

The integration of the security system is becoming one of the most popular methods used by many corporations in converging their existing system into an all encompassing system. Two (2) of the main components of the ISMS are the hardware and the software solutions. The hardware portion includes security devices like the CCTV, the video recording (either digital or analogue), access control and the intrusion devices. The software solution is an important feature which ensures that this equipment communicates and works coherently in a common personal computer base environment. One of the main reasons for the high number of security companies in the industry is that the software solutions are proprietary and customers are "locked-in" with a particular company depending on the ISMS to which they commit. Because of this, many industry players are demanding for more user-friendly system operating within a common open standard like the communication TCP/IP protocol. In this respect, the MGB Group is keeping abreast with industry development by directing their efforts towards R&D product development and technology enhancements.

Further information on the Group's products and services are provided in Section 4.3.2 below.

Some of the notable projects completed by MESB from 1999 to 2003 (with contract values exceeding RM2 million) are as follows:

1. Description of Project : Telekom Headquarters, Kuala Lumpur

Name of Client : UEM Genisys Sdn Bhd

Contract Value : RM2.8 million

Year of Commencement : 1996 Year of Completion : 2002

2. Description of Project : Prime Minister Office, Residence and Department, Putrajaya

Name of Client : Putrajaya Holdings Sdn Bhd

Contract Value : RM18 million

Year of Commencement : 1998 Year of Completion : 2000

3. Description of Project : Y2K Contingency Plan for Hospital Name of Client : Ministry of Health, Malaysia

Contract Value : RM26 million

Year of Commencement : 1999 Year of Completion : 1999

4. Description of Project : Wisma Putra at Parcel 1, PJP 2, Putrajaya

Name of Client : Monetrade Profmatic / Sunline M&E Services J.V.

Contract Value : RM3.9 million

Year of Commencement : 1999 Year of Completion : 2002

5. Description of Project : Berjaya Times Square, Kuala Lumpur Name of Client : Invescor-Dumez Jaya-Woh Hup JV

Contract Value : RM13 million

Year of Commencement : 1999 Year of Completion : 2003

6. Description of Project : Putrajaya Parcel C & D, Putrajaya Name of Client : Putrajaya Holdings Sdn Bhd

Contract Value : RM15 million

Year of Commencement : 2000 Year of Completion : 2001

7. Description of Project : Deputy Prime Minister Department, Putrajaya

Name of Client : Putrajaya Holdings Sdn Bhd

Contract Value : RM3.5 million

Year of Commencement : 2000 Year of Completion : 2001

8. Description of Project : Wisma Putra, Putrajaya
Name of Client : Putrajaya Holdings Sdn Bhd

Contract Value : RM3.9 million

Year of Commencement : 2001 Year of Completion : 2002

9. Description of Project : Palace of Justice, Putrajaya

Name of Client : Bina Goodyear Bhd Contract Value : RM5.7 million

Year of Commencement : 2001 Year of Completion : 2003

10. Description of Project : Computer Equipment Supply for Schools in Sabah, Perlis and

Kuala Lumpur

Name of Client : Ministry of Education, Malaysia

Contract Value : RM78 million

Year of Commencement : 2002 Year of Completion : 2002

11. Description of Project : Putrajaya Convention Centre, Putrajaya

Name of Client : IJM Construction Sdn Bhd

Contract Value : RM6.6 million

Year of Commencement : 2002 Year of Completion : 2003

12. Description of Project : 2G1, Precinct 2, Putrajaya

Name of Client : Bumi Teraju Development Sdn Bhd & Sunway Construction

Sdn Bhd JV

Contract Value : RM5.2 million

Year of Commencement : 2002 Year of Completion : 2003

13. Description of Project : 2G2, Precinct 2, Putrajaya

Name of Client : Putrajaya Perdana Construction Sdn Bhd

Contract Value : RM7.5 million

Year of Commencement : 2002 Year of Completion : 2003

14. Description of Project : 2G5 & 2G6, Precinct 2 (PH 2), Putrajaya

Name of Client : Sunway Engineering Sdn Bhd

Contract Value : RM2.4 million

Year of Commencement : 2002 Year of Completion : 2003

15. Description of Project : Menara Maybank, Kuala Lumpur

Name of Client : Malayan Banking Berhad

Contract Value : RM3.6 million

Year of Commencement : 2002 Year of Completion : 2003

As at 31 March 2004, MESB has secured 50 projects with a total contract value of approximately RM373 million. The unrecognised revenue for these contracts in hand is approximately RM190 million. Some of the major on-going projects (with contract values exceeding RM2 million) are as follows:

1. Description of Project : Pandan Hospital, Johor Bahru

Name of Client : MH Projects Sdn Bhd Contract Value : RM96.0 million Services Rendered : e-Project Management

Year of Commencement : 2000 Expected Year of Completion: 2004 % of Completion : 87%

2. Description of Project : Alor Setar Hospital, Kedah Name of Client : MH Projects Sdn Bhd

Contract Value : RM86.5 million Services Rendered : e-Project Management

Year of Commencement : 2001 Expected Year of Completion: 2005 % of Completion : 39%

3. Description of Project : Fire Alarm System-Universiti Teknologi Petronas

Name of Client : Nam Fatt Sdn Bhd/Ahmad Zaki Sdn Bhd/Ibai Bina Sdn Bhd

Contract Value : RM3.5 million

Services Rendered : IBMS
Year of Commencement : 2001
Expected Year of Completion: 2004
% of Completion : 84%

4. Description of Project : Tunnel Management System Putrajaya

Name of Client : Perbadanan Putrajaya / Putrajaya Holdings Sdn Bhd

Contract Value : RM13.1 million

Services Rendered : IBMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 38%

5. Description of Project : Syariah Court POJ 3G3 Putrajaya

Name of Client : Bina Goodyear Sdn Bhd

Contract Value : RM1.9 million

Services Rendered : IBMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 0%

6. Description of Project : ASRS, TUDM Subang

Name of Client : Ministry of Defence, Malaysia

Contract Value : RM54.2 million

Services Rendered : IBMS
Year of Commencement : 2002
Expected Year of Completion: 2005
% of Completion : 37%

Description of Project : Car Park Parcel Z, Precinct 1, Putrajaya

Name of Client : Ganda Imbuhan Sdn Bhd

Contract Value : RM3.4 million

Services Rendered : IBMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 50%

8. Description of Project : Alor Setar Hospital, Kedah Name of Client : MH Projects Sdn Bhd

Contract Value : RM2.5 million

Services Rendered : ISMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 39%

9. Description of Project : Nurse Training College, Alor Setar Hospital

Name of Client : Sari Multi-Builders Sdn Bhd/MH Projects Sdn Bhd

Contract Value : RM5.0 million

Services Rendered : e-Project Management

Year of Commencement : 2002 Expected Year of Completion: 2005 % of Completion : 26%

10. Description of Project : 3G1, Putrajaya

Name of Client : Road Builder (M) Sdn Bhd

Contract Value : RM2.5 million

Services Rendered : IBMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 70%

11. Description of Project : Residential Building, Alor Setar Hospital Name of Client : Jallcon (M) Sdn Bhd/MH Projects Sdn Bhd

Contract Value : RM5.5 million

Services Rendered : e-Project Management

Year of Commencement : 2002 Expected Year of Completion: 2005 % of Completion : 47%

12. Description of Project : Parcel E (SP1) Putrajaya
Name of Client : Norwest-Orbtech-IJM JV

Contract Value : RM8.7 million

Services Rendered : ISMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 59%

13. Description of Project : Parcel E (SP2) Putrajaya
Name of Client : Perkasa-Sutera-Bina Puri JV

Contract Value : RM2.8 million

Services Rendered : ISMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 65%

14. Description of Project : Parcel E (SP3) Putrajaya

Name of Client : Pembinaan Punca Cergas Sdn Bhd

Contract Value : RM6.0 million

Services Rendered : ISMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 20%

15. Description of Project : Parcel E (SP4) Putrajaya
Name of Client : ZAO-Nam Fatt JV

Contract Value : RM7.2 million

Services Rendered : ISMS
Year of Commencement : 2002
Expected Year of Completion: 2004
% of Completion : 78%

16. Description of Project Parcel E (SP5) Putrajaya

Putra Perdana Construction Sdn Bhd Name of Client

Contract Value RM3.3 million

Services Rendered ISMS Year of Commencement 2002 **Expected Year of Completion:** 2004 % of Completion 62%

17. Description of Project 2G3 & 2G4 (P II), Putrajaya : Name of Client Letrikon Engineering Sdn Bhd

Contract Value RM3.2 million

Services Rendered **IBMS** Year of Commencement 2003 **Expected Year of Completion:** 2004 % of Completion 76%

18. Description of Project 4G3 & 4G4, Precinct 4, Putrajaya

Ireka Engineering & Construction Sdn Bhd Name of Client

Contract Value RM4.9 million

Services Rendered **IBMS** Year of Commencement 2003 : **Expected Year of Completion:** 2005 % of Completion 45%

19. Description of Project 4G1 & 4G2, Precinct 4, Putrajaya :

Name of Client Putra Perdana Construction Sdn Bhd :

Contract Value RM11.3 million :

Services Rendered **ISMS** Year of Commencement 2003 **Expected Year of Completion:** 2005 % of Completion 30%

20. Description of Project Sungai Buloh Hospital, Selangor

> Name of Client Rira Bina Sdn Bhd Contract Value RM2.0 million

Services Rendered **ISMS** Year of Commencement 2003 **Expected Year of Completion:** 2004 % of Completion 40%

21. Description of Project 4G3 & 4G4, Precinct 4, Putrajaya

Name of Client Ireka Engineering & Construction Sdn Bhd

Contract Value RM11.8 million

Services Rendered **ISMS** Year of Commencement 2003 Expected Year of Completion: 2005 % of Completion 19%

22. Description of Project 2G3 & 2G4, Putrajaya Name of Client

WCT Engineering Berhad

Contract Value RM14.0 million

Services Rendered ISMS Year of Commencement : 2003 **Expected Year of Completion:** 2005 % of Completion 0%

23. Description of Project 2G6, Putrajaya :

> Name of Client Sunway Engineering Sdn Bhd

Contract Value RM5.5 million

Services Rendered ISMS 2003 Year of Commencement **Expected Year of Completion:** 2005 % of Completion 0%

4.3.2 **Principal Services and Products**

Services

The MGB Group is a key player in the areas of system integration of IBMS, ISMS and c-project management of mechanical and electrical services. For close to two decades, the Group, through MESB, has played a pivotal role in nation building by providing cost-effective state-of-the-art e-project management and system integration services for office buildings, shopping complexes, airports, oil refineries and manufacturing plants. Fundamental to this success is the Group's mission to continually exceed customers' increasing expectations. Currently, the Group focuses on building and integrating world class technology to the market and is committed to continuous improvements in quality, service and productivity.

The MGB Group considers customer support, service and satisfaction a vital part of its core areas of excellence. The value-added services that the MGB Group offers to its clients are summarised as follows:

Products & Services	Details			
IBMS	IBMS is an integration of BAS, Access Control, CCTV System and Addressable Fire Control & Monitoring System. The IBMS provides a centralised monitoring and control of entire building services through sensors and equipment placed at strategic areas and helps to regulate and optimise energy costs, maintenance and manpower costs.			
ISMS	ISMS provides a high level of security solution by integrating all the individual security system like CCTV, Card Access, Perimeter Intrusion Detection system, Door monitoring system, Guard Tour system and asset tracking system into one single intelligent system.			
JBCM	JBCM Software is a universal control and monitoring software for accessing, automating and controlling smart devices over the Internet. The software allows the building industry to integrate all types of embedded devices into a single, truly interoperable system, regardless of any protocol to control and monitor sites over the Internet and to collect and analyse data.			

Products & Services	Details
e-Project Management	MESB specialises in providing e-project management of mechanical and electrical services. It specialises in system integration of smart devices for controlling, monitoring and automating mechanical systems such as air conditioning system, fire fighting, plumbing and sanitary, hot water, medical gas, kitchen equipment, hydrotherapy system, pneumatic tube system and medical gaseous system. The system integration of electrical services provided include power transformer, main switchboard, distribution board, external lighting, lighting and surge protection.

Products

In addition to the key services offered to its customers, MESB is also an agent/distributor in Malaysia for the world's top building automation and security products. The product range of MESB is set out as follows:

Products	Description	ISMS	IBMS	JBCM
NexWatch	A complete product range of building security systems from software to controllers to filed sensors	√		
CCTV Systems	A complete product range of CCTV systems from software to controllers to CCD cameras	✓		
Invensys Building Automation System	A complete product range of building automation systems from software to controllers to filed sensors		✓	
Invensys Control Valve	A complete product range of mechanical equipment control valve and actuator		✓	
Simplex Fire Alarm Systems	A complete product range of building fire alarm systems from software to controllers to filed sensors		✓	
Murata Automated Storage and Retrieval System	A complete product range of warehouse storage and retrieval systems from software to controllers to robotic arms		✓	
Tridium – JACE	Java application control engine for IBMS			✓
Tridium – Ni@gara FrameWork	A fully internet-enabled distributed infrastructure for real-time access, automation and control of embedded devices			✓
Tridium – Vycon	Web-enabled building automation control engine			✓
SecureMax	Smart home intelligent systems	✓	✓	

MESB is also an agent in Malaysia for Invensys Building Systems Pte Ltd and NexWatch, which are amongst the world's leading IBMS and ISMS companies.

4.3.3 Technology

The MGB Group is one of the pioneers in the system integration and e-project management of security and automation product integration in Malaysia, and holds proven expertise and cutting edge technology in building security management and automation systems. The MGB Group's main technology expertise lies in the customisation and redevelopment of the Java-based Ni@gara FrameWork (Open System), the fully internet-enabled distributed infrastructure software, into its own JBCM software used to monitor, control, schedule, trend and/or alarm objects within diverse, embedded systems in real time via thin clients. The MGB Group has also secured the technological rights for the application of the Java-based Ni@gara FrameWork.

The Ni@gara Framework is a universal software infrastructure that allows MESB to build customised, Web-enabled applications for accessing, automating and controlling "smart" devices in real-time over the Internet.

The open platform Java-based JBCM unifies and integrates diverse systems and devices - regardless of manufacturer, communication standard or software - into a single interoperable system.

The system integration of IBMS and ISMS is the formation of the successful customisation of JBCM software. The MGB Group specialises in the IBMS and ISMS market that encompasses the system integration of all hardware and software required for the control and management of the entire building components including HVAC, light, fire and security equipment that can be controlled from a single base location. The integration of IBMS and ISMS represents a significant progress in technological advancements within the building technology arena.

The JBCM software includes a wealth of standard services for event handling, logging, web access, and others. A service is defined as a special type of node that provides access to published and verified sets of functionality for other nodes. Some examples of services include control engine services which execute control nodes on a periodic basis, database services which provide standard SQL access to all application data, e-mail services which manage e-mail routing of alarms.

Most importantly, JBCM is a software solution that leverages on the power of mainstream technologies without the constraints of a proprietary design or implementation. Diverse systems can include:

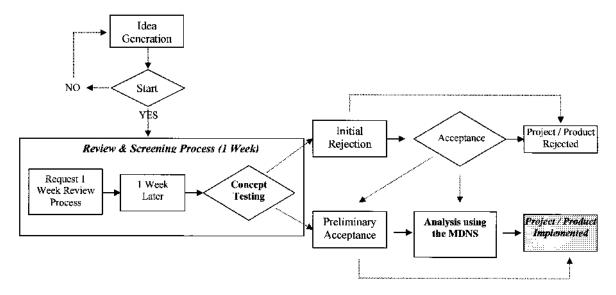
- multiple generations of similar products that do not communicate with each other or require multiple tools to engineer;
- different products manufactured by different groups within a single company; and
- dissimilar products manufactured by multiple companies.

The other secondary technologies, which the Group supports, includes utilisation of e-project management of mechanical and electrical services, NexWatch product line for the integration of a simple security system to highly customised, large systems with hundreds of CCTV cameras and sophisticated alarm monitoring devices, and Tridium Inc, USA – a universal software infrastructure that allows businesses to easily build software applications for accessing, automating and controlling smart devices over the Internet.

4.3.4 Patents and Trademarks

Currently, the Group does not have any trademark or patent with the Malaysian authorities. Nevertheless, processes undertaken by the Group, such as system integration and customisation of software are not easily replicated. The Group relies upon a combination of trade secrets, non-disclosure and other contractual agreements to attempt to protect its proprietary rights. The Group is also protected by the general copyright laws in Malaysia for its proprietary processes and know-how. Going forward, the Group intends to protect its intellectual property rights by registering trademarks over some of its products and solutions it has developed.

4.3.5 Product Innovation Process Flow of the Group



(a) Idea Generation

The development decision cycle starts with the search for ideas. The search should be a formal, structured process that seeks and includes input from the R&D team, relevant customers, advisory bodies, other departments, and business partners (e.g., suppliers, principals, development partners). Ideas generated in this phase are tested for compatibility with the MGB Group's predefined innovation values that is, its vision, articulated goals, objectives, and strategies.

(b) Review and Screening Process

Typically this process takes one week to be completed. In this phase, ideas should be further screened to determine whether the Group possesses the necessary competencies and resources to support the idea. If not, a further examination should be considered to determine whether the Group can obtain them, how it can do so, and the cost involved.

(c) Concept Testing

During this phase, the product development team refines the product idea into a product concept targeted at specific customer segments within the IBMS or ISMS area. The Group also assesses whether the proposed concept can be implemented based on the Group's technology capabilities.

(d) Analysis using the Metronic Digital Nervous System ("MDNS")

The feasibility of the proposed concept is then analysed based on the MDNS which is an information exchange network built on a combination of IT infrastructures, different software applications, Internet technology and web concept of the MGB Group. If the product meets the MDNS objectives of the Group, the product will then be tested based on the following assessment modules:

- Financial Analysis Using information and data captured during previous projects, the R&D team conducts a rigorous examination of the marketing strategy to determine whether it is possible for the product to meet company sales, cost, and profit objectives.
- Strategy Development In this phase, the R&D team defines the size and structure of
 the product's target market, creates a strategy for positioning and selling the project, and
 establishes goals for market share and profit for the first few years after the launch of
 the product.
- Market Testing In this phase, beta version of products are tested to determine whether it performs as expected in final form. Questions asked during this phase include issues of functionality or whether the product in this form will meet the Group's sales and financial expectations. Feedback from this phase will be provided to the R&D team for further refinements.

(e) Project / Product Implemented

If responses to all the Group's previous inquiries have been positive, the R&D team will undertake the actual development of the product itself. During this phase, which includes an iterative loop linked to market testing, the R&D team develops the product concept, drawing, or prototype into a physical product for use in the Group's projects.

4.3.6 Estimated Market Coverage and Share

Company	Market Share (%)
The MGB Group	21%
Johnson Controls Sdn Bhd	32%
Honeywell Engineering Sdn Bhd	31%
Siemens Building Technologies Sdn Bhd	7%
Others	9%

The combined IBMS and ISMS market (for projects excluding individual equipment revenue comprising HVAC, light, fire and security equipment) is estimated at RM182 million in 2002. Honeywell Engineering Sdn Bhd, Johnson Controls Sdn Bhd and Siemens Building Technologies Sdn Bhd are multinational players that develop their software and hardware through their parent companies to produce an efficient building management system flow. The MGB Group commands an estimated 21% of the combined IBMS and ISMS market in Malaysia.

Further information on the industry players are set out in Section 4.5.6 of this Prospectus.

(Source: Infocredit D&B (Malaysia) Sdn Bhd)

4.3.7 Principal Markets, Marketing and Distribution

The MGB Group's current business focus is on the local market. Most of its customers are local comprising Government organisations and private companies. The Group has, in the past, ventured overseas and made inroads into countries such as Brunei and Vietnam.

The marketing team of the MGB Group carries out its sales and marketing activities by promoting the Group's products to its customers who are mainly corporate clients. The Group's marketing strategy and focus is to provide prompt and efficient services to its potential and existing customers, expand its customer base and gather feedback for product improvement. The marketing and distribution modes/activities include:

- Pre-tender design (plan & specifications)
- Tenders
- Seminars
- Referrals
- Trade exhibitions

The MGB Group's participation in trade fairs and exhibition allows relationship building with its customers and helps to promote brand awareness in the local and South East Asia market.

The MGB Group intends to leverage on its existing technology and engineering process capabilities to expand into the following areas:

- venture into other overseas markets;
- offer a wider range of services; and
- market horizontally into other application markets.

4.3.8 Source and Availability of Hardware and Software

Raw materials for the MGB Group are defined as both human capital and IBMS and security systems equipment. Please refer to Section 4.3.12 of this Prospectus for further information on human capital.

The Group's suppliers are primarily from overseas due to the foreign suppliers' ability to provide advanced ICT products that are compatible with the latest IBMS technology system. In order to mitigate the possibilities of any disruptions to the supply of such equipment, the MGB Group has entered into several exclusive and non-exclusive distributors/dealers agreements/arrangements with reputable international hardware and software manufacturers, as follows:

Name of supplier/principal	Description of arrangement and products supplied		
Invensys Building Systems Pte Ltd, Singapore	MESB has a Distributor Agreement dated 11 August 2003 and the term of the agreement is two (2) years from the date of execution being 6 October 2003. This is a periodic renewal agreement with exclusive and/or non-exclusive product distribution rights as stated in the agreement with the principal that provides for the BAS, IBMS and HVAC controlled products. Invensys is involved in the design, manufacture, installation of support building controls and building management systems for commercial and industrial buildings. Its product range extends from valves, actuators, sensors and controllers to advanced IBMS.		
NexWatch	MESB has a non-exclusive Dealer Agreement with NexWatch that provides products for security management and access card management systems. This is a periodic renewal agreement. The current period covered is 1 September 2003 to 31 August 2005. With over twenty five (25) years experience, NexWatch is the only manufacturer of complete proximity access control systems.		
Tyco Fire, Security & Services Pte Ltd Singapore	MESB has on 7 April 2004 signed a non-exclusive Distribution Agreement with Tyco Fire and Security Services Asia Pte Ltd Singapore as the distributor of the SIMPLEX brand of fire detection products, devices and accessories. This is a periodical agreement and currently is with an initial period of two (2) years from 7 April 2004.		
Scandec AS, Norway	MESB has an exclusive Distributor Agreement with Scandec AS for molecular resonance locating system or Alpha6 system. This is a periodical agreement and currently is with an initial period of twelve (12) months from 21 August 2003.		
Firestem Limited, United Kingdom	MESB has a Licence Agreement with Firestem Limited for fire scal compound and other chemicals. This is an exclusive right agreement with term of ten (10) years from 26 March 2001.		
Meditherm Inc, USA	MESB has an Independent Representative Agreement with Meditherm Inc for digital infra red thermal imaging system for clinical applications including Severe Acute Respiratory Syndrome screening, camera, and imaging system. This is an exclusive, renewable agreement with initial term of two (2) years from 12 May 2003.		

The principals also provide technical support and training to their authorised dealers/distributors. The Group's Procurement / Purchasing Department will evaluate the suppliers in terms of pricing, quality, product and after-sales services before the Directors and senior management evaluate and decide on new distributorship from overseas suppliers/ principals.

The Group is responsible for the design, supply, installation, testing, commissioning and after sales services of the products and services it supplies to its customers.

4.3.9 Quality Control

The MGB Group adopts a stringent internal quality management assurance policy to ensure that products and services provided by the Group are of high quality and meet the specifications and requirements of its customers. The Directors of MGB consider the consistent high standard of services and quality of equipment as an essential attribute in retaining existing customers and attracting new ones as well as maintaining its status as one of the leading companies in IBMS and ISMS in Malaysia. The MGB Group is thus committed to providing quality products and services.

The MGB Group conducts control checks at various stages of the tender process to facilitate corrective actions in order to eradicate any cause of deviation at their sources.

MESB was certified with ISO 9001:2000, accredited by Lloyd's Register Quality Assurance in the areas and scope of "design, engineering, construction, project management, commissioning, service and maintenance of intelligent building management and security systems, mechanical & electrical services". Its quality management system is therefore subject to reviews by customers and bi-annual external audits carried out by Lloyd's Register Quality Assurance in compliance with the criteria set out under ISO 9001:2000 certification.

4.3.10 R&D

As an engineering-based company, the Group is operating in a rapidly changing technology industry. To maintain its competitiveness in the market, the Group places strong emphasis on R&D to achieve quality improvement, enhance features, capabilities and processes of its business activities. The MGB Group is committed to continuous R&D efforts to keep abreast of market developments, market trends and to enable it to tap into new markets, so as to ensure the long-term sustainability of its business.

The MGB Group's R&D objectives are explained as follows:

(i) Enhancing product features

In order to compete in a continuously evolving technology industry, the Group employs extensive R&D and market intelligence to maintain its competitiveness and position in the market. It also rides on the existing platform of its products and develops products that have solid conceptual and architectural foundation to support any future development requirements. In addition, the Company utilises a wide variety of its resources and ideas through research discussions to achieve the best possible engineering designs.

(ii) Technology improvement

The Group has embarked on several R&D collaboration initiatives with several renowned companies including Tridium Inc. USA and Murata Ltd, Japan on selected high-growth products which are in line with its business focus and competencies. The Group is also currently in the process of producing a revolutionary compact and versatile digital Input/Output module, high-tech low-cost home automation and security systems and universal controls software to be used in conjunction with existing and future controls hardware.

(iii) Benchmarking of projects for process improvement

The Group is focused on process improvement by studying and benchmarking the process, design and implementation of projects related to BAS and ISMS. During the design stage of a new product, staff from different divisions are placed in a common project team where information and knowledge are shared between project team members. The R&D members of the Group then records the data of projects in the knowledge database of the Group and analyses the requirements of the new projects based on precedent cases. This method of benchmarking has proven to improve the management and operational efficiency of its projects as it allows corrective actions to be put in place before actual implementation of projects which would eventually lead to reduction in variances/deviations of project goals.

Using the system, the R&D team of the MGB Group has contributed significantly to the success of past projects such as:

- In 1988, MESB developed a logic programme for Hyatt Kuantan which allows the
 monitoring and control of chilled temperature to prevent the condensation of the
 piping system which resulted in huge energy savings. The system is still in operation
 currently.
- In 1989, MESB developed a software to integrate the York air-cool chiller control system for Telekom based in Kelana Jaya and the Paediatric Hospital of Kuala Lumpur which is still in operation today.
- In 1990, MESB developed a logic programme for a timber company based in Kuantan to automate the kiln drying process of the timber which includes programmable control equipment and sensors to detect timber dryness. Using the existing system, the company emulated this process for another timber company based in Sibu.
- In 1991, MESB integrated an automation system with card access system and proximity card using a programmable logic control sequence for Petronas BDO based in Miri.
- In 1992, MESB developed a logic programme to control and monitor critical temperature humidity for cleanroom environment for Chung Hwa Picture Tube Sdn Bhd based in Shah Alam. The system is still in operation currently
- In 1999, MESB developed an embedded software on top of a Y2K compliant software to protect all mechanical and electrical services related electronic devices for the Ministry of Health.
- In 2000, MESB integrated the in-house time attendance management system with a security access module for Putrajaya project.
- From 2001 to 2002, MESB developed a logic programme rated Class 10 for critical temperature humidity control for cleanroom environment for MIMOS's wafer fabrication plant based in Technology Park Malaysia. This system is still in operation currently.
- From 2001 to 2002 MESB developed a software to integrate the Hirotec process airconditioning system and lighting control system for Telekom Headquarters (Pantai) which allows the automation of the entire BAS function of the building.
- From 2002 to 2003, MESB developed an integration software to control and monitor
 the tunnel automation, tunnel security and surveillance with CCTV and fire alarm
 system into a unified building management system for the Common Utility Tunnel
 Project in Putrajaya.

- In 2003, MESB developed an integration software to control and monitor the fire alarm system, master clock system, lift system and facility management system into a unified building management system for Putrajaya Convention Centre.
- In 2003, MESB developed and completed a state-of-the-art security and building automation system for the Palace of Justice in Putrajaya which integrated all fire alarm system, lift system and voice communication system into a unified building management system.

As part of its five (5)-year business development plan, the Group's R&D plan shall be focused on the consolidation of its inherent strengths and to diversify geographically into other countries such as China, Brunei, Vietnam and other Asean countries. In this regard, the R&D activities of the Group will revolve around:

- (i) Continuous new product enhancement and development, focusing on Internet-enabled technologies for e-devices;
- (ii) Assessing new technology and conducting system requirement studies and analysis to improve both value and quality of its IBMS and ISMS;
- (iii) Conducting system design, programming, testing and benchmarking of its deliverables to enhance its knowledge database to monitor, track and trend ongoing projects; and
- (iv) Developing new areas for expansion and diversification of business activities and products.

As at 31 March 2004, the MGB Group's R&D team comprises nine (9) personnel, headed by Dr Ng Tek Che and assisted jointly by Encik Wan Shahida Azmi Johari and Mr Kung Teong Eng, and is supported by a team of senior engineers. The R&D team undertakes R&D, engineering, product testing and software development activities. The Group is involved actively in new product developments whereby a substantial amount of beta testing is conducted.

The R&D team currently concentrates on R&D of best practices and quality of standard of its processes to achieve zero-defects and minimise problem areas during project implementation and deployment. It also conducts regular customer visits to provide technical support with an objective to enhance the products through obtaining feedbacks from these customers. In addition, the Group utilises a wide variety of its resources and ideas through research discussions to achieve the best possible engineering designs.

For the financial years ended 31 December 2001 to 31 December 2003, the Group's R&D expenditure, all of which did not qualify for tax incentives, was as set out below:

Financial year ended	R&D expenditure	% of revenue
	RM'000	
31 December 2001	308	0.6
31 December 2002	350	0.3
31 December 2003	487	0.4

4.3.11 Interruption in Operations

The MGB Group did not experience any disruption in business which had a significant effect on its operations during the twelve (12)-month period prior to the date of this Prospectus.

4.3.12 Information on Employees

As at 31 March 2004, the Group has a total of 208 employees (including 3 Directors), of which 3 are foreigners. They hold various job functions including sales and marketing, finance, administration/human resources, customer service, technical support and software development. As at 31 March 2004, approximately 46% of the total staff force are engineering based professionals.

The total number of employees and length of service as at 31 March 2004 are as follows:

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Categories of staff	More than 8 years	5 to 8 years	2 to 5 years	Less than 2 years	Total
Directors, General Managers, Senior Managers	3	-	2	1	6
Managers, Assistant Managers	6	7	7	3	23
Senior Executives, Senior Engineers, Executives, Engineers	7	8	27	54	96
Technicians, Draughtsman, Supervisors, Clerical, Despatch	-	6	17	60	83
	16	21	53	118	208

The management of MGB maintains close and cordial relationship with its employees. Together with its employees, the Group creates a healthy and comfortable working environment. The Group regularly organises recreational events such as family day, sports day and annual dinners for the employees and their spouses. In addition, the Group places great emphasis on employees' safety and health.

The employees of the MGB Group are not members of any labour unions. There has not been any industrial dispute in the past between the employees and management.

The Group provides a series of continuous training and development programmes for its employees, which includes in-house workshops to update all the employees on the new developments in the Group. The employees receive technical and production training from the Group's in-house experts. The main objective of its training and development programme is to keep its staff informed about recent developments in the IBMS and security technology and to further encourage overall productivity and efficiency.

In addition, the Group also engages external training centres and associations to conduct seminars and workshops to identify, evaluate and manage risks, to enhance management quality and increase the competency level of its employees. The types of external programmes that the staff have participated are management courses, engineering courses, information technology training and sales/marketing courses.