

BURSA MALAYSIA DERIVATIVES BERHAD

Date : 10 March 2008

Trading Participant Circular : 15/2008

DIRECT MARKET ACCESS

(1) AMENDMENTS TO THE RULES OF BURSA MALAYSIA DERIVATIVES BERHAD

(2) ISSUANCE OF THE OPERATIONS DIRECTIVE

(3) ISSUANCE OF THE DIRECT MARKET ACCESS HANDBOOK

INTRODUCTION

1. Please be advised that the Exchange is implementing Direct Market Access with effect from 17 March 2008.
2. In relation to the above, the Exchange is issuing the following :-
 - (a) amendments to the Rules of Bursa Malaysia Derivatives Berhad ;
 - (b) the Operations Directive ; and
 - (c) the Direct Market Access Handbook

which shall take effect on **17 March 2008**.

AMENDMENTS TO THE RULES OF BURSA MALAYSIA DERIVATIVES BERHAD

3. The Rules of Bursa Malaysia Derivatives Berhad ("**Rules of Bursa Derivatives**") have been amended pursuant to section 9 (1) of the Capital Markets and Services Act 2007. The aforesaid amendments are set out in **ANNEXURE 1** attached herewith.
4. All rules, guidelines, notices or circulars in force which make references to or contain provisions relating to the above matters shall have effect from the effective date as if such references or provisions relate to the said amendments.

OPERATIONS DIRECTIVE

5. The Operations Directive is issued pursuant to Rule 617.3 (2) of the Rules of Bursa Derivatives. The Operations Directive is as set out in **ANNEXURE 2** attached herewith.
6. With reference to Section 3.2 of the Operations Directive on risk filters, we wish to draw your attention to Section 3.2.2.3 which states that :-

"If risk filters (h) and (j) are not installed by the Trading Participant, then the Trading Participant must set the values for risk filters (c) and (i) in accordance with the values prescribed by the Exchange".

7. In this respect, please be informed that the values for risk filters (c) and (i) as prescribed by the Exchange are as follows :-

Risk filter	Description	Values prescribed by the Exchange
Risk filter (c)	Maximum number of contracts per order	300
Risk filter (i)	Far from the last traded price (per contract, in %)	(i) 4 ticks translated into % in respect of the following:- <ul style="list-style-type: none"> • FCPO – 3rd month contract • FKLI – 1st month contract (ii) 25 ticks translated into % in respect of all other contract months of FCPO and FKLI as well as all other products traded on the derivatives market.

8. The Exchange reserves the right to revise the values prescribed above from time to time.

DIRECT MARKET ACCESS HANDBOOK

9. The Direct Market Access Handbook provides guidance to Trading Participants in respect of practices recommended to be observed in relation to the discharge of their obligations under some of the Rules of Bursa Derivatives pertaining to Direct Market Access and the Operations Directive. The Direct Market Access Handbook is as set out in **ANNEXURE 3** attached herewith.
10. Whilst not mandatory, these recommended practices are instructive of the minimum standards required to be observed by Trading Participants which may adopt additional controls as they deem fit.

TRADING PARTICIPANT INFORMATION TECHNOLOGY SECURITY CODE

11. In relation to the Trading Participant Information Technology Security Code ("**IT Security Code**") which is issued today under Trading Participant Circular :14/2008, please be advised that Trading Participants which are offering Direct Market Access must comply with ITSS 3 and ITSS 4 as well as other relevant requirements of the IT Security Code for the purpose of operating Direct Market Access in accordance with the requirements set out in the above amendments to the Rules of Bursa Derivatives and the Operations Directive before submitting the written confirmation to the Exchange in accordance with Rule 617.3(4) of the Rules of Bursa Derivatives or by 16 September 2008, whichever is earlier.

OTHERS

12. For further information or any enquiry on the amendments to the Rules of Bursa Derivatives, kindly contact :-
 - (a) Ms Benothini Bascaran (+603-20347317)
 - (b) Ms Lai Fui Sim (+603-20347079).

13. For further information or any enquiry on the Operations Directive, the Direct Market Access Handbook and the IT Security Code, kindly contact :-
 - (a) Mr Gerald Blondel (+603-20347591)
 - (b) Mr Lum Chee Wah (+603-20347734)
 - (c) Mr Pasupathy Velauthah (+603-20347141)
 - (d) Ms Angeline Yap (+603-20347188).

14. This circular is available on Bursa Malaysia's website at http://www.bursamalaysia.com/website/bm/rules_and_regulations/bursa_rules/bm_derivatives.html.

RULE DEVELOPMENT & ADVISORY

AMENDMENTS TO THE RULES OF BURSA MALAYSIA DERIVATIVES BERHAD IN RELATION TO DIRECT MARKET ACCESS

EXISTING PROVISIONS		AMENDED PROVISIONS	
Rule		Rule	
200	DEFINITIONS AND INTERPRETATION	200	DEFINITIONS AND INTERPRETATION
201	Definitions	201	Definitions
	New provision.		“Direct Market Access” or “DMA” means the process by which orders to buy or sell Contracts including any modifications and cancellations thereof are submitted into a DMA Infrastructure for execution in the ATS by persons referred to in Rule 617.4 without any intervention by a Registered Representative and/or being entered or re-entered by a Registered Representative.
	New provision.		“DMA Infrastructure” means the infrastructure established and/or maintained by or for the Trading Participant which facilitates Direct Market Access.
202	Interpretation	202	Interpretation
202.7	Any reference to these Rules to “suspend” or “halt” in relation to the trading of a Contract may be construed to mean “forbidden”, “halted”, “reserved”, “suspended” or “frozen” as determined by the Exchange pursuant to Rule 702B.	202.7	Any reference to these Rules to “suspend” or “halt” in relation to the trading of a Contract may be construed to mean “forbidden”, “interrupted” , “reserved”, “suspended” or “frozen” as determined by the Exchange pursuant to Rule 702B.
300	PARTICIPANTSHIP	300	PARTICIPANTSHIP
313	Local Participant – Rights	313	Local Participant – Rights
313.1	A Local Participant shall have the following rights in respect of the trading facilities provided by the Exchange : (a) the right to trade for himself in the Market, in such manner as	313.1	A Local Participant shall have the following rights in respect of the trading facilities provided by the Exchange : (a) the right to trade for himself in the Market, in such manner as

EXISTING PROVISIONS		AMENDED PROVISIONS	
	<p>the Exchange may from time to time direct ; <u>and</u></p> <p>New provision.</p> <p>(b) all other rights conferred on Local Participants by these Rules in respect of trading in Contracts in the Market.</p>		<p>the Exchange may from time to time direct ;</p> <p>(b) the right to trade from anywhere within or outside Malaysia; and</p> <p>(c) [No change]</p>
322	Registered Representatives	322	Registered Representatives
322.1	(a) A Registered Representative is a person registered with the Exchange to act as a trading representative of a Trading Participant. Trading Participants may accept orders on behalf of Clients only through their Registered Representatives.	322.1	(a) A Registered Representative is a person registered with the Exchange to act as a trading representative of a Trading Participant. Trading Participants shall accept orders on behalf of Clients only through their Registered Representatives.
600	PARTICIPANTS' CONDUCT	600	PARTICIPANTS' CONDUCT
	New provision.	601.3A	<p>Record of clients</p> <p>(1) It is the responsibility of each Trading Participant to maintain at all times an up to date record of its Clients and the persons authorised by the Clients in accordance with Rule 603.1(b) and to indicate, where applicable, if the Clients have been granted Direct Market Access.</p>
	New provision.	617	DIRECT MARKET ACCESS
	New provision.	617.1	<p>Definition</p> <p>(1) For the purpose of this Rule 617, "DMA Order" means a Direct Market Access order.</p>

EXISTING PROVISIONS		AMENDED PROVISIONS	
	New provision.	617.2	<p>General</p> <p>(1) Subject always to the requirements of the Rules, a Trading Participant may provide Direct Market Access provided that :-</p> <p>(a) the Direct Market Access is effected through a DMA Infrastructure which complies with the terms prescribed by the Exchange ; and</p> <p>(b) the Direct Market Access is only provided to persons who comply with the requirements stipulated in Rule 617.4 below.</p> <p>(2) For the avoidance of doubt, other than the provisions in this Rule 617, all other provisions in the Rules and the Trading Procedures shall apply to Participants and Registered Persons as defined in Rule 500.</p>
	New provision.	617.3	<p>DMA Infrastructure</p> <p>(1) A Trading Participant shall ensure that all DMA Orders are sent through the DMA Infrastructure in the manner determined by the Exchange.</p> <p>(2) The Exchange may issue guidelines, notices or circulars in relation to the functionalities, connectivity, operation and security requirements of the DMA Infrastructure.</p> <p>(3) A Trading Participant shall obtain the approval of the Exchange prior to the establishment of the DMA Infrastructure or effecting any change to the DMA Infrastructure after the commencement of the operation of the DMA Infrastructure, unless determined otherwise by the</p>

EXISTING PROVISIONS		AMENDED PROVISIONS	
			<p>Exchange.</p> <p>(4) A Trading Participant must submit to the Exchange at least two (2) market days prior to the commencement of the operation of the DMA Infrastructure or prior to effecting any changes to the DMA Infrastructure, a written confirmation that the DMA Infrastructure and all the requirements in relation to the functionalities, connectivity, operation and security requirements of the DMA Infrastructure comply with the Rules, unless determined otherwise by the Exchange.</p> <p>(5) Even if a Trading Participant has complied with the requirements in Rules 617.3 (3) and (4) above, it shall be the responsibility of the Trading Participant to ensure that it has all other controls and measures in place to ensure that it complies with all the relevant provisions in the Rules.</p> <p>(6) A Trading Participant shall assume full responsibility for the use of the DMA Infrastructure.</p>
	New provision.	617.4	<p>Clients</p> <p>(1) A Trading Participant shall take reasonable steps to ensure that a Direct Market Access Client and the persons authorised by the Client in accordance with Rule 603.1 (b) have :-</p> <p>(a) knowledge of the process of entering DMA Orders through the DMA Infrastructure;</p> <p>(b) knowledge of the requirements in the Rules in relation to trading on the Market ; and</p> <p>(c) knowledge of the relevant laws pertaining to trading on</p>

EXISTING PROVISIONS		AMENDED PROVISIONS	
			<p>the Market.</p> <p>(2) A Trading Participant shall execute a written agreement with the Clients to whom it intends to provide Direct Market Access to and the agreement shall address the following areas:-</p> <p>(a) the duties, obligations and rights of the Trading Participant and its Clients in relation to the Direct Market Access; and</p> <p>(b) the Clients' compliance with the Rules.</p>
	New provision.	617.5	<p>DMA Orders</p> <p>(1) For the avoidance of doubt, the following Rules shall be applicable to all DMA Orders :-</p> <p>(a) Rule 701.2 (a), in that the Trading Participant shall be deemed to be the principal in relation to all trades effected through Direct Market Access and the Exchange shall not recognise the interest of any third party ; and</p> <p>(b) Rule 322.1 (a), in that all DMA Orders shall be deemed as orders submitted for execution in the ATS by a Registered Representative on behalf of a Client.</p>
	New provision.	617.6	<p>Action by the Exchange</p> <p>(1) Without prejudice to any other powers of the Exchange contained in the Capital Markets and Services Act, this Rule 617 and other relevant provisions in the Rules, the Exchange may, at its absolute discretion and without notice take any of the actions enumerated in Rule 617.6(2) where :-</p>

EXISTING PROVISIONS		AMENDED PROVISIONS	
			<p>(a) there is a breach or likelihood of breach of any provisions in Rule 617 ; and/or</p> <p>(b) there is a commission or likelihood of a commission of any of the offences under the Capital Markets and Services Act.</p> <p>(2) Pursuant to Rule 617.6(1), the following actions may be taken by the Exchange :-</p> <p>(a) suspend or cease the provision of Direct Market Access by a Trading Participant; and/or</p> <p>(b) to direct a Trading Participant to suspend or cease the provision of Direct Market Access by the Trading Participant to any one or more of the Clients and the persons authorised by the Clients in accordance with Rule 603.1(b).</p>
	New provision.	617.7	<p>Effect of action taken by the Exchange</p> <p>(1) In the event that the Exchange undertakes any of the actions under Rule 617.6 (2) against the persons referred to in Rule 617.4, such actions shall also be applicable to any person who is the proxy, agent, nominee or persons acting in concert with such persons as the case may be.</p> <p>(2) Where an action has been taken under Rule 617.6 (2), a Trading Participant may make representations to the Exchange for the discontinuance of the action taken. The Exchange may after the representations were made, discontinue with the action taken. However such discontinuance shall not be construed as an omission or error of any kind on the part of the Exchange in undertaking the action under Rule 617.6(2) in the first</p>

EXISTING PROVISIONS		AMENDED PROVISIONS	
			place. (3) The provisions in Rule 507 shall not apply to any action taken under Rule 617.6(2).
700	TRADING RULES	700	TRADING RULES
701	Trading on the Market	701	Trading on the Market
701.1	(a) All trading by Participants in Contracts shall be effected through the ATS in the manner stipulated in these Rules, the Trading Procedures or any other directives issued by the Exchange from time to time. New provision.		(a) [No change] (1A)Unless otherwise specified by the Exchange, a Trading Participant’s connection to the ATS for the purpose of trading of Contract on the Market must be through an access point approved by the Exchange.
701.2	(a) All trading on the market by Participants shall be deemed to be as principals and <u>neither the Exchange nor the Clearing House shall be obliged to</u> recognise the interest of any third party.	701.2	(a) All trading on the market by Participants shall be deemed to be as principals and the Exchange shall not recognise the interest of any third party.
705	Inviolability of Contracts Without prejudice to the powers of the Exchange under Rule 703.1A(c) and 707, all orders executed through the ATS shall not be subject to any cancellation and shall be binding on Participants.	705	Inviolability of Contracts Without prejudice to the powers of the Exchange under Rule 703.1A(c) and 707, all orders, howsoever entered and executed through the ATS shall not be subject to any cancellation and shall be binding on Participants.

**BURSA MALAYSIA DERIVATIVES BERHAD
TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

1 DEFINITIONS, ACRONYMS USED, SCOPE AND INTERPRETATION**1.1 Definitions and Acronyms used**

Access	means authorised entry into the DMA Infrastructure as governed by the access privileges granted to the User or Administrator.
Access Device	means any form of device used to Access the DMA Infrastructure for the purpose of Order Creation and/or Modification. The Access Device shall be deemed as the initiation point of Order Creation.
Administrator	means employee(s) of a TP who is(are) duly authorised by the TP, inter alia, to have Access to the DMA Infrastructure, and includes such other person(s) who is(are) authorised by the TP to operate any part of the DMA Infrastructure but excludes the Users described herein.
ATS	means the Exchange's automated and computerised trading system as defined in the Rules of Bursa Derivatives.
Automatic Matching	means matching of orders entered into the ATS as established/envisaged in the Rules of Bursa Derivatives.
Availability	means the time and duration in which the DMA Infrastructure becomes available for Access.
Client	means persons referred to in Rule 617.4 of the Rules of Bursa Derivatives.
DMA	means Direct Market Access as defined in the Rules of Bursa Derivatives.
DMA Infrastructure	means the infrastructure which facilitates DMA as defined in the Rules of Bursa Derivatives and shall comprise all components, both substance and form, which are governed by the provisions established herein. The connectivity envisaged between Users and the ATS via the DMA Infrastructure is described below: <p style="text-align: center;">User ⇌ Access Device ⇌ DMA Infrastructure ⇌ ATS</p>
DMA Order	means DMA Order as defined in the Rules of Bursa Derivatives.
electronic Order-routing	means the act of routing/relaying a DMA Order.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

Exchange	means Bursa Malaysia Derivatives Berhad.
ESZ	means the Exchange's Secured Zone which is the zone designated by the Exchange, in accordance with such requirements as may be determined by the Exchange from time to time, to be where the Exchange's Group of Companies' Information Technology Infrastructure resides. The ATS shall be deemed to reside within the ESZ.
Modifications	means any change(s) made to a DMA Order.
Order Acceptance	means the acceptance of a DMA Order entered into the ATS in accordance with such procedures as established and envisaged by the Exchange and/or the Rules of Bursa Derivatives.
Order Creation	means the act of creating a DMA Order.
Order Entry	means the act of entering a DMA Order into the ATS for the purpose of Order Execution as envisaged in the Rules of Bursa Derivatives.
Order Execution	Order Execution is deemed to consist of all of the following chain of events: <ul style="list-style-type: none">• Order Acceptance by the ATS;• Automatic Matching of DMA Orders by the ATS; and• Order Match Confirmation by the ATS.
Order Match Confirmation	means the confirmation produced by the ATS subsequent to Automatic Matching.
Registered Representative	means a Registered Representative as defined in the Rules of Bursa Derivatives.
Rules of Bursa Derivatives	means the Rules of Bursa Malaysia Derivatives Berhad, as may be amended, varied, supplemented or substituted therefore from time to time.
TP	means Trading Participant as defined in the Rules of Bursa Derivatives.
TPSZ	means Trading Participant's Secured Zone. The TPSZ shall be the designated zone where the TP's physical and logical infrastructure resides for the purpose of connecting with the ESZ.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

Trading Session	means trading sessions as prescribed in the Rules of Bursa Derivatives.
User	means a person who uses an Access Device to Access the DMA infrastructure.
Validation	means the act of assessing a DMA Order, manually, automated or otherwise, against risk filter(s) assigned with pre-defined criteria and values for purposes, including but not limited to, managing the risks associated with each DMA Order prior to Order Entry.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

1.2 Scope

- 1.2.1 These directives shall regulate all the activities/processes of DMA, both in form and substance, from Order Creation to Order Entry into the ATS. It shall also include the process of notifying Users of the Order Match Confirmation from the instance Order Execution has been completed by the ATS.
- 1.2.2 Enclosed as **Appendix 1** is a diagram (Diagram on DMA) which describes the scope of these directives as indicated by the non-shaded areas.

1.3 Interpretation

- 1.3.1 Any reference made in these directive to a rule(s), guideline(s), notice(s) and/or circular(s) shall include all modifications, amendments, supplements and/or substitutions.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

2. GENERAL REQUIREMENTS

- 2.1 All activities/processes in the DMA Infrastructure shall be established in accordance with the provisions established herein.
- 2.2 A TP shall define and document all the functional specifications for all the activities/processes and/or events of the DMA Infrastructure. In addition, a TP shall maintain an up-to-date indexed list of all the functional specifications for all the activities/processes and/or events of the DMA Infrastructure.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

3. FUNCTIONAL REQUIREMENTS**3.1 Users and Administrators**

- 3.1.1 A TP shall issue to each User a unique User identity designation ("ID") which shall be used to sign-on via an Access Device for the purpose of Access to the DMA Infrastructure. A TP shall ensure that Users sign-off from the DMA Infrastructure accordingly, automatically or otherwise.
- 3.1.2 A TP shall maintain at all times, an up-to-date list of Users and ensure that each unique User ID is indexed to the User's name and relevant documentation in order to establish a clear association with the trading account.
- 3.1.3 TPs are required to appoint Administrators whose responsibilities shall include but not limited to ensuring that the DMA Infrastructure is functioning according to its functional specifications.
- 3.1.4 A TP shall issue to each Administrator a unique Administrator ID which shall be used to sign-on for the purpose of Access to the DMA Infrastructure. A TP shall ensure that Administrators sign-off from the DMA Infrastructure accordingly, automatically or otherwise.
- 3.1.5 Administrators shall not be granted with any Access privileges to the DMA Infrastructure that are similar or normally granted to Users.
- 3.1.6 Further to 3.1.2, a TP shall also maintain the details of all Administrators on the same list.
- 3.1.7 A TP shall clearly define and document the Access privileges of Users and Administrators in the following documents:-
- 3.1.7.1 A matrix detailing the relationship of Access privileges that can be granted to a User and Administrator.
- 3.1.7.2 An Access privilege profile/detail of each User and Administrator based on the ID issued.

TRADING PARTICIPANTS' DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE

3.2 Validation

- 3.2.1 A TP shall be responsible for defining, installing and documenting a set of risk filters assigned with pre-defined criteria and values for the Validation of each and every DMA Order created by the User for purposes of Order Entry in accordance with the provisions established herein.
- 3.2.2 The risk filters that a TP are required to install and activate are as prescribed below: -

Type of risk filter	Risk filter name
Cash Position	(a) Real-time cash position
Order	(b) Maximum capital engaged per order
	(c) Maximum number of contracts per order
	(d) Daily long position limit per contract and per product family
Contract Position	(e) Daily short position limit per contract and per product family
	(f) Gross position limit per contract and per product family
	(g) Total capital engaged
	(h) Far from the market spread (per contract, in ticks)
Manipulation	(i) Far from the Last Traded Price (per contract, in %)
	(j) Small orders far from the Last Traded Price
	(k) Type of instrument
Trading Permission	

- 3.2.2.1 the TP must ensure that all the risk filters are activated at all times ;
- 3.2.2.2 in relation to Clients who will be undertaking only strategy trades, TPs are required to activate at least one of the risk filters in the 'Contract Position' group ; and
- 3.2.2.3 if risk filters (h) and (j) are not installed by the TP, then the TP must set the values for risk filters (c) and (i) in accordance with the values prescribed by the Exchange.
- 3.2.3 Each Client having Access to the DMA Infrastructure shall be assigned to at least one Registered Representative.
- 3.2.4 The tracking and utilisation of the risk filters established for the purpose of Validation shall be updated on a real-time on-line basis.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

3.3 DMA Queue

- 3.3.1 Each DMA Order shall be automatically assigned with a sequence number.
- 3.3.2 All DMA Orders in the DMA Infrastructure shall be chronologically prioritised by reference to date and time.
- 3.3.3 All DMA Orders created via an Access Device shall be queued and attended to in accordance with the Rules of Bursa Derivatives.

3.4 DMA Infrastructure Activity Log

- 3.4.1 A DMA Infrastructure activity log ("Log") shall be established and maintained to record all the events/activities/processes of all Users and Administrators, including those produced by the DMA Infrastructure which shall include but not limited to the status of DMA Orders from Order Creation to the notification of Order Match Confirmation.
- 3.4.2 Access to the Log shall be restricted to Administrators and any other authorised person/(s) as may be designated by the TP. Any work carried out on this Log shall be recorded with full details.
- 3.4.3 The following shall be the minimum details (where appropriate and relevant) to be recorded in the Log with reference to the ID, date and time-stamp :-
 - 3.4.3.1 User/Administrator sign-on;
 - 3.4.3.2 User/Administrator sign-off and the manner in which the sign-off was carried out i.e. manual or automated;
 - 3.4.3.3 Order ID/sequence number;
 - 3.4.3.4 The outcome/status of the Validation;
 - 3.4.3.5 The outcome/status of the Order Entry;
 - 3.4.3.6 Modifications ;
 - 3.4.3.7 Cancellations; and
 - 3.4.3.8 Order Match Confirmation received from the ATS and the notification of the same when it is made to the Users.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

- 3.4.4 The date and time of the ATS shall be the sole reference, which all date and time references in the DMA infrastructure are based on.
- 3.4.5 A TP shall define and document appropriate archival policies to be implemented for the Log. Otherwise, the entire Log shall be archived for a period of not less than 5 years from the date of creation.

3.5 Error and/or exception handling

- 3.5.1 A TP shall clearly establish a set of internal procedures on handling all errors and exceptions. In establishing the same, the procedures shall include at least the following:-
- 3.5.1.1 A list of errors and exceptions that have been identified with recommended solutions (if any), including records of action taken;
 - 3.5.1.2 The risks associated with and the handling priority for each of the identified errors and/or exceptions ; and
 - 3.5.1.3 The escalation procedures for each of the handling priority.
- 3.5.2 Without derogation to any of the provisions contained herein, a TP shall establish sufficient monitoring and/or review procedures and the frequency thereof, for all activities in relation to DMA. The same shall include but is not limited to surveillance procedures in order to handle exceptions.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

4. CONNECTIVITY REQUIREMENTS

4.1 Connectivity between the DMA Infrastructure and the ATS

- 4.1.1 All physical and logical connections between the ESZ and the TPSZ shall be solely performed by the Exchange or its appointed vendors/representatives.

5. APPLICATION FOR APPROVAL

- 5.1 Pursuant to Rule 617.3 (3) of the Rules of Bursa Derivatives, a TP shall obtain the Exchange's approval prior to the establishment of the DMA Infrastructure or effecting any change to the DMA Infrastructure.
- 5.2 The application for approval shall be made in the form specified in **Appendix 2 - APPLICATION FOR APPROVAL OF TRADING PARTICIPANTS' DMA INFRASTRUCTURE**.
- 5.2.1 In the application, the TP shall demonstrate that its DMA Infrastructure complies with the requirements set out in the following:-
- 5.2.1.1 Information Technology Security Code;
- 5.2.1.2 Rules of Bursa Derivatives ; and
- 5.2.1.3 these directives.
- 5.3 TPs must submit the application form (to be completed in type written form with original signatures included) along with the following supporting documentation and/or information (may include illustrations, technical or otherwise):-
- 5.3.1 A complete set of functional specifications of the DMA Infrastructure demonstrating compliance with the Functional Requirements as prescribed in section 3 of these directives, including :-
- 5.3.1.1 details of the TP's DMA technical infrastructure architecture with details of its hardware, software and connectivity solutions;
- 5.3.1.2 details of the operation of its risk filters;
- 5.3.1.3 details of maintenance of the Log ;
- 5.3.1.4 details of access controls to DMA Infrastructure; and

TRADING PARTICIPANTS' DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE

5.3.1.5 any other information which the TP considers relevant to Bursa Derivatives in considering this application.

In respect of changes to the DMA Infrastructure, a complete set of changes to the functional specifications including a list of changes indexed against the list previously approved;

5.3.2 Connectivity specifications demonstrating compliance with the Connectivity Requirements as prescribed in section 4 of these directives ; and

5.3.3 User acceptance certification of the functional specification(s) intended to be implemented.

5.4 If the DMA Infrastructure is obtained from an independent software vendor, the TP must ensure that the independent software vendor is one which has been approved by Bursa Derivatives.

5.5 Bursa Derivatives may request for additional information from the TP in relation to this application.

5.6 Upon approval of the DMA Infrastructure, the TP must:-

5.6.1 pay the monthly access fee of RM 3,000 which shall be payable monthly in advance; and

5.6.2 pay any other fees, levies or other charges imposed by Bursa Derivatives from time to time.

5.7 In approving the DMA Infrastructure or any change to the DMA Infrastructure, Bursa Derivatives may impose such conditions as it deems fit and the TP must comply with the conditions as if they form part of these directives.

5.8 Bursa Derivatives' approval of the DMA Infrastructure or any change to the DMA Infrastructure must not be construed that Bursa has verified :-

5.8.1 the TP's compliance with the Information Technology Security Code, Rules of Bursa Derivatives and these directives in relation to the establishment of the DMA Infrastructure ; and

5.8.2 the quality and reliability of the DMA Infrastructure.

6. DECLARATION OF COMPLIANCE

6.1 The DECLARATION OF COMPLIANCE (**Appendix 3**) shall be submitted not less than 2 market days prior to the commencement of the operation of

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

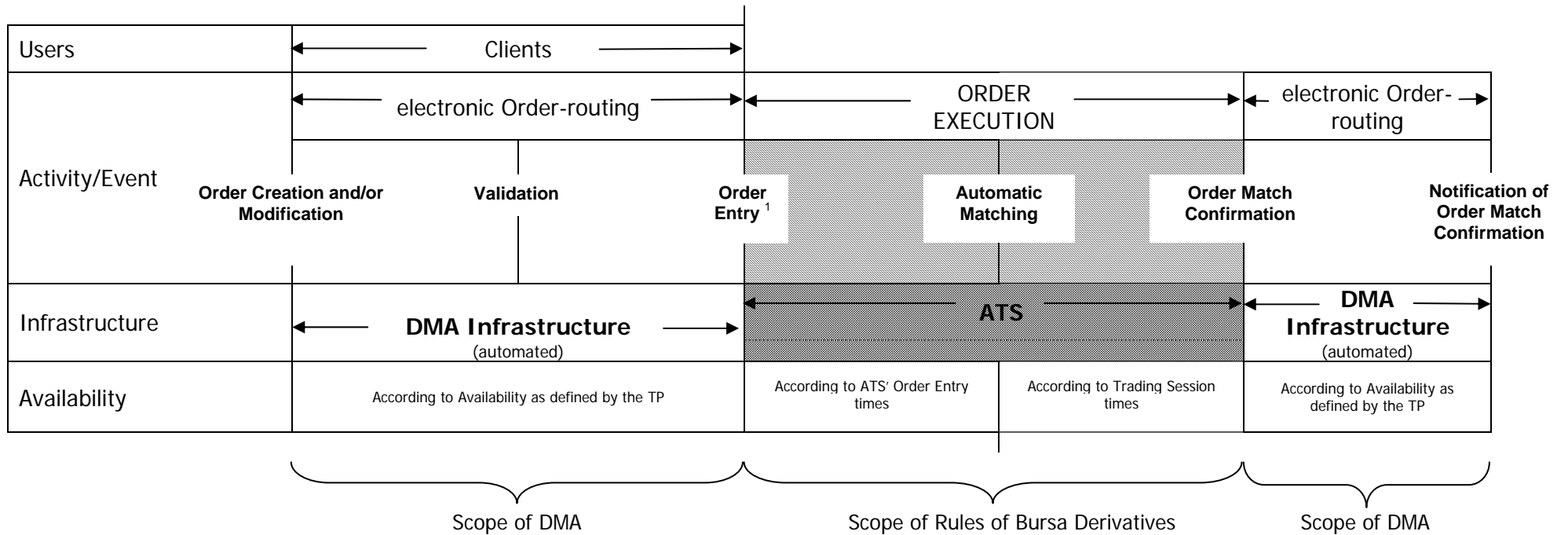
the DMA Infrastructure or prior to effecting any changes to the DMA Infrastructure.

7. COMMUNICATIONS

- 7.1 All matters pertaining to the provisions contained herein, including all application forms and supporting documents, shall be directed to :-

Market Access Department
Bursa Malaysia Bhd
10th Floor, Exchange Square, Bukit Kewangan,
50200 Kuala Lumpur,
Malaysia.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**



¹ No manual intervention excluding exceptions.

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

**APPLICATION FOR APPROVAL OF TRADING PARTICIPANTS' DMA
INFRASTRUCTURE**

To:

Bursa Malaysia Derivatives Berhad
Exchange Square
Bukit Kewangan
50200 Kuala Lumpur
Malaysia

We hereby apply for approval for our DMA Infrastructure/changes to our DMA Infrastructure* and submit the following documentation and/or information in support of our application:

[please itemise the documentation and/or information as prescribed in Section 5.3 of these directives]

Authorised signatory:	
Name:	
Designation:	
Date:	

* Delete accordingly

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE****APPLICANT'S DETAILS**

1.	Name of Applicant:	
2.	Address and telephone numbers of principal place of business	
3.	Name, designation and contact details of main contact person in relation to application for approval of DMA Infrastructure	
4.	Name, designation and contact details of DMA Manager	
5.	Name, designation and contact details of DMA Technical Contact	
6.	DMA Software and Version Number (i.e. IOS)	
7.	Location of DMA Server and Fix 4.4 Gateway	

**TRADING PARTICIPANTS'
DIRECT MARKET ACCESS – OPERATIONS DIRECTIVE**

DECLARATION OF COMPLIANCE

Bursa Malaysia Derivatives Berhad ("the Exchange")

**COMPLIANCE WITH THE REQUIREMENTS OF THE EXCHANGE IN RELATION TO
DIRECT MARKET ACCESS**

Pursuant to the requirements of Rule 617.3(4) of the Rules of the Exchange, we, [*insert name of the Trading Participant*], hereby confirm that the DMA Infrastructure* and all the requirements in relation to the functionalities, connectivity, operation and security requirements of the DMA Infrastructure comply with the Rules of the Exchange including any guidelines, notices or circulars of general application issued by the Exchange.

Signed _____ Head of Operations
Date _____

Signed _____ Compliance Director / Officer [delete accordingly]
Date _____

* Defined in the Rules of the Exchange to mean the infrastructure established and/or maintained by or for the Trading Participant which facilitates Direct Market Access.

BURSA MALAYSIA DERIVATIVES BERHAD

DIRECT MARKET ACCESS HANDBOOK

TABLE OF CONTENTS

BACKGROUND	3
KEY OBJECTIVES.....	3
DEFINITIONS.....	3
SECTION A: OVERVIEW OF THE BURSA DERIVATIVES DMA ARCHITECTURE.....	4
A.1. BURSA DERIVATIVES DMA TECHNICAL ARCHITECTURE.....	4
A.2. DMA PARTICIPANTS' INFRASTRUCTURE OPTIONS	6
A.3. ACCESS BY DMA CLIENTS	8
SECTION B: GUIDELINES ON TECHNICAL AND CONNECTIVITY REQUIREMENTS.....	9
B.1. GENERAL DESCRIPTION OF CONNECTIVITY REQUIREMENTS.....	9
B.2. BURSA TRADE ACCESS VIA MMTP	10
B.3. BURSA TRADE ACCESS VIA FIX 4.4	11
B.4. NETWORK CONNECTIVITY REQUIREMENTS	12
B.5. COMPLIANCE WITH SECURITY STANDARDS "ITSS"	13
B.6. DMA TESTING INFORMATION AND REQUIREMENTS.....	13
SECTION C: GUIDELINE ON RISK MANAGEMENT REQUIREMENTS.....	16
C.1. CONDITIONS FOR CONNECTIVITY OF DMA CLIENTS	16
C.2. SYSTEM SECURITY AND ACCESS CONTROLS.....	21
C.3. DMA PARTICIPANT INTERNAL CONTROL REQUIREMENTS.....	21
C.4. EXAMPLES OF HOW RISK FILTERS ARE CALCULATED.....	25
SECTION D: GUIDELINES ON CERTIFICATION FOR INDEPENDENT SOFTWARE VENDORS (ISVS) ..	29
D.1. ISV ELIGIBILITY REQUIREMENTS	29
D.2. ISV SOFTWARE PRODUCT REQUIREMENTS	29
D.3. APPLICATION PROCESS TO BECOME AN APPROVED DMA ISV.. ERROR! BOOKMARK NOT DEFINED.	
D.4. APPROVAL OF DMA APPROVED ISVS.....	30
D.5. HELPDESK FOR ISVS	30
SECTION E: APPENDICES.....	31
APPENDIX A: NYSETT DMA GATEWAY: TESTING AND CREATION OF ID	32
APPENDIX B: GL TRADE DMA GATEWAY: TESTING AND CREATION OF ID	36
APPENDIX C: APPLICATION TO BECOME AN APPROVED VENDOR.....	37
APPENDIX D: DMA DIRECTORY	42

DIRECT MARKET ACCESS HANDBOOK

BACKGROUND

The introduction of Direct Market Access (“DMA”) by Bursa Malaysia Derivatives Bhd (“Bursa Derivatives”) will enable direct electronic access by clients to Bursa Trade, which is the Bursa Derivatives’ Automated Trading System. Connectivity to Bursa Trade via Open Application Programming Interface (“API”) will provide users with flexibility and choice of front-end systems and interface solutions.

The DMA regulatory framework encompasses the Rules of Bursa Derivatives, the DMA Operations Directive and the Trading Participants’ Information Technology Security Code (“TP IT Security Code”).

KEY OBJECTIVES

Bursa Derivatives is issuing herein the “Direct Market Access Handbook” (“DMA Handbook”) with the following objectives:

1. To highlight key obligations of Trading Participants (“TPs”) under the Rules and Operations Directive in relation to DMA.
2. To provide guidance to TPs in respect of practices recommended to be observed in relation to the discharge of their obligations under some of the Rules and the Operations Directive. Whilst not mandatory, these recommended practices are instructive of the minimum standards required to be observed by TPs, which may adopt additional controls as deemed fit in relation to their DMA business.
3. To provide crucial information about the Bursa Derivatives DMA architecture, the technical and connectivity requirements.
4. To provide other relevant information, namely :-
 - (a) the DMA Directory ;
 - (b) the various application forms ; and
 - (c) terms and conditions for Independent Software Vendors (“ISVs”).

DEFINITIONS

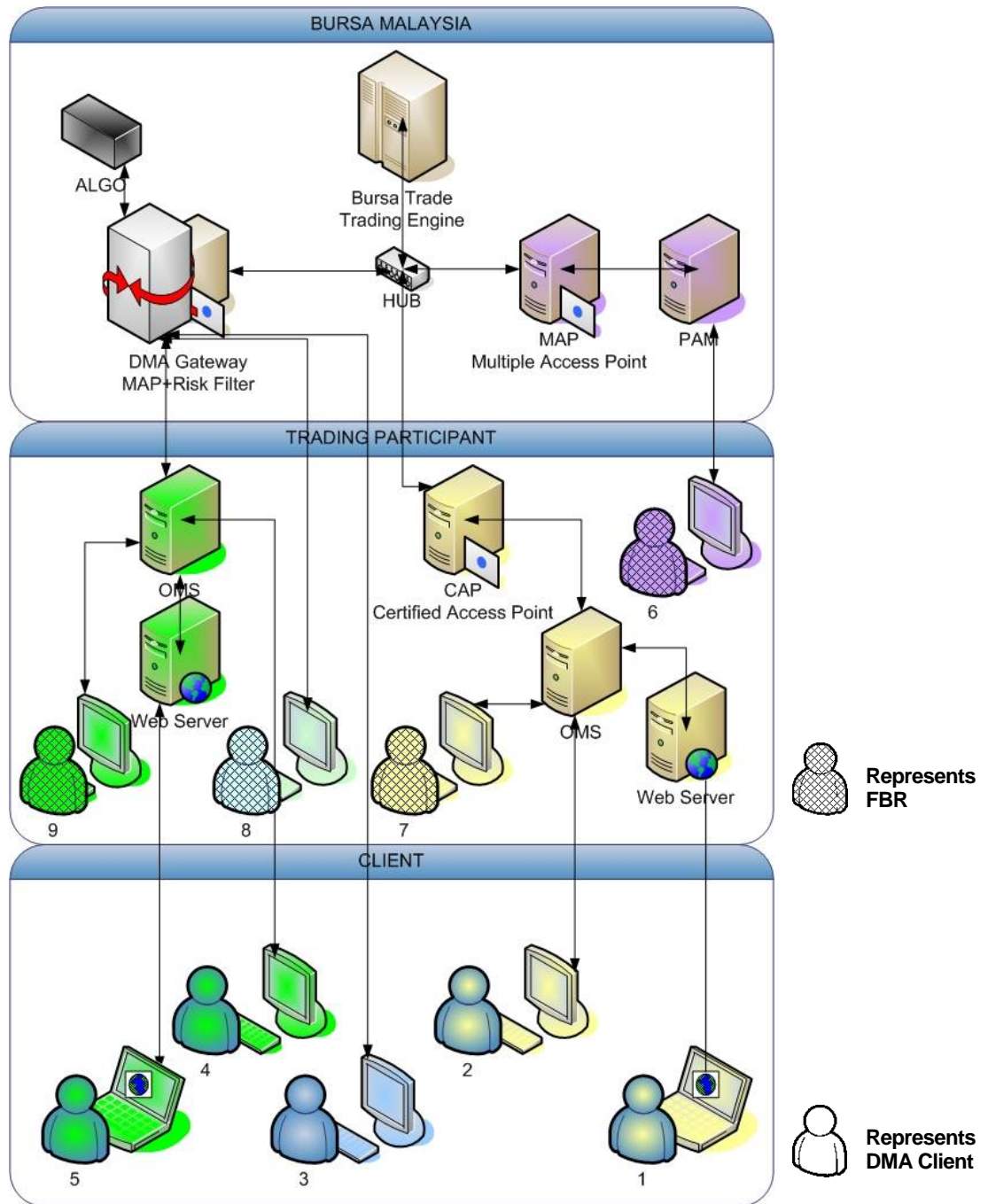
Unless otherwise stated, words or expressions defined in the Rules of Bursa Derivatives and/or the DMA Operations Directive shall when used in the DMA Handbook, carry the same definition. The term “DMA Participant” shall refer to TPs offering DMA, and the term “DMA Client” shall refer to Clients accessing Bursa Trade via DMA.

DIRECT MARKET ACCESS HANDBOOK

SECTION A: OVERVIEW OF THE BURSA DERIVATIVES DMA ARCHITECTURE

1. Bursa Derivatives DMA Technical Architecture










1.1. Description of Technical Architecture



DIRECT MARKET ACCESS HANDBOOK

1.2. DMA Participants Technical Architecture Options

With reference to the illustration of the DMA technical architecture in Section A.1.1 above, the DMA technical architecture options available to DMA Participants are summarized as follows:

Architecture Option Code	Order Entry	User Ref.	Activity*	Description
1. Purple	FBR	6		PAM infrastructure. Order Entry by FBRs.
2. Yellow	FBR/ DMA Client	1, 2, 7	  	<ul style="list-style-type: none"> • DMA infrastructure at the DMA Participant's premises. • The hosting of a Web server by the DMA Participant enables internet trading. • Refer Section B.1.1 for hardware/software requirements.
3. Blue & Light Blue	FBR/ DMA Client	3, 8	 	<ul style="list-style-type: none"> • Bursa Hosted DMA Gateway infrastructure. • Does not facilitate internet trading because there are no Web servers hosted by DMA Participant.
4. Green	FBR/ DMA Client	4, 5, 9	  	<ul style="list-style-type: none"> • Bursa Hosted DMA Gateway infrastructure. • The DMA Participant has an OMS and/or Web server. • Refer Section B.1.1 for hardware/software requirements.

* Key to Table above:



Telephone Order



Internet Order



DMA

DIRECT MARKET ACCESS HANDBOOK

2. DMA Infrastructure¹ Options

Based on the Bursa Derivatives DMA Infrastructure Options outlined in Section A.1.2 above, the DMA Participant may choose from any of the following solutions to offer connectivity by DMA Client's Access Device (front-end access solutions).

2.1. Proprietary DMA Infrastructure Solution

DMA Participants may develop their own proprietary DMA Infrastructure for their DMA clients, subject to obtaining the necessary approval from Bursa Derivatives.

The DMA Participant is required to also obtain approval from Bursa Derivatives when changes are made to its proprietary DMA Infrastructure. This solution requires the DMA Participant to host a DMA Order Management System ("OMS") server.

This option will be utilising the Technical Architecture Option No.2 set out in Section A.1.2 above.

2.2. Third Party Software

DMA Participants may also choose to use Third Party Software from Approved DMA ISVs. The list of Approved ISVs is available on Bursa Malaysia's website. This solution requires the DMA Participant to host a DMA Infrastructure server. The requirements for ISVs are set out in the "*Guidelines on Certification for Independent Software Vendors (ISVs)*" set out in Section D.

This option will be utilising the Technical Architecture Option No.2 set out in Section A.1.2 above.

¹ In the Rules of Bursa Derivatives, the term "DMA Infrastructure" is defined as the infrastructure established and/or maintained by or for the TP which facilitates DMA.

The Operations Directives defines DMA Infrastructure as the infrastructure which facilitates DMA and shall comprise all components, both substance and form, which are governed by the provisions established herein. The connectivity envisaged between Users and the ATS via the DMA Infrastructure is described below:

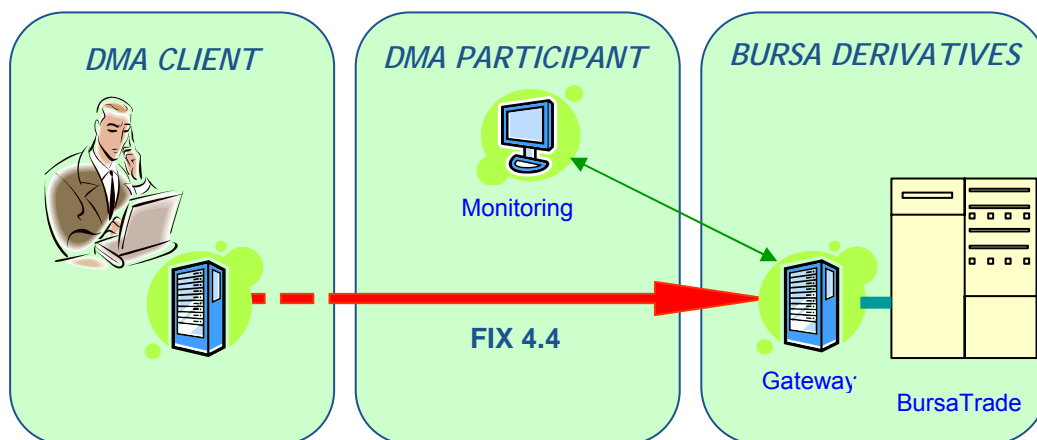
User ⇔ Access Device ⇔ DMA Infrastructure ⇔ ATS

DIRECT MARKET ACCESS HANDBOOK

2.3. Bursa Malaysia Hosted DMA Gateway (“Gateway”)

DMA Participants may choose to connect to the Gateway, which has the following features:

- 2.3.1 DMA Client is connected directly to the Exchange DMA Server located physically next to the Bursa Trade matching engine at the Exchange.
- 2.3.2 Each DMA Participant has a risk monitoring screen remotely connected to the Gateway.
- 2.3.3 The Gateway caters to DMA Participants focusing on offering FIX 4.4 access points to their DMA Clients and Algorithmic Trading. However, it is possible to use the Gateway to offer Proprietary DMA front-end solutions and web interface.
- 2.3.4 The architecture of the Gateway is illustrated below:



- 2.3.5 In the instance where the DMA Participant uses the Gateway as the only means of offering DMA Infrastructure to their DMA Clients, this option will be utilising the Technical Architecture Option No.3 set out in Section A.1.2 above.
- 2.3.6 In the instance where the DMA Participant uses the Gateway as well as hosting additional OMS and/or Web servers, it will be utilising the Technical Architecture Option No.4 set out in Section A.1.2 above. The OMS server hosted at the DMA Participant’s premises may support PAM, internally developed Proprietary DMA Infrastructure Solution or Third Party Software.

DIRECT MARKET ACCESS HANDBOOK

2.4. Approval of DMA Infrastructure

Rule 617.3 (3) requires the DMA Participant to obtain the approval of Bursa Derivatives prior to the establishment or before effecting any changes to the DMA Participant's DMA Infrastructure. Rule 617.3 (4) further provides that DMA Participants must provide written confirmation that the DMA Infrastructure and all the requirements in relation to the functionalities, connectivity, operation and security requirement of the DMA Infrastructure comply with the Rules at least 2 market days prior to the commencement of the operation of the DMA Infrastructure or before effecting any changes to the DMA Participant's DMA Infrastructure.

Please refer to Section 5 of the DMA Operations Directive for details on application procedures.

3. Access by DMA Clients

Bursa Trade can be accessed directly via TPs that are DMA Participants and DMA Clients are given the flexibility to select from a number of front-end access solutions from Approved DMA ISVs. The lists of DMA Participants and Approved DMA ISVs, which may be reviewed by Bursa Derivatives from time to time, can be found on Bursa Malaysia's website².

² <http://www.bursamalaysia.com/website/bm/trading/DMA/>

DIRECT MARKET ACCESS HANDBOOK

SECTION B: GUIDELINES ON TECHNICAL AND CONNECTIVITY REQUIREMENTS**1. General Description of Connectivity Requirements**

Sections B.1, B.2 and B.3 are only applicable to the DMA Participant that hosts its own OMS and/or Web server (either Technical Architecture Options No.2 or No. 4), and will not be required for connection to the Gateway.

1.1. Hardware/Software Requirements

1.1.1 DMA Participants that wish to connect to Bursa Trade via DMA must have a Certified Access Point ("CAP").

1.1.2 The CAP must possess the following minimum configuration:

CAP Server BursaTrade Server

- Pentium IV 3.4GHz 1M Cache 1GB/4GB 80GB SATA
- Integrated ATI RAGE XL Video Controller with 8-MB SDRAM Video memory
- Integrated SATA RAID 0/1 Hard Disk Controller
- Additional 80Gb SATA 1.5Gb, 7,200ROM Hard Drive (1")
- 1.44 MB FDD Option
- CD ROM Drive Option
- Embedded NC7782 Dual Port Gigabit NIC
- Integrated iLO Remote Management
- 350 Watt PFC Power Supply
- 1U Rack
- Anti-virus software

Dongle

- Dongle-USB Versa from MARX Software Security

Operating System ("OS") Software

- Windows Server 2003, Web Edition

1.1.3 Section 4.1 of the DMA Operations Directive requires all physical and logical connections between the ESZ³ and the TPSZ⁴ to be solely performed by the Exchange or its appointed vendors/representatives.

³ ESZ refers to the Exchange's Secured Zone where the Exchange's IT Infrastructure resides. The Automated Trading System (Bursa Trade) shall be deemed to reside within the ESZ.

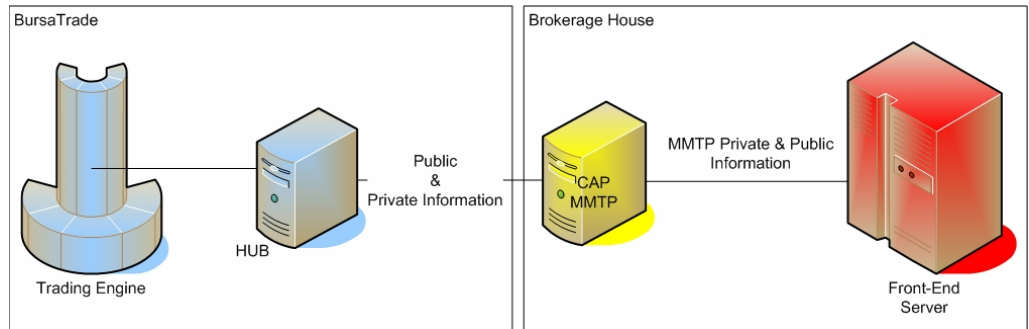
⁴ TPSZ refers to the TP's Secured Zone. The TPSZ shall be the designated zone where the TP's physical and logical infrastructure resides for the purpose of connecting with the ESZ.

DIRECT MARKET ACCESS HANDBOOK

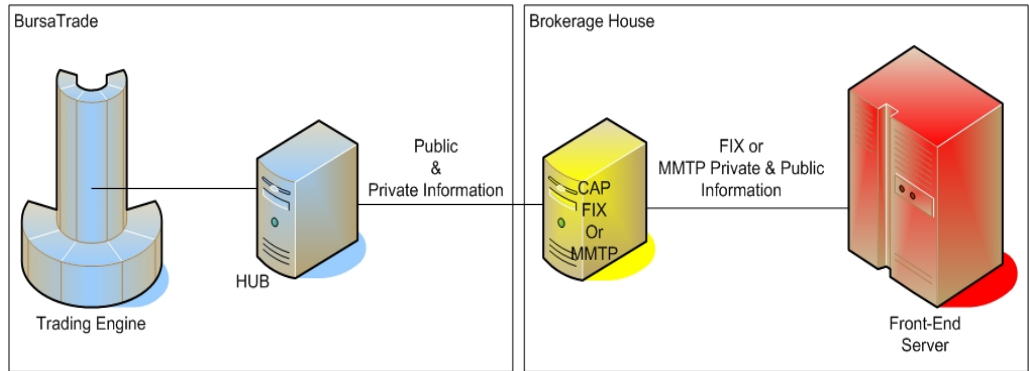
2. Bursa Trade Access via MMTP

2.1. Description of Access

2.1.1 The diagram below illustrates access to Bursa Trade using MMTP protocol. This is for the first phase of DMA in February 2008, as the Bursa Trade Derivatives DMA platform will be accessible only in MMTP and via a CAP.



2.1.2 By the second half of 2008, the Bursa Derivatives DMA platform will be accessible in MMTP or FIX 4.4 format, via a CAP.



2.2. Documentation

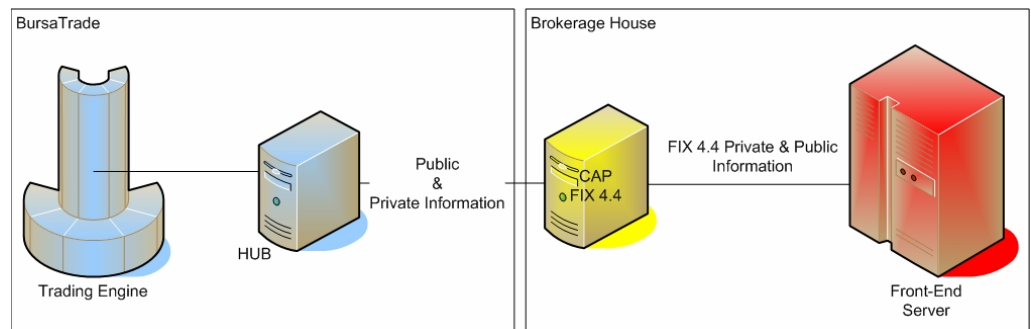
The MMTP protocol documentation can be requested by emailing us at DMA@bursamalaysia.com

DIRECT MARKET ACCESS HANDBOOK

3. Bursa Trade Access via FIX 4.4

3.1. Description of Access

3.1.1 This diagram below illustrates access to Bursa Trade using the FIX protocol. This is for the second phase of DMA in 1H of 2008, as the DMA Equity & Derivatives platform will be accessible in both MMTP and FIX.



3.2. Documentation

The FIX protocol documentation can be requested by emailing us at DMA@bursamalaysia.com

DIRECT MARKET ACCESS HANDBOOK

4. Network Connectivity Requirements

4.1. Requirements for DMA Participants

- 4.1.1 DMA Participants must use a leased line to gain access to Bursa Trade's production environment.
- 4.1.2 DMA Participants must use an ISDN line and set up the ISDN router to gain access to the Bursa Trade DMA testing environment.
- 4.1.3 A DMA Participant that already has a CAP to access the production platform cannot use the same CAP to access the testing platform.
- 4.1.4 The ISDN router is recommended to have the following configuration:

NO.	PRODUCT CODE	DESCRIPTION
	Router & Module	
1.	CISCO 1721, or CISCO 1841	Modular Router w/1xFE, 2 WAN slots, 16 FL/64 DR, or Modular Router w/2xFE, 2 WAN slots, 32 FL/128 DR
2.	CAB-ACU	Power Cord UK
3.	WIC-1B-S/T	Port ISDN WAN Interface Card (dial and leased line) **Note: If 1800 series router is used, the product code of this module is "WIC-1B-S/T-V3".
	Cables	
4.	UTP CABLE	UTP Cable, 10 feet (**x 2)
	Optional item	
5.	Switch/hub	Switch/hub to connect the router & application server. **Note: The UTP crossover cable can be used to connect the ISDN router & application server. This will not require to have switch/hub installed.

4.2. Requirements for DMA Clients

- 4.2.1 DMA Clients may use leased lines, private network or solutions offered by connectivity vendors to connect to the DMA Participant's DMA Infrastructure. The minimum bandwidth requirement for connectivity by DMA Clients is 64 kbps. DMA Participants should recommend the appropriate bandwidth to be met by their DMA Clients with regard to the trading activity undertaken.

DIRECT MARKET ACCESS HANDBOOK

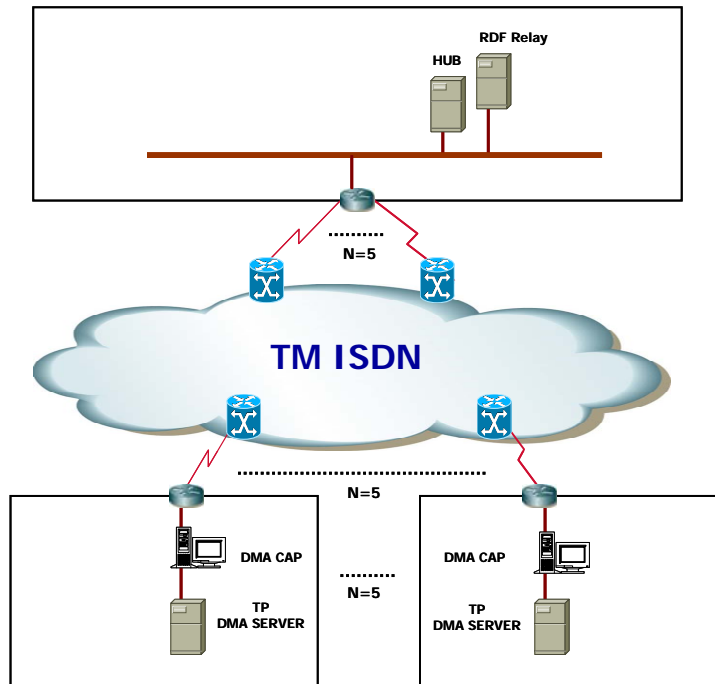
5. Compliance with the IT Security Standards

In setting up its DMA Infrastructure, and overseeing the connectivity of its DMA Clients to its DMA Infrastructure, the DMA Participant must comply with the TP IT Security Code. Detailed IT Security Procedures must be implemented to achieve the standards in the TP IT Security Code, and it is the responsibility of the DMA Participant to develop and document procedures in line with their operations, including those relating to their DMA Infrastructure.

6. DMA Testing Information and Requirements

6.1. Technical and Connectivity Requirements for Testing

- 6.1.1 DMA Participants may opt for either the CISCO 1721 or CISCO 1841 model. Please note that CISCO has announced the end of life for the CISCO 1721 model but will continue to support it. Bursa recommends DMA testing participant to opt for CISCO 1841 if it is a new procurement.
- 6.1.2 The IP address information and the sample configuration of ISDN router will be provided later and the ISDN dial-up speed will be limited to 128Kbps if it is equipped with one unit of 'WIC-1B-S/T-V3' module and one ISDN line.
- 6.1.3 The diagram below illustrates the network requirements and how a connection is established to conduct testing.



DIRECT MARKET ACCESS HANDBOOK

6.2. Testing Facilities

- 6.2.1 The testing platform will be made available from 9:00 am to 5:00 pm Malaysian time, Mondays to Fridays. From time to time, Bursa Derivatives may have to interrupt testing during the day for maintenance. In the event of such a need, all test users will be duly informed.
- 6.2.2 The summary of the testing facilities available, and the respective time lines is as follows:

Item	Via MMTP	Via FIX 4.4	Via Gateway
Do I need a CAP?	Yes	Yes	No
Testing platform available in ... (for ISVs)	Already available	1H 2008	Already available
Testing platform available in ... (for DMA Participants)	Already available	1H 2008	Already available

6.3. Testing on DMA Participant's Infrastructure (Non-Gateway)

6.3.1 DMA Participants

The DMA Participant and the ISV (if any) should ensure that testing is done for each message and possible values on the different fields contained in the MMTP Private Message Specification.

6.3.2 DMA Clients

For DMA Clients testing on a DMA Participant's Infrastructure, other than the Gateway, the DMA Participant and the ISV (if any) should ensure that testing is done for each message and possible values on the different fields contained in the FIX 4.4 Specifications.

6.4. DMA Clients Testing on the Gateway

Procedures and Forms relating to DMA Clients' testing on the Gateway are set out in the following appendices:

- Appendix A: NYSETT DMA Gateway – Testing and Creation of ID
- Appendix B: GL TRADE DMA Gateway – Testing and Creation of ID

DIRECT MARKET ACCESS HANDBOOK

6.5. DMA Clients Testing on DMA Participant's Infrastructure

For DMA Clients testing on a DMA Participant's Infrastructure, other than the Gateway, the DMA Participant and the ISV (if any) should ensure that testing is done for each message and possible values on the different fields contained in the Private Messages (SLE) Specifications.

6.6. DMA Testing Results

Further to the conduct of DMA Testing, the DMA Participant should be assured of the following:

- That the DMA Client has conducted the testing properly; and
- That it is satisfied that the system connectivity of the DMA Client to the DMA Infrastructure will not have any impact on the integrity and efficiency of Bursa Derivatives' trading facilities.

DIRECT MARKET ACCESS HANDBOOK

SECTION C: GUIDELINE ON RISK MANAGEMENT REQUIREMENTS

1. Conditions for Connectivity of DMA Clients

1.1. Clients' knowledge of the process for the submission of orders through the DMA Infrastructure, Laws and Rules in relation to Trading on the Malaysian Derivatives Market

1.1.1 Rule 617.4(1) provides that DMA Participants shall take reasonable steps to ensure that a DMA Client and persons authorised by the DMA Client have :

- knowledge of the process of entering DMA orders through the DMA Infrastructure;
- knowledge of the requirements in the Rules in relation to trading on the market; and
- knowledge of the relevant laws pertaining to trading on the Market

1.1.2 For the purpose of discharging its obligations under Rule 617.4(1), we recommend DMA Participants to have procedures in place to ensure that the DMA Client demonstrates that it has knowledge of the matters set out in Rule 617.4(1) (refer to Section C.1.1.1 above). For example, the level of knowledge of DMA Clients can be assessed by asking relevant questions on the matters set out in Rule 617.4(1). The DMA Participant should also implement review procedures, such as discussions with DMA Clients and updates, to ensure that the DMA Client's required level of knowledge remains satisfactory.

In this respect, we recommend that the DMA Participant should provide its DMA Clients with information, guidance and training⁵ on the following areas:

- Bursa Trade features and functionalities i.e. trading phases, market timing, matching mechanism, order types, execution conditions and instrument state⁶;
- Contract specifications of products listed on Bursa Derivatives;
- Prohibited trading practices and trading offences; and

⁵ The requirements for the DMA Participant to train the DMA Client in the requirements of the Exchange Rules in relation to the entry of orders and trading and other applicable requirements, and to ensure that revisions and updates to the Laws, Exchange Rules are promptly communicated to the DMA Client should be incorporated in the Agreement between DMA Participant and DMA Client. Refer Section C.1.3.1 on Recommended Terms of Agreement.

⁶ Refer to the "Trading Participant's Manual".

DIRECT MARKET ACCESS HANDBOOK

- Margining requirements.

1.1.3 In relation to DMA Clients accessing Bursa Trade via Internet (refer to Section C.1.2.2 below), a DMA Participant may rely on a confirmation from the DMA Client that the Client and the persons authorised by the Client have knowledge of the matters set out in Rule 617.4(1).

1.2. DMA Client – Criteria and Requirements

The DMA regulatory framework encompasses the Rules of Bursa Derivatives and the DMA Operations Directive, and regulates all forms of access to Bursa Trade where there is no intervention by a FBR. This includes direct connectivity to the DMA Participant's OMS Server or the Gateway to facilitate order routing and algorithmic trading by buy-side institutions and hedge funds (sometimes referred to as "direct access"), and internet trading to facilitate retail participation in the derivatives market.

1.2.1 DMA Clients Accessing Bursa Trade via an Access Device connected to a DMA Participant's OMS Server or Gateway

The DMA Participant should limit access to Bursa Trade via an Access Device connected to a DMA Participant's OMS server (that is connected to a CAP) or the Gateway, to the following classes of entities:

- Licensed entities/ individuals under the CMSA;
- Participants of Bursa Malaysia Group;
- Banks and Financial Institutions licensed under the Banking and Financial Institutions Act, 1989/Islamic Banks licensed under the Islamic Banking Act, 1983; or
- Regulated entities in a recognized regulatory jurisdiction⁷ including, but not restricted to, brokers, financial institutions, insurance companies, investment companies, asset managers, discretionary funds, trust funds and employee benefit plans.

These classes of entities may be subject to simplified Client Due Diligence ("CDD") due to the regulated nature of their business.

Clients that do not fall within the categories set out above may be allowed to connect "directly" to the DMA Participant's OMS server or Gateway only if enhanced CDD measures (refer Section C.1.2.3

⁷ A jurisdiction where there is an exchange that is recognised as a Specified Exchange pursuant to Section 105 of the Capital Markets and Services Act 2007 ("CMSA") and Rule 711 of the Rules of Bursa Derivatives.

DIRECT MARKET ACCESS HANDBOOK

below) and careful consideration of the client risk profile have been carried out.

1.2.2 DMA Clients Accessing Bursa Trade via Internet

Bursa Derivatives envisages that Clients that access the market via internet (“Internet Clients”) will comprise primarily retail clients and should be subject to enhanced CDD measures (refer Section C.1.2.3 below), unless there are special mitigating circumstances e.g. where reliable information on the Client can be obtained publicly, or where the Client has a good track record.

Internet Clients must be connected via an additional Web server, which is connected to an OMS server or Gateway. The Web server may contain enhanced security features and added risk management controls/filters.

1.2.3 DMA Client Due Diligence – Know Your Client (“KYC”) Requirements

Rule 603.1 requires a TP to exercise due diligence in learning the essential facts as to the Client and its or his investment objectives and financial situation prior to the commencement of trading. The requirements to monitor and report suspicious transactions are also set out under the Anti-Money Laundering Act 2001⁸ and the Guidelines on Prevention of Money Laundering and Terrorism Financing for Capital Market Intermediaries⁹ issued by the Securities Commission. In this respect, the DMA Participant must ensure that all reasonable steps are taken to ensure adherence to these KYC requirements.

We recommend that all reasonable steps should be taken to accurately establish the DMA Client’s business and financial background, and its’ investment objectives. The DMA Participant should be assured of the financial probity of the DMA Client and that it has sufficient financial resources to meet its obligations.

Enhanced CDD should be undertaken for clients with higher risk profiles, whilst simplified CDD may be conducted for clients with lower risk profiles e.g. regulated entities. The KYC measures undertaken in relation to eligibility requirements for DMA Clients should be reviewed regularly, at least on an annual basis. Suggested and recommended data to be obtained for simplified or enhanced CDD are as follows:

⁸ <http://www.parlimen.gov.my/actindexbi/pdf/ACT-613.pdf>

⁹ Revised edition issued in January 2007
http://www.sc.com.my/eng/html/resources/guidelines/2007%20AML-Guidelines%20Final_1.pdf

DIRECT MARKET ACCESS HANDBOOK

Client Type	Simplified CDD	Enhanced CDD
Individual	<ul style="list-style-type: none"> • IC or passport • Address – residential and permanent address, if different 	<ul style="list-style-type: none"> • IC or passport • Address – residential and permanent address, if different • Occupation • Latest 3 months' payslip or latest income tax statement or bank statement
Corporation	<ul style="list-style-type: none"> • Certification of Incorporation • Memorandum & Articles of Association • Board Resolution on opening of account • Specimen signature of authorised signatories 	<ul style="list-style-type: none"> • Certification of Incorporation • Memorandum & Articles of Association • Board Resolution on opening of account • Specimen signature of authorised signatories • Information on the nature of business and its corporate structure • Latest audited financial statement and/or management financial statements • Latest 3 month bank statement • Power of Attorney (if applicable)

In carrying out the above, the TP should exercise due diligence and be aware of any suspicious client behaviour(s) that warrant further enquiry or probe (herein referred to as "Red Flag"). Some of the situations of Red Flag are as follows:-

- a series of transactions or activities which are senseless or irrational in nature (e.g. constantly buying and selling securities at a loss)
- the client requests to pay third parties or receives funding from third parties
- the client is reluctant to co-operate in verifying his/her identity
- the client frequently makes last minute changes to payment instructions
- orders are received from persons other than the account holder.

TPs should properly monitor other doubtful circumstances where clients' accounts may be subjected to abuse, including but not limited to cases where a few clients' accounts carry identical correspondence addresses.

Any unexplained information should always be investigated.

DIRECT MARKET ACCESS HANDBOOK

Assessments of the expected pattern of the activity of the client on a continuous basis throughout the business relationship with the client should also be considered.

1.2.4 Record of DMA Clients

Refer to Rule 601.3A.

1.3. Agreement between DMA Participant and DMA Client

Rule 617.4(2) requires the DMA Participant to execute a written agreement with DMA Clients to address the following areas:

- The duties, obligations and rights of the DMA Participant and its Clients in relation to DMA; and
- The Clients' compliance with the Rules.

1.3.1 Recommended Terms of Agreement

The following terms are recommended to be incorporated in the written agreement between the DMA Participant and the DMA Client to ensure that crucial provisions are agreed to prior to trading, to mitigate disputes, and to empower DMA Participants to take immediate preventive and corrective measures with respect to fair and orderly trading.

- The DMA Client shall enter orders and trade in compliance with the Rules of the Exchange and other applicable regulatory requirements;
- Specific parameters defining the orders that may be entered by the DMA Client are stated, including restriction to specific instruments or size of orders, and the DMA Participant shall have the right to reject orders that do not fall within the designated parameters of authorised orders;
- The DMA Participant has the right to reject an order for any reason;
- The DMA Participant has the right to change or remove an order in the Order Book and has the right to cancel any trade by the DMA Client for any reason;
- The DMA Participant has the right to discontinue accepting orders from the DMA Client at any time without notice;

DIRECT MARKET ACCESS HANDBOOK

- The DMA Participant agrees to train the DMA Client in the requirements of the Exchange Rules in relation to the entry and trading of orders and other applicable requirements;
- The DMA Participant agrees to ensure that revisions and updates to Laws and Rules are promptly communicated to the DMA Client.

2. System Security and Access Controls

2.1. DMA Infrastructure Users & Administrators

The DMA Participant must ensure security of access to the DMA Infrastructure at all times to ensure that unauthorised persons are denied access to the DMA Infrastructure. Please refer to :

- Section 3.1 of the DMA Operations Directive for the requirements in relation to the Users and Administrators of the DMA Infrastructure
- The TP IT Security Code – Baseline Procedures for ITSS 3: Logical Access Controls.

3. DMA Participant Internal Control Requirements

The DMA Participant shall have written policies and procedures and comply with the following internal control requirements in relation to the provision of connectivity of its DMA Infrastructure to DMA Clients.

3.1. Internal Controls: Areas of Focus for DMA Participants

Whilst the fundamental requirements of effective internal control as set out in the “Compliance Guidelines for Futures Brokers” (“Compliance Guidelines”) remain relevant for all TPs regardless of the medium of communication or delivery, there are a few critical internal control areas in relation to DMA trading that the DMA Participant should focus on:

3.1.1 Segregation of Duties

It is stated in the Compliance Guidelines that there must be strict separation between the credit control function, and the trading, dealing and marketing functions to ensure independence, and mitigate the risk and consequences of conflicts of interests.

It is recommended for DMA Participants to segregate the DMA direct execution desk from other Agency desks to ensure confidentiality of DMA Client Orders. Anonymity, along with increased control and speed of execution are the key benefits of trading via DMA, and the DMA Participant should endeavour to maximise these features.

DIRECT MARKET ACCESS HANDBOOK

3.1.2 Credit Controls

It is stated in the Compliance Guidelines that TPs must ensure that suitable credit limits are set for their clients. It is recommended that the CDD assessment of DMA Client's financial probity must be decided independently of the trading, dealing or marketing functions.

We recommend for DMA Participants to consider enforcing stricter credit control for clients requiring enhanced CDD requirements, especially in relation to overseas accounts. These may include the requirement to pay higher upfront maintenance margins, the collection of deposits and/or collateral as guarantee of performance, more frequent margin calls, restriction on total open positions and/or strict cut-loss policies.

It is recommended that credit limits and any subsequent variation of credit limits are authorised by a senior management officer of the DMA Participant who is independent of trading, dealing and marketing functions, and is not associated with the DMA Client in question.

It is stated in the Compliance Guidelines that TPs must ensure that proper systems and control procedures are implemented to ensure that their clients do not trade beyond the credit limits imposed. Further, the Operations Directive states that risk filters (automated pre-execution checks) must be undertaken for all DMA Clients' orders. The risk filters are covered in greater detail under Section C.3.2 below.

3.1.3 Post-Trade Review

DMA Participants should also ensure that proper and adequate post trade risk management monitoring systems and procedures are set in place to monitor risk exposure of DMA Clients' trades with respect to total open positions, total Initial and Variation Margin etc. DMA Participants should ensure that account activity is monitored at least on a daily basis.

3.2. Risk Filters

Section 3.2.1 of the DMA Operations Directive requires DMA Participants to define, install and document a set of filters and/or checkpoints with pre-defined criteria and values responsible for the Validation¹⁰ of each and every Order.

¹⁰ The DMA Operations Directive defines Validation as "means the act of assessing a DMA Order, manually, automated or otherwise, against risk filter(s) assigned with pre-defined criteria and values for purposes, including but not limited to, managing the risks associated with each DMA Order prior to Order Entry".

DIRECT MARKET ACCESS HANDBOOK

Filter and filter parameters provide the principal means in the validation of each Order to ensure compliance with Rules in relation to trading on the market. Filters are intended to establish points at which Orders are tested and passed to the market only when pre-set conditions are met.

3.2.1 Mandatory Risk Filters

DMA Participants must install the filters set out in Section 3.2.2 of the Operations Directive and as stated below. Examples of how risk filters are calculated are set out in Section C.4.

Type of Filter	Filter Name
Cash Position	Real-time cash position
Order	Maximum capital engaged per order
	Maximum number of contracts per order
Contract Position	Daily long position limit per contract and per product family
	Daily short position limit per contract and per product family
	Gross position limit per contract and per product family
	Total capital engaged
Manipulation	Far from the Market Spread (per contract, in ticks)
	Far from the Last Traded Price (per contract, in %)
	Small orders far from Last Traded Price
Trading Permission	Type of Instrument

3.2.2 Filter Parameters

Filter parameters are variables within filters that can be changed to modify the effectiveness of the filters without changing the nature of the rule to which the filter applies. Any changes, including intra-day changes to filter parameters must be controlled, monitored, authorized and recorded properly.

3.2.3 Section 3.2.4 of the Operations Directive requires the tracking and utilisation of the filters established for the purpose of Validation to be updated on real-time on-line basis.

3.2.4 In the event that an order is rejected by a risk filter, it is recommended that both the DMA Client and the Futures Broker Representative (“FBR”) should each receive a rejection notice. The FBR will normally contact the DMA Client to assess how to handle the rejection. Any actions taken to

DIRECT MARKET ACCESS HANDBOOK

manage an exception must be in accordance with the DMA Participant's internal control policies and procedures, and logged and appropriately documented. Refer Section C. 3.4 below on "Error and/or Exception Handling".

3.3. Maintenance of DMA Infrastructure Activity Log

Section 3.4 of the DMA Operations Directive requires DMA Participants to establish and maintain a DMA Infrastructure activity log ("Log") to record all the events/activities/processes of all Users and Administrators, encompassing the full order flow. Access to the Log shall be restricted to Administrators and any other authorised person/(s) as may be designated by the DMA Participant. Any work carried out on this Log shall be recorded with full details. The date and time references in the Log shall be that of the ATS. In relation to the above directive, the following applies :-

3.3.1 Minimum Details to be Recorded in the Log

Refer to Section 3.4.3 of the DMA Operations Directive.

3.3.2 Recommended Practices in Storage of DMA Log and Records

The DMA Participant should ensure that DMA records can be easily retrievable by authorised personnel, stored securely and that proper back-up controls are kept. The DMA Participant must be able to produce a complete audit trail of transactions, from receipt of an order to its settlement upon request by the Exchange.

The DMA Participant should also ensure that appropriate backup of DMA records are kept with reference to recommendations of TP IT Security Code – Baseline Procedures for ITSS 6: Computer Operations, Section 6.4 "Backup Storage Media Protection".

3.4. Error and/or Exception Handling

Refer to Section 3.5 of the DMA Operations Directive for the requirements on error and/or exception handling. We recommend that any errors, rejections and exceptions be monitored and investigated/resolved on a daily basis, and a review of the actions taken in relation to errors and/or exceptions should be undertaken by the Compliance Officer on a regular basis.

DIRECT MARKET ACCESS HANDBOOK

4. Examples of How Risk Filters Are Calculated

4.1. Real-time Cash Position

Start of day:

CLIENT A / [Cash position]: RM 5,000,000

10:15 am:

Client A buys 100,000 shares at RM12

The new real-time cash position is now RM 3,800,000

* For ease of calculation, the scenario above excludes transaction costs

4.2. Maximum Number of Contracts per Order

Check performed on each individual order. Assume that Client A has the following limit:

CLIENT A / [Max. number of contract/order] = 100

11:16 am:

Client A sends a buy order, 120 lots, FCPO Sept 07 at RM2,200.

The order is rejected because the maximum number of contract per order for client A is 100

4.3. Daily Long Position Limit per Contract and per Product Family

Start of day:

CLIENT A / [DAILY LONG POSITION LIMIT FKLI Sept07] = 200

CLIENT A / [DAILY LONG POSITION LIMIT FKLI Dec07] = 200

10:16 am

Client A sends a buy order, 50 lots, FKLI Sept 07 at RM1,304

The order is accepted

10:20 am:

Client A sends a buy order, 170 lots, FKLI Sept 07 at RM1,300

The second order is rejected because it as exceeds the daily long position limit (50 + 170>200)

10:21 am:

Client A sends a buy order, 170 lots, FKLI Dec 07 at RM1,300

This order is accepted

DIRECT MARKET ACCESS HANDBOOK

4.4. Daily Short Position Limit per Contract and per Product Family

Start of day:
 DEALER A / [DAILY SHORT POSITION LIMIT FKLI Sept07] = 300
 CLIENT A / [DAILY SHORT POSITION LIMIT FKLI Sept07] = 50
 CLIENT B / [DAILY SHORT POSITION LIMIT FKLI Sept07] = 100
 CLIENT C / [DAILY SHORT POSITION LIMIT FKLI Sept07] = 250

Clients A, B and C are attached to Dealer A.

10:25 am:
 Client A sends a sell order, 50 lots, FKLI Sept 07 at RM1,304
The order is accepted.

10:42 am:
 Client B sends a sell order, 90 lots, FKLI Sept 07 at RM1,300
The second order is accepted.

10:43 am:
 Client C sends a sell order, 170 lots, FKLI Sept 07 at RM1,300
This order is rejected because it will go over Dealer A's Daily Long Position Limit. (50 + 90 + 170 > 300)

4.5. Daily Gross Position Limit per Contract and per Product Family

The gross position limit in real-time takes into consideration both short and long positions as well as active/non executed orders.

Start of day: Actual Gross Position received from Back-Office = 200
 CLIENT A / [GROSS POSITION LIMIT FCPO] = 1000

28/05/07 10:45:
 Client A, buy order [executed], 150 lots, FCPO Sept07 at RM2,340
GP= 350

29/05/07 11:51:
 Client A, buy order [executed], 200 lots, FCPO Sept07 at RM2,345
GP= 550

30/05/07 15:51:
 Client A, sell order [in book], 300 lots, FCPO Sept07 at RM 2,360

DIRECT MARKET ACCESS HANDBOOK

GP= 850
30/05/07 15:59:
Client A, buy order, 300 lots, FCPO Sept07 at RM2,346
This order is rejected as it exceeds the gross position limit.
(850 + 300 >1000)

4.6. Trading Permission Level

The DMA system shall be able to grant/forbid the access for a given DMA Client/FBR to:

- Selected markets,
- Selected Instrument types,
- Product Families.

4.7. Far from the Market Spread

The objective of this filter is to stop a limit order when:

- Price limit of a Buy order > Best Ask + 5 ticks
- Price limit of a Sell order < Best Bid – 5 ticks

Check performed for each individual order:
BUY ORDER / X TICK FROM BEST LIMIT = 5
SELL ORDER / X TICK FROM BEST LIMIT = 5
Assuming the best limits are [1380, 1390] tick = 1
Client A sends a buy order price 1,400:
Order rejected
Client A sends a buy order price 1,395:
Order accepted
Client A sends a buy order price 1,390:
Order accepted
Client A sends a sell order price 1,370:
Order rejected

DIRECT MARKET ACCESS HANDBOOK

4.8. Small Orders Far from Last Traded Price

The objective of this filter is to detect market manipulation when orders are purposely triggered to manipulate those employing technical analysis strategies. It will stop small orders from straying too far from the Last Traded Price.

Check done for each individual order:

BUY ORDER / X TICK FROM LTP = 25

SELL ORDER / X TICK FROM LTP = 25

Assuming the best limits are [1380, 1390], tick = 1

Client A sends a buy order price 1,395:

Order accepted

Client A sends a buy order price 1,430:

Order rejected

DIRECT MARKET ACCESS HANDBOOK

SECTION D: GUIDELINES ON CERTIFICATION FOR INDEPENDENT SOFTWARE VENDORS (ISVS)

1. ISV Eligibility Requirements

- 1.1. The following ISVs may apply to become Approved Vendors:
 - 1.1.1 ISVs who already have trading solutions implemented and running in several financial markets, with references from their clients currently using their Software Product;
 - 1.1.2 ISVs who are able to provide customer assistance from 7:00am to 9:00pm, Malaysia time; and
 - 1.1.3 ISVs who are not insolvent and do not have any judgment against them that remains unsatisfied or outstanding. In the event there is any litigation pending against the vendor, the vendor shall disclose to Bursa Malaysia the nature of the legal suit.

2. ISV Software Product Requirements

- 2.1. The Software Product must fulfil ALL the following requirements:
 - 2.1.1 Properly receive and display all critical information about the market, particularly if a particular product or the entire market is reserved or suspended during regular market hours.
 - 2.1.2 Handle connectivity to Bursa Malaysia and manage trading sessions in the protocols provided (MMTP or FIX 4.4). This includes proper logon, message sequencing as well as the smooth handling of disconnects and reconnects.
 - 2.1.3 Capable of proper order entry and cancellation, as well as receipt of both order acknowledgement and fill information.
 - 2.1.4 Be designed and developed to ensure that it does not adversely impact the Bursa Malaysia electronic markets at large. (for example, even though the system is designed to minimise such possibilities, there may exist scenarios that could flood the Bursa Malaysia network and/or processors, causing latency for other market participants)
 - 2.1.5 Comprise features and functionalities that support compliance with Exchange Rules dealing with the entry and trading of orders as set out in the "Trading Participant's Manual".

DIRECT MARKET ACCESS HANDBOOK

- 2.1.6 Be designed to accommodate new products and new initiatives developed by Bursa Malaysia (e.g., implied spread functionality, market-making).
- 2.1.7 Be designed to quickly and easily adapt to any configuration changes, such as changes in trading hours, matching algorithms or size of market depth, without the need to make software changes.
- 2.1.8 Integrate pre-trade credit check features.
- 2.1.9 Pass the tests specified in the test plan.

3. Approval of DMA Approved ISVs

Approval of DMA Approved ISVs shall be at the sole discretion of Bursa Malaysia. In granting such approvals, Bursa Malaysia will consider, among other factors, the fulfilment of the ISV Eligibility Requirements and the ISV Software Product Requirements. The decision of Bursa Malaysia is final and no appeal will be entertained.

4. Helpdesk for ISVs

All communication and queries in relation to applications to become an Approved DMA ISV, or in relation to the DMA project shall be directed to the following:

Attention to: Market Access Department, Bursa Malaysia

Object: Approved ISV

Email Address: DMA@bursamalaysia.com

DIRECT MARKET ACCESS HANDBOOK

SECTION E: APPENDICES

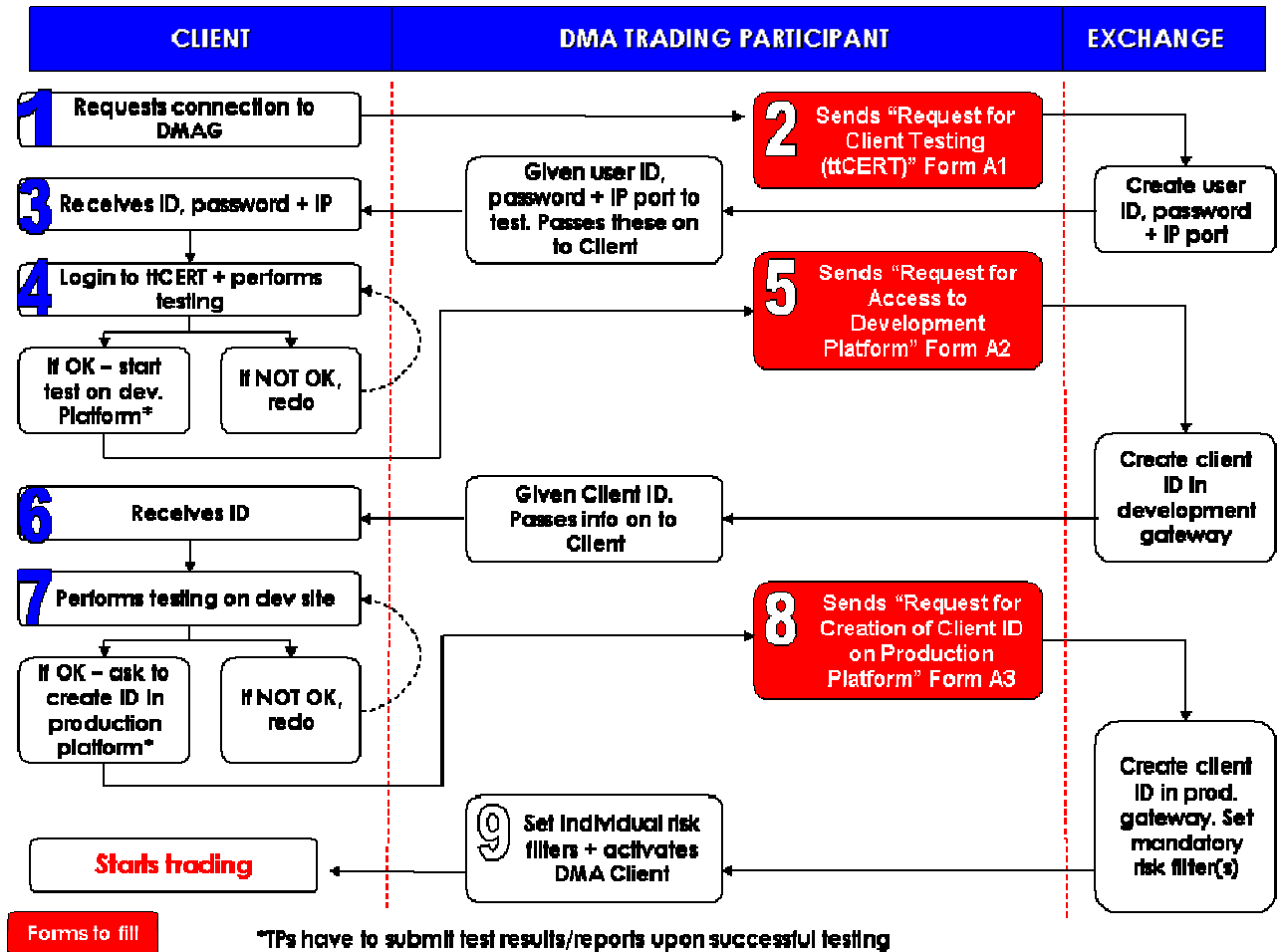
- Appendix A: NYSETT DMA Gateway – Testing & Creation of ID
- *Appendix B: GL TRADE DMA Gateway – Testing & Creation of ID (draft in process)*
- Appendix C: Application to Become an Approved Vendor
- Appendix D: DMA Directory

DIRECT MARKET ACCESS HANDBOOK

APPENDIX A

NYSETT DMA GATEWAY: TESTING AND CREATION OF ID

1. Description of Client Onboarding Process for NYSETT DMA Gateway



2. NYSETT Gateway Forms to be Submitted to Market Access Department

- Form A1: Request for Client Testing - ttCERT
- Form A2: Request for Access to Development Platform
- Form A3: Request for Creation of Client ID on Production Platform

DIRECT MARKET ACCESS HANDBOOK

FORM A1 (NYSETT GATEWAY)
REQUEST FOR CLIENT TESTING – ttCERT

Instructions: Please fill up the form in full and return via fax/e-mail to:

Bursa Malaysia Berhad
9th Floor Exchange Square
Bukit Kewangan
50200 Kuala Lumpur
Attention: Market Access Department

Fax: +603 2710 1891

E-mail: dma@bursamalaysia.com

Name of Trading Participant or ISV:

.....

Trading Participant or ISV DMA Contact Person (Name + Contact Details):

.....

Name of DMA Client (i.e. DMA Client intending to test with ttCERT):

.....

DMA Client Contact Person (Name + Contact Details):

.....

Name of Person(s) Conducting Tests on ttCERT (Name + Contact Details (e-mail address required))

.....

Authorised Signature +
Company Stamp of Trading Participant/ISV

.....

DIRECT MARKET ACCESS HANDBOOK

FORM A2 (NYSETT GATEWAY)
REQUEST FOR ACCESS TO DEVELOPMENT PLATFORM

Instructions: Please fill up the form in full and return via fax/e-mail to:

Bursa Malaysia Berhad
9th Floor Exchange Square
Bukit Kewangan
50200 Kuala Lumpur
Attention: Market Access Department

Fax: +603 2710 1891

E-mail: dma@bursamalaysia.com

Name of Trading Participant:

.....

Trading Participant DMA Contact Person (Name + Contact Details):

.....

Name of DMA Client (i.e. DMA Client who has already tested with ttCERT):

.....

DMA Client Contact Person (Name + Contact Details):

.....

This serves to confirm that the DMA Client has tested against the ttCERT site successfully. We are submitting the following for Bursa Derivatives' further action:

Item	Remarks/Additional comments
ttCERT Test scripts	
Any other documents	

We would like to request for access to the development server (NYSETT DMA Derivatives Gateway) to conduct further testing.

Authorised Signature +
Company Stamp of Trading Participant

.....

DIRECT MARKET ACCESS HANDBOOK

FORM A3 (NYSETT GATEWAY)
REQUEST FOR CREATION OF CLIENT ID ON PRODUCTION PLATFORM

Instructions: Please fill up the form in full and return via fax/e-mail to:

Bursa Malaysia Berhad
9th Floor Exchange Square
Bukit Kewangan
50200 Kuala Lumpur
Attention: Market Access Department

Fax: +603 2710 1891

E-mail: dma@bursamalaysia.com

Name of Trading Participant:

.....

Trading Participant DMA Contact Person (Name + Contact Details):

.....

Name of DMA Client (i.e. DMA Client who has already tested with ttCERT):

.....

DMA Client Contact Person (Name + Contact Details):

.....

This serves to confirm that the DMA Client has tested against the ttCERT AND development sites successfully. We are submitting the following for Bursa Derivatives' further action:

Item	Remarks/Additional comments
Development site test scripts	
Any other documents	

We would like to request for the creation of a Client ID for our DMA Client on the production platform.

Authorised Signature +
Company Stamp of Trading Participant

.....

GL TRADE DMA GATEWAY: TESTING AND CREATION OF ID

Draft in process

DIRECT MARKET ACCESS HANDBOOK

APPENDIX C

APPLICATION TO BECOME AN APPROVED VENDOR

To:

Bursa Malaysia Berhad
Exchange Square
Bukit Kewangan
50200 Kuala Lumpur
Malaysia

We hereby apply to become an Approved Vendor to market our Software Product for the DMA facility offered by Bursa Malaysia. We have read and understood the Terms and Conditions for DMA Approved Vendors (“Terms and Conditions”) attached herein and are agreeable to be bound by the said Terms and Conditions.

The contact person that is authorised by us to receive notices is _____ and may be reached at the e-mail address _____. We agree to inform you of any change of the contact person and/or e-mail address.

Please find enclosed herewith the following:

- A profile of our company detailing the business and financial standing of the company
- A description of the Software Product.
- A detailed test plan to be carried out for testing connectivity and functionalities of the Software Product.

Name of company:	
Authorised signatory:	
Name:	
Designation:	
Date:	

DIRECT MARKET ACCESS HANDBOOK

TERMS AND CONDITIONS FOR DMA APPROVED VENDORS

1 Introduction

- 1.1 Bursa Malaysia Berhad (“Bursa Malaysia”) will be offering a new facility which allows direct electronic access by market participants to Bursa Malaysia’s new trading platform, BursaTrade. This new facility shall be known as Direct Market Access (“DMA”).
- 1.2 To access BursaTrade, market participants must use software developed and marketed by vendors which have been approved by Bursa Malaysia as “Approved Vendors” for DMA (hereinafter the software to be used by market participants for DMA shall be referred to as “Software Product”).
- 1.3 These terms and conditions shall apply to all vendors who wish to become Approved Vendors and to the Software Product marketed by them for use by market participants for DMA.

2 Eligibility

- 2.1 The following may apply to become Approved Vendors:
 - 2.1.1 Vendors who already have trading solutions implemented and running in several financial markets with references from its clients currently using its Software Product.
 - 2.1.2 Vendors who are able to provide customer assistance from 7:00am to 9:00pm, Kuala Lumpur time.
 - 2.1.3 Vendors who are not insolvent and do not have any judgment against them that remains unsatisfied or outstanding. In the event there is any litigation pending against the vendor, the vendor shall disclose to Bursa Malaysia the nature of the legal suit.
- 2.2 Bursa Malaysia, at its sole discretion, reserves the right to refuse approval of any company or persons as an Approved Vendor. The decision of Bursa Malaysia is final and no appeals will be entertained.

3 Application to become an Approved Vendor

- 3.1 Any vendors applying to become an Approved Vendor must use the application form attached to these terms and conditions as Appendix A.
- 3.2 All applications must be accompanied by the following:

DIRECT MARKET ACCESS HANDBOOK

- 3.2.1 A profile of the company detailing financial standing and business of the company.
- 3.2.2 A description of the Software Product.
- 3.2.3 A detailed test plan to be carried out for the testing of connectivity and functionalities of the Software Product.
- 3.2.4 Vendors who are also applying to participate in the “early bird” testing programme must, in addition to the above, provide a marketing plan for their Software Product.

4 Requirements of Software Product

The Software Product must:

- ◆ Properly receive and display all critical information about the market, particularly if a particular product or the entire market is reserved or suspended during regular market hours.
- ◆ Handle connectivity to Bursa Malaysia and manage trading sessions in the protocols provided (MMTP or FIX 4.4). This includes proper logon, message sequencing as well as the smooth handling of disconnects and reconnects.
- ◆ Be capable of proper order entry and cancellation, as well as receipt of both order acknowledgement and fill information.
- ◆ Be designed and developed to ensure that it does not adversely impact the Bursa Malaysia electronic markets at large. (for example, even though the system is designed to minimize any such possibility, there do exist scenarios that could flood the Bursa Malaysia network and/or processors, causing latencies for other market participants)
- ◆ Be designed to support features and functionalities critical to Bursa Malaysia’s market.
- ◆ Be designed to accommodate new products and new initiatives developed by Bursa Malaysia (e.g., implied spread functionality, market-making).
- ◆ Be designed to quickly and easily adapt to any configuration changes, such as changes in trading hours, matching algorithms or size of market depth, without the need to make software changes.
- ◆ Integrate pre-trade credit check features.
- ◆ Pass the tests specified in the test plan.

5 Contact Persons

DIRECT MARKET ACCESS HANDBOOK

- 5.1 All communication in respect of the application to become an Approved Vendor or in respect of the DMA project shall be directed to the following:

Attention to: Market Access Department, Bursa Malaysia

Object: Approved ISV

Email Address: DMA@bursamalaysia.com

6 Confidentiality

In these Terms and Conditions, “**Confidential Information**” refers to any and all information, in any form, that is marked confidential or where not so marked, which is by its nature confidential or not generally available to the public or which the recipient knows or ought to know is confidential. All applicants applying to become Approved Vendors shall keep any Confidential Information strictly confidential and shall not disclose the Confidential Information to any other party(s) without Bursa Malaysia’s prior consent in writing. For the purposes of clarity, all activities in relation to and in connection with the development and implementation of the DMA, including testing by “early bird” Approved Vendors, prior to the official launch of DMA shall be confidential.

7 Disclaimer

- 7.1 Bursa Malaysia (including its related companies, directors, agents and/or employees) makes no representation and/or warranty, express or implied, in respect of, or in connection with any of the following and shall not be held liable to any person in respect of, or in connection with any of the following:

7.1.1 The selection or rejection of any Approved Vendor;

7.1.2 The marketing of any Software Product;

7.1.3 The quality of any Software Product;

7.1.4 Any direct, special, punitive, indirect or consequential damages (including loss of profits) even when notified of the possibility of such damages); and

7.1.5 Any breach of any intellectual property rights of third parties in the development, marketing and use of the Software Product.

8 Indemnity

- 8.1 All persons applying to become Approved Vendors and Approved Vendors shall at all times indemnify and keep Bursa Malaysia (including its related companies, directors, agents and/or employees) indemnified against any and all claims,

DIRECT MARKET ACCESS HANDBOOK

liabilities, losses and damages howsoever caused or incurred as a consequence of or arising in any way from their participation in the DMA project or in developing, testing or marketing their Software Product.

9 Changes / Modifications to this document

- 9.1 Bursa Malaysia shall have the right to impose additional requirements or to vary or modify any terms and conditions herein contained, as it deems fit.

10 Governing law

- 10.1 The terms and conditions set out in this document shall be governed by and construed in accordance with the laws of Malaysia.

DMA DIRECTORY

1. Bursa Malaysia Market Access Department

Key Contact Persons:

Gerald Blondel

Head, Exchanges Development

Email: GeraldBlondel@bursamalaysia.com

Tel: +603 2034 7591


Michelle Tan

Manager, Exchanges Development

Email : MichelleTan@bursamalaysia.com

Tel : +603 2034 7226

Instant Messaging :

DMA Gateway Control Center:  DMA.BursaMalaysia

General Enquiries:

General enquiries and request for information about DMA should be addressed to the following email DMA@BursaMalaysia.com

2. Approved DMA ISV

The list of DMA ISVs can be found at www.bursamalaysia.com

3. DMA Participants

The list of DMA Participants can be found at www.bursamalaysia.com