



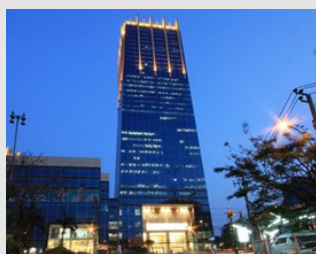
# MGB INTERNATIONAL

# CAPABILITY STATEMENT

## 2016



*MGB UK Office*



*MGB International Head Office  
Bangkok Thailand*

*Since its formation in Asia Pacific Region in 2007 MGB International has grown to an organisation comprising more than 50 professionals*

## COMPANY OVERVIEW

Magnate Grey Box Ltd. (MGB) was incorporated in the UK on the 1st January 2004 combining the railway expertise of Magnate Associates Ltd. with the materials and logistics expertise of Western Electrical Ltd. The UK business continues to serve the UK and European railway signalling markets, and is now called MGB Engineering Limited and operates as a separate entity to MGB International Ltd.

The shareholders and directors of MGB formed Magnate Grey Box (Thailand) Ltd in 2007 in response to the shortage of signalling design engineers in the world market. The company is based in Bangkok and has recruited a team of enthusiastic, high quality graduate Thai engineers undertaking training aligned with the IRSE licensing requirements for signalling designers.

Magnate Grey Box (Thailand) Ltd. changed its name to MGB International Ltd. in December 2008 to reflect more accurately the core business of the company in the international market. The company was started as and remains a privately financed enterprise. MGB International Ltd. is referred to in this document as MGBI.

MGBI was established to address the challenges and opportunities that exist in the international railway signalling market by introducing cost effective added-value services and products wherever possible. The company is pro-actively working with its clients towards the goals of signalling design standardisation and thus project cost reduction.

MGBI established Magnate Grey Box International Pty Ltd in Australia in March 2009, in order to better serve its major client in New South Wales and Queensland. The Australian company provides clients with a full range of design and project services including design & verification, project engineering, commercial management, project management, site management, testing and project engineering. The Australian company is recruiting and training signalling engineers locally as well as providing a local interface for the Thai company. MGBI established an office in Brisbane, Queensland in March 2009.

MGBI also established MGBI Malaysia Sdn Bhd in Kuala Lumpur in 2011, again to better provide local support to major clients. MGBI Malaysia provides independent verification and validation services and engineering consultancy support. In 2013, MGBI entered into a partnership with Specom Engineering Sdn Bhd (Malaysia) to provide rail operators with a unified approach to rail signalling, electrification and communications.

MGBI established an office in Perth, Western Australia in January 2012 to serve the Rail Sector. In 2015 MGBI entered into a partnership with Titan ICT Consultants to provide rail operators with an integrated approach to rail signalling and communications systems to meet the changing rail environment. To strengthen and build on this partnership, MGBI established a second base in Brisbane Queensland with the opening of a shared office with the Queensland consortium of Titan ICT consultants in the Brisbane CBD in 2015.

Throughout its evolution, MGBI has sought to provide cost effective solutions to some of the challenges that exist across the signalling industry. One of these solutions is MGBI's proprietary materials and labour estimating and management system, DMITS. The DMITS system allows the production of highly accurate bills of material and labour at early stages of any project, which may then be updated to reflect design, installation or testing driven change. Recording and measuring the change on signalling projects has resulted in more detailed understanding of the causes of cost escalation, and by using the predictive ability of the system, has allowed cost of change analysis to be carried out before rather than after changes are implemented.

Today, under the Managing Director Peter Foxley, MGBI have gained considerable experience in the provision of design, installation, testing and project engineering services for Rail clients within Australia and Asia. Our portfolio of project history ranges from light rail to heavy rail, electrified to non-electrified lines, passenger to freight rail and our experience covers every aspect of the project lifecycle over numerous rail authorities and government bodies.

MGBI's employees and associates consist of highly qualified multi nationals from all over the world. The knowledge base and experience of our key personnel in combination with our company portfolio demonstrates our international stature as a well-established railway signalling consultancy firm serving the Asia Pacific region. In addition to our key personnel, over the years MGBI have built relationships with a large number of skilled consultants and subcontractors who specialise in design, testing, TCS systems and project engineering – these associates can be recruited at short notice.

MGB International operates under a Matrix structure which allows departments to work closely together and communicate with each other frequently to solve issues. Efficient lines of communication enhance productivity and allow for quick decision-making. Managers can respond quickly to the needs of customers and the organization.

MGB International has representation in;

- ◆ Bangkok,
- ◆ Kuala Lumpur,
- ◆ Perth,
- ◆ Sydney,
- ◆ Newcastle and
- ◆ Brisbane.



MGB International has developed a comprehensive suite of in-house Training Courses

## ORGANISATION AND KEY PERSONNEL

MGB International delivers complete Signalling Services as an integrated service and has established an extensive network of offices in Thailand, Malaysia, Queensland, and Western Australia.

Permanent offices are located at Bangkok, Kuala Lumpur, Brisbane CBD, Brisbane Regional and Perth.

Subsidiary staff are located in Newcastle and Sydney.

An affiliate office is located in Melbourne.

The company's head office is located in Bangkok, Thailand.

## COMPANY EXECUTIVE MANAGEMENT

Peter Foxley	Managing Director
Andy Kennedy	Systems Director
Tatchaporn Poolprasert	Country Manager Thailand /Group HR & Finance

## REGIONAL MANAGEMENT TEAM

Bill Jack	Project Director (Group)
Chris Holdship	Head of Training & Competence
Noelle Wall	Engineering Manager Thailand
John Ralphs	Engineering Manager Australia West
Simon Flint	Engineering Manager Australia East
Charlie Hackett	Engineering Manager Malaysia
Alan McDowall	Engineering Manager (Project Dependent)
Zachary Piper	Systems Manager

## PEOPLE

MGB International recognises that its main asset is its people and therefore invests heavily in the development and retention of employees.

MGB International has a full time dedicated Head of Training & Competence responsible for employee training and development.

MGB International is considered by the industry as an employer of choice. This is evident from MGB International's continued ability to attract and retain quality people in the business.

MGB International retains quality employees by providing in-house and external training and development programs so that employees are continually up-skilled in their respective fields of expertise.

The development of employees has allowed the company to provide career planning, opportunities and promotion from within the organization resulting in a skilled, high performing, cohesive and loyal team culture and stable workforce.

Working in MGBI means joining an international company, working with people of different ethnicities and cultures.

The company's culture is clearly evident and built on loyalty and trust and the empowerment of self-directed teams and individuals.



*MGB is an ISO accredited organisation and operates a quality management system which meets the requirements of ISO9001:2008.*



*MGB International has achieved the status of Authorised Engineering Organisation with TFNSW*

## MANAGEMENT SYSTEMS

Quality of service is absolutely fundamental to our reputation and ethos. We enjoy a high level of repeat business and referrals from clients and work hard to keep it that way.

MGB is an ISO accredited organisation and operates a quality management system which meets the requirements of ISO9001:2008. We are committed to delivering the highest standards of service across all projects but know that if we are to achieve our prime objectives we must “raise the quality bar”. We therefore continually seek to enhance the performance and consistency of our quality system through improved processes and measures.

At MGB we take our responsibility to the environment very seriously.

We have an environmental policy and management system in place and are committed to complying with any environmental requirements of ISO 14001:2008

## MEMBERSHIPS, AGREEMENTS & ACCREDITATIONS

MGB International has been registered as a provider with the following organisations/companies as a Service provider;

### Panel Memberships

- ◆ Queensland Rail – Project Management Services
- ◆ Queensland Rail – Signalling Engineering Service Providers
- ◆ Public Transport Authority (WA) - Panel 3 – Rail Infrastructure (Signalling)

### Signalling/Framework Agreements

- ◆ Sydney Trains
- ◆ ARTC – Signalling Design – Project Management/Engineering and Testing & Commissioning
- ◆ JHR CRN – Signalling Design Services
- ◆ Ansaldo – STS (Design & Testing)

### Accreditations

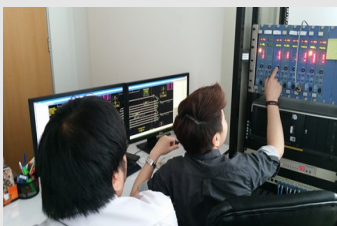
- ◆ ASA of NSW - Authorised Engineering Organisation
- ◆ IRSE – Accredited Assessor



*MGB Provides integrated Signalling services from concept design through detailed design including testing and commissioning*



*MGB International has considerable experience in Microlok application data design, checking & verification.*



*MGB International Microlok II Simulator test desk.*

## DESIGN SERVICES

Our employees have various levels of experience which we constantly strive to invest in, giving us the right skills for the future. We have developed our own training modules and also offer a range of signalling courses to the rail sector.

A growing number of our engineers have IRSE licenses and undertaken competency assessments which are now a prerequisite for carrying out activities associated with the safety critical aspects of railway signalling projects. Please contact us should you want an up to date list of our engineers and their associated competences.

- ◆ Signal Feasibility and Concept Design
- ◆ Detailed Signal Design
- ◆ Signal PBI Data Design
- ◆ Signalling IV&V
- ◆ Train Control System Design
- ◆ Communication Design
- ◆ Project Management
- ◆ Project Engineering
- ◆ Signal Testing & Commissioning
- ◆ Signalling Competence Assessment

## INDEPENDENT VERIFICATION & VALIDATION

MGBI undertakes independent IV&V activities for other Signalling Companies. Typically this includes design, testing, commissioning and related certification activities.

## ASSET MANAGEMENT

MGBI has a well-developed Technical Signalling Design organisation which can undertake design services throughout the full Asset Lifecycle. This includes concept design, detailed design and maintenance support design. MGBI also provides specialised Signalling Maintenance Services. Senior staff also have considerable management experience in Signalling Maintenance within Australia, as well as International Operations and Maintenance activities including undertaking signalling maintenance, service and call centre support for organisations such as Network Rail, CTRL, Renfe HST, China HST, RFI, RATP.

MGBI has teamed with SAEG for several years now. A synergy has developed between the two organisations such that jointly we combine to provide a coordinated team with significant expertise capable of providing a range of Asset Maintenance and Support Services with particular emphasis on Signalling. SAEG has a specialised team of qualified engineers with considerable Asset Maintenance experience within Australia. Together we bring a team of more than 60 professional staff capable of providing a wide range of Asset Maintenance and Support services.

## TOOLS

MGBI uses various tools as part of its design process;

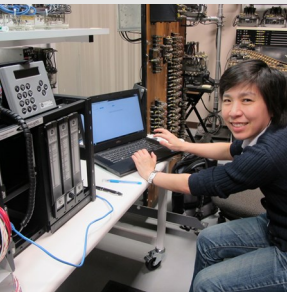
- ◆ Microstation
- ◆ AutoCAD
- ◆ ElectroLogIXS VLC development suite
- ◆ ElectroLogIXS Vital Hardware Simulator
- ◆ CADconform software – identification & correction of CAD standards issues
- ◆ Microlok II Simulator

*MGBI Personnel have worked on a wide range of technology applications throughout UK, Asia and Australia*

*MGBI Personnel have undertaken OEM training for data design and programming of various technologies.*



*MGBI personnel are qualified Frauscher Axle Counter designers*



*MGBI possesses simulation tools and expertise to perform GE XP 4 application data simulation testing*

## SIGNALLING TECHNOLOGIES

MGBI personnel have experience with the design and application of the following Signalling Technologies

- ◆ ATP L10000
- ◆ ATP L12000
- ◆ AWS
- ◆ Axle Counters Frauscher ACS 2000
- ◆ Axle Counters Frauscher FaDC
- ◆ Axle Counters Thales
- ◆ ElectroLogIXS
- ◆ GE XP4 LX Predictors
- ◆ GCP 4000 LX Predictor
- ◆ Microlok+
- ◆ Microlok II
- ◆ Microlok II Simulation
- ◆ Microtrax
- ◆ Route Relay Interlocking
- ◆ Seltrac
- ◆ SSI
- ◆ Track Circuits—HV
- ◆ Track Circuits—Audio Frequency
- ◆ TPWS
- ◆ Westrace

## SIMULATION TECHNOLOGIES

MGBI have experience with the design and application of the following Interlocking Simulation Technologies and also possess the relevant hardware and software tools;

- ◆ Microlok II
- ◆ ElectroLogIXS
- ◆ GE XP4
- ◆ GCP 4000

## RAMS ANALYSIS

MGBI has in-house RAMS engineer to undertake RAMS analysis requirements for specific projects.

## TESTING & COMMISSIONING

The following are details of MGBI's Rail and Testing and Commissioning capabilities;

### Testing

- ◆ Principles testing
- ◆ Tester-in-Charge
- ◆ Factory and Field Function testing
- ◆ Testing Documentation (Plans; Procedures; Guidelines; Work Packages & Certificates)

### Commissioning

- ◆ Commissioning Management
- ◆ Commissioning Documentation (Plans; Work Packages & Hand-Over Certificates)
- ◆ Commissioning Field Testing

## PROJECT HISTORY

Client	Rail Authority / Operator	Project	Role	Year
Ansaldo STS Malaysia	State Railway Thailand	SRT CBI Station Upgrade	Installation Assurance, Testing & Commissioning Services	2016
Public Transport Authority	PTA	ATP Encoder & Transponder Replacements - Joondalup and Midland Lines	Design Services	2016
Rail Industry Construction	ARTC	Yarrandale - Dubbo	Design Services	2016
George Kent - Lion Pacific JV & Rapid KL	Prasarana Malaysia Berhad	Chan Sow Lin Interlocking Modifications	Detailed Design, Installation & Supervision, Testing & Commissioning	2016
Worley Parsons	ARTC	Bylong Coal Loop	Design Services	2015
ARTC	ARTC	Hunter Valley Turnout Upgrades	Design Services	2015
MW Engineers	ARTC	Port Germein MISS Data	Design Services	2015
Ansaldo STS Malaysia	State Railway Thailand	SRT CBI 5 Station Upgrade	Preliminary, Detailed & Data Design	2015
Ansaldo STS Malaysia	Mumbai Metropolitan Region Development Authority (MMRDA)	Mumbai Monorail Line 1 & Line 2	Detailed Design & Data Design	2015
George Kent - Lion Pacific JV & Rapid KL	Prasarana Malaysia Berhad	Sri Petaling RSD1	Detailed Design, Installation & Supervision, Testing & Commissioning	2015
George Kent - Lion Pacific JV & Rapid KL	Prasarana Malaysia Berhad	Ampang Line Extension RSD2	Installation & Supervision	2015
Thales - CMCE	Prasarana Malaysia Berhad	Ampang Line Extension RSD2	Installation & Supervision	2015
Signal Support Services	ARTC	Tamrookum Level Crossing	Detailed Design & Data Design	2015
John Holland CRN	John Holland CRN	Warral Level Crossing	Detailed Design & Data Design	2015
John Holland CRN	John Holland CRN	Bornore Level Crossing Upgrade	Detailed Design & Data Design	2015
John Holland CRN	John Holland CRN	Molong MLI Alterations	Detailed Design	2015
John Holland CRN	John Holland CRN	Mirrool, Goolgowi, Mandra, Mogriguy, Gilgandra, Wallerawang, Bathurst, Parkes, Borenore, Molong	Records Updating / As Built	2015



*MGB International have undertaken full design services from concept through detail design to testing and commissioning support for ASTS/SRT on the 5 stations CBI upgrade in Thailand.*

## PROJECT HISTORY



MGB International undertook IV&V of MNDT Signalling



Client	Rail Authority / Operator	Project	Role	Year
Diverse Group	Rio Tinto	Ilod & Sear Level Crossings	Detailed Design	2015
BG&E	John Holland CRN	Ardlethan Siding	Concept Design	2015
BG&E	John Holland CRN	Tarago Siding	Concept Design	2015
Jacobs	Sydney Trains	West Ryde SFS	Concept Design	2015
Jacobs	ARTC	West Connex Enabling Works Project	Independent Verification	2015
Public Transport Authority	PTA	Project Engineering & Design Services	Project Engineering & Design Services	2015
Ansaldo STS Malaysia	Keretapi Tanah Melayu Berhad (KTMB)	Malaysia North Double Tracking Project	Independent Verification & Validation	2014
Ansaldo STS Malaysia	Keretapi Tanah Melayu Berhad (KTMB)	Malaysia North Double Tracking Project	Principles Testing & Functional Testing	2014
John Holland CRN	John Holland CRN	Parkes - Nash Street Level Crossing	Detailed Design & Data Design	2014
John Holland CRN	John Holland CRN	Wallerawang	Detailed Design & Data Design	2014
John Holland CRN	John Holland CRN	Bathurst Signal Relocation	Detailed Design & Data Design	2014
AANCSA	ARTC	Togar Loop	Concept Design	2014
ARTC	ARTC	Whittingham Hub	Concept Design	2014
ARTC	ARTC	Scone Loop Reconfiguration	Detailed Design, Correlation, Testing	2014
C2CE	Rio Tinto	Lang Hancock Railway Extension from Hope Downs	Detailed Design Verification	2014
UTS Rail	ARTC	North Coast Control Tables	Detailed Design	2013
UTS Rail	ARTC	Kilawarra - Taree Re-Signalling	Detailed Design	2013



## PROJECT HISTORY



*MGB International have designed several Microlok and Relay interlockings for ARTC North Coast Corridor*



*MGB International undertakes Level Crossing risk analysis and detailed design*



*MGB International has undertaken various design assignments for Heavy Haul operators throughout Australia*

Client	Rail Authority / Operator	Project	Role	Year
GE Transportation	SRT Thailand	Test Site of ElectrologIXS XP4 Crossing Configuration	Detailed Design	2013
Rio Tinto	Rio Tinto	Competency Management System	Competency	2013
Rail Industry Construction	Pacific National	Greta LX Monitor	Detailed design	2013
ABI Group	One Steel	New GCP 4000 Level Crossing	Detailed Design	2013
ORAH Rail	ARTC	Kooragang (4th Dump Station)	Detailed Design	2012
ORAH Rail	ARTC	Rossglen LX	Detailed Design	2012
ORAH Rail	ARTC	Gloucester Level Crossing	Detailed Design & Project Engineering	2012
AANCSA	ARTC	Bells Gate Crossing Loop	Detailed Design	2012
GE Transportation	Fortescue Metals Group (FMG)	FMG Mainline Project	Detailed Design	2012
Ansaldo STS	ARTC	Koolbury Passing Loop	Detailed Design & Project Engineering	2010
Ansaldo STS	ARTC	Bengalla Loop	Detailed Design & Project Engineering	2010
Ansaldo STS	ARTC	Yarrowa Loop	Detailed Design	2009
Ansaldo STS	ARTC	Baerami Loop	Detailed Design & Project Engineering	2009
Ansaldo STS	ARTC	Murrumbo Loop	Detailed Design	2009
Ansaldo STS	ARTC	Braefield Crossing Loop	Detailed Design	2009
Ansaldo STS	ARTC	Mangoola Loop	Detailed Design	2009

*Quality of service is absolutely fundamental to our reputation and ethos. We enjoy a high level of repeat business and referrals from clients and work hard to keep it that way.*

*Our employees have various levels of experience which we constantly strive to invest in, giving us the right skills for the future. We have developed our own training modules and also offer a range of signalling courses to the rail sector.*

*Like all successful companies our people are our strongest asset. They are confident, experienced and absolutely passionate about what they do - helping our clients to deliver their projects.*

## CONTACT DETAILS

### THAILAND (HEAD OFFICE)

MGB International Limited  
A12/F Q House Lumpini,  
1 South Sathorn Road,  
Tungmahamek,  
10120 Bangkok  
Thailand

T +66 (0) 2 677 7355

F +66 (0) 2 677 7356

#### Contact Name

Ms Tatchaporn Poolprasert

E: [tatchaporn.p@mgbil.com](mailto:tatchaporn.p@mgbil.com)

### MALAYSIA

MGBI Malaysia Sdn Bhd  
Suite 13A.01(A) Level 13A  
Wisma Goldhill  
67, Jalan Raja Chulan  
50200 Kuala Lumpur  
Malaysia

T +60 (0) 3 2032 2895

F +60 (0) 3 2032 2893

#### Contact Name

Ms Lam Li Hua

E: [li.hua@mgbil.com](mailto:li.hua@mgbil.com)

### AUSTRALIA - BRISBANE

Magnate Grey Box International Pty Ltd  
Unit 34, Strathlink,  
27, South Pine Road  
Brendale,  
4500 Queensland  
Australia

T +61 (0)7 3889 7231

#### Contact Name

Mr William Jack

E: [william.jack@mgbil.com](mailto:william.jack@mgbil.com)

### AUSTRALIA - BRISBANE CBD

Magnate Grey Box International Pty Ltd  
Level 10,  
490, Upper Edward Street,  
Spring Hill,  
4000 Queensland  
Australia

T +61 (0)7 3889 7231

#### Contact Name

Mr William Jack

E: [william.jack@mgbil.com](mailto:william.jack@mgbil.com)

### AUSTRALIA (PERTH)

Magnate Grey Box International Pty Ltd  
Level 24, Allendale Square,  
77, St. George Terrace  
Perth,  
6000 Western Australia  
Australia

T +61 (4) 7856 0400

F +61 (8) 6141 3101

#### Contact Name

Mr John Ralphs

E: [john.ralphs@mgbil.com](mailto:john.ralphs@mgbil.com)