POLICY FRAMEWORK AND 'INTERNATIONAL BEST PRACTICES' FOR ESTABLISHMENT AND OPERATIONS OF A FUTURES/DERIVATIVES MARKET

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1. Introduction

1.1 Background

The Government of Kenya through a policy pronouncement by the then Deputy Prime Minister and Minister of Finance, in his June 10, 2010 Budget speech, announced that steps would be made towards developing institutional and legal frameworks to introduce a commodities and futures exchange in Kenya. Subsequently the Futures Exchange Project (FEP) was initiated by the Office of the Deputy Prime Minister and Minister of Finance, resulting in the establishment of the Futures Market Committee (FMC) on September, 2010, comprising senior representatives of the Ministry of Finance, Capital Markets Authority, State Law Office, Ministry of Environment and Mineral Resources and the Ministry of Trade.

As part of its mandate of providing a roadmap for the establishment of commodity futures market in Kenya, the FMC undertook benchmark study exposure to two jurisdictions, Mauritius and India after benchmarking from twelve (12) jurisdictions through desk research. The key objective of the study was to further examine the policy, institutional and legal frameworks, with a view to informing on the appropriate framework for Kenya.

The choice of the jurisdictions was based mainly on the similarities of the economies of Mauritius and India to that of Kenya as developing countries. In addition, other various unique characteristics included policy framework, product structure; regulatory model; type of market intermediaries; trading, clearing and settlement systems; monitoring and surveillance systems; price dissemination systems, as well as capacity building and sensitization for players in the commodity futures markets.

The benchmark study involved meetings with the management of the futures exchanges, futures regulatory authorities; futures exchange members, spot markets, warehouses and capacity building institutions on commodity futures.

This policy document is informed by a review of previous work carried out by the Futures Market Committee to develop a policy framework to facilitate the development of robust commodity and financial futures and derivatives market by a long-term Futures expert, Mr. Assim Jang; value addition to existing policy following capacity building programmes for CMA staff conducted over the past 3 years in Ethiopia, Brazil, United States of America, Botswana and South Africa, as well as peer review of existing

literature on commodity and financial derivatives by our peer regulators such as the Dubai Financial Services Authority (DFSA) and the Commodity Futures Trading Commission (CFTC)

This policy document, that has been adopted by the Board of the Capital Markets Authority, outlines policy recommendations taking into account international best practice for establishment and operation of futures and derivatives markets, as well as selected stakeholders views following comprehensive engagements. It forms a rationale for development of regulations that will soon be submitted to the National Treasury for gazettement as well as amendments to existing legislations to facilitate the futures and derivatives market in Kenya

1.2 Existing Government Policy on Futures Market Development in Kenya

The Kenyan Government made the following policy recommendations in May 2011 as a way forward for introduction of a commodity futures market in Kenya:

i. A regulated commodity futures market in Kenya should be established under the current provisions of the Capital Markets Act;

ii. In the short term the futures contracts to be traded should be for internationally traded commodities such as currencies (USD, Euro, Yen, Kshs etc.), minerals (Gold, Silver, Copper etc.), energy (natural gas, petroleum, electric power etc.) and carbon credit which are cash settled considering that the warehouse receipting infrastructure is still underdeveloped;

iii. The Capital Markets Authority (CMA) should immediately invite applications for the establishment of a commodity futures exchange under Section 2 of the Capital Markets Act where commodity futures are recognized as securities (i.e. Section 2: Definitions – "Securities" means – (c) any right, warrant, option or futures in respect of any debenture, shares, bonds, notes or in respect of commodities). In addition, the Authority should require the applicants to submit to the Authority for consideration and approval before issuance of a license, their self-regulatory organization (SRO) rules, by-laws, business rules and other relevant information as may be required. However, in **the medium term** there will be need to amend the Capital Markets Act and regulations hereunder to facilitate adequate oversight on the commodity futures market;

iv. The Authority should expeditiously design and implement a capacity building programme for its staff to facilitate efficient and effective oversight of the futures market;

v. The Authority and the licenced exchange to embark on a sensitization campaign on commodity futures market to the relevant stakeholders;

vi. The Nairobi Stock Exchange (NSE) should be urged and facilitated by the Authority to establish a futures and options market segment for derivatives of equity and debt instruments **subject to its demutualization**;

vii. The licensed exchange in partnership with relevant stakeholders should immediately start the development of a clear framework for a warehousing system to address issues of storage and bulk handling; preservation and protection; testing and certification; audit and accreditation; collateral management and other related services. This will ensure a proper linkage between warehouse receipt system and a well functioning commodity futures market;

viii. Futures Markets Committee (CFMC) to continue working and identify sections of the Capital Markets Act and the Regulations thereunder that need to be amended for consideration during the next budget cycle. This is necessary to ensure smooth oversight of the market by the Capital Markets Authority.

1.3 Need to review and refine existing policy

The Authority, following engagements with peer regulators acknowledged the need to take a more holistic approach towards regulating this market by building further capacity and benchmarking to global standards.

This was guided by the fact that the International Organisation of Securities Commissions (IOSCO) has been providing international best practices and perspectives on derivatives markets.

IOSCO's report on 'Objectives and Principles of Securities[1] Regulation' published in May 2003 sets out thirty principles of securities regulations which are based on three objectives of securities regulations, namely:

[1] For convenience, in IOSCO's May 2003 document, the words "securities markets" are used, where the context permits, to refer compendiously to the various market sectors. In particular, where the context permits they should be understood to include reference to the derivatives markets. The same applies to the use of the words "securities regulation".

1. Protection of Investors[2]
2. Ensuring markets are fair, efficient and transparent
3. Reduction of systemic risk

Previously, in response to the Asian financial crisis of 1998, IOSCO developed its Objectives and Principles of Securities Regulation to establish a framework for the regulation of securities markets, intermediaries, securities issuers, and collective investment schemes.

Ten years later (2008), following the Global Financial Crisis, IOSCO determined that its objectives and principles were not designed to prevent systemic risk and were therefore insufficient. Consequently ,it revised its objectives and principles and added eight (8) new principles, including two that specifically focused on systemic risk.

The main principles for regulation of the futures and derivatives market are contained in the report on Principles for Regulation and Supervision of Commodity Derivatives Markets, of September 2011, prepared by the Task Force on Commodity Futures Markets in response to the request by the G20 at its November 2010 summit in Seoul, Korea for further work on regulation and supervision of commodity derivatives markets aimed at strengthening transparency and address market abuse[3]. The document contains Principles in relation to:

- Contract designs;
- Surveillance of Commodity Derivatives Markets;
- Addressing disorderly Commodity Markets;
- Enforcement and Information Sharing; and
- Enhancing price discovery in a Commodity Derivatives Market

While some of the latest principles relate to OTC Derivatives Market, which Kenya is not embracing at the moment, it is important to note their existence and possible use in the medium to long-term in the Kenyan market.

Otherr relevant IOSCO publication is their report on the "International Regulation of Derivative Markets, Products and Financial Intermediaries" released in December 1996. It is a very comprehensive report and provides a

[2] The term "investor" is intended to include customers or other consumers of financial services.

[3] See Annexure I : Highlights of Key Principles for Regulation and Supervision of Commodity Derivatives Market

description of various models or approaches to the regulation of derivatives markets based on regulatory summaries prepared on common framework of analysis (IOSCO 1996b). It was observed that while there was no single model for regulating the derivatives markets, there was substantial similarity in perceived regulatory objectives.

Additionally, the December 1996 report outlines the key issues which should be given due consideration including membership of the exchange, contract design, risk management, clearinghouse settlement guarantee, default procedures, investor education, arbitration, investor grievance reddressal mechanisms, etc.

Effectively, CMA's policy and regulatory framework recommendations have been made with a view to achieve IOSCO's objectives and all its Principles. The Authority is also cognizant of new policy issues that are promulgated regularly to guide this industry and will continue to update this policy framework as and when the need arise.

Lastly, the re-engineered 'international best practices', and processes and procedures for implementation thereof are based on actual experience in a developing market such as Kenya with due focus on IOSCO's three objectives and their applicability in the local market.

To assess the local market, meetings were conducted with the Nairobi Securities Exchange (NSE), Central Depository & Clearing Corporation, brokers of the NSE, fund managers, the Coffee Board, the National Cereals and Produce Board, Commercials banks and other important stakeholders.

1.4 Organization of the Report

This report is organized in four sections:

i. Policy Recommendations
ii. Recommendations on Regulatory Framework
iii. Recommended reengineered 'international best practices'
iv. Conclusion

2.0 Policy Recommendations

(i) Regulatory structure- Single versus multiple Regulator

Globally, there is a shift towards adopting what is termed as an 'Integrated Regulatory Approach'. In an integrated approach, a single regulator oversees all types of financial institutions and provides both prudential regulation as well as conduct-of-business (otherwise referred to as consumer protection) regulation. The integrated approach is designed to eliminate regulatory arbitrage, facilitate greater communication and information-sharing among regulators of a given institution, and consolidate rule-making and application. A system with a single regulator would generally be set up with two main divisions, the larger part focused on prudential regulation and the second part on conduct of business regulation and consumer protection.

The International Monetary Fund ('IMF') has been a proponent of the integrated approach and even countries such as Canada have been advised to consolidate their regulatory functions.

As stated in the earlier section, the IOSCO's report on the 'International Regulation of Derivative Markets, Products and Financial Intermediaries' released in December 1996 provides a description of various models or approaches to the regulation of derivatives markets based on regulatory summaries prepared on common framework of analysis but does not recommend adoption of any one particular model.

As regards Kenya, which is a small market in comparison with other global markets, a single securities market regulatory approach is practical and is also in line with the global trend of consolidation, with 85% of the jurisdictions having a single securities market regulator globally.

(ii) Regulatory Framework

a. Capital Markets Act

To start with amendments made in the Capital Markets Act in 2011 would suffice. However, once the market matures then a separate 'Futures/Derivatives Act' can be enacted.

b. Strong Self-regulatory Approach[4]

It is recommended the adoption of a strong self-regulatory approach particularly in light of the amendments already made in the Capital Markets Act in 2011.

In a strong self-regulatory approach, the public authority is the primary regulator. It relies on exchanges (SROs) to perform extensive regulatory functions that extend beyond their market operations, including regulating brokers' business conduct. Examples of such jurisdictions include Japan (TSE, and Osaka Securities Exchange, or OSE), Malaysia (Bursa Malaysia), India (National Commodity & Derivatives Exchange and Multi-commodity Exchange), US (CME), etc.

In the most complete form of strong self-regulatory model, it has the authority to establish rules of conduct of its members (brokerage firms) or their customers and to supervise compliance with, as well as enforce, those rules. In Kenya this authority is provided under the provisions of the Capital Markets Act for delegation of power by the apex regulator. A full-fledged self-regulatory organization performs three main regulatory functions:

- Rule-making: Establishing rules governing the conduct of brokerage firms and its customers

- Supervision: Supervising brokerage firms and markets to monitor compliance with the rules. If the exchange operates its own clearinghouse, then it also regulates its clearing and settlement systems

- Enforcement: Enforcing compliance with the rules by investigating potential violations and disciplining customers and brokerage firms that violate them.

However, a key requirement in a strong self-regulatory approach is that there should be complete clarity between the role of the apex regulator and its oversight functions, and the SRO's responsibility to ensure compliance with the regulations.

[4] Adriane Fresh and Martin Neil Baily, What does international experience tell us about regulatory consolidation – The PEW Briefing Paper#6

It is envisioned that the futures exchange to be established in Kenya would be demutualized and be a for-profit entity which in itself may lead to conflict of interest situations. To have a balance between the SROs for-profit objective and public interest objectives, regulators tend to overcome the potential conflict of interest by having an equal number of public interest directors, nominated by the regulators, to the shareholder directors with the chairman of the board, who will have the casting vote, will be from amongst the public interest directors.

c. Central Depositories Act: Regulatory Framework for Clearing and Settlement of Derivatives

Kenya has presently adopted a model whereby the Clearing and Settlement Function will be carried out by an approved Futures Exchange either as a department within the Exchange or a subsidiary (Clearing house).

However, the medium to long term horizon entails having in place a stand-alone clearing house for more than one Futures Exchange. In this regard, it is important to review the existing regulatory framework for Central Securities Depositories (CSD) to facilitate the establishment and operation of a clearing house that will provide the market with a clearing and settlement facility. This clearing and settlement facility will perform the function of a central counterparty (CCP) and will seek to contain counterparty risk that can arise from the inability of a clearing participant in settling market contracts. Further as clearing houses are systemically important institutions, regulation must also ensure that these institutions are subject to adequate oversight by the Authority.

Consequently the CSD shall have a separate regulatory framework to distinguish it from the clearing house as both of these institutions perform separate functions. In addition the clearing house and central depository perform a public function and as such the regulatory framework shall ensure that those who establish and operate these institutions are held accountable by the regulator. Further, regulation must also ensure that these institutions act in the public interest as opposed to only acting in the interest of its owners.

d. The Role of the Futures Market Committee Going Forward

The role of the broad-based Futures Market Committee will still be very important with regard to consensus building between the stakeholders at the developmental stage and therefore it should continue play this role till such

time the futures exchange becomes fully operational and even perhaps thereafter.

In fact, its role can become more effective if other stakeholders such as the Central Bank of Kenya, Ministry of Energy and Petroleum, Ministry of Agriculture, Livestock and Fisheries and a Treasurer of one of the largest commercial banks in Kenya are included in the Futures Market Committee. This recommendation is made in light of the series of meetings held with the stakeholders.

The role of the Futures Market Committee could also be critical in paving the way for a smooth launch of a futures market in Kenya and the subsequent move to providing linkages with the spot market.

iii) Number of Futures Exchanges to be licensed in Kenya

In order to address this issue perhaps we should look at some of the factors to measure the performance of a futures exchange and what constitutes success.

The two key metrics to measure the success of a futures exchange is;

1. Trading volumes; and
2. Open Interest[5]

During the last decade a number of futures exchanges have sprung up in Latin America, Asia and Africa based on the premise that there is a need in the country for a platform for;

1. Managing price volatility
2. Providing price discovery

However, despite government and donour agencies support, success for a majority of futures exchanges have remained elusive. More often than not, it is assumed once a futures exchange has been established business will automatically follow without much effort, which is not the case, and in the process basic pre-requisites are ignored.

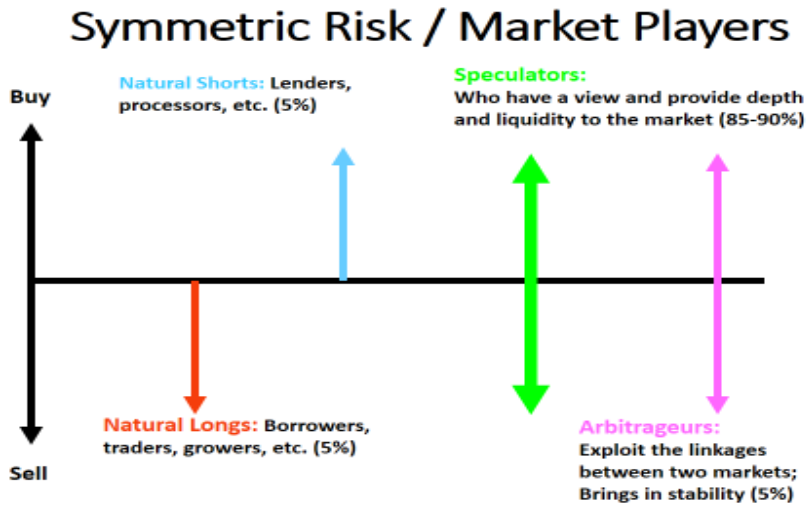
[5] Open interest refers to the total number of derivative contracts (either buys or sells (one side)), like futures and options, that have not been settled in the immediately previous time period for a specific underlying security. A large open interest indicates more activity and liquidity for the contract.

In order to assess if an economy requires one or more futures exchange we need to look at some of the key conditions necessary for an operational futures exchange;

1. Size of the underlying cash market (it is often stated that the size of the futures market is around ten times the underlying cash market)
2. Around 85-90% of the volume at a futures exchange is attributed to speculators or better still to market participants who take a view of the market using their own cash resources and in the process provide depth and liquidity to the market. Hence, without speculation the market cannot exist as less than 5% of the futures contracts are held onto till expiration and culminate in the delivery of the underlying. Therefore, speculation provides the much needed revenue to the futures exchanges.

   However, in the same vein one can say that a purely speculative market does not provide any direct benefit to the economy. Therefore, prudential regulators, who have the necessary powers as well as tools, must continuously assess the desired level of speculative activity they would like to permit in their markets.

   Perhaps, the following diagram best illustrates the interaction of various players in a futures market;



Please Note; the thickness of the arrows reflects the volumes attributed to types of market players.

3. It is a known fact that two out of every three new futures contracts fail and are de-listed within the first two years of being introduced. History bears testimony to the fact that launching any new futures contract is inherently difficult. After all, a new contract means altering ways of doing business for the potential market participants. The great unknown is "risky" for them, even if the futures contract is, ironically, an effective new tool to combat the risk they have been seeking to tame in their course of daily business, and represents a great new opportunity. Launching a new contract is intrinsically difficult as it involves a lot of people changing their behavior and committing to support an object unknown to them. This was the case 50 years ago; it remains true today. As trading becomes more established, the rate at which additional participants join the market increases. For all new contracts, trading volume increases slowly at the beginning. At some point, it is as if the market hits an inflection point at which point a sudden rush of volume is registered.

In light of the foregoing the first two-three years will determine if a newly established exchange is successful or not.

Notwithstanding the above , the Authority remains conscious that the ultimate determination of the viability of multiple exchanges should be left to market forces and will therefore seek to provide a facilitative environment for establishment of business by firms, as provided for in the Kenyan Constitution, as well as the East African Common Market Protocol.

The Authority shall therefore license any exchange that meets the criteria as prescribed in proposed regulations. However, the licensing criteria shall be of such high standard that whichever firm(s) obtains a license will have a high probability of success. In addition an 'in principle' approval will be granted first for the successful applicants, to be reviewed based on milestones in establishment, with a clear statement that a license to commence trading will only be issued after all the milestones are met within specific timelines. In the event that more than one Exchange is eventually licensed, product differentiation must be maintained, otherwise liquidity will be divided between the exchanges, which could threaten the survivability of the Exchanges;

If the Nairobi Securities Exchange (NSE) wishes to list Single Stock Futures and/or Stock Index Futures in the period prior to the full legal framework for derivatives markets coming into force (the draft framework having been subject to public comment and finalized

awaiting gazeetement into law), the Authority will consider any such application subject to the following considerations:

- It must have been approved as demutualized by the Authority in accordance with the relevant regulations; and
- All other requirements regarding margining, segregation, clearing and settlement infrastructure, Central Counterparties (CCP), Settlement Guarantee Find (SGF), Investor Protection Fund (IPF) and other regulatory requirements for a Futures Exchange must be in place at the NSE prior to permission being granted.

In order to ensure an even playing field, there shall not be any compromise on other conditions laid down in the draft regulations as relates to the NSE regarding risk management, including volatility based margining system, establishment of a settlement guarantee fund and an investor protection fund for the futures segment, trading systems, clearing & settlement systems, online connectivity with the exchanges' designated settlement bank and putting in place separate regulations for business in futures contracts.

(iii) Design of a Futures Exchange

There is only one business model for a futures exchange with the basic building blocks being:

1. Well-designed standardized contracts, based on the underlying cash market, which are fungible due to their standardized nature. Hence, trades can be offset during the life of a contract
2. Undertakes 'novation' whereby the exchange or its clearinghouse is the Central Counterparty (CCP) and is a 'buyer to every seller' and 'seller to every buyer'
3. Guaranteed settlement of all trades based on the margins & deposits in the 'Settlement Guarantee Fund' (SGF). The margins & deposits in the SGF can be viewed as the capital of the clearinghouse and the corpus of the SGF would grow with the volume of activity
4. Volatility based margining system to determine 'initial margins'[6] and deposits placed by market intermediaries (brokers) to counter high intensity extreme events in support of the open interest attributed to their proprietary as well their clients positions[7]

[6] Initial margins are analogous to a performance bond and are used to eliminate counterparty credit risk.
[7] These concepts will be explained and discussed in detail in section 4 of this report.

5. All open positions are market-to-market with the intention that the viability of each and every open position is checked on a daily basis and settled on a T+1 basis prior to start of trading the next day
6. Market intermediaries must meet a minimum capital and solvency requirements for becoming a member of the exchange and its clearinghouse
7. Non-payment of margins which threatens the integrity of the futures market, is an automatic event of default
8. Clear and precise processes and procedures, without any ambiguity, for handling defaults of market intermediaries and their customers
9. Investor grievance reddressal mechanism
10. Arbitration mechanism

The difference between futures exchanges really lies in the processes and procedures of implementing the 'international best practices'.

A world class exchange should be established, based on the above building blocks with clear and precise processes and procedure, which should also attract international players particularly the current international buyers of coffee from Kenya who also have well established commodity futures brokerage operations on a global basis. They would be ideal candidates for inducting as market makers in commodities which are traded internationally and also be listed at the newly established futures exchange in Kenya. However, this can only be achieved if the futures exchange goes beyond just adopting the 'international best practices' at its inception and demonstrates that it fully complies with the IOSCO's three key objectives stated earlier.

(iv) Contracts to be listed

Futures contracts must define the amount, quality, and location of the underlying being traded, as well as an execution date. Other necessary features include the minimum increment for price fluctuations, duties required of buyers and sellers during the delivery process, and deadlines for those duties to be completed. For a futures exchange to attract broad participation, all of these specifications need to be consistent with existing spot market practices, and all specifications must be standardized so that the only variable is the price.

Market participants must have a high level of assurance over the price, ownership, delivery, and payment of the agreed transaction, and contracts must be appropriately sized and balanced for all market participants.

As the market is always ahead of the regulators, my view would be to let the futures exchange come up with the specifications of the futures contracts which in their view would be successful.
As the final approval of the regulator is required prior to listing of all futures contracts, it can ensure that the due process and the feedback of the stakeholders had been obtained during the design of the futures contract prior to granting any approvals.

As stated earlier, globally 2 out every 3 contracts fail as they have not been designed properly. The key to contract design is that a futures contract must not deviate from the spot market practices and also provide an economic justification for its listing.

Lastly, even if the contract has been designed properly, it may not be able to gain liquidity. Therefore, particularly in the case of electronic markets, every effort should be made to appoint marker-makers at the launch of the contract who would be obligated to provide tight two-way quotes which would go a long way in building depth and liquidity.

(v) Legal Status and Ownership Structure

It is recommended that the futures exchange should be demutualized so as to separate ownership from the right to trade. It is also recommend that the ownership structure for each group of shareholders must not exceed 25% with at least 15% shareholding held by Kenyan entity (ies).

In addition , the futures exchange to be established will be required to have regard to the public interest being a part of the key national infrastructure for the financial system with the responsibilities of providing pseudo-public service notwithstanding being a for profit entity.

Apart from being demutualized, the futures exchange must have a single dominant shareholder which ideally should be a national level institution with domain knowledge and experience of the commodities business. The rationale for this is that in all likelihood , perhaps only a national level institution can take a long term view of the business of a futures exchange and its

sustainability as opposed to prospective shareholders who are either pure investors or technology providers and are attracted to the venture only for short term gains.

Finally, from the outset the shareholders must have a clear objective and they need to address as to why they wish to become shareholders of the futures exchange and if they have the necessary domain knowledge about the workings of all aspects of the futures exchange and/or its business. Therefore, the best way to assess this would be invite a business plan from potential shareholders or consortiums.

(vi) Capitalization of the Futures Exchange

IOSCO's report "International Regulation of Derivative Markets, Products and Financial Intermediaries" released in December 1996 discusses the minimum capital requirements for exchanges and clearing corporations but it does not provide any specific recommendations or guidelines in this regard. In fact the survey of a vast number of jurisdictions, contained in their December 1996 report, does not have any minimum capital requirements for exchanges and clearing corporations but all jurisdictions have a minimum capital requirements for market intermediaries.

As mentioned in the earlier section it takes a minimum of two years to see if a contract listed on a futures exchange is successful or not. Similarly it takes at least two-three years if a futures exchange becomes a viable entity or not. Therefore a rough rule of the thumb is that the futures exchange should have sufficient net worth[8], as opposed to an initial paid-up-capital (cash), so that it can survive for a minimum of the 3 years without any expected income from its operations so as to avoid any further capital injections which may or may not materialize.

(vii) Organization Structure

[8] For this purpose 'networth of a Futures Exchange' means the aggregate value of paid-up equity share capital plus free reserves (excluding statutory funds, benefit funds, and reserves created out of revaluation) reduced by the investments in businesses, whether related or unrelated, aggregate value of accumulated losses and deferred expenditure not written off, including miscellaneous expenses not written off.

It is recommended that the exchange should have well qualified and trained staff in all relevant areas of its operations.

However, the key requirement is that the futures exchange must have, in addition to well trained and qualified staff, sound processes and procedures for implementing the regulations and its business rules.

(viii) Market Participants

It is recommended that a simple structure be implemented at the initiation; Members of the Exchange, Brokers (Members who register with the CMA) and their Clients.

Specialists would be Clients of Brokers. Emphasis should be on developing a deep and liquid market which is a pre-requisite for attracting;

i. Speculators
ii. Arbitrageurs
iii. Spread Traders; and
iv. Hedgers

As regards other categories, perhaps they are only suited for well developed markets such as the US.

The futures exchange shall grant **non-transferable memberships** of the exchange based on an eligibility criteria approved by the CMA and would include minimum networth and minimum net capital balance (measure of solvency) requirements. **There would not be any cap or limit on the number of memberships it can grant.**

(ix) Trading & Clearing Infrastructure

There are two approaches to clearing and settlement at futures exchanges;

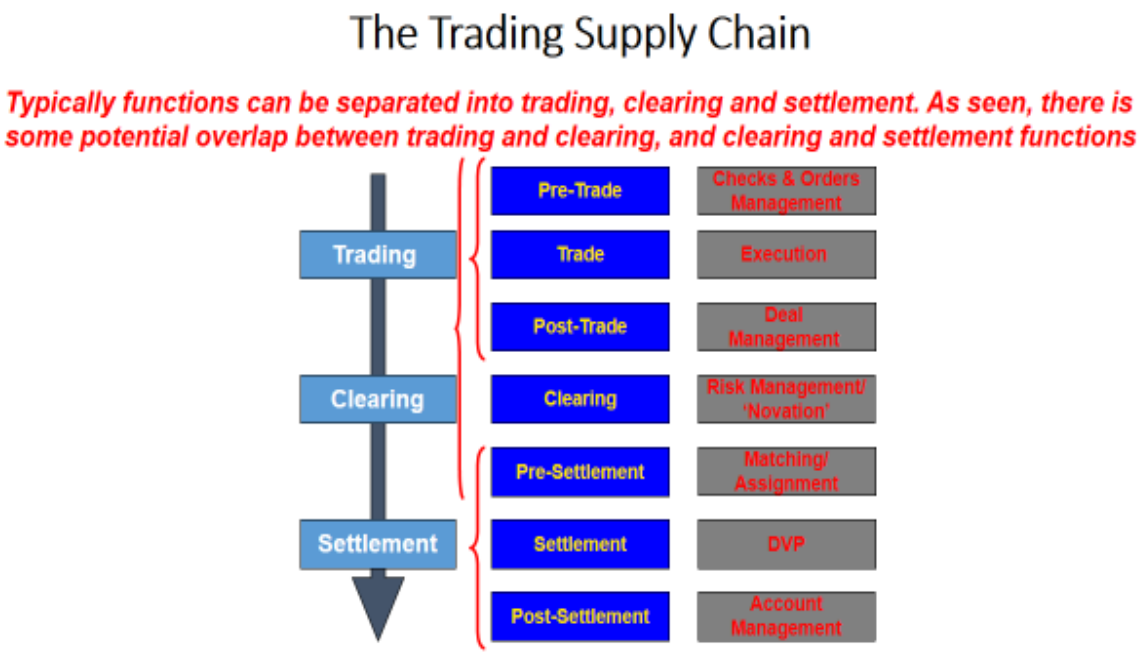
a) In a **Vertical approach** (silo), trading, clearing and settlement are all performed by the futures exchange either directly or it separates trading from its clearing and settlement activities which are undertaken by a 100% owned legal entity.

b) Whereas in the **horizontal approach,** futures exchanges' clearing and settlement activities are outsourced to an independent 3rd party.

Globally, both models have been adopted for business reasons.

However, since the 2007 global financial crisis two of the largest exchanges in the world, Euronext and Intercontinental Exchange have moved away from the horizontal outsourcing model and set-up their 100% owned clearing and settlement subsidiaries because of the fears of contagion.

Typically trading, clearing and settlement functions are all tightly coupled activities at a futures exchange whereas clearing and settlement alone are considered critical process driven activities as illustrated hereunder;



At any newly established process driven entity, activities require a gestation period for both the operations staff to gain experience and processes to mature. **Therefore, at the planned futures exchange it is recommended that an integrated approach is followed from its launch for at least a period of three years and thereafter a review can take place if there are any prudential or regulatory concerns.**

The planned futures exchange should have brokers who all have clearing privileges. Therefore all clients will be required to trade and settle through brokers of the exchange.

The integrated clearinghouse of the planned futures exchange should perform 'novation' and guarantee settlement of all traders. The futures exchanges' business rules should include rules for clearing & settlement and monitoring thereof.

A Settlement Guarantee Fund (SGF) is a pool of assets used to guarantee the successful settlement of all trades executed on the exchange even in the event a broker is unable to meet his settlement obligation. SGF is used to meet the payment obligation of brokers. The SGF exists solely for the protection of solvent brokers who are counterparties of the defaulting broker and prevents a "snowballing" effect of defaults among other brokers and their clients.

An SGF does not provide insurance against settlement problems nor does it reduce the risk off settlement default by a broker. It serves as the last resort to complete settlement in the event of a default, and it is an essential element of a comprehensive settlement-risk containment system.

Whereas, an Investor Protection Fund (IPF), is a pool of funds for protection of investors who are clients of brokers. Payouts from the IPF are only triggered in case of a broker defaults or clients' idle balances lying with brokers are misappropriated.

Payouts from the SGF are only made in case of broker defaults and used for settlement purposes.

Please Note; Payouts from the SGF are not to clients of Brokers.

As stated above, the futures exchange must have an integrated clearing, settlement and surveillance systems in place. The exchanges' rules, as well as processes and procedures will dictate how each of these functions will be performed.

Real-time market monitoring will be principal responsibility of the exchange as it expected to be a strong SRO. CMA should only be involved in post-trade market monitoring and surveillance. However, CMA must run stress tests to check adequacy of the SGF but only on post-trade data.

Capacity Building

A futures exchange requires a developed financial system to successfully cover the exchange's transactions. Where financial capacity is limited, market participants must be trained and knowledgeable in financial trading and risk taking to enable use of the exchange. In Brazil, BM&F educates market participants though short- and long-term courses, seminars in major production regions, partnerships with companies and financial institutions, and a bi-weekly publication on agricultural commodities[9]. In addition, financial institutions' commitment to the exchange must be nurtured through the consultative development of procedures. If there are no financial institutions that can sufficiently service the clearinghouse function, then there will not be enough financial development for a futures exchange.

CMA intends to run a 'Futures Certification Programme' which would go a long way in capacity building in the market. The programme is modular and is ideal for staff of the regulator and futures exchange, brokers and their clients, and specialists such as speculators, hedgers and arbitrageurs.

CMA should take the lead in building this know how in the country and as it addresses its next milestone, development of an organization structure for the Futures Unit, due consideration shall be given to recruit experts from across the continent to build capacity in the Unit over a specified period of time.

[9] UNCTAD. (2009). *Development Impacts of Commodity Exchanges in Emerging Markets.* Geneva, Switzerland: The United Nations Conference on Trade and Development (UNCTAD). http://archive.unctad.org/en/docs/ditccom20089_en.pdf

3.0 Recommendations on Regulatory Framework

Prior to discussing the regulatory framework, it is important to discuss the role of the government and the market requirements.

No market functions in a vacuum. In order to be efficient, the market needs an active, committed role of the Government: a role of oversight, disciplining those who try to manipulate the markets to their own benefit and ensuring the sanctity of contracts; and an enabling role, providing the necessary legal and regulatory framework, even part of the infrastructural framework without which market actors cannot function properly. Markets need the Government - the only problem is that over regulation should be avoided.

Over regulation normally results from not appreciating the functioning and purpose of a futures exchange. Futures exchanges, if they function well, are but an image of physical markets. Supply and demand conditions on the physical market, which otherwise would be known only to a small number of well-placed companies, are made visible, for all to see, through the functioning of the futures market. If supply/demand conditions are bad, from the Government's point of view, the futures exchange may be the messenger that brings the bad news, but should not be blamed for this.

The relation between the futures exchange and the Government need not be one of adversaries. Not fully appreciating the role and usefulness of a futures exchange can indeed lead to policies that hurt the futures exchange and their users. However, a futures exchange cannot do without a framework, which can only be created by the Government. Governments need to police the futures exchange so that direct and indirect users can rest assured, that indeed, the futures exchange serve the public rather than a particular private interest, and they need to facilitate - or rather, enable - the functioning of the futures exchange through the provision of an appropriate legal and regulatory framework. Taking into account the large potential benefit of a futures exchanges for a country's economy, Governments can also facilitate the growth of an emerging futures exchange by providing targeted regulatory support.

General Provisions in the Capital Markets Act ('Act')

The door was opened for introducing trading in Futures Contracts in Kenya by way of 'The Capital Markets (Amendment) Bill, 2011' enacted by the Parliament of Kenya.

In its present form, the Act only recognizes a single type of exchange, a Securities Exchange. However, differentiation can be made by the CMA on the basis of types of securities it authorizes to list due to the following provisions in the Act;

1) securities to be listed require the Authority's approval
2) "securities" means derivatives including futures contracts and options contracts
3) derivatives including futures contracts and options contracts on-
   a) securities;
   b) indices;
   c) interest or other rates;
   d) currency;
   e) futures; or
   f) commodities
4) futures contracts have been defined in the Act

It is understood that it is not feasible to carry out any amendments in the Act at the moment.

In light of the foregoing, it is recommended that a work around is available for the Authority to license a securities exchange for listing of Futures Contracts under section 12 of the Act and issue rules, regulations and guidelines as may be required for the purpose of carrying out its objectives under the Act including;

1. issuing regulations for licensing a Securities Exchange for listing Futures Contracts
2. issuing regulations for licensing of Futures Brokers, and
3. issuing regulations for business of Futures Contracts

Also;

4. approve the rules of the Futures Exchange governing the 'business of Futures Trading'; and
5. issue guidelines and/or directive to the Securities Exchange licensed to list Futures Contracts for inclusion of certain provisions in its rules governing the 'business of Futures Trading'

Below is the list of the sub-items listed and where will they be incorporated in 1. 2. & 3 mentioned above.

Description	**To be incorporate in**
Regulatory jurisdiction of over derivatives	CMA is empowered to regulate derivatives business
Creating an Offence	2. & 3. Will have appropriate provisions
Trade practice violations	2. & 3. Will have appropriate provisions
Manipulation	2. & 3. Will have appropriate provisions
Fit and Proper standards	1. will have appropriate provisions
Record keeping	1. & 2. will have appropriate provisions
Approval of Contracts	1. & 3. Will have appropriate provisions
Emergency Action	1. & 3. Will have appropriate provisions

Regulations should detail the following provisions:

Description	**To be incorporate in**
Contract terms and conditions	3. will have suitable provisions
Licensing of futures market intermediaries	2. Will have appropriate provisions. As regards the minimum networth and solvency guidelines or a directive can be issued to the exchange. However, the regulator should not be concerned with the entry fee, etc. except if it is set too high, which may prove to be an impediment to building liquidity at the exchange.
Provisions for segregation of client funds	1. 2. & 3. will have appropriate provisions
Penalty for contravention of certain provisions	2. & 3. will have appropriate provisions

Futures Exchange as an SRO	1. will have appropriate provisions
Trading and Clearing Infrastructure	1. & 3. will have appropriate provisions
Records to maintained by market participants	1. 2. & 3. Will have appropriate provisions

As per section 19A of the Capital Markets Act states 'A person shall not use the words "stock exchange", "securities exchange", "derivatives exchange" or "futures exchange" in connection with a business except in accordance with a securities exchange license granted by the Authority'

The reading of the above is that if CMA grants a license to a securities exchange for listing futures contracts then the Securities Exchange licensed to list futures contracts can be called a 'Futures Exchange'.

Lastly, it is worth noting that the new regulatory framework for futures exchanges, futures brokers and business of futures contracts should be developed as subsidiary legislation of the Capital Markets Act and cross-referencing between two subsidiary legislation (cross-referencing between the new regulations and existing regulations of the securities market) must be avoided at all times as it may dilute the very purpose promulgating new regulations for a new line business in the market.

4.0 Recommended re-engineered 'international best practices' for adoption in Kenya

This section of the report is on the 'international best practices' for establishment and operations of a futures/derivatives market including recommendations on adoption of some of the re-engineered practices in Kenya, after a thorough assessment of their suitability in the local market.
Perhaps, it should be mentioned at the outset that this section does not only just list the 'recommended international best practices' but goes a step further and provides the **actual processes and procedures for implementation of the 'best practices' or the 're-engineered best practices' based on my experience in a developing country, wherever applicable.**

Secondly, wherever possible an explanation is provided on the rationale for the recommended best practices.

Thirdly, wherever possible processes and procedures at the exchange level are outlined to ensure compliance with the recommended rules of the exchange.

Regulatory Framework

A. Primary Legislation – The Capital Markets Act

1. Care should be taken to ensure that 'futures trading' does not run afoul of the 'Betting, Lotteries and Gaming Act'. Otherwise it would be extremely difficult for the market to become successful as contracts would not be enforceable.
2. The definition of a 'futures contract' should be judicially crafted to distinguish it from spot and forward contracts, which fall under the purview of the 'Sale of Goods Act' and should also allow physical delivery, offset or payment of difference to settle the contract.
3. Ideally, there should be a distinction between a 'Securities Exchange' and a 'Futures Exchange'
4. The primary legislation should have a broad and an all-encompassing definition of 'Commodity' which can perhaps include 'Financial Instruments' to cater for currencies, interest rates and indexes as underlying's. Of course, the approval of the Authority will always be required for futures contracts prior to their being listed.
5. A Futures Exchange and/or its clearinghouse is a buyer to every seller and seller to every buyer through 'Novation'. This is the 'international best practice'.

The concept of "Novation" or "Substitution" is provided for in the law of contract. In contract law, novation or substitution may take place in any contract by mutual agreement of the parties and it may occur when two parties agree to change the terms of the contract by adding or substituting any of the existing party or inviting a third party to be a part of the contract.

At a futures exchange upon execution of a trade between a buyer and a seller, the clearinghouse steps in, being a third party, and becomes a buyer to the seller and a seller to the buyer. Thus becomes the Central Counterparty guaranteeing the settlement of the futures contract.

The benefit of a clearinghouse stepping in is that eliminates the credit risk between the two original parties who after "Novation" are only left exposed to 'market risk'.

A question for CMA's lawyers is to confirm that in absence of a provision for "Novation" in the Capital Markets Act, can such a provision be incorporated in the subsidiary regulations?

B. Regulations

1 Separate Regulations should be promulgated by the Authority for licensing of Securities Exchanges for listing of Futures Contracts
2 Regulations for licensing of market intermediaries; and
3 Regulations for business of Futures Contracts.

a) It is a 'best practice" that the regulations for business of Futures Contracts should detail market offenses and should have the following prohibitive provisions;

False trading

(i) No person shall create or cause to be created, or do anything that is calculated to create, a false or misleading appearance of active Trading in a Futures Contract on a Futures Market, or a false or misleading appearance with respect to the market for, or the price of, Futures Contracts on a Futures Market.

(ii) Without limiting the general nature of what constitutes a false or misleading appearance of active trading under subsection (1), a false or misleading appearance of active Trading in Futures

Contract is created for the purpose of this section if a person executes, or holds himself out as having executed, an order for the purchase or sale of a Futures Contract on a Futures Market, without having effected a bona fide purchase or sale of the Futures Contract in accordance with the Rules and practices of the Futures Market.

Bucketing

(i) No person shall execute, or hold himself out as having executed, an order for the purchase or sale of a Futures Contract on a Futures Market, without having effected a bona fide purchase or sale of the Futures Contract in accordance with the Regulations and practices of the Futures Market.

Manipulation of price of a Futures Contract and cornering

No person shall, directly or indirectly –

(i) manipulate or attempt to manipulate the price of a Futures Contract that may be dealt in on a Futures Market, or of any Commodity which is the subject of such Futures Contract; or

(ii) corner or attempt to corner, any Commodity which is the subject of a Futures Contract.

Employment of fraudulent or deceptive devices, etc.

No person shall, directly or indirectly, in connection with any transaction with any other person involving Trading in Futures Contract –

(i) employ any device, scheme or artifice to defraud that other person;

(ii) engage in any act, practice or course of business which operates as a fraud or deception, or is likely to operate as a fraud or deception, of that other person;

(iii) make any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made in the light of the circumstances under which they were made, not misleading.

Fraudulently inducing Trading in Futures Contracts

No person shall, directly or indirectly, induce or attempt to induce another person to trade in a Futures Contract –

(i) by making or publishing any statement, promise or forecast that is false, misleading or deceptive;

(ii) by any concealment of material facts; or

(iii) by recording or storing in, or by means of, any mechanical, electronic or other device information that is false or misleading in a material particular, induce or attempt to induce another person to trade in a Futures Contract.

C. Rules of the Securities Exchange, and Processes & Procedures for insuring Compliance thereof

1. General Comments

a) It is envisioned that to be established futures exchange will be an SRO and therefore should have the power to establish its rules for 'Governing the business of Futures Trading', with the approval of the Authority.

2) Governance

a) It should provide for the general powers of the board and appropriately should grant the board broad authority to protect the integrity of the markets and accordingly, to take a wide variety of actions to manage the exchange. For clarity and certainty, consideration should be given to specifically including the management of all actions relating to the clearing and settlement at the exchange.

b) It should provide for a wide variety of emergency powers that can be exercised by the Board. This list should cover all appropriate circumstances. However, consideration should also be given to providing that the managing director, or staff under his direction, may take appropriate actions as matters when necessary, without prior consultation with the board. The emergency matters could be divided into categories wherein for one group, the managing director may take action and for the other, the board will need to take action. The division of the emergency powers will depend on a fuller understanding of the current matters in the underlying markets and should be made through consultation with the lead board member or the chairman of the board.

In any event, even where the board may be required to take an emergency action, consideration should be given to permitting the chairman or the chairman in consultation with any other two board members that he may be able to contact, to take a required action on behalf of the board. Such action should have the full force and effect as though the board had taken the action until the full board meets and either ratifies such action or modifies or repeals that action.

In any event, the exchange should not have in place any rule that would in any way, limit the taking of emergency action due to the inability or unavailability of the managing director or the chairman of the board.

c) The rules of the exchange should clearly distinguish between a financial default which threatens the integrity of the futures market and breach of the exchange rules which does not necessarily result in a serious challenge to the financial integrity of the exchange.

i. A financial default is clear and concise, and free from doubt. Therefore, the event of declaring a financial default should be automatic. It must be dealt with immediately and decisively.

Generally, such actions arise in the context of a clearing broker failing to pay an initial or variation margin in a timely manner, and no delay can be allowed in permitting the Managing Director to take the immediate and appropriate action to reduce, and or eliminate, the financial risk to the Exchange. Any further sanction such as fine can be decided at a later date through a procedure that may require Committee or Board meetings.

b) It should provide that a Disciplinary Committee of the Board shall be responsible for recommending whether any disciplinary action needs to be taken in case of breach of exchange rules and appropriate actions resulting there from.

   Further, it should provide that the Committee shall deal with investor complaints. This has the potential to be a heavy workload for the Committee of what may be routine matters. Consideration should be given to the Committee defining the general policies regarding dealing with investor complaints and permitting the Managing Director or staff under his direction to deal with such matters. Monthly reports can be given to the Committee to demonstrate compliance with the Committee determined policy and for the purposes of determining whether such policies should be modified.

c) It should provide for the distribution of certain powers and responsibilities in the absence of the Managing Director. Consideration should be given to developing a deeper and pre- determined chain of command in advance of any necessity for actions.

d) The rules should provide for a set of conflict of interest provisions that are very vital for the efficient operation of the Exchange. It should provide that in the event of a contravention of the conflict of interest provision, the board "may take any action" against the director. Consideration should be given to setting forth the specific actions that may be taken against the director. They could be set forth as "including, but not limited to….". Such actions would of course, be consistent with the corporate laws of Kenya, but a setting forth of a representative list would remove from doubt any suggestion that a director was not certain of an action that could be taken against him.

3) Membership of the Futures Exchange

It is often stated that the quality of the membership of the exchange is the first line of defense for an exchange. The exchange must specify the

financial criteria, minimum networth and minimum net capital balance (solvency), for all members of the exchange with the approval of the Authority. Further quarterly networth and solvency statements must be submitted to the exchange.

Additionally,

a) The rules should provide for procedures to insure full treatment of membership issues. They should recognize the importance of membership and reviewing all membership applications so as to insure the integrity of the futures market, integrity of the clearing and settlement functions, and guarantee provided by the Exchange.

b) It should provide a clear distinction between a member of the exchange who holds membership of any class or description of the Futures Exchange and is not a shareholder. Only a member who registers with the Authority becomes a broker of the Futures Exchange and only then he is eligible to enjoy all the benefits and privileges of a Futures Exchange.

c) The rules should provide that each CEO, the Risk Manager, key personnel, of the broker shall satisfy certain minimum requirements and must be registered with the Authority. Further, any changes must be reported to the Authority together with the reasons for the change specifically if the change was caused in part, or in whole, due to key personnel not complying with rules of the exchange or with the other requirements.

d) It should provide that no Broker shall trade on the exchange for the purposes of influencing the futures market or for the purposes of influencing the cash market. Consideration should also be given to including provisions which would also prohibit a broker from taking any action in the cash market which was designed to influence the futures markets. Such a provision would provide asymmetry of treatment between using either market to influence either of the other markets. While oversight of the cash market is outside of the exchange's mandate, use of the cash market to cause false prices on the exchange should be subject to its prohibitions.

e) A number of circumstances should be provided in the rules that give rise to a violation. One such circumstance should be "misconduct" and misconduct should be defined as failure to provide information to the futures exchange. The providing of information to the exchange is a fundamental requirement of good membership. No inquiry can be fully conducted, nor conducted in a timely fashion, absent the receipt of all necessary information. In the interests of removing any uncertainty and highlighting the importance of the receipt of such information, consideration should be given to specifically identifying the failure to provide information or otherwise cooperate with any inquiry to be a violation.

f) All brokers will be required to maintain the following two accounts with the exchanges' designated clearing bank;

i. Brokers' House Account
ii. Brokers' Client Group Account

All clients' deposits and withdrawals will be made through the Brokers' Client Group Account so that there is a complete and full audit trail maintained at all times.

g) Relations with Clients;

i. Every Broker shall enter into an agreement with each of his Clients, before accepting or placing orders on the client's behalf. Such agreement shall specify the minimum conditions specified by the Board of the exchange.

ii. Broker shall make the client aware of the precise nature of the broker's liability for business to be conducted, including any limitations on that liability and the capacity in which the broker acts and the clients' liability thereon.

iii. The broker shall make the client aware of the risk associated with the business in futures trading including any limitations on the liability and the capacity in which the broker acts and the client's liability thereon by issuing to the client a copy of the Risk Disclosure Document as specified by the Exchange at the time of the opening of an account. The Risk Disclosure Document shall be duly signed by the client and maintained and retained by the Broker.

iv. All accounts for clients must be opened and maintained in the exchanges' systems after undertaking the 'Know Your Client" process including the verification of clients' personnel details in the National Database Registry.

h) Brokers of the exchange will provide their clients' the following two ways for trading on the exchange;

a. Broker Assisted Trading
b. Direct Market Access

i) Prior to allowing Direct Market Access, brokers must insure that their client has the proper knowledge and understanding of online trading and risks involved in leverage trading.

i) All clients should be made fully aware that in case of non-payment of the daily mark-to-market losses prior to the start of business the next working day will result in closing out of their open positions.

j) The rules should clearly state that brokers, being the obligors of exchange, are obligated to pay the clients mark-to-market losses or close out their clients positions at the start of business on the next working day and failure to do so will result in the broker being in default.

k) An alternative provision should also be incorporated whereby if the broker chooses to pay its clients mark-to-market losses the maximum he can do so is for up to say 72 hours.

PLEASE NOTE; THE FIRST INDICATION OF A POETNTIAL DEFAULT IS THE BROKER AND HIS CLIENTS INABILITY TO SETTLE MARK-TO-MARKET LOSSES.

4) Risk Management & the Margining Regime

In respect of futures contracts that are transacted on the exchange, all buyers and sellers shall post such amount as initial margin, including special, variation, delivery and additional margin, as may be specified by the exchange and approved by the board from time to time.

Please note that they are no exemptions allowed, even if the participant is an AAA rated entity. The board of the exchange, only with the approval of the Authority, may allow discounts on margins only in cases where it can be exhibited that a participant is a hedger or a market-maker. However, guidelines/notifications should be issued in this regard.

Secondly, as the exchange would be at a developmental stage it should accept margins in cash only.

The methodology for calculating such margins must be approved by the Authority prior to its implementation.

Brokers being the obligors of the exchange and its clearinghouse must also deposit **Worst Case Margin (WCM)** on their proprietary positions as well as on all their clients' positions, without any netting (gross basis).

The international best practice is to calculate the margin requirements using volatility based techniques such as the **Value-at-Risk (VaR).**

a) The first line of defense is provided by **Initial Margins (IM)** which are normally calculated on the basis of 1-day 99% VaR, at both the client and broker levels, on all open positions subject to T+1 daily settlement (mark to market) mechanism being in place.
    i. In a new futures market such as the one to be established in Kenya, it is highly recommended that there should be a pre-trade check for adequacy of IM applied to all orders, both at the broker and client levels, prior to the order being sent to the exchanges' trade matching engine.

b) The second line of defense is provided by the **WCM** and it covers the expected loss in situations that go beyond those envisaged in the minimum of 1-day 99% VaR estimates used in estimated initial margin.
    i. The VaR based IM is aimed at covering the worst expected loss on 99% of the days over the sample period. Whereas, WCM is used to cover the maximum likely loss in situations that go beyond those envisaged on the 99% of the days that is 1% of the days over the sample period.
    ii. The WCM is applicable on all the open positions (clients as well as brokers' proprietary positions) and is adjusted against the brokers' deposit placed with the clearinghouse.
    iii. One must appreciate that the brokers of the exchange are the ultimate obligors of the exchange and the exchanges' settlement guarantee is for the mutual benefit of the brokers and not their clients. Therefore WCM is required to be deposited by the brokers on all open positions**; brokers' proprietary positions and all their clients' positions without any netting.**

c) During the expiry month of a contract, brokers and their clients will be required to pay an **add-on spot month margin** on all open futures positions. This add-on spot month margin will be in addition to the initial margin requirement. Some clearinghouses impose a variable add-on spot month margin which increases as the number of days to expiration decrease, as volatility tends to increase during this period.

d) During periods of increased volatility or a continuous unidirectional move which increases the price of the futures contract by a certain fixed percentage, clearinghouses impose a **special margin** for a fixed duration.

Special margin will be payable in addition to the initial margin requirement.

e) Upon expiry of the contract, a **delivery margin** replaces the IM and spot margins on open futures positions in the multiple of deliverable lots and continues to be in place till the final settlement has been made. The **delivery margins** are calculated based on the number of days required for completing the physical delivery which in essence is the look ahead period. **Delivery margin** is payable immediately at the expiry of the contract.

f) Clearinghouses establish daily price limits for trading in all futures contracts. These limits are stated in terms of the previous day's closing price plus and minus maximum fixed price movement per trading unit or a percentage. Once a futures price has increased by its daily limit, there can be no trading at any higher price until the next day of trading. Conversely, once a futures price has declined by its daily limit, there can be no trading at any lower price until the next day of trading.

   For some contracts, daily price limits are eliminated during the month in which the contract expires. Because prices can become particularly volatile during the expiration month (also called the "delivery" or "spot" month), market participants lacking experience in futures trading may wish to liquidate their positions prior to that time, or at the very least, trade cautiously and with an understanding of the risks which may be involved.

g) **Spread Margin – Intra-Commodity Spread**

   i. Spread discounts are made available in the case of offsetting open positions in two contracts with different expiration dates but in the same commodity with the margin applied being charged on the higher of the two legs. This is due to fact that in spread positions there is only an interest rate risk and discounts are withdrawn when one leg is offset or at expiration.

5) Clearing Limit

All Brokers must have a Clearing Limit assigned to them by the exchanges' clearinghouse prior to being eligible to trade for their own account as well as on behalf of their clients. Clearing Limit is assigned on the basis of a Clearing Deposit placed with the clearinghouse.

A broker by virtue of being a member of exchanges' clearinghouse must have the capacity to support all his own as well as all his clients open position by placing;

a) The exchange prescribed minimum clearing deposit (liquid networth) with the clearinghouse, and
b) The required WCM, on his proprietary and all his clients' positions, without any netting, should be less than the required minimum clearing deposit

In case he wishes to enhance the Clearing Limit he may place an additional deposit with the clearinghouse but his additional deposit must be from his own funds and **should not exceed the declared segregated Net Capital Balance to the exchange**.

Computation of a Clearing Limit;

i. Clearing Limit is defined as the maximum value of open positions that a broker can take across all his clients and across all contracts in all commodities. Clearing Limit is a multiple of the clearing deposit of the broker with the exchange and is calculated on the basis of a WCM as determined by the exchange. The WCM associated multiple will vary from commodity to commodity listed on the exchange.

ii. For example in the case of Gold the WCM is 2.5% which gives a multiple of 40 times (100/2.5).

iii. For the purposes of a Clearing Limit, a broker's gross open position includes both the brokers own open positions and clients' open positions. Open positions, at the Broker level, are calculated on the basis of all open, own and clients, positions across all contracts in all commodities as shown in the following example;

Clearing Limit Calculation (For Illustration Purposes Only)				
Contract	Proprietary	Client X	Client Y	Position Commodity Wise
	Qty	Qty	Qty	Qty
Gold Oct	200	200	200	Long 600
Gold Nov	200	(100)	100	Long 300 Short 100
Rice Oct	(100)	100	(200)	Long 100 Short 300

In the below example the total obtained after multiplying the Daily Settlement Prices of Gold and Rice contracts with the corresponding open positions in these contracts will be the Kenyan Shilling value of the outstanding against the exchange assigned Clearing Limit.

Broker Level - Without Netting				
Commodity	Value (Kshs)	Long Position	Short Position	Total Position
Gold	150,000	900	100	1,000
Rice	200,000	100	300	400

Commodity	Total Position	Value (Kshs)
Gold	1,000	150,000,000
Rice	400	80,000,000
Total Outstandings		230,000,000

6) Position Limits

Position limits are imposed by exchanges to curb excessive speculation that can cause unwarranted price moves. These limits are based on taking into account the following:

a. The size of the available underlying; for example the size of identifiable supply in the cash market

b. The average daily turnover in a commodity in the cash markets

Position Limits are the maximum open position that a Member or his clients can have in any contract at any point of time. This is calculated as the higher of a specified percentage of the total open interest in the contract or a specified value. Open Interest is the total number of open positions in that futures contract multiplied by its last available traded price or closing price, as the case may be.

7) Clearinghouse of the Exchange

In any market there are a large number of buyers and sellers each with a unique risk profile. As a market participant in a fast moving market such as in the case of futures trading, it is impossible to assess the risk of every counterparty prior to entering into a trade.

The role of an exchanges' clearinghouse is to simplify the complex web of relationships between multiple buyers and sellers across a market by simply allowing all participants to trade against a single known and a financially sound entity. Hence all buyers and sellers require is to establish a single relationship regardless who the ultimate buyers and sellers are. This is what is termed as the 'power of central counterparty clearing'. The exchanges' rules will have suitable provisions to reflect workings of the clearinghouse including the process of substitution, by way of 'Novation', upon execution of a trade.

i. All Future Contracts transacted on the Exchange will be cleared and settled by the clearinghouse of the exchange and shall be deemed to guarantee the settlement. The guarantee of the clearinghouse is only extended to the brokers and not to their clients.
ii. The exchange and its clearinghouse does not guarantee the financial obligations of a broker to his clients.

iii. Every broker shall be fully responsible for all his commitments to the exchange and his clients irrespective of whether one or more clients with whom he has dealings have defaulted. Default of any one or more clients shall not affect the rights of other clients with whom the broker has dealings but who are not in default.

iv. The Exchange shall not be deemed to guarantee the delivery, the title, genuineness, quality or validity of any goods or any documents passing through the clearinghouse.

v. The Exchange shall not be liable for obligations of a client of a broker nor shall the clearinghouse become liable to make deliveries to or accept deliveries from a client of a broker.

8) Exchange designated Clearing Bank

To facilitate the online flow of funds between the brokers and the exchange the exchange will designate clearing bank(s). The clearing bank must meet

the criteria set by board which may include the minimum networth, branch network, credit rating, etc. The rules of the exchange should have a suitable provision for appointment of a clearing bank on the following lines;

a) The exchange may designate one or more scheduled commercial bank(s) as the designated clearing bank(s) of the exchange for providing and facilitating the collection of funds, transfer of funds, sharing of information and other value added services pursuant to the rules, subject to the criteria specified by the board.

It is recommended that the exchange maintain the following five accounts at the clearing bank;

i. Initial Margin Account
ii. Clearing Deposit Account
iii. Fees Account
iv. Penalties Account
v. Final Settlement Account

9) Segregation of Clients' Funds[10],[11]

Almost all jurisdictions have provisions in their regulatory framework about segregation of clients' funds from broker's own funds and also have suitable provisions prohibiting the unauthorized use of clients' funds.

Despite the legal provisions every year clients' funds are misappropriated or misused or invested in the market without the client's permission in both the developed as well as in the developing world.

In order to implement segregation in both letter and spirit one should go beyond and make it mandatory for all clients' funds to be held at the exchanges' clearinghouse instead of with brokers or **in a segregated account at their bank**.

[10] Pakistan Mercantile Exchange Ltd. (PMEX) was the first exchange in the world to adopt moving of all margins from the brokers to the exchanges' clearinghouse where they were kept in completely segregated accounts.
[11] EUREX is now a second such exchange to do so but gives the clients of brokers' the option of where they want margins to be held; brokers or the exchanges' clearinghouse.

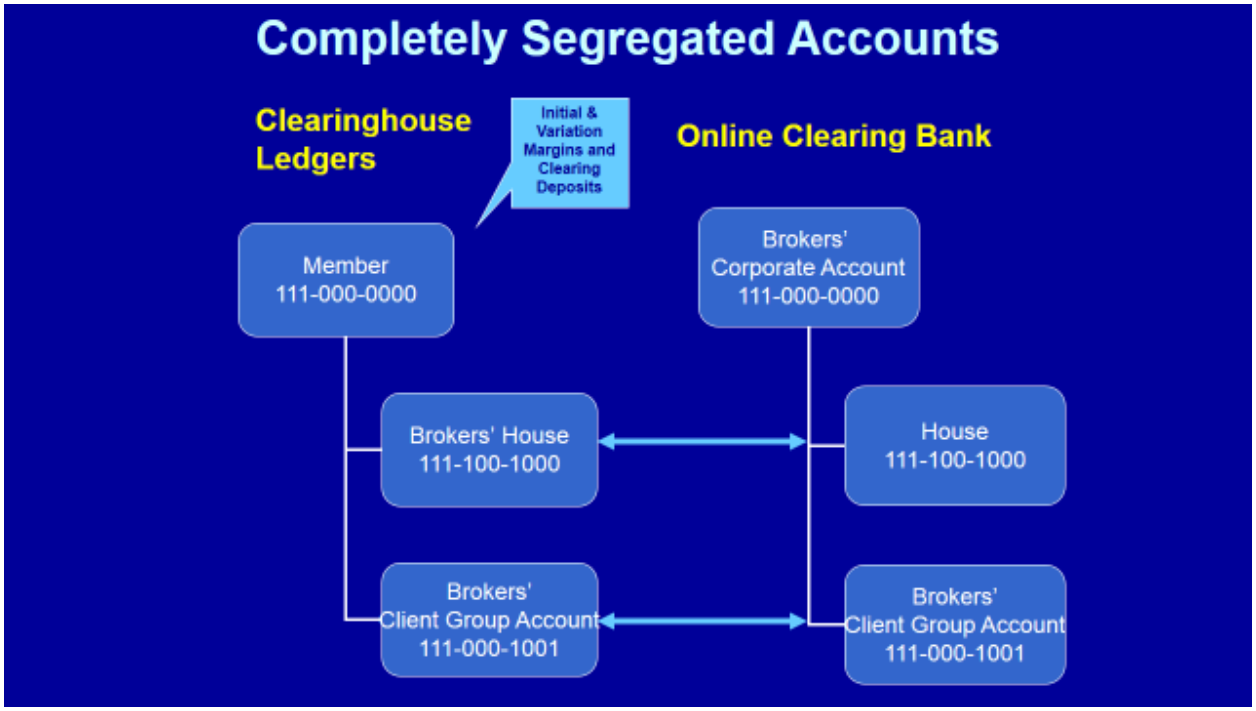
Therefore, to implement segregation between brokers' own funds and clients' funds, and maintenance of segregated clients' funds at the clearinghouse the following provisions should be included in the rules of the exchange;

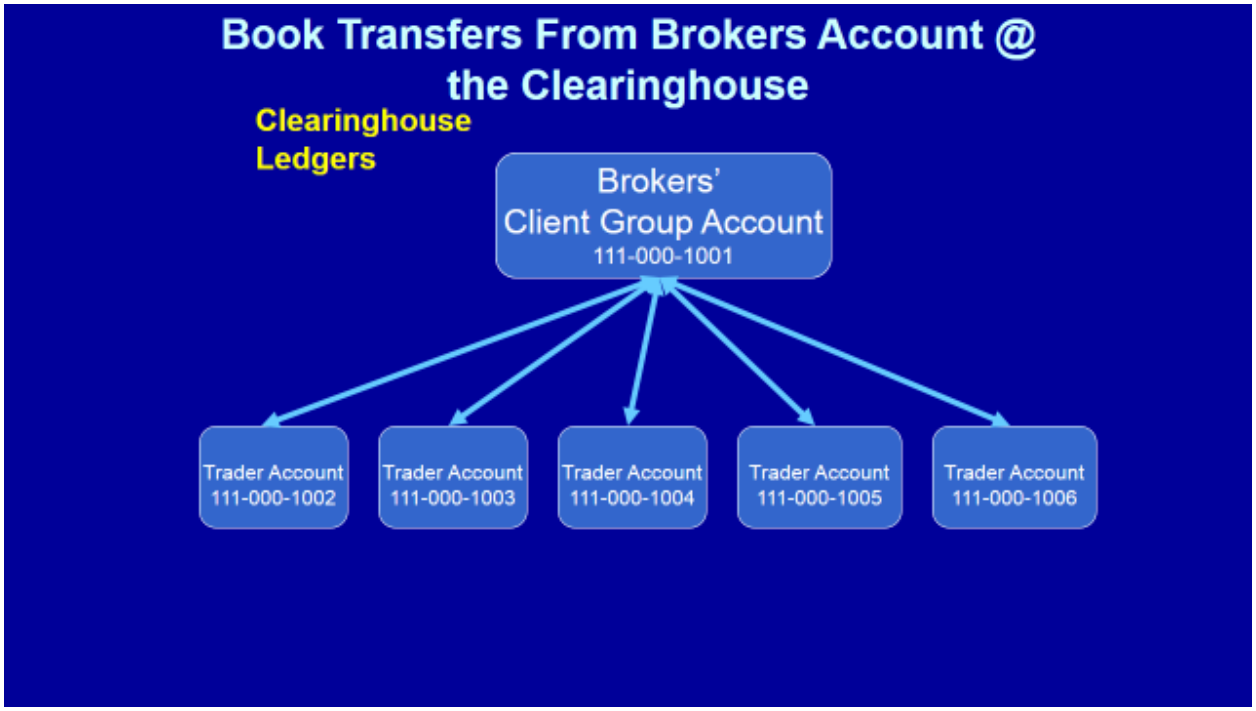
a) Margin deposits received by brokers from their clients shall be accounted for and maintained separately in completely segregated accounts without any commingling between his own funds and his clients' funds, or between any of his client's, and shall be used solely for the benefit of the respective client's positions.

b) Margin deposits received from clients will only be deposited into the 'Brokers Client Group Account' maintained with the exchanges' designated clearing bank and transferred, using the online transfer facility, forthwith to the exchanges' appropriate account also maintained with the clearing bank for ultimate transfer to brokers' 'Client Group Account' at the exchanges' clearinghouse.

c) Brokers will allocate margin deposits to their individual clients' accounts from their 'Client Group Account' at the clearinghouse.

For the sake of clarity, the accounts structures at the clearing bank as well as at the clearinghouse are shown in the following two slides;





10) Settlement Guarantee Fund (SGF)

An SGF is a pool of assets used to guarantee the successful settlement of all trades executed on the exchange in the event a broker is unable to meet his settlement obligation. SGF is used to meet the payment obligation. The SGF exists solely for the protection of solvent brokers
who are counterparties of the defaulting broker and prevents a "snowballing" effect of defaults among other brokers and their clients.

An SGF does not provide insurance against settlement problems nor does it reduce the risk of settlement default by a broker. It serves as the last resort to complete settlement in the event of a default, and it is an essential element of a comprehensive settlement-risk containment system.

A clearinghouse's counterparties are the brokers. Clearinghouses centralize the risk borne as a common counterparty and then require brokers to choose and serve the business needs of their clients.

In order to centralize risk and bear such risk, clearinghouses play a role in selecting and admitting brokers to the clearinghouse so that they become eligible for the performance guarantee. A principal-to-principal relationship best describes the relationship between the clearinghouse and its broker.

Clients have the freedom to choose the broker for executing transactions. Thereafter, the responsibility of being the common counterparty is that of the clearinghouse but it is a common counterparty only to its brokers.

The clearinghouse will ensure the integrity and stability of the futures market by acting as a guarantor. In other words, if a broker were to default on an open futures contract, the obligations of that broker towards the counterparty broker would become the responsibility of the clearinghouse.

There is no direct contractual relationship between clearinghouse and its brokers' clients. The clearinghouse guarantee, therefore, does not extend directly to the clients of brokers but clearinghouse guarantee mechanism does, however, ensures that a default of a broker's counterparty (i.e. another broker) will not affect the non-defaulting broker's ability to meet its own and its client obligations. In this way, the clearinghouse ensures that brokers (and therefore, indirectly, their clients) are protected from counterparty (i.e. other brokers) defaults. Detailed default procedures will be discussed in the Default section of this document.

A Futures Exchange business model has been developed bearing in mind the foregoing and the importance of large scale hedging requirements. Therefore, the exchange with its online banking functionality and the ability to maintain segregated client accounts in its systems
which would involve managing large number of payments and fund flows. This would require handling large amounts of cash collateral on a **gross basis** whereas the actual risk to the clearinghouse would be on a **net basis**.

The exchanges' clearinghouse should require each broker to contribute to the SGF. This fund is a shared obligation of all brokers, and provides coverage for residual risks. These risks include the risk that market conditions may prevent an orderly liquidation of a defaulting broker's positions within the timeframe contemplated in the calculation of margin requirements.

It is recommended that initial margins and clearing deposits should only be in the form of cash by the fund as it would be at a developmental stage. However, the rules should recognize that contributions may be in other forms such as bank guarantees, securities and so forth which could be made available at a later stage. Further consideration must be given to the

liquidity of any other contribution that may be accepted into the Fund. While other forms of deposit may well be appropriately accepted at a later date, consideration should be given to accepting them only if they can promptly and without any delay, be converted into cash so as to be fully utilized. In the absence of the availability of immediate liquidation or conversion into cash, appropriate banking facilities should be established so as to permit the securing of cash with the other Fund deposits as collateral for such cash.

a) Loss-Sharing Arrangements

Loss sharing arrangements vary from clearinghouse to clearinghouse. Clearinghouses, therefore, define loss-sharing arrangements in order to allocate losses to brokers. Loss-sharing arrangements alter the incentives of brokers to default. Centralized loss sharing mutualizes risk. There is an effective alternative with centralization that demutualizes risk. Thus, all brokers of the clearinghouse have incentives to restrict the risk-increasing activities of other brokers. Decentralized loss sharing diffuses exposure. Loss exposures are limited to those realized between immediate counterparties.

Some brokers may introduce more risk than others may because of the size of their clientele. In a mutualized risk sharing model, if a broker introduces more risk that results in losses, they face the same penalty as other brokers who have introduced no risk. In order to obviate the asymmetry, clearing limits are placed on such brokers. Limits may impose constraints on their businesses. Those whose businesses are small may not find the loss-sharing process fair since it imposes a penalty on them. The asymmetry of potential gains and losses in a mutualized loss-sharing system that allocates rights of equal magnitude to introduce risk is a deterrent to the participation of small and financially weak from becoming brokers.

Mutualized risk sharing is generally adopted by clearinghouses where the brokers are owners of the clearing entity and also participate in its management. Captive clearinghouses tend to adopt a demutualized risk sharing model.

It is recommended that at the to be established Futures Exchange in Kenya, its clearinghouse should adopt a centralized with a demutualized loss sharing arrangement whereby brokers will be

required to share the loss based on their outstanding positions at the time the clearinghouse incurs a loss.

While it is fully understood that, in a centralized loss-sharing system, while providing a benefit to individual market participants in eliminating counterparty risk, does entail a certain degree of systemic risk that will be addressed by the exchange through appropriate safeguards, including among other things minimum solvency and capital adequacy requirements, complete segregation of clients funds and regular unannounced spot financial audits of all brokers participating in the guarantee of performance.

b) Stress Testing

"Stress testing" is aimed at identifying and limiting potential exposures to brokers and the clearinghouse from extreme price movements and ensuring that the clearinghouse's financial resources are adequate in such circumstances. "Stress testing" is the selection of extreme price scenarios, that is, price movements not covered by margin requirements, and the simulation of potential losses and liquidity pressures that could result if such price movements led to a broker's default. Such tests can be used both to identify and to limit exposures to individual brokers and to gauge the adequacy of clearinghouse's financial resources.

If the simulated credit exposures to one or more brokers approached or exceeded the amount of the clearinghouse's resources, it could either reduce the exposures (by requiring the individual brokers to reduce their open positions or increase their margin or clearing deposits) or increase the size of its own resources. If the simulated liquidity needs exceeded available liquidity, the clearinghouse could require the brokers in question to post additional deposits.

c) Pay-in, Pay-out & Topping Up

The rules of the exchange will detail the complete mechanism for pay-in, pay-out and topping-up, in case of utilization of the SGF.

11) Default Processes & Procedures

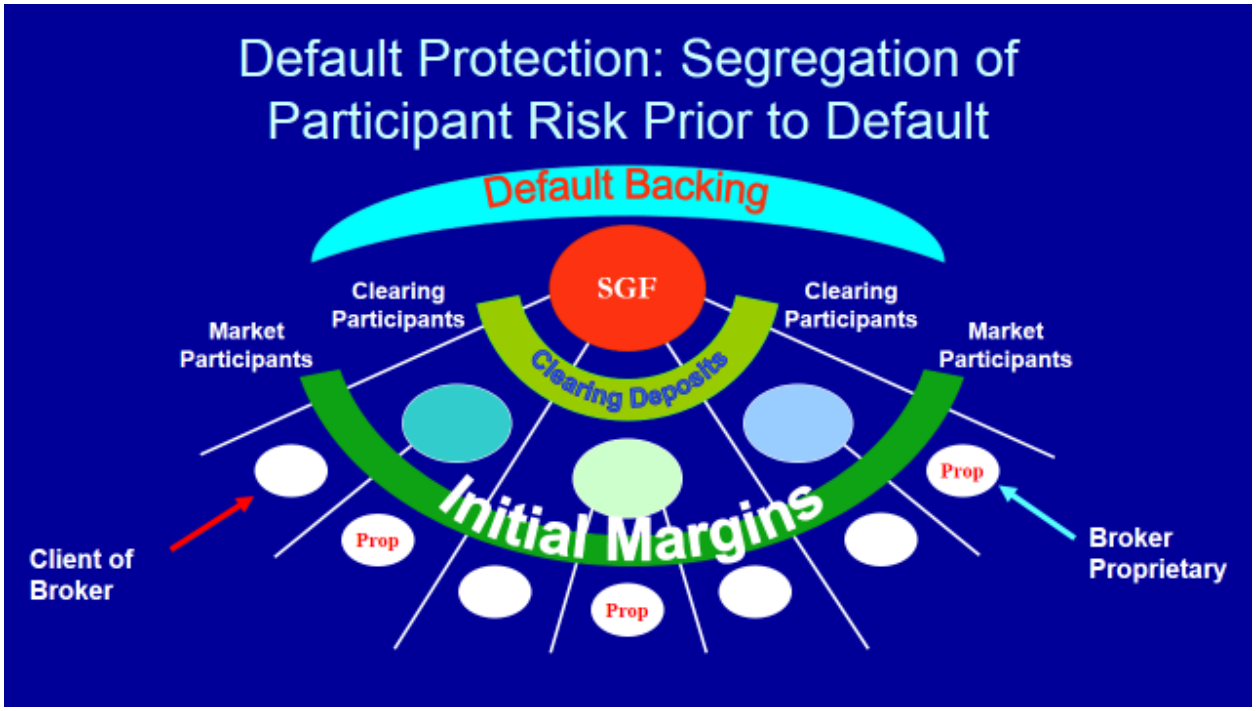
Protection of client assets is of paramount importance in any market. In our proposed methodology, the clearinghouse will maintain complete

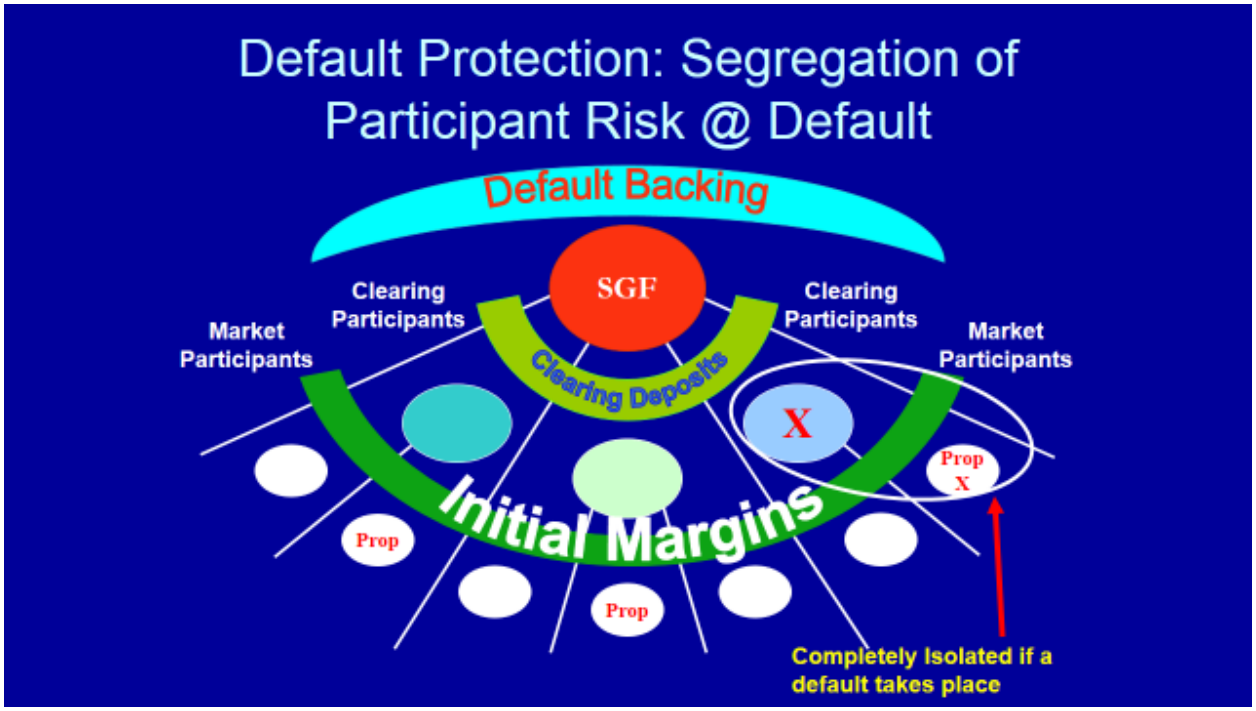
segregation of each client funds to protect against any broker default or other clients' default. Brokers will be required to hold client monies and must place such monies in a completely segregated bank account as illustrated earlier in this document. The rationale behind this requirement is to ensure that a broker cannot use client monies for their own trading and that any monies so held, are protected from the general creditors of the broker in the case of insolvency.

A report by the Technical Committee of the IOSCO identified best practices for the treatment of positions, funds and assets. Its conclusions: client positions of the defaulting firm at the market will preferably be transferred swiftly to other firms to avoid financial harm to clients, and to avoid spreading the damage from the default; in cases where the nature of the positions makes transfer impracticable, or in cases such as where the client has not completed the necessary documentation for the transfer or the applicable regulation does not allow for transfers, client positions may be liquidated in the market as swiftly as practicable, taking the potential market effect into account.

The rules of the exchange should provide for both of the above alternatives.

The following two images illustrate the foregoing;


Default Protection: Segregation of Participant Risk Prior to Default
Default Backing
SGF
Clearing Participants
Clearing Participants
Market Participants
Market Participants
Clearing Deposits
Initial Margins
Prop
Prop
Prop
Client of Broker
Broker Proprietary


Default Protection: Segregation of Participant Risk @ Default
Default Backing
SGF
Clearing Participants
Clearing Participants
Market Participants
Market Participants
Clearing Deposits
X
Initial Margins
Prop
X
Prop
Prop
Completely Isolated if a default takes place

Although the clearinghouse has a direct exposure only to its brokers, if a broker holding a large position for a client who subsequently defaults, this could affect the solvency of the broker concerned as he is the ultimate obligor of the clearinghouse. The clearinghouse should carefully monitor client positions and may impose additional margins on a broker should it believe that the size of its client positions are sufficiently large to potentially prejudice his financial position, in the event of a client default.

A broker that sustains a series of prolonged daily settlement losses on its house clearing account could potentially result in an erosion of the broker's net worth. The clearinghouse must monitor the overall broker's daily settlement amounts through maintaining a historical database (both house and client clearing). Cumulative positions are also reviewed and assessed daily.

In the event of a broker default, the following shows the order in which the available funds are to be applied after the application of margins.

a) Order and priority of the utilization of the SGF used in the event of a broker default:

Firstly against the initial margins & clearing deposit of the defaulting broker

Secondly against the proceeds from the defaulting broker's assets

Thirdly against income, if any, earned from investment of SGF

Fourthly to replace the SGF a replenishment call will be made to other brokers to contribute to the SGF in the ratio of their outstanding exposure at the time of default.

b) If the cumulative amount under all the above heads is not sufficient to adjust the loss, non-defaulting brokers shall be required to contribute the deficient amount in the ratio of their outstanding exposure at the time of default.

All non-defaulting brokers of the exchanges' clearinghouse have a continuing obligation to share the loss or to meet the short fall in the SGF as a result of a broker default, should the need arise. A non-defaulting broker's failure to comply with a cash call will constitute an event of default.

Examples of types of Defaults

The risk management and financial surveillance practices adopted by a centralized clearinghouse are specifically designed to prevent a broker from defaulting on its obligations. The following summarizes the steps that would be taken were such an event ever to occur.

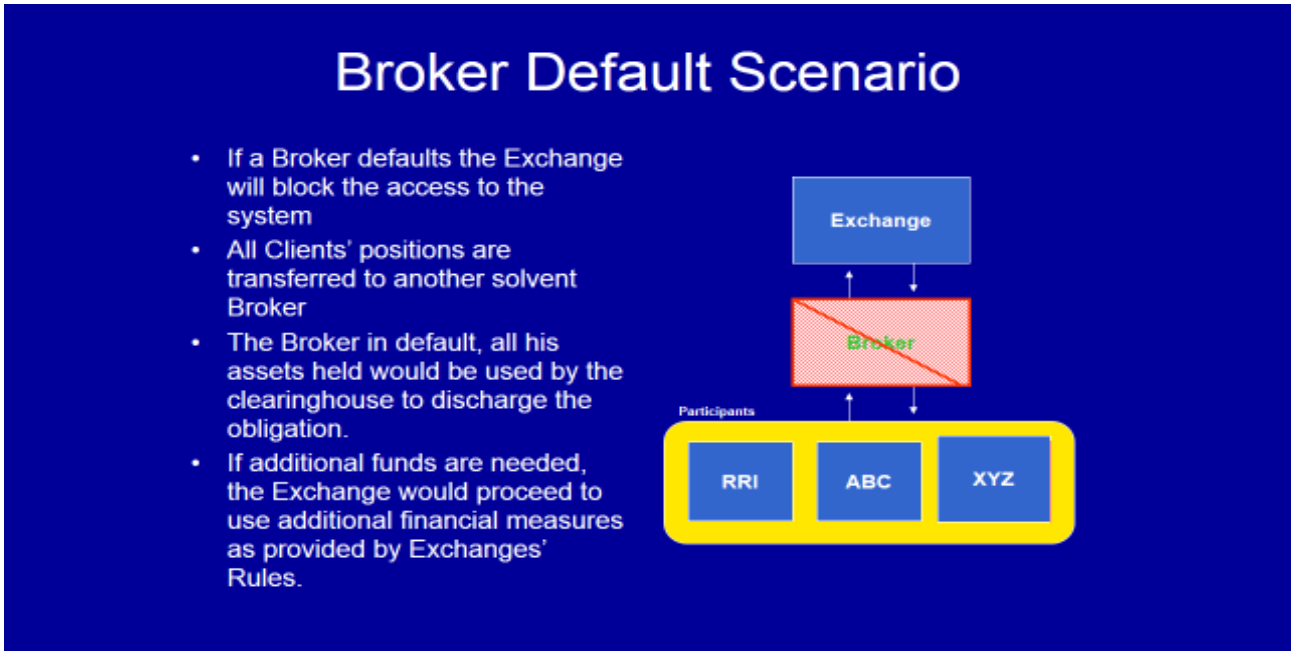
a.) Brokers' House Default (Proprietary Positions)

If a broker were unable to meet its financial obligation and the default occurred in its house account, the clearinghouse will act immediately to:

i. Attempt to transfer all segregated client positions and monies to another solvent broker
ii. If required, take control or liquidate the positions in the house account or in both the house and client accounts
iii. Apply the defaulting brokers' initial margins and clearing deposits to offset the loss, if any.

Client assets (positions and/or monies) on deposit with or in the control of the clearinghouse or its other brokers will not be utilized by the clearinghouse in the case of a broker default resulting from house activity.

The above scenario and the process is illustrated hereunder;



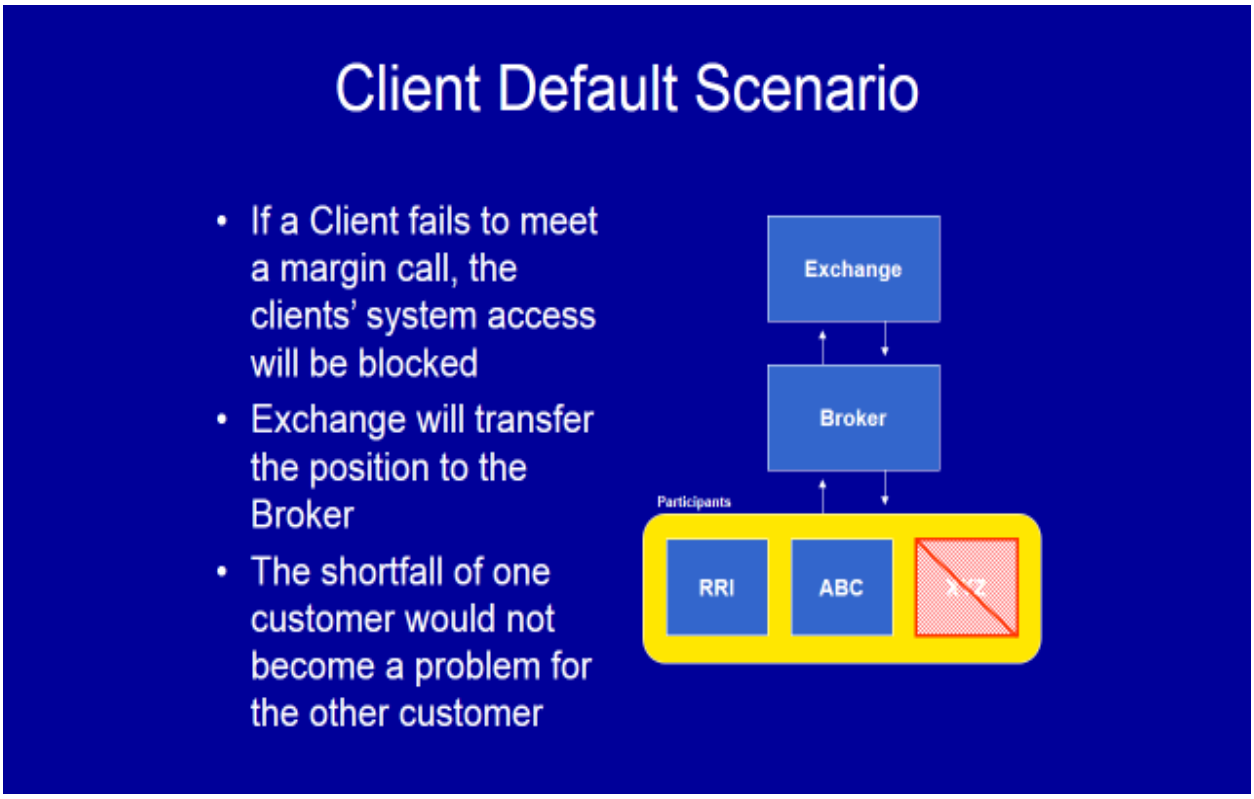
b.) Client Default

If a broker was unable to meet its financial obligation and the default occurred in its client account, the clearinghouse will act immediately to:

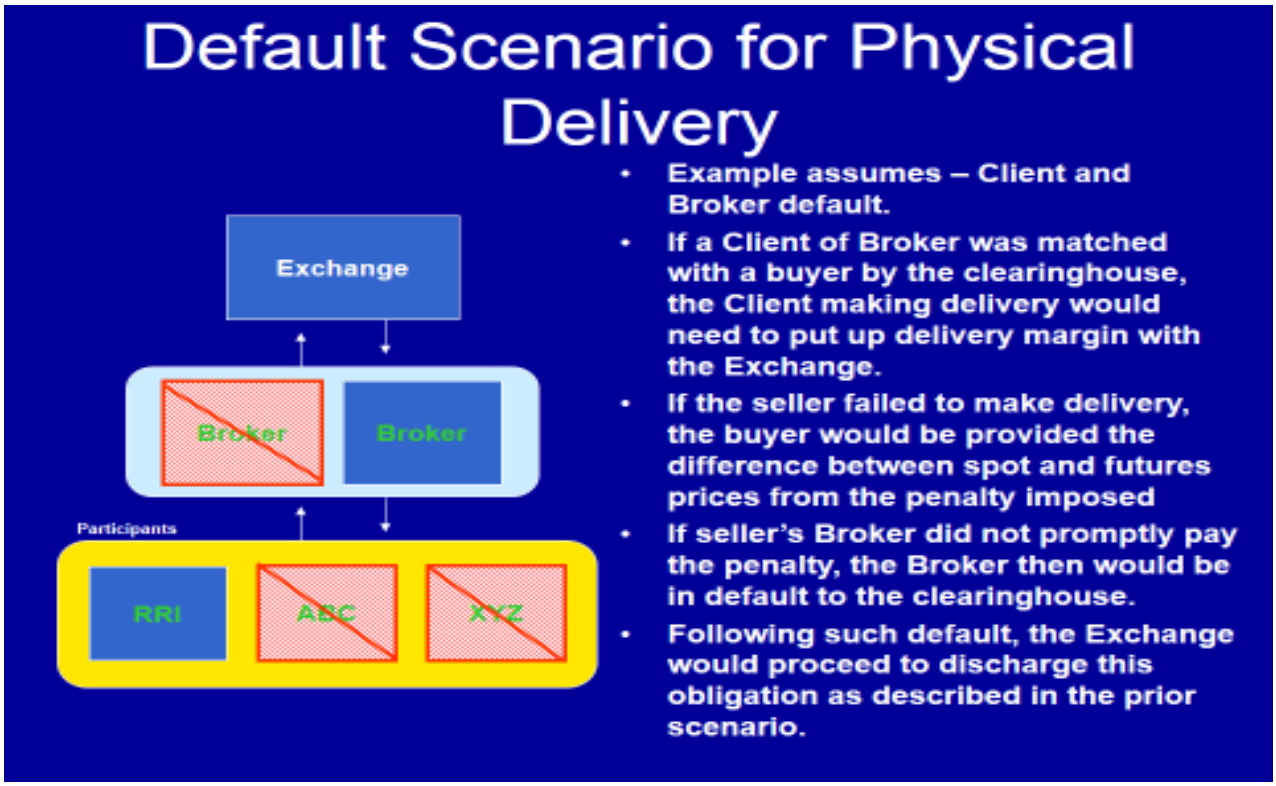
i. Attempt to force the broker to close-out the defaulting client positions and monies will be transferred to brokers account, or
ii. Ask broker to take control of or liquidate client positions, and
iii. Apply the client's initial margins to offset losses, if any

Non-defaulting client assets (positions and/or monies) on deposit with or in the control of the clearinghouse or its brokers will not be utilized in the case of a default resulting from other clients' activities. Accordingly, initial margins deposited by other non-defaulting clients will not be at risk.

The following image illustrates this scenario and the associated process;



c.) Client & Broker both Default in the case of physical delivery at expiration



12) Investor Protection Fund

An Investor Protection Fund is well recognized as a tool to demonstrate an awareness of the client participation in exchange trading activity and public acknowledgement of the utilization of all efforts to provide a safe and sound environment for the participation in exchange trading. Naturally, such a Fund cannot stand as a guarantee of all trading loses or as remuneration of all loses due to misfeasance by brokers, but it does serve as a public signal of exchange awareness of client participation in the markets.

The management of the Fund should be vested in a Trust which is separate to the Board of the exchange. A sound and well recognized practice ensures not only operational, but public perception of a separation of duties between the exchange and the Trust.

The 'standard best practice' is that the fund is built-up gradually, with the increase in the volume of business, with contributions by the exchange (a percentage of the exchange fees) and brokers (a percentage of brokerage).

The Board of the exchange should develop and establish appropriate rules, and processes and procedures for addressing investor complaints.

13) Exchanges' Trading System

The purpose of a Futures Exchange is two folds; price discovery and price risk management. It is quite obvious that in order to achieve these two objectives one needs have an efficient market that in turn can be achieved through providing nationwide access, using the Internet, and go beyond the traditional commercial hubs of the country. Another benefit of widest possible outreach is to develop a deep and a liquid market with diversity of risk to the clearinghouse but with uniform credit risk for all the market participants using the globally accepted Central Counterparty Clearing model.

Of course, the Futures Exchange would offer broker assisted trading but the best way to achieve these objectives is for the exchange to provide an electronic trading facility up to the client level with direct access to the exchanges' order book. Providing direct access to the exchanges' order book is termed as the 'Direct Market Access' (DMA) and is considered as the 'international best practice'.
With advancements in technology and wide use of the Internet in Kenya, DMA offers the following benefits;

i. A low cost solution for new start-up exchanges apart from providing easy access to all should also provide real-time risk management.
ii. DMA usually offers lower transaction costs because only the technology is being paid for and not the usual order management and oversight responsibilities that come with an order passed to a broker for execution.
iii. Orders are handled directly by the originator giving them more control over the final execution and the ability to exploit liquidity and price opportunities more quickly.

The exchanges' electronic trading facility must have the following modules;

No.	Module
1	Exchange Broker/ Client Administration
2	Front End Trading
3	Risk Management (should provide a Pre-trade Check at Account Level)
4	Trading and Matching
5	Monitoring and Surveillance
6	Clearing and Settlement
7	Back Office
8	Broker/Client Accounting

Electronic trading has dramatically reduced costs, provides wider and greater participation in futures markets, greater transparency and control to market participants and regulators, faster market access, and substantially greater liquidity which lowers the incidence of manipulation.

Conclusion

The foregoing adequately demonstrates that a futures exchange and its clearinghouse have a number tools at their disposal to maintain the integrity of its market and sanctity of its contracts. However, what needs to be highlighted is that the key departments of the exchange, market operations, risk & analytics and compliance, all have to work in tandem to maintain an orderly market.

If all departments perform their functions in an orderly manner and their staff is vigilant then an event of default should not come as a surprise as brokers and their client's activity does provide numerous early warning signals.

In our opinion the key to maintaining an orderly market is the quality and design of the exchanges' processes and procedures to implement the regulatory framework. Therefore the exchanges' management must ensure

that there are no work loops or control gaps in the processes and procedures.

Additionally it is the management's responsibility to ensure that the exchanges' trading data is only accessible on a need basis and there should be a sound access control policy in place.

However, the regulator shall ensure that the exchange has undergone a legal, processes and procedures, and systems security audits prior to granting permission for 'going live'.

ANNEXURE : HIGHLIGHTS: IOSCO PRINCIPLES ON REGULATION AND SUPERVISION OF COMMODITY DERIVATIVES

1 PRINCIPLES ON CONTRACT DESIGN

a) **Accountability –** Market Authorities should establish a clear framework as to design and review criteria or procedures for commodity derivatives contracts. Market Authorities should be accountable for compliance with statutory and/or self-regulatory standards on a continuing basis and should retain powers to address the provisions of existing contracts, which produce manipulative or disorderly conditions. At a minimum a statutory Market Authority should have legal powers to address and where necessary to vary contract provisions which produce, or are deemed likely to produce, manipulative or disorderly conditions

b) **Economic Utility -** Contracts should meet the risk management needs of potential users and promote price discovery of the underlying commodity. The design and/or review of commodity derivatives contracts should include a determination that the contract can meet the risk management needs of potential users of the contract and/or promote price discovery of the underlying commodity. The determination of economic utility may be supported by surveys of potential contract users or may be implied - for example, from an analysis of the physical market. The regulator should, as a minimum requirement, be informed of the type of products to be traded on an exchange or trading system and should review and/or approve the rules governing the trading of the product;

c) **Correlation with Physical Market -** Contract terms and conditions generally should, to the extent possible, reflect the operation of (i.e., the trading in) the underlying physical market and avoid impediments to delivery

d) **Promotion of Price Convergence through Settlement Reliability** - Settlement and delivery procedures should reflect the underlying physical market and promote reliable pricing relationships and price convergence and should be regularly evaluated to ensure that they meet this standard. Settlement and delivery terms should be specified and made available to market participants.

e) **Responsiveness -** The views of potential contract users should be taken into account in designing commodity contracts.

f) **Transparency -** Information concerning a physical commodity derivatives contract's terms and conditions, as well as other relevant information concerning delivery and pricing, should be readily available to Market Authorities with respect to all derivatives transactions within its jurisdiction and to market participants in organized derivatives markets.

2. PRINCIPLES FOR THE SURVEILLANCE OF COMMODITY DERIVATIVES MARKETS

a) **Framework for Undertaking Market Surveillance -** Market Authorities should have a clear and robust framework for conducting market surveillance, compliance and enforcement activities and there should be oversight of these activities. A market surveillance program should take account of a trader's related derivatives and physical market positions and transactions. Market surveillance programs should be supported by sufficient resources, access to physical market data and analytical capabilities.

b) **Monitoring, Collecting and Analyzing Information –** Market Authorities should develop, employ and maintain methods for monitoring of trading activity on the markets they supervise, collecting needed information and analyzing the information they collect that are efficient and suitable for the type of market being supervised. Effective monitoring of orders and electronic transactions requires real-time monitoring capabilities, supported by automated systems that detect trading anomalies. Monitoring, collection and analysis should also focus on intra-day trading.

c) **Authority to Access information -** Market Authorities should have the authority to access information on a routine and non-routine basis for regulated commodity derivatives markets as well as the power to obtain information on a market participant's positions in related over-the-counter (OTC) commodity derivatives and the underlying physical commodity markets. In particular, Market Authorities should have the power to:

- access information that allows the reconstruction of all transactions on a regulated commodity derivatives market (audit trail);
- access information that permits them to identify large positions (i.e., "large exposures" or "concentrations") and the composition of the market in question;
- access information, if needed, on the size and beneficial ownership of positions held by a market participant in order to aggregate positions held under common ownership and control;
- access information about a market participant's transactions and positions in related OTC and physical commodity markets; and
- take appropriate action where a commodity derivatives market participant does not make requested market information available to the Market Authority.
- Market Authorities should review the scope of their authority to obtain such information and if necessary to request such power from the relevant legislature or other appropriate governmental bodies.

d) Collection of Information on On-Exchange Transactions – In respect to on-exchange commodity derivatives transactions, a Market Authority should collect information on a routine and regular basis on:

- pricing of contracts throughout the trading day in real time;
- daily transactional information including time and date of trade, commodity contract, delivery month, expiry date, buy/sell, quantity, counterparties to the contract, and price of the contract;
- daily reports of end-of-day positions held by market intermediaries (both "whole firm" and by individual trader) and by other market participants, where the size of the position is above a specified level ("large position"). Information collected should permit a Market Authority to identify each position holder (by name or code) down to the first customer level, and the size of position, by contract month, for each position holder.
- The Market Authority should have the capability to aggregate position holder information promptly in order to identify positions under common ownership or control;
- where appropriate, warehouse stocks or other deliverable supply.

e) Large Positions – Market Authorities should require the reporting of large trader positions for the relevant on-exchange commodity derivatives contracts. The Market Authority should have the ability to aggregate positions owned by, or beneficially controlled on behalf of, a common owner.

3. PRINCIPLES TO ADDRESS DISORDERLY COMMODITY DERIVATIVES MARKETS

a) **Intervention Powers in the Market -** Market Authorities should have, and use, effective powers to intervene in commodity derivatives markets to prevent or address disorderly markets and to ensure the efficiency of the markets. These powers should include the following:

1) Position Management Powers, Including the Power to Set Position Limits - Market Authorities should have and use formal position management powers, including the power to set ex-ante position limits, particularly in the delivery month.

These should necessarily include position management powers that:

- Establish a trader's automatic consent to follow an order of the Market Authority when that trader's position reaches a defined threshold size or any size, which the Market Authority considers prejudicial to orderly market functioning, taking into account all relevant circumstances. They should also require such a trader to comply with the Market Authority's order, either not to increase a position or to decrease a position; and

- Authorize a Market Authority to place ex-ante restrictions on the size of a position a market participant can take in a commodity derivatives contract (i.e., position limits).

2) Other Discretionary Powers - Market Authorities should also have the powers to employ any of the following measures, as appropriate to address market disruption or the perceived threat of such disruption or to assist market surveillance efforts:

- the imposition of price movement limits;
- calling for additional margin, either from customers or from clearing members on behalf of their clients;
- ordering the liquidation or transfer of open positions;
- suspending or curtailing trading on the market (e.g., trading halts and circuit breakers);
- altering the delivery terms or conditions;
- cancelling trades;
- requiring owners of positions to specify delivery intentions; and
- requiring traders to disclose related OTC derivatives or large physical market positions.

b) **Review of Evolving Practices -** Market Authorities should have, or contribute to, a process to review the perimeter of regulation to ensure that they have the power to address evolving trading practices that might result in a disorderly market. Exchanges and self-regulatory organizations play a critical and complementary role with governmental regulators in identifying such practices.

4. PRINCIPLES FOR ENFORCEMENT AND INFORMATION SHARING

(a) **Rules and Compliance Programs** - Market Authorities should have rules, compliance programs, sanctioning policies and powers to prohibit, detect, prevent and deter abusive practices on their markets, including manipulation or attempted manipulation of the market. The rules and compliance programs should take account of the whole position of the market participant (i.e., all positions under common ownership and control). There should be clarity as to what constitutes manipulative, abusive conduct or other prohibited conduct.

Specific practices which Market Authorities should seek to detect and prevent include, among others:

i) causing, or attempting to cause, artificial pricing in the market;
ii) creating a false or misleading appearance of active trading;

iii) disseminating false or misleading information in respect of the market or conditions that affect the price of any commodity;
iv) creating, or attempting to create, a corner or squeeze, in which an abusive controlling position is accumulated in the physical and/or futures or OTC markets, forcing those holding short positions to settle their obligations, by purchase or offset or otherwise, to their detriment;
i) abuse relating to customer orders;
ii) "wash trades", involving no change of beneficial ownership or economic purpose;
vii) collusive trades, which seek improperly to avoid exposure to the pricing mechanism of the market;
viii) violation of applicable position limits;
ix) concealment of a position holder's identity and,
x) misuse of information.

b) **Framework for Addressing Multi-Market Abusive Trading -** The overall framework for market surveillance and enforcement within a jurisdiction should be structured to provide for active and coordinated detection and enforcement action against manipulative or abusive schemes that might affect trading on multiple exchange and OTC markets, as well as the underlying physical commodity markets.

c) Powers and Capacity to Respond to Market Abuse - Market Authorities should have adequate powers and capacity to investigate and prosecute actual or suspected market abuse, including attempted manipulation. IOSCO members that are responsible for the oversight of commodity derivatives markets should have all of the powers required by the IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU).

d) **Disciplinary Sanctions Against Market Members -** The relevant Market Authority should have and use effective powers to discipline its members or other authorized market participants if an abusive practice has occurred in the market. There should be clarity as to the types of disciplinary actions that can be taken.

Sanctions should, amongst other things, include some or all of the following measures:
i) warnings (public and private);
ii) reprimands;
iii) re-training;
iv) restitution;
v) disgorgement of illicit gains
vi) fines;
vii)conditions on trading;

viii)trading prohibitions;
ix) suspension from membership;
x) expulsion from membership; and
xi) where appropriate, a criminal referral

e) **Disciplinary Sanctions Against Non-Members of the Market**

The relevant Market Authority should have power to take action against non-members of regulated commodity derivatives markets or other market participants if they have engaged in abusive or manipulative practices, or are suspected of doing so. Market authorities may require contractual relationships between members and customers that enable action to be taken. It is anticipated that enforcement powers will usually be embedded in statute and would be exercised by a government body, including a public prosecutor or the courts.
In addition, Market Authorities should be able to intervene, or cause the exchange to intervene, in the market to address or to prevent an abuse by non-members, using appropriate measures - through members - such as for example by raising the level of margin, imposing trading limits and liquidating positions, as well as removing trading privileges. Any intervention action should be timely.

f) Information Sharing - Market Authorities should cooperate with one another, both domestically and outside the jurisdiction, to share information for surveillance and disciplinary purposes. In particular Market Authorities should have arrangements that allow them to share information on large exposures in linked markets and on supplies relative to these markets. These arrangements should take account of (as applicable):

- The Exchange International Information Sharing Memorandum of Understanding and Agreement (Exchange International MOU) and the Declaration on Cooperation and Supervision of International Futures Exchanges and Clearing Organizations (Declaration), which facilitate the identification of large exposures by firms that could have a potentially adverse effect on multiple markets;
- The IOSCO Multilateral Memorandum of Understanding Concerning Consultation and Cooperation and the Exchange of Information (MMOU); and
- Guidance issued by IOSCO in respect of information sharing, such as IOSCO's Principles Regarding Cross-Border Supervisory Cooperation, Report on Multi-jurisdictional Information Sharing for Market Oversight, and Guidance on Information Sharing.
- Information sharing to facilitate heightened surveillance is warranted where physical commodity derivatives contracts trade on different exchanges and are linked economically, such as where one contract's

settlement price is determined by reference to the settlement price of the other contract.

5. PRINCIPLES FOR ENHANCING PRICE DISCOVERY ON COMMODITY DERIVATIVES MARKETS

(a) **Commodity Derivatives Market Transparency.** Market Authorities should publish the aggregate exposures of different classes of large traders, especially commercial and non-commercial participants, within the bounds of maintaining trader confidence.