WHITE PAPER ON CROSS-BORDER TRADING THROUGHOUT THE GCC.

PROJECT:	STRATEGIC COMMENTARY
AUTHOR:	PAUL PICKUP
VERSION:	1.1

Table of contents

1. Introduction

TTC is a consultancy specialising in stock exchange and CSDs.

TTC has done a great deal of work in the subject of market linkage, and has become a leading thinker in the complex issues surrounding the structure of exchange alliances, mergers and the subsequent mechanics of trading, settlement and related technology.

TTC has been influential in the progress of the European exchanges as they consolidate. In particular, the Italian stock exchanges have followed the strategic advice to create trading, clearing and settlement links with other exchanges rather than participating in a merger.

TTC also spelled the end of the iX merger (the proposed joining of the London Stock Exchange and Deutsche Börse Group) by providing analysis into the structural, regulatory and tax issues. This highlighted the lack of clarity surrounding the merger. Unfortunately the analysis was not commissioned by the exchanges themselves but by a group of their brokers, and resulted in a great deal of embarrassment for the LSE.

2. Need for Cross-border investment

The GCC countries are unique in the world. In comparison with many emerging economies, the GCC countries do not have to attract investment. Their problem is more to keep the money from flowing out. The markets are national at present and largely trade their own stocks and allow only nationals and residents to invest in them.

There is an increasing need for the GCC countries to trade their stock cross-border. This is mainly due to the small number of stocks that are traded on all of their markets, and the lack of alternative investment vehicles commonly available, such as derivatives or bonds.

The stocks traded on the GCC stock exchanges are also highly polarised, in that a few stocks are extremely liquid while other stock's liquidity is poor.

Thus there is a need for each country to trade each other's stocks and be able to create a more diverse liquidity pool for spreading risk.

3. Structural issues

It has been a requirement throughout much of the world for stock exchanges to be able to seek ways of allowing easy cross border trading since the re-establishment of a truly global economy at the start of the 1990s. This has been exasperated in Europe with the introduction of a single currency. The requirement for the European stock exchanges to facilitate cross-border transactions comes from the brokers, who trade funds across pan-European sectors.

The progress in Europe has been slow, mainly as the European Union (or any other pan European organisation) has not mandated a solution. This has left the exchanges to seek alliances with each other, whilst becoming for-profit organisations and competing with each other for market share. While there has been some consolidation, progress is still far from achieving a pan-European solution.

Model 1: One big stock exchange is the answer?

This does not work, as regional exchanges need to exist to encourage smaller businesses through more relaxed listing requirements. It is only the liquid stocks that need to trade cross border. There are also sovereignty issues, regional tax issues, listing requirements and accounting practises that have to be unified before a single business process can be established. This has prevented the European bourses from truly merging.

Model 2: Consolidation through merging

The only success in Europe is Euronext, but behind the hype, they have only recently managed to unify the technology across the exchanges of France, Belgium and the Netherlands. However, brokers still need to "join" Euronext Brussels even if they are already members of Euronext France. The clearing and depository systems are also not unified, and will not be until 2008. Progress, even within the mergers, are simply too slow for them to be any practical use.

Model 3: Federal

At the other end, there is a federal approach, where a group of exchanges sign alliances with each other to trade each other's stocks. However, these have resulted in a few linkages, of sort that TTC proposed, or little at all.

3.1. Proposed structure – an International Supervisory Body (ISB)

The proposed structure is an amalgam of models 1 and 3. There needs to be a congruence of rules for the trading of cross border stocks, but without a single exchange running it.

There needs to be a higher authority overseeing the stock exchanges to provide direction, facilities and a solution that can be joined rather than merged with. Importantly, a structure needs to be provided that allows exchanges to leave cleanly.

The central body's task will be to provide an environment for cross-border trading to investors. It is recommended that this body not be aligned closely with any of the existing stock exchanges, to avoid any sense of competitiveness. Ideally this would report to the GCC directly. For the sake of simplicity, we shall call this an International Supervisory Body, or ISB.

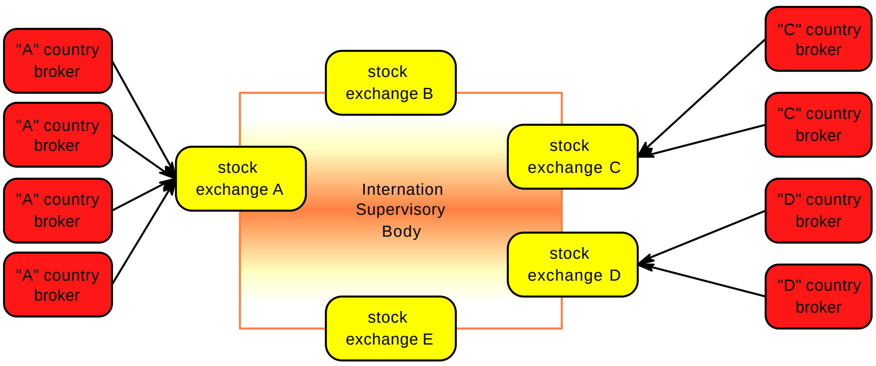

Figure 1 ISB structure

The ISB will need to be founded on the principles of:

- Investor protection
- Ease of use
- Minimal cost per transaction

The central body does not imply that there needs to exist a central stock exchange or depository. This is explained in the subsequent sections.

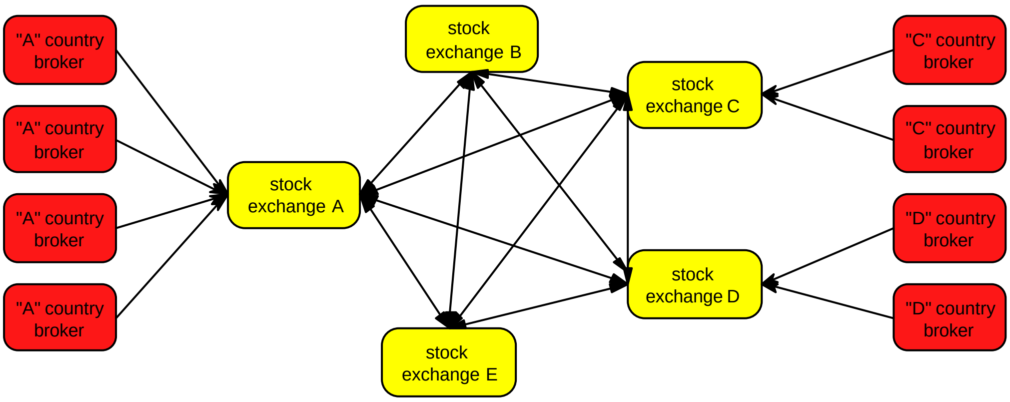

Figure 2: Back to back membership relations

4. Membership

4.1. Back to back membership

A major part of the proposed structure is to force the national stock exchange to be responsible for the guarantees and regulation required by other exchanges. This seems a sensible approach as the Stock exchanges already have guarantee mechanisms in place to ensure investor protection. In TTC we call this a "back-to-back" approach, which is referred to frequently in this paper.

In essence, it is where stock exchange C (see Figure 2) becomes a member (as a broker) of stock exchange A. thus all the trading by stock exchange C's members on stock exchange A; appear as orders from stock exchange C rather than the individual broker. Again this seems sensible as the witnessed proportion of cross-border activity is not vast – approximately 30% in Europe. In other words, 70% of all trading is in national stocks and the order book would not be filled with orders all from "stock exchange C".

In the back-to-back principle, members of a national exchange do not need to become members of foreign exchanges, but can apply for international trading status, which may imply a higher fee and increased regulatory requirements.

At a higher level, stock exchanges become members of the ISB in a similar manner to their members. This requires them to subscribe a fee to support the ISB's overheads, modify their regulation to international standards and submit listings for stocks they wish to list internationally.

The ISB would oversee the back-to-back membership, but as an entity would not be directly involved.

This removes the complexity of each broker having to be registered on each exchange throughout the GCC and lowers the cost for the individual investor.

5. Effect on listing requirements

The structure would require that there be common standards for listing companies, especially in the areas of:

- Reporting
- Company accounting
- Voting rights

TTC does not recommend that national accounting practises be changed, but an investigation is required into the differences between the accounting requirements of the GCC countries, and if necessary, requires that companies submit additional accounting information in order to be traded internationally.

TTC would also propose that there be different levels of listing, for international and domestic. The charging of international listing may be greater than the cost for domestic to contribute towards the ISB's overheads.

IPOs may be either national or international.

6. Trading cross border

Again, there would be requirements for trading rules to be harmonised, with the significant proviso that simple orders need only be passed via the ISB rather than any local specialities. This should be acceptable as the requirement for specialist trading is only national rather than remote, usually driven my information circulating in the same country as a stock is invested in.

6.1. Single order book

An important aspect of the structure is to maintain a single order book, providing the depth of market for the investor. The question then becomes whether the order book is based in the national exchange (where the stock is listed) or on a central order book supported by the ISB.

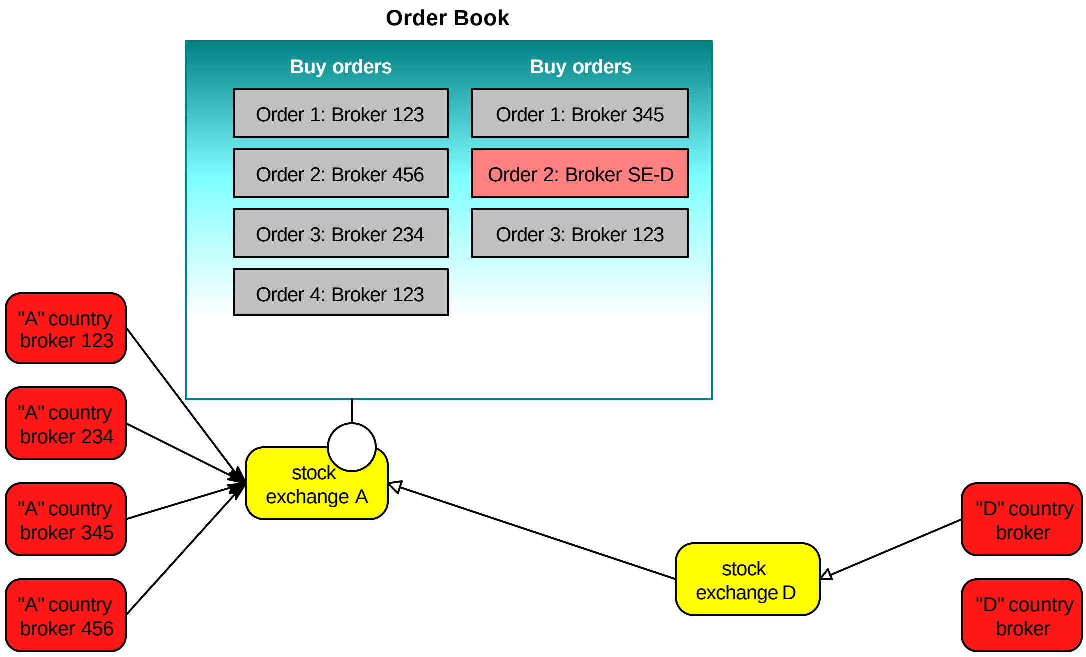

Figure 3: Cross-border order flow

Again, recognising that any order routing may add a small delay, and also recognising that split second trading is only done in the local markets, we propose that the national markets retain the order book and that all orders are routed by the ISB to those markets, as shown in Figure 3. This also simplifies the role of the market supervisor (see regulation).

The order will technically pass through the ISB, but not in terms of entities.

The interface to the broker is the same as for the national markets, with an order being entered in an international stock looking the same as an order on the domestic market.

The exchanges provide cross border guarantees on behalf of their broker. In the case of a broker defaulting, the risk is passed to the representative exchange, requiring bonds of guarantee or insurance funds to be in place to cover any losses.

6.1.1. Trading Hours

Presently, the countries of the GCC have different trading hours. For the international stocks these will need to be harmonised across the countries for practical reasons. This could lead to difficulties during Ramadan.

7. Regulation of the GCC markets

The ISB would set standards of regulation for the internationally traded stocks, and maintain a higher regulatory role that would oversee, inspect and advise the member exchanges. The member exchanges would have to abide by the ISB regulatory obligations for those internationally traded stocks. There cannot be a back-to-back arrangement in this respect, as there would need to be a body to resolve disputes.

The ISB can incidentally become a school for regulatory best practise in the CGG.

Market surveillance would be carried out by the national exchange for the stocks that they are listing. Where there is suspect trading by a member of a foreign exchange, the foreign exchange would be requested to investigate and provide an explanation or report to the originating exchange.

National regulators would have to have powers of suspension of an entire foreign exchange, as they would with one of their brokers.

Where regulation monitors the sale of managed funds, which cover international stocks, regulations would also have to be standardised across the GCC.

8. Depository and Registry structure

The back-to-back arrangements would apply in respect of deposited or registered stock. Foreign stock exchanges would be the registered holders of stock, but would have to maintain records of ownership within their country. These records can be inspected if required by the exchange where the stock is registered.

No stock can be more than 49% owned by foreigners. Either the ISB or the national exchange would have to build functionality into their systems to ensure that this is not exceeded at the point of order entry. Threshold warnings will have to be issued if the 49% rule is getting close, otherwise there is a risk that fund managers may not be able to fulfil their obligations.

Countries within the GCC have different depository or registry structures. The common functioning of these will have to be evaluated.

8.1. Settlement period

This currently ranges from T0 to T3. A standard settlement period would have to be implemented across all internationally traded stocks. In doing this, stock exchanges would probably need to harmonise the rest of their trading stocks to avoid settlement complexity.

9. Payment

There are different currencies in the member countries. Two models can be investigated:

Model 1: single currency

In advance of a single currency being implemented in the GCC, a single currency can be established for the purposes of trading stock. This of course would require the organisation of a GCC central bank and the free trading of the currency on the currency markets. If this is not practical, the US dollar or Euro may be used.

All exchanges use either their central bank or a representative bank to facilitate payments. To ease the ability of brokers to trade cross-border, the banks would require back-to-back agreements, with the foreign exchange becoming a member of the national exchange's bank, and taking responsibility for payment of the transactions done by their members. This would be mirrored within their own banks between the exchange account and the member's account, requiring a clearing account to be created.

Model 2: Multi-currency

This is more complex. Payments would have to be facilitated by the ISB in conjunction with a spot rate FX trading function, supplied by a commercial bank or broker under licence. Accounts would have to be held by the ISB as a bank (or by an appointed bank) and payments conducted via continuous linked settlement. Rates would be agreed at the time of trade.

The spot rates will also need to be broadcast along with the market data.

Otherwise, the back-to-back arrangements would apply.

Market prices may also need to be translated, introducing significant complexity. This requires further investigation.

10. Technology

Following the principle of "easy of use", the technical challenge is to reduce the broker's work required to connect to a minimum. The solution is thus to modify the existing interfaces to the national exchange's systems to route the incoming orders away from their trading engine, via the ISB to the listing exchange for execution.

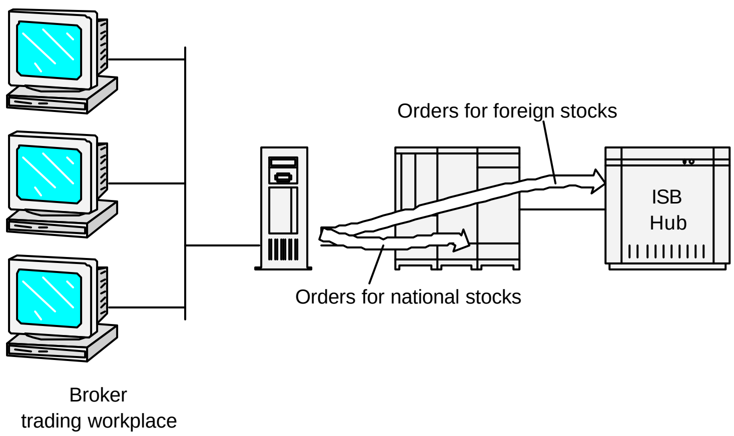

Figure 4: Order routing at the national exchange

The use of a hub reduces the number of links between exchanges from a "many-to-many" to "many-to-one-to-many".

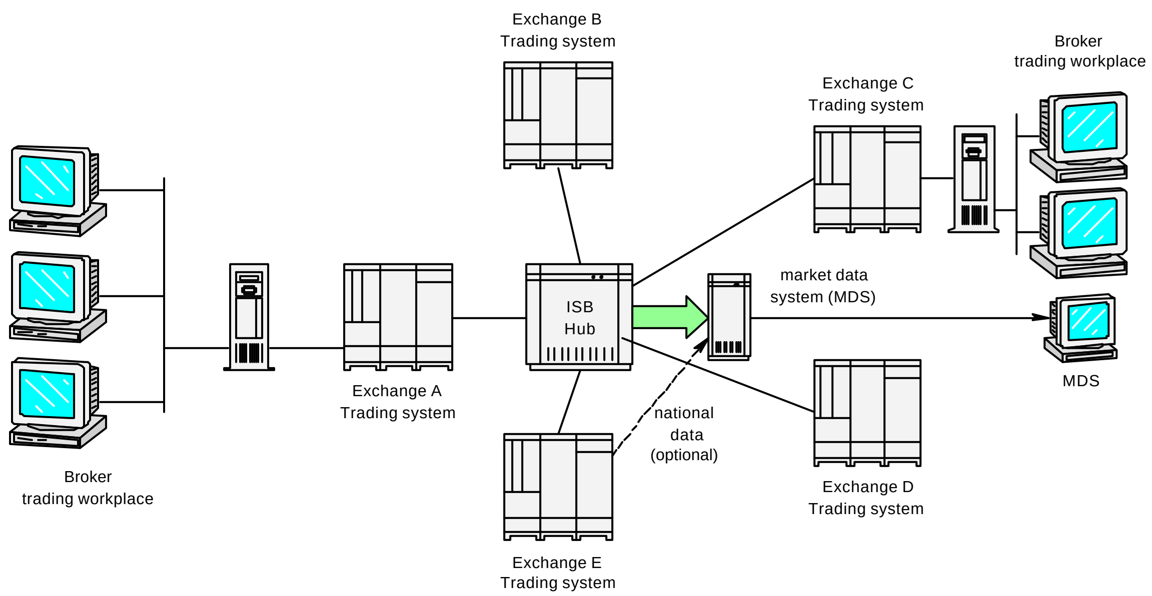

Figure 5: Overview of technical architecture (trading and market data)

Thus the stock exchanges do all the system changes, not their members (which is what has happened in Europe).

Similarly, order book information, static data changes and trade data will need to be available from the ISB and presented to the broker as if the stock is traded nationally.

A central hub will need to be made at the ISB to support the following functionality:

- Order routing
- Market Data Dissemination
- Static data updates
- Corporate news dissemination (either collected centrally or from member exchange's systems)
- Depository updates
- Payments (this may take place through a designated bank, subject to further analysis)
- Spot rates for currencies.
- Pan GCC index calculations

The messaging passing through the ISB hub will, of course, need to be real time and not allow any delay that causes an unfair market.

11. Conclusions

There are many challenges in providing cross-border trading through the GCC countries. Never the less, the problems are all solvable, and with the principles that they will be founded on, the GCC will produce a solution that will be a world leader.

The establishment of the ISB is key, and is on the critical path. The mechanisms for establishing the ISB are similar to the establishment of an exchange itself, requiring regulation, membership and a means to transact. Thus the establishment of the ISB should follow this route and requires authorisation from the GCC.

Document History

Version	Date	Author	Summary of Changes
1.0	10/8/03	P. Pickup	Initial
1.1	19/04/04	P. Pickup	Correction