#### HISTORY AND DEVELOPMENT

# Listing of HKEx's Shares on the Stock Exchange



Completion of merger of Exchanges and Clearing Houses under HKEx Futures Exchange trading becomes entirely screen based

### 1996

AMS/2 introduced by the Stock Exchange

ATS upgraded and renamed as HKATS **GEM** launched

#### 1995

Stock Options market launched ATS introduced by the Futures Exchange

CCASS introduced

#### 1993 First listing of H shares on Stock Exchange

AMS introduced by the Stock Exchange

HKCC assumed the functions performed by the Futures Exchange's former guarantee corporation and clearing house

Futures Exchange established (named The Hong Kong Commodity Exchange Limited at the time)

Trading commenced on the unified Stock Exchange



Hong Kong's first formal stock market established

Photo credit: Hong Kong Tourist Association

## Stock Exchange

Records of securities trading in Hong Kong date back to 1866 but the first formal stock market, the Stockbrokers' Association of Hong Kong, was established in 1891. It was renamed the Hong Kong Stock Exchange in 1914.

In 1921, a second exchange was incorporated — the Hong Kong Sharebrokers' Association. The two exchanges merged to form the Hong Kong Stock Exchange in 1947.

The rapid growth of the Hong Kong economy led to the establishment of three other exchanges in the late 1960s and early 1970s — the Far East Exchange (1969), the Kam Ngan Stock Exchange (1971) and the Kowloon Stock Exchange (1972).

Prompted by the 1973 market crash and the need to strengthen market surveillance, the Government set up a working party in 1977 to consider the unification of the four stock exchanges. As a result, the unified exchange — the Stock Exchange — was incorporated on 7th July, 1980. The four exchanges ceased trading after the close of business on 27th March, 1986 and all their trading was moved to the Stock Exchange. A new era began with the commencement of trading via a computerised system, AMS, on the Stock Exchange in November, 1993. AMS/2, the upgraded version of AMS, was introduced in January, 1996.

After the market crash in October, 1987, the Stock Exchange underwent a fundamental reform, including the establishment of a more widely representative council and a strong, professional executive management team, to safeguard the interests of all participants and to operate and develop the market effectively. Since then the Stock Exchange has developed from a largely domestic operation to a major international stock exchange and the total number of companies with shares listed on the main board of the Stock Exchange has grown from 298 as at 31st December, 1989 to 701 as at 31st December, 1999.

Over the years the range of securities traded on the Stock Exchange has steadily increased. In July, 1993 the Stock Exchange pioneered the listing of H shares, allowing mainland China-incorporated entities direct access to the international equity capital market. In September, 1995 the Stock Exchange introduced the trading of stock options with the establishment of its stock options market. More recently, August, 1999 saw the first listing of Exchange Fund Notes, allowing non-institutional investors the opportunity to invest in debt instruments issued by the Government, while October, 1999 saw the listing of notes issued by the Hong Kong Mortgage Corporation and November, 1999 saw the first listing of units in the Tracker Fund of Hong Kong, a collective investment fund designed to provide investment results corresponding to the performance of the Hang Seng Index.

In response to the needs of growth enterprises to be able to raise funding at an early stage, GEM was launched in 1999. Trading commenced on GEM for the first time in November, 1999.

Most recently, in May, 2000, the Stock Exchange and NASDAQ introduced a pilot program allowing the trading of selected NASDAQ stocks on the Stock Exchange.

#### **Futures Exchange**

The Futures Exchange was established in 1976 as The Hong Kong Commodity Exchange Limited. At that time the main products traded on it were cotton futures, sugar futures, soybean futures and gold futures. In 1985 the exchange adopted its present name in preparation for the change in the nature of the predominant business being transacted on it. In 1986, the Futures Exchange commenced the trading of its first financial product, Hang Seng Index futures. Since then the range of products traded has increased with trading in three-month HIBOR futures being launched in February, 1990, Hang Seng Index options being launched in March, 1993, the first set of stock futures being launched in March, 1995 and currency futures being launched in November, 1995.

The Futures Exchange's first electronic screen based trading system, the Automated Trading System (ATS), was introduced in November, 1995. An upgraded version of this system, re-named HKATS, is now the trading platform for all products traded on the Futures Exchange following the migration on 5th June, 2000 to electronic trading, from open outcry, of trading in Hang Seng Index futures contracts and option contracts.

Prior to 1989, all trades executed on the Futures Exchange were cleared and guaranteed by contracted agents. In March, 1989, as a result of the 1987 market crash, HKCC assumed these functions and has since provided a more advanced and rigorous risk management system.

#### **HKSCC**

CCASS, which is operated by HKSCC, came into operation in June, 1992. HKSCC Registrars Limited, a wholly owned subsidiary of HKSCC, was set up in April, 1993 to provide share registration services to companies listed on the Stock Exchange. Since December, 1994 the direct admission into CCASS, on their first dealing date, of all new securities to be listed on the Stock Exchange has been mandatory.

In January, 1996 HKSCC set up its own central securities depository to handle the depository, custody and nominee services relating to the operation of CCASS — prior to that time these services were provided by a contracted agent. In May, 1998 HKSCC's Investor Account Service was launched, enabling investors to enjoy directly the benefits of HKSCC's computerised book-entry clearing and settlement system.

In May, 1999 HKSCC launched its EIPO subscription service. Since the launch of trading in Exchange Fund Notes and Hong Kong Mortgage Corporation Notes on the Stock Exchange in August and October, 1999 respectively, HKSCC has provided a tendering facility for such notes as eligible securities in CCASS. In November, 1999 HKSCC became a participant of the Depository Trust Corporation to support the trading on the Stock Exchange of selected securities listed on NASDAQ pursuant to the pilot program jointly developed by the Stock Exchange and NASDAQ.

## Reform of Hong Kong's securities and futures markets

In his Budget Speech of 3rd March, 1999, the Financial Secretary announced a comprehensive reform of the securities and futures markets in Hong Kong to enhance Hong Kong's competitiveness in an increasingly globalised financial marketplace. The reform included fundamental changes in the market structure to be achieved through the merger of the five recognised and approved market operators in Hong Kong, namely the Stock Exchange, the Futures Exchange, HKSCC, SEOCH and HKCC, under a single holding company, HKEx.

The merger of the Exchanges was effected by way of schemes of arrangement between the Exchanges and their respective shareholders pursuant to which the then existing shares of the Exchanges were cancelled and, in consideration, the shareholders received shares in HKEx. The required legislative provisions for effecting the merger, including turning HKSCC into a company limited by shares and a wholly owned subsidiary of HKEx, were provided through the passing of the Merger Ordinance. Following the approval of the schemes by the shareholders of the Exchanges in meetings held on 27th September, 1999, their subsequent sanction by the High Court of Hong Kong and the passing of the Merger Ordinance, the merger was completed on 6th March, 2000 when the Group took on its current structure.

Prior to the merger of the Exchanges and Clearing Houses under HKEx it was necessary to hold a share in the Stock Exchange or Futures Exchange in order to trade on or through its facilities. In addition, shareholders in the Exchanges had certain rights attached to their shareholdings, including voting rights at the Exchanges' general meetings. However, they had no right to participate in the profits of the Exchanges. As a result of the merger the shareholders of the Exchanges effectively exchanged their ownership rights in the Exchanges for economic interests in HKEx and the conventional right to receive dividends. Additionally, the existing trading rights of the shareholders remained unaffected with each shareholder being granted one Trading Right on the relevant Exchange for each share of that Exchange held immediately prior to completion of the merger.

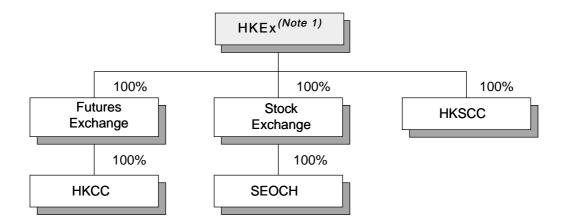
Prior to the merger of the Exchanges and Clearing Houses under HKEx, the function of prudential regulation of Stock Exchange Participants was the responsibility of the Stock Exchange. This function has been transferred to the SFC since the merger of the Exchanges and Clearing Houses. Similarly, primary responsibility for the routine inspection of the businesses of Exchange Participants, monitoring their compliance with conduct rules and liquid capital requirements, and ensuring that they have proper systems of management and control in place has been transferred to the SFC.

Through the merger and the Introduction Hong Kong will have taken a decisive step in reforming a central part of its financial infrastructure. In particular, the Board believes that these will bring the following benefits:

- consolidation of the Exchanges and Clearing Houses within a single group should bring synergies and economies of scale in terms of operational efficiency, savings in infrastructure investment and financial strength to meet external competition. It will also facilitate the integration of the trading and clearing systems of the Group, bringing both competitive advantages and risk management benefits which would have been unobtainable before the merger;
- an integrated structure should be able to develop the critical mass to create new services and opportunities to compete in the new global environment;
- the separation of the ownership of the Exchanges from the right to trade on them
  enables the interests of market participants such as issuers, investors and other
  financial services providers, as well as those of brokers, to be more properly
  reflected in the ownership and management of the Exchanges and the manner in
  which the Exchanges respond to market forces;
- HKEx will have greater flexibility to raise capital since it can use the capital markets.
   This is essential in light of the increasing financial burden facing exchanges arising from the need to provide users with state-of-the-art trading and settlement systems;
- public listing will promote public ownership and subject HKEx to transparency, accountability and market discipline; and
- the listing of HKEx on the Stock Exchange will add to the market a new world-class, professionally-run financial institution that will broaden the investment base of quality companies in Hong Kong. Through the listing and the creation of a public market in the Shares, the investing public will be able to participate directly in a flagship institution of Hong Kong.

## **GROUP STRUCTURE**

An overview of the Group's corporate structure is summarised below:



#### Notes:

- 1. As at the Latest Practicable Date there were a total of 756 shareholders of HKEx.
- 2. Details of all Group companies are shown in Appendix I to this document. Only the five market operator companies are shown above.

## STRENGTHS OF THE GROUP

As referred to in the section of this document headed "Industry overview — global stock and futures markets", the world's stock and futures exchanges operate in an increasingly competitive environment. To meet such challenges, exchanges across the world are adopting performance driven, corporate style, ownership and management structures in order to become more commercial, performance-driven and competitive organisations. Additionally, the landscape of the global exchanges industry is changing fundamentally with the adoption of strategic initiatives including horizontal and vertical integration, mergers and the formation of strategic alliances.

The Directors believe that the Group has a number of strengths upon which it can draw, including:

- the standing of the Stock Exchange the Stock Exchange is the largest stock
  exchange in non-Japan Asia in terms of market capitalisation. The size of the market
  facilitates its depth and liquidity, and efficient price discovery;
- ability to adapt to the changing environment as a result of the merger under HKEx
  of the Stock Exchange Group, the Futures Exchange Group and the HKSCC Group,
  the separation of the ownership of the Exchanges from the right to trade on them and
  the operation and governance structures being adopted for the Group, the Group is
  well positioned as a client-focused and profit-driven business organisation to meet
  the challenges of the rapidly evolving securities and futures industry; and

• integrity of the markets — the Group operates numerous procedures to ensure the integrity of the exchange-based securities and futures markets in Hong Kong and promote the high degree of confidence in regard to such matters that persons trading on, and settling trades through, the facilities of the Group demand.

#### **BUSINESS OF THE GROUP**

#### Overview

HKEx owns and operates the only stock exchange and futures exchange in Hong Kong, and their related clearing houses. Together these provide the trading platforms for a range of cash and derivatives products, and the facilities for efficiently processing trades in an environment that continuously seeks ways to reduce risk and cost.

### **Business of the Stock Exchange**

#### (a) Overview of operations

The Stock Exchange has the exclusive right to establish, operate and maintain a stock market in Hong Kong (defined in the Securities Ordinance as a place where persons regularly meet together to negotiate sales and purchases of securities (including prices), or a place at which facilities are provided for bringing together sellers and purchasers of securities, but does not include the office of (i) a Stock Exchange Participant, (ii) a registered dealing partnership of which a Stock Exchange Participant is a partner, or (iii) a recognised clearing house). Its purpose is to promote capital formation in Hong Kong and mainland China by providing issuers and investors with a fair, transparent and efficient central securities marketplace. It meets the needs of issuers for access to funds in a flexible and responsive regulatory environment. It also gives local and international investors access to securities in a venue where they can have confidence in the regulation of users and the reliability of the trading and settlement systems. By continuous improvement and innovation in its services it is also the intention of the Stock Exchange to enhance Hong Kong's position as an international financial centre.

The Stock Exchange operates two cash market platforms, namely its main board and GEM, and its derivatives platform, the stock options market.

# (i) Main board of the Stock Exchange

Until the coming into operation of GEM, the main board was the only market operated by the Stock Exchange for the trading of securities. Companies that wish to list their shares on the main board must meet certain prescribed criteria prior to listing (including certain profitability/track record requirements) and continue to comply with prescribed disclosure and other obligations after listing. In addition to shares, securities listed and traded on the main board of the Stock Exchange comprise warrants (equity and derivative), debt securities, unit trusts and mutual funds. As at the Latest Practicable Date, the shares of some 714 companies were listed on the main board of the Stock Exchange. In addition, as at the Latest Practicable Date, some 205 warrants, 263 debt securities, and 21 unit trusts and mutual funds were listed and traded on the main board

of the Stock Exchange. In aggregate, the market capitalisation of the main board as at the Latest Practicable Date stood at approximately HK\$4,586 billion. The total equity funds raised by companies listed on the main board over the 10 years ended 31st December, 1999 amounted to approximately HK\$880 billion.

## (ii) GEM

GEM is an alternative market to the main board of the Stock Exchange. GEM was established in recognition of the fact that growth enterprises (particularly emerging ones) may have good ideas and growth potential but not always be able to take advantage of these opportunities as they do not fulfil the profitability/track record requirements of the main board and are therefore unable to obtain a listing on that board. GEM is designed to bridge this gap. The emphasis is on "buyers beware" and "let the market decide". Its rules and requirements are designed to foster a culture of compliance by listed issuers and sponsors in the discharge of their respective responsibilities.

As at the Latest Practicable Date the shares of some 26 companies were listed on GEM and it had a market capitalisation of approximately HK\$57 billion.

### (iii) Stock options market

The Stock Exchange operates a stock options market where options on listed securities are traded. As at the Latest Practicable Date there were 18 securities that had been selected by the Stock Exchange, including units in the Tracker Fund of Hong Kong, on which options are traded. The number of securities over which options are issued is increased and decreased from time to time by the Stock Exchange (subject to the approval of the SFC) in accordance with market demand.

## (iv) Execution of trades on the Stock Exchange

Trades on the main board of the Stock Exchange and GEM are effected through the Automatic Order Matching and Execution System (AMS) which displays real time price information and automatically matches buy/sell orders on a price/time basis. Trading on the original AMS utilised by the Stock Exchange was conducted solely on the floor of the Stock Exchange. By contrast, the present system, AMS/2, which was introduced in January, 1996, enables trading to be conducted via input terminals located on the Stock Exchange's trading floor or at the premises of Stock Exchange Participants. AMS/2 has the capacity, following upgrades in July, 1997 and April, 2000 to support a daily volume of approximately 600,000 trades.

It is intended that AMS/2 will be replaced by a new system, AMS/3, before the end of the year 2000. The main objectives of AMS/3 are to improve the Stock Exchange's operational capabilities and efficiency and enhance accessibility for investors. The processing capacity and performance of the new AMS/3 system will exceed that of AMS/2. The core central market trading system will be enhanced to allow it to host, if necessary, the concurrent trading of multiple markets for over 20 hours each day. In addition to continuous matching, other trading methods, such as market making, will be technically practicable which could, if required, be used to support future market development needs and to facilitate the launching of new investment products.

A major new feature of AMS/3 will be the provision of connectivity between the Stock Exchange's host system and the systems of Stock Exchange Participants through an open gateway. Trades on the Stock Exchange can currently only be effected by placing orders with brokers directly. However, through AMS/3's new investor access channels, investors will be able to input their orders via the Internet, mobile phones and other electronic devices directly through to the Stock Exchange's Internet channel. The orders will then be routed to the relevant Stock Exchange Participants via the Stock Exchange's Order Routing System for credit confirmation, before being forwarded to the trading platform for matching and execution. As an alternative to the Stock Exchange's Order Routing System, Stock Exchange Participants can choose to develop their own routing system for collection of orders.

Further information regarding AMS/3 is set out in the section of this document headed "Future Plans and Prospects".

Trades in stock options are effected through a screen-based electronic trading system known as the Traded Options System (TOPS). TOPS is a hybrid system combining order and quote matching on a price/time basis. The order matching is similar to AMS/2 but, in order to promote liquidity, it also utilises quotes provided by market makers. Quote matching operates when there is no matching order after a market order has been entered. In these circumstances TOPS prompts market makers to offer two-way quotes for the option series. The market makers are obliged to offer two-way quotes for the option series for a minimum quantity within a limited period of time and not to exceed the maximum permitted spreads. Alternatively, investors may also request their brokers to input quote requests for the option series that they intend to trade. Market makers are then obliged to provide quotes for such option series and the investors can decide whether or not to input a trade order.

## (v) Sale of information

The Stock Exchange provides market information to a variety of users, including information vendors, market data feed subscribers and teletext subscribers. Information vendors gather the required information from multiple sources, and package and redistribute it to market end users such as Stock Exchange Participants, investment banks, fund managers, academics and market participants generally. The Stock Exchange also provides historical trading information to private investors and others on an ad hoc basis.

### (vi) The Stock Exchange and NASDAQ pilot program

In May, 2000 the Stock Exchange and NASDAQ introduced a pilot program under which seven securities listed on NASDAQ have been admitted for trading, instead of listing, on the Stock Exchange. With the launch of the pilot program, the Stock Exchange has increased its ability to act as a platform for investors and institutions wishing to invest in the stocks of companies with global presence and high market capitalisations.

### (b) Stock Exchange Participants and Options Exchange Participants

In order to trade on or through the facilities of the Stock Exchange it is necessary to hold a Stock Exchange Trading Right and to be a Stock Exchange Participant. Authorisation under

the Stock Exchange's rules as a Stock Exchange Participant requires, among other things, the person to be a limited company incorporated in Hong Kong or an individual ordinarily resident in Hong Kong, to meet certain liquid capital requirements, to have (or, in the case of corporate participants, to have a director who has) passed certain examinations, to have (or, in the case of corporate participants, to have a director who has) the requisite experience and to be of good financial standing. Anyone who wishes to trade on or through the facilities of the Stock Exchange but who is not a Stock Exchange Participant, e.g. a member of the public, must do so through the services of a Stock Exchange Participant.

A Stock Exchange Participant who conducts options trading on the Stock Exchange must additionally be admitted and registered by the Stock Exchange as an Options Exchange Participant.

As at the Latest Practicable Date, there were a total of 514 Stock Exchange Participants and 50 Options Exchange Participants. During the twelve month period ended 31st March, 2000, approximately 32 per cent. of the total value of Stock Exchange trades were accounted for by the top 14 Stock Exchange Participants in terms of dollar trading volume.

## (c) Rules relating to trading on the Stock Exchange

Trading on the Stock Exchange is regulated by the rules of the Stock Exchange or, in the case of stock options, its Options Trading Rules. Under the Stock Exchanges Unification Ordinance, no rules of the Stock Exchange or any amendment to them may have effect unless approved in writing by the SFC.

## (d) Rules relating to the listing of securities on the Stock Exchange

Regulation of the listing and continued listing of securities on the main board of the Stock Exchange and GEM is principally provided by the Listing Rules and the Rules Governing the Listing of Securities on GEM, respectively. Any amendment to the Listing Rules and the Rules Governing the Listing of Securities on GEM may have effect only with the approval of the SFC. Further rules regulating the listing and continued listing of securities are contained in the Securities Ordinance and the Securities (Stock Exchange Listing) Rules. Other regulations which have an impact on the listing of securities on the Stock Exchange include the Companies Ordinance, the Protection of Investors Ordinance, the Takeovers Code, the Code on Unit Trusts and Mutual Funds and the Code on Share Repurchases.

## **Business of the Futures Exchange**

### (a) Overview of operations

The Futures Exchange is one of the derivatives market leaders in the Asian region. The Futures Exchange provides efficient and diversified markets for the trading of futures and option contracts by its more than 140 exchange participant organisations, including many that are affiliated with international financial institutions.

There are four types of derivative products offered by the Futures Exchange, namely, equity index, equity, interest rate and foreign currency derivative products:

- equity index derivative products these currently comprise futures and option contracts based on the Hang Seng Index, the Hang Seng 100, the Hang Seng Properties Sub-Index and the Hang Seng China-Affiliated Corporations Index (also known as the red-chip index). Equity index derivative products provide the ability to manage portfolio risk and to capture index arbitrage opportunities;
- equity derivative products these are currently offered in respect of 17 stocks and provide the ability to participate in the price movement of those stocks. All stock futures contracts are cash settled with no physical delivery of securities when the contract expires;
- interest rate derivative products these currently comprise one-month HIBOR futures contracts and three-month HIBOR futures contracts based on one-month and three-month HIBOR, the benchmarks for short-term interest rates in the Hong Kong dollar money market. As such they provide effective hedging instruments; and
- foreign currency derivative products these currently comprise one-day rolling currency futures contracts in Yen, Euro, the Pound Sterling and the Deutschemark. Each contract provides a highly visible pricing mechanism and allows the efficient establishment and closing out of U.S. dollar positions against a specific currency at transparent market prices.

Trading volume on the Futures Exchange has grown from approximately 236,000 contracts in 1989 to approximately 6.3 million contracts in 1999. The Futures Exchange's product mix is dominated by Hang Seng Index futures contracts, which currently contribute over 80 per cent. of total trading volume.

## Execution of trades on the Futures Exchange

All trades on the Futures Exchange are effected using its electronic trading platform, the Hongkong Futures Automated Trading System (HKATS). The Futures Exchange first utilised an electronic platform, the Automated Trading System (ATS), in November, 1995 and, in preparation for the migration of Hang Seng Index futures and option contracts from open outcry to electronic trading, the system was upgraded to the current version and re-named HKATS with effect from 19th April, 1999. The migration of trading Hang Seng Index option contracts and futures contracts to HKATS subsequently occurred on 5th June, 2000 resulting in all trading now being screen based. Trading on HKATS is conducted via HKATS workstations or self-developed systems located at the premises of Futures Exchange Participants. HKATS displays real time price information and automatically matches buy/sell orders on a price/time basis.

The recent migration of trading in Hang Seng Index products to screen based trading has brought a range of market efficiency and competitive advantages to the Futures Exchange, namely increased efficiency for all market participants through trading on the same centralised market platform, transparency of pricing with real time price and volume information available,

greater accessibility unconstrained by the size of the trading floor and the need for physical presence, the potential for lower transaction costs resulting from economies in staffing among Futures Exchange Participants, greater flexibility to introduce new products, greater accuracy in the recording of trades and enhanced surveillance.

# (b) Futures Exchange Participants

In order to trade on or through the facilities of the Futures Exchange it is necessary to hold a Futures Exchange Trading Right and to be a Futures Exchange Participant. Authorisation under the Futures Exchange's rules as a Futures Exchange Participant requires, among other things, the person to be a limited company incorporated in Hong Kong or be an individual ordinarily resident in Hong Kong, to meet certain liquid capital requirements, to be duly registered with the SFC as a dealer under the Commodities Trading Ordinance and to be of good financial standing. Anyone who wishes to trade in derivatives through the Futures Exchange but who is not a Futures Exchange Participant, e.g. a member of the public, must do so through the services of a Futures Exchange Participant.

As at the Latest Practicable Date, there were a total of 143 Futures Exchange Participants. During the twelve month period ended 31st March, 2000, approximately 43 per cent. of the total number of Hang Seng Index futures contracts traded on the Futures Exchange were accounted for by the top 10 Futures Exchange Participants by number of contracts traded.

## (c) Rules relating to trading on the Futures Exchange

Trading on the Futures Exchange is regulated by the Rules, Regulations and Procedures of the Futures Exchange. Under the Commodities Trading Ordinance, no rules of the Futures Exchange or any amendment to them may have effect unless approved in writing by the SFC.

#### Clearing, settlement and market integrity

Clearing and settlement procedures are key to market integrity. The Group's clearing and settlement procedures for the various products traded on the Exchanges are carried out by the three Clearing Houses, namely, HKSCC, SEOCH and HKCC. HKSCC is responsible for the clearing and settlement of transactions in eligible securities on the main board of the Stock Exchange and GEM, and SEOCH and HKCC are responsible for the clearing and settlement of derivative products traded through the Stock Exchange's stock options market, and the Futures Exchange, respectively.

# (a) Overview of operations

(i) HKSCC — clearing and settlement of transactions in eligible securities traded on the main board of the Stock Exchange and GEM

HKSCC, the owner and operator of CCASS and the central securities depository, is responsible for the clearing and settlement of all broker-to-broker trades of eligible securities on the Stock Exchange. CCASS is a computerised book-entry clearing and settlement system for eligible securities listed on the Stock Exchange and was introduced by HKSCC in June, 1992. Within CCASS, delivery and receipt of securities is effected via

electronic debits and credits through CCASS Participants' stock accounts. Before the establishment of CCASS, Stock Exchange trades were settled by physically exchanging share certificates for cheques or cash. As a result, settlement backlogs and late deliveries were common, especially when market turnover was high.

Stock Exchange trades are settled through CCASS by one of two modes, namely, through the Continuous Net Settlement system (CNS System) on a continuous netting basis or through the Isolated Trades system (Isolated Trades System) on a trade-for-trade basis. Under the CNS System each CCASS Participant's purchases or sales of a particular security from or to other CCASS Participants are netted off against each other on a rolling basis to arrive at a single net purchase or net sale position for settlement purposes. By contrast, under the Isolated Trades System each trade is individually settled. Transactions in eligible securities in respect of broker-custodian transactions, broker-investor transactions, stock borrowing and lending, stock pledging and portfolio movements are also cleared and settled on a trade-for-trade basis. HKSCC only acts as the counterparty to trades settled through the CNS System.

CCASS Participants, other than Investor Participants, must comply with prescribed financial requirements set by CCASS and all CCASS Participants must comply with the provisions of the CCASS rules.

## (ii) HKSCC — other services

Acting as a common nominee, HKSCC Nominees Limited, a wholly owned subsidiary of HKSCC, provides nominee services for CCASS Participants such as exercising shareholder rights on their behalf in accordance with their instructions, and collecting benefit entitlements. HKSCC Registrars Limited, a wholly owned subsidiary of HKSCC, provides share registration services for companies listed on the Stock Exchange and is the share registrar for nearly all mainland China-incorporated entities that have listed H-shares on the Stock Exchange. As at 31st December, 1999, HKSCC Registrars Limited was acting as the share registrar for 52 listed companies in Hong Kong. In May, 1999 HKSCC launched its EIPO subscription service to enable IPO share application instructions to be given electronically by CCASS Participants through CCASS terminals or the CCASS phone system for new shares in those IPOs which adopt the EIPO service.

# (iii) SEOCH and HKCC — clearing and settlement of derivative products

SEOCH is a wholly owned subsidiary of the Stock Exchange and serves as the clearing house for the Stock Exchange's stock options market. It acts as the counterparty to options trades through the novation of the obligations of the buying and selling SEOCH Participants, calculates and collects margin, pays and collects options premiums, and processes options exercised. In order for an Options Exchange Participant to clear trades directly through SEOCH it is necessary for it to be registered as a SEOCH Participant. If not so registered, an Options Exchange Participant must clear trades through SEOCH via a SEOCH Participant who is authorised to clear trades for other Options Exchange Participants. The SEOCH system is linked to CCASS to facilitate physical settlement of option contracts when they are exercised.

HKCC is a wholly owned subsidiary of the Futures Exchange and is responsible for the clearing and registration of transactions effected on the Futures Exchange. It

operates as the settlement counterparty for trades through the novation of the obligations of the buying and the selling HKCC Participants. In order for a Futures Exchange Participant to clear trades directly through HKCC it is necessary for it to be registered as an HKCC Participant. If not so registered, a Futures Exchange Participant must clear trades through HKCC via an HKCC Participant who is authorised to clear trades for other Futures Exchange Participants.

Both SEOCH Participants and HKCC Participants must comply with prescribed financial requirements set by SEOCH and HKCC, respectively, and observe any position limits imposed pursuant to the rules of SEOCH, HKCC, the Exchanges, the Securities Ordinance or the Commodities Trading Ordinance, as applicable. They must also comply with the provisions of the relevant Ordinances and the rules and regulations of SEOCH and HKCC, as applicable.

### (b) Risk management

Risk management is an important function of HKEx that has profound implications for the rest of the financial system. To this end HKEx has established a Risk Management Committee which is chaired by the Chairman of HKEx and has seven other members of whom five have been appointed by the Financial Secretary. The terms of reference of the Risk Management Committee are set down in the Merger Ordinance which requires a recognised controller of an exchange or clearing house to establish, and keep established, a committee to (i) formulate policies on risk management matters relating to the recognised exchange controller's activities and those of the exchanges and clearing houses of which it is the recognised exchange controller, and (ii) submit such policies to the recognised exchange controller for its consideration.

Each of the Clearing Houses maintains a reserve/guarantee fund as described below, the size of which is reviewed from time to time in accordance with the methodologies and policies adopted by the Clearing House under the supervision of the SFC. Following the merger of the Clearing Houses under HKEx and the inception of the Risk Management Committee, the Risk Management Committee will in due course be reviewing the methodologies and policies currently adopted and will submit its recommendations to HKEx. In addition, following the separation of ownership of the Exchanges and the right to trade on or through their facilities which resulted from the merger of the Exchanges and Clearing Houses under HKEx, the Group will be reviewing and, if necessary, amending its rules relating to, amongst other things, the reserve, guarantee and margin funds of the Clearing Houses in order to reinforce their legal status.

#### (i) HKSCC

Under the CNS System, HKSCC becomes the settlement counterparty, through novation, to both the buying and the selling Broker Participants and consequently provides a form of settlement guarantee. By contrast, HKSCC facilitates but does not become a counterparty in the settlement of trades settled through the Isolated Trades System.

HKSCC guarantees the good title of all securities once they have been accepted in the CCASS depository. If the certificates of such securities are found to be defective, HKSCC retains recourse against the depositing participant.

HKSCC employs a range of risk management and safeguard measures, including the maintenance of a guarantee fund which indemnifies HKSCC against any losses it may suffer as a result of guaranteeing trades cleared through the CNS System and the good title of share certificates deposited by Broker Participants in the CCASS depository. The guarantee fund comprises contributions that have been made by Broker Participants in proportion to their share of CNS positions (subject to a minimum of HK\$50,000 in respect of each Stock Exchange Trading Right held), insurance coverage and contributions from HKSCC's reserves. As at 31st March, 2000, the fund stood at approximately HK\$354 million (exclusive of insurance coverage). In addition, HKSCC has (i) standby facilities from banks for an aggregate amount of HK\$1.0 billion and (ii) a standby facility from the Stock Exchange for an amount of HK\$100 million, to provide additional liquidity to meet its obligations in CCASS in the event any CCASS Participant defaults in its payment obligations. Potential losses arising from defective securities are also covered by insurance of up to HK\$500 million in aggregate, subject to a maximum of HK\$200 million per claim.

The other key risk management techniques adopted by HKSCC are as follows:

- securities-on-hold all Stock Exchange broker-to-broker trades are due for settlement on T+2, the second business day following the trade day. On the due day, HKSCC collects securities from the stock clearing accounts of Broker Participants with net short stock positions and allocates securities to the stock clearing accounts of Broker Participants with net long stock positions under trades cleared through the CNS System. Securities for which payment has not been confirmed are put on hold and Broker Participants are not allowed to use or withdraw them. However, a Broker Participant can make a cash prepayment to HKSCC, or provide it with a bank guarantee, in order to make immediate use of the on-hold securities;
- marking-to-market as the settlement counterparty to Broker Participants under the CNS System, HKSCC is exposed to market risk as a result of unfavorable fluctuations in the prices of the open positions under trades settled through the CNS System. To monitor and control risk exposure, HKSCC will evaluate the market risk of the open position by reference to the difference between the market value of the CNS System stock position and the original contract value. The difference between these two values is called marks, which is the level of market risk expressed in monetary terms. All Broker Participants' open positions under trades settled through the CNS System are marked to market daily at 11:00 am and at day end. Broker Participants have to pay net unfavourable marks in cash (or use securities as collateral) to HKSCC. Marking to market and collection of net unfavorable marks help to confine HKSCC's market risk to about a single day's market fluctuations; and
- monitoring of defective securities certificates deposited in CCASS are screened and checked by HKSCC upon receipt against lists of reported defective or lost securities. HKSCC will immediately send all deposited certificates to the share registrars of the relevant issuing companies for re-registration into the name of the HKSCC common nominee, which will subject the certificates to further checking by the share registrars. When

deposited securities are found to be defective or have been reported lost, the depositing CCASS Participant is required to replace them immediately or provide collateral to HKSCC equivalent to 130 per cent. of the market value of the relevant securities.

# (ii) SEOCH and HKCC

SEOCH and HKCC monitor their exposures through their risk management systems which are intended to achieve a prudent balance between market integrity and liquidity.

SEOCH and HKCC become the settlement counterparties of all trades effected on the Stock Exchange's options market and the Futures Exchange, respectively, through novation.

Both SEOCH and HKCC have established reserve funds to support them in fulfilling their respective counterparty obligations in the event that one or more SEOCH Participants and/or HKCC Participants fail to meet their obligations to SEOCH and/or HKCC, as applicable. The reserve funds comprise the following components (save where indicated):

- participants' cash deposits;
- insurance;
- resources appropriated by SEOCH/HKCC from time to time out of its general reserves;
- interest income; and
- bank guarantees and facilities (for HKCC only).

The reserve funds of SEOCH and HKCC respectively stood at approximately HK\$115.4 million and HK\$417.8 million as at 31st March, 2000 and there has been no material adverse change in such amounts since then.

SEOCH's and HKCC's respective risk management systems are regularly being reviewed and modified to reflect the most advanced risk management techniques. The key safeguards adopted by SEOCH and HKCC are as follows:

- margin requirements minimum levels of margin are established for all products. The minimum margin levels required are largely based on scenario analysis conducted in accordance with internationally accepted methodologies to calculate the maximum potential loss of an open position based on historical volatilities:
- marking-to-market a settlement price is determined at the close of the market each day and all open positions are marked to that price. All adjustments to futures and option contracts on the Exchanges resulting from the mark-tomarket system are settled daily;
- intra-day margin calls SEOCH and HKCC conduct intra-day margin calls when the market exceeds pre-determined volatility levels during a trading day. The margin of a contract or a portfolio of contracts which has been eroded by significant price movements can be restored and therefore SEOCH and HKCC

are protected against any further price movements. By having the capacity to conduct intra-day margin calls, SEOCH and HKCC do not have to wait until the next daily settlement but are able to reduce their risk exposures during periods of high volatility; and

 capital-based position limits — SEOCH and HKCC assign gross and net position limits to each Options Exchange Participant and HKCC Participant, respectively, in respect of either the number of contracts traded or the amount of margin required, to ensure that their exposures to such participants do not exceed the financial capacity of the participant.

## (c) Regulation of the markets

The overall regulatory structure of the markets within Hong Kong is set out in the section of this document headed "Industry overview — Hong Kong's stock and futures markets".

Within this structure it is the duty of HKEx, pursuant to the Merger Ordinance as a recognised exchange controller, to ensure so far as is reasonably practicable:

- an orderly and fair market in securities or futures contracts traded on or through the Exchanges;
- that risks are managed prudently; and
- that each of the Exchanges and Clearing Houses complies with any lawful requirement placed on it under any enactment or rule of law and with any other legal requirement placed on it.

In discharging its duty, the Group is required under the Merger Ordinance to act in the interests of the public, having particular regard to the interests of the investing public, and to ensure that where those interests conflict with any other interests that the Group is required to serve under any other law, the interests of the public will prevail.

The regulatory functions of the Stock Exchange primarily comprise:

- supervision of the listing process and the ongoing compliance by issuers with their obligations under the Listing Rules and the Rules Governing the Listing of Securities on GEM;
- market surveillance, including detecting trading malpractices, maintaining market transparency through monitoring price and turnover movements on a real time basis and requiring prompt disclosure of price sensitive information, and monitoring exceptional concentrations in positions and unusual price fluctuations;
- ensuring that its trading rules are properly complied with; and
- monitoring the financial and open positions of Stock Exchange Participants.

The regulatory functions of the Futures Exchange primarily comprise:

- market surveillance, including detecting and preventing market disruption and trading malpractices;
- ensuring that its trading rules are properly complied with;
- monitoring the financial and open positions of Futures Exchange Participants; and
- reviewing the operational plans of prospective Futures Exchange Participants to obtain assurance that adequate trading, compliance and risk management policies and procedures are in place.

If any trading irregularity or malpractice is detected by an Exchange it will investigate the situation and, if a breach of its trading rules is discovered, it may result in disciplinary proceedings being instituted against the relevant participant and its registered representatives. The Stock Exchange also takes disciplinary proceedings in relation to breaches of its Listing Rules and the Rules Governing the Listing of Securities on GEM.

## (d) Listing of HKEx

## (i) Merger Ordinance

Under section 13 of the Merger Ordinance, the Shares may only be listed if the SFC states in writing that it is satisfied that:

- rules made under the Stock Exchanges Unification Ordinance adequately deal with possible conflicts of interest that might arise if HKEx were to be a listed company; and
- HKEx has entered into arrangements with the SFC that adequately ensure, inter
  alia, the integrity of the securities and futures markets and the compliance with
  obligations as a listed company which would fall on HKEx if it were to become
  a listed company.

Also pursuant to section 13 of the Merger Ordinance, the Listing Rules must make provision to the effect that the SFC shall, instead of the Stock Exchange, take all actions and make all decisions in relation to HKEx that would be taken by the Stock Exchange in the case of a company that was not HKEx except in the case of any action or decision in respect of which the SFC states in writing that it is satisfied that a conflict of interest would not arise if that action or decision were to be taken or made, as the case may be, by the Stock Exchange.

The requisite written confirmation referred to above has been given by the SFC.

## (ii) Listing Rules

The Listing Rules have been amended to incorporate a new chapter (Chapter 38) relating specifically to the listing of HKEx. The new chapter sets out the requirements that must be satisfied for the securities of HKEx to be listed on the Stock Exchange. The provisions include:

- that, as regards HKEx's application for listing and status as a listed issuer, the SFC has the powers and functions that the Stock Exchange has in relation to such securities (except the power to make listing rules), and to the exclusion of the Stock Exchange's own powers, except in the case of any action or decision in respect of which the SFC states in writing that it is satisfied that a conflict of interest will not arise if the action were taken or decision made by the Stock Exchange;
- the framework established by the SFC for exercising its listing related powers and functions with respect to HKEx. The framework comprises committees established by the SFC pursuant to the Securities and Futures Commission Ordinance and persons who will exercise with respect to HKEx applicable powers and functions, in so far as is practicable and applicable, in a like manner to the Listing Committee, Listing Appeals Committee and Listing Division established under the Listing Rules and the Chief Executive of the Stock Exchange, respectively. The relevant committees and persons are:
  - the SFC (HKEC Listing) Committee, which shall exercise applicable powers and functions equivalent to those of the Listing Committee including applicable powers and functions equivalent to those of the Listing (Review) Committee;
  - the SFC (HKEC Listing) Appeals Committee, which shall exercise applicable powers and functions equivalent to those of the Listing Appeals Committee;
  - the SFC (HKEC Listing) Executive, comprising the Executive Director in charge of the Corporate Finance Division of the SFC and members of staff of the Corporate Finance Division of the SFC, which shall exercise applicable powers and functions equivalent to those of the Listing Division;
  - the Executive Director in charge of the Corporate Finance Division of the SFC, who shall exercise applicable powers and functions equivalent to those of the Executive Director — Listing and the Chief Executive of the Exchange; and
  - the Secretary to the SFC (HKEC Listing) Committee and/or to the SFC (HKEC Listing) Appeals Committee, who shall exercise applicable powers and functions equivalent to those of the Secretary to the Listing Committee and/or Listing Appeals Committee;

- that HKEx, as an applicant for listing and as a listed issuer, has all the rights and obligations that any other applicant for listing and listed issuer (as applicable) has, except that the SFC acts in the place of the Stock Exchange;
- that the SFC, acting in the place of the Stock Exchange, has all the rights and obligations in relation to HKEx that the Stock Exchange has in relation to any other applicant for listing or listed issuer;
- procedures regarding the completion and filing or delivery by HKEx of forms, information and documents pursuant to the Listing Rules; and
- that any person that considers a conflict of interest may exist or may come into existence, or may have existed and may continue or be repeated, between the interests of HKEx, the Stock Exchange or any other company of which HKEx is the controller and the interests of the proper performance of any regulatory function performed by the Stock Exchange should bring the facts of the matter to the attention of the Executive Director in charge of the Corporate Finance Division of the SFC.

## (iii) Memorandum of Understanding

A Memorandum of Understanding has been entered into, dated 19th June, 2000, between the SFC, HKEx and the Stock Exchange in regard to the listing of the Shares on the Stock Exchange. The Memorandum of Understanding will continue in force until (i) HKEx ceases to be a listed issuer under the Listing Rules, (ii) subject to the Merger Ordinance, all parties agree to terminate it, and (iii) its termination by the SFC in the case of a failure or refusal on the part of HKEx or the Stock Exchange to fully comply with the provisions of, or to perform its respective obligations under, the Memorandum of Understanding. The Memorandum of Understanding is a public document, but does not give rise to any rights, direct or indirect, on the part of third parties, nor are third parties entitled to require compliance by any party to the Memorandum of Understanding with any of its respective obligations thereunder.

The Memorandum of Understanding records arrangements between the parties acting in different capacities and reflecting various relationships:

- the SFC acting as the statutory regulator of Hong Kong's securities and futures markets and (with respect to HKEx and other persons where a conflict of interest may arise) as the front line regulator of users of those markets;
- the Stock Exchange acting as the front line regulator of listed issuers and Exchange Participants (except with respect to HKEx and other persons where a conflict of interest may arise) and as a securities exchange;
- HKEx acting in the capacity of an applicant for listing and listed issuer and as the holding company of the Stock Exchange and other companies of which HKEx is the controller; and

 companies of which HKEx is the controller in the capacity of subsidiaries of a listed issuer and as companies performing regulatory functions and exercising regulatory powers.

The provisions of the Memorandum of Understanding include, among other things, agreement between the parties:

- that the SFC shall, instead of the Stock Exchange, take all actions and make all
  decisions in relation to HKEx that would be taken by the Stock Exchange in the
  case of other applicants and issuers except in the case of any action or decision
  in respect of which the SFC states in writing that it is satisfied that a conflict of
  interest will not arise if that action or decision were to be taken or made, as the
  case may be, by the Stock Exchange;
- that the SFC will receive and consider HKEx's application for listing and that the SFC will be responsible for the supervision of HKEx's compliance with the Listing Rules as a listed issuer;
- as regards ongoing listing procedures, among other things, that (i) the SFC will have all the powers and functions that the Stock Exchange has in relation to a listed issuer except the Stock Exchange's power to make listing rules, (ii) the Stock Exchange will not (unless requested by the SFC and agreed by HKEx) be bound to monitor or enforce the Listing Rules in relation to HKEx or make any referral under its statutory obligations to the SFC in relation to HKEx (except where it relates to unusual market activities involving HKEx's securities detected by the Stock Exchange, as referred to below), and (iii) the Stock Exchange will take action as required by the SFC in relation to the admission to, suspension or removal from, listing of the Shares on the Stock Exchange, the suspension or resumption of trading in Shares on the Stock Exchange, and any other administrative steps reasonably required by the SFC;
- in relation to company announcement procedures, provision for the SFC to advise the Stock Exchange of any administrative steps it reasonably requires the Stock Exchange to take on its behalf in relation to any division of the decision-making and administrative steps involved in issuing company announcements;
- in relation to any application by HKEx for a waiver from the Listing Rules, that the Listing Division of the Stock Exchange will provide to the SFC certain information and advice upon request;
- that HKEx will pay to the SFC the following fees:
  - in relation to HKEx's listing application, and ongoing listing, any fees required by the Listing Rules; and

- in comparable circumstances applying to HKEx, any fee that would have been payable to the Stock Exchange by other applicants and issuers in connection with their listing on the Stock Exchange;
- that, on request from the Stock Exchange, the SFC will pay to the Stock Exchange its reasonable costs and out of pocket expenses incurred in performing administrative steps for the SFC under the Memorandum of Understanding;
- as regards market integrity that, as soon as reasonably practicable, new arrangements will be formalised for the effective discharge of the respective responsibilities of HKEx and the SFC in relation to SFC oversight of members of the Group, supervision of Exchange Participants and market surveillance, to reduce any areas of duplication of function, to facilitate a smooth and cooperative working relationship and to enable the SFC more effectively to discharge its statutory obligation of supervision;
- as regards market surveillance, that the Stock Exchange will immediately inform the SFC if it detects unusual market activity involving HKEx's securities that reveals a possible breach of any relevant Ordinance, business rule or licence condition;
- that the Memorandum of Understanding will be reviewed once each year by senior executive officers of the parties, and that any party can request a meeting to discuss the operation of the Memorandum of Understanding;
- that if it becomes apparent that it is necessary or desirable to amend the Memorandum of Understanding, each of the parties will use its reasonable endeavours to agree on appropriate amendments as soon as practicable; and
- that the parties will generally cooperate to achieve the objectives of section 13 of the Merger Ordinance, the Memorandum of Understanding and Chapter 38 of the Listing Rules.

## (iv) Conflicts of interest

Under the Merger Ordinance, in discharging their obligations to ensure an orderly and fair market and/or to ensure that risks are managed prudently, HKEx, the Exchanges and the Clearing Houses are required to act in the interests of the public, having particular regard to the interests of the investing public, and to ensure that where such interests conflict with any other interests that each is required to serve under any other law, the former will prevail. Additionally pursuant to the Merger Ordinance, where the SFC is satisfied that:

- a conflict of interest exists or may come into existence between:
  - the interest of HKEx or a company of which HKEx is the controller ("relevant company"); and

- the interest of the proper performance of the functions conferred by the Merger Ordinance or any other enactment (including any rules made under any enactment, whether or not they are subsidiary legislation) on HKEx or the relevant company; or
- such a conflict of interest has existed in circumstances that make it likely that the conflict of interest will continue or be repeated,

then the SFC may by notice in writing served on HKEx or the relevant company, as the case may be, stating the reason or reasons in support of the ground or grounds for the notice, direct HKEx or the relevant company, as the case may be, to forthwith take such steps as are specified in the notice (including steps in relation to any of its affairs, business and property whatsoever) for the purposes of remedying the conflict of interest or the matters occasioning the conflict of interest, as the case may be.

Contravention of a notice served on HKEx or a relevant company will constitute a criminal offence.

Under the Memorandum of Understanding HKEx is required to use its best endeavours to ensure that staff of HKEx or of any company of which it is the controller are alert to, and identify, conflicts of interest or potential conflicts of interest which may arise in the course of the performance of regulatory functions. Where a conflict or potential conflict of interest exists it is to be referred to a Conflict Committee, comprising not less than three employees of HKEx (of whom at least two must be drawn from the Chief Executive of HKEx, the Chief Operating Officer of HKEx, the Chief Executive of the Stock Exchange and the Chief Executive of the Futures Exchange), for consideration. If the Conflict Committee determines that a conflict or potential conflict of interest does or may arise it is required to notify nominated representatives of the SFC who will then consider the circumstances of the case and determine whether in their opinion the regulatory function can be discharged without their intervention. Any disagreement between the Conflict Committee and the SFC representatives as to the approach taken by the SFC representatives will be referred to the SFC for resolution if agreement is not reached within five business days, and the SFC is required to make its determination within five business days of a matter being referred to it.

If, pursuant to the Memorandum of Understanding, it is determined or agreed that a conflict or potential conflict of interest does or may exist then the SFC has the following powers and functions with respect to the performance of regulatory powers and functions by HKEx or any company of which it is the controller:

- the power to require HKEx to provide information with respect to its present and proposed interest and all those of any company which HKEx is the controller;
- the power to give a direction to HKEx and/or any company of which it is the controller (HKEx is required to forthwith comply with such direction and procure compliance with such direction by any such company); and
- the power to exercise all or any of the powers and functions of any company of which HKEx is the controller, and in such event the SFC shall have and be entitled to exercise such powers and functions to the exclusion of any such company.

Under the Memorandum of Understanding HKEx is expressly prohibited from asking or requiring any company of which it is the controller to exercise regulatory powers or functions, take regulatory actions or make regulatory decisions which a reasonable person would regard as being intended either:

- to place HKEx (or any company of which it is the controller) in an advantageous position as compared with any person regulated by any such company; or
- to place any person regulated by any such company in a disadvantageous position as compared with HKEx (or any company of which it is the controller).

Such prohibited behaviour is also extended to persons with which HKEx (or any company of which it is the controller) has or proposes to have a business relationship, or has entered into or proposes to enter into a business arrangement.

## (e) Market compensation arrangements

## (i) Fidelity Fund

The Fidelity Fund, which is administered by the compensation committee of the Stock Exchange, has been established by the Stock Exchange, as an alternative to the required guarantee of HK\$2 million by each Stock Exchange Participant that would otherwise be required pursuant to Chapter 9 of the Rules of the Stock Exchange, for the purpose of compensating Stock Exchange Participants who suffer pecuniary loss as a result of or in connection with the default of a Stock Exchange Participant. Each Stock Exchange Participant who participates in the Fidelity Fund is required to deposit with the Stock Exchange the sum of HK\$50,000. As at 31st March, 2000, approximately 94 per cent. of Stock Exchange Participants had chosen to participate in the Fidelity Fund, which stood at approximately HK\$86.0 million with one pending claim for the sum of HK\$68,250.

#### (ii) Unified Exchange Compensation Fund

The Unified Exchange Compensation Fund ("Compensation Fund") is a fund set up under the Securities Ordinance for the purpose of compensating any person dealing with a Stock Exchange Participant (other than another Stock Exchange Participant or a recognised clearing house within the meaning of the Clearing Houses Ordinance) for any pecuniary loss suffered as a result of a failure of the Stock Exchange Participant to perform a legal obligation in connection with its stockbroking business.

Under the Securities Ordinance, the SFC is responsible for maintaining the Compensation Fund, and the Stock Exchange is required to make a deposit of HK\$50,000 to the fund for each Stock Exchange Trading Right. Additionally under that Ordinance, the Stock Exchange, upon request from the SFC, has an obligation to replenish the Compensation Fund in respect of payments out of the Compensation Fund in satisfaction of claims made. The Rules of the Stock Exchange require holders of Stock Exchange Trading Rights to make the deposit referred to above, and to contribute towards any replenishment by the Stock Exchange of the Compensation Fund.

Since the establishment of the Compensation Fund in 1986, a total of over 8,700 claims have been received against the Compensation Fund. In particular, a total of over 7,900 claims were made by investors in respect of four major default cases that occurred in 1998 in respect of which modified compensation arrangements have been agreed among the Government, the SFC and the Stock Exchange. Such modified compensation arrangements include, among other things, allowing payment of compensation of up to HK\$150,000 to each claimant ahead of, and notwithstanding that such payment will exceed, the compensation which would be payable to each claimant through apportioning between the claimants the up to HK\$8 million payable in respect of each of the defaulting Stock Exchange Participants under the Securities Ordinance. Also under the modified arrangements, the Stock Exchange's obligation to replenish the Compensation Fund is subject to a ceiling of HK\$8 million for each of the defaulting Stock Exchange Participants notwithstanding that the total amount paid out of the Compensation Fund might exceed this amount. It has been further agreed that, until the new investor compensation arrangements envisaged in the consultation paper entitled "A Consultation Paper on New Investor Compensation Arrangements for Hong Kong" issued by the SFC in September 1998 are put in place, the obligation of the Stock Exchange to replenish the Compensation Fund is to be capped at HK\$8 million in respect of any future defaulting Stock Exchange Participant, irrespective of whether the modified compensation arrangements referred to above are adopted in any subsequent default case.

To enable the Compensation Fund to have adequate resources to finance the modified compensation arrangements referred to above and to maintain it at a prudentially adequate level, the Group and the SFC have each committed to contribute HK\$300 million into the Compensation Fund. To date, the Group has injected HK\$100 million of its commitment. As regards the remaining HK\$200 million of the Group's commitment, it has been agreed with the Government and the SFC that HK\$150 million will be satisfied by a transfer from the surpluses of the Lifeboat Fund, and the Group has set aside sufficient resources to satisfy payment of the remaining HK\$50 million. Additionally, the Government has undertaken to apply to the Finance Committee of the Legislative Council for a loan to be made to the Compensation Fund to ensure proper protection of investors and the continuing operation of the Compensation Fund should there be a need after the contribution of monies by the Group and the SFC referred to above.

## (iii) Futures Exchange Compensation Fund

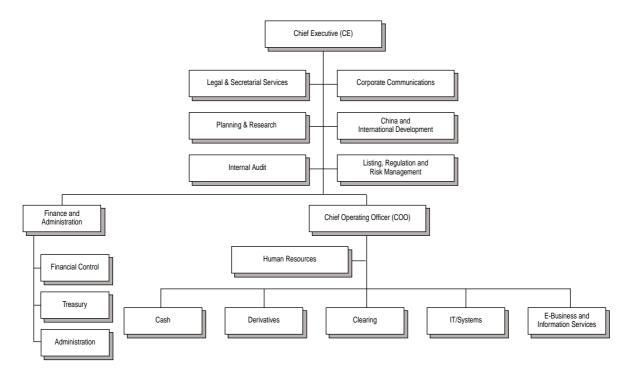
The Futures Exchange Compensation Fund is a fund established under the Commodities Trading Ordinance for the purpose of compensating any person who sustains pecuniary loss because of a default committed in the course of or in connection with the commodity futures trading business on the Futures Exchange of a Futures Exchange Participant or any of its directors, partners or employees. The Futures Exchange is required by the Commodities Trading Ordinance to deposit with the SFC and keep deposited HK\$50,000 for the Futures Exchange Compensation Fund in respect of each holder of a Futures Exchange Trading Right. The maximum liability of the Futures Exchange to the Futures Exchange Compensation Fund is limited to HK\$100,000 in respect of each holder of a Futures Exchange Trading Right. The SFC is responsible for maintaining the Futures Exchange Compensation Fund. The Futures Exchange Compensation Fund stood at approximately HK\$91 million as at 31st March, 2000.

Since HKCC assumed responsibility for clearing trades in March, 1989, payment out of the Futures Exchange Compensation Fund has only been made in respect of the failure of a small broker in early 1998. In that case there were 21 valid claimants against the Futures Exchange Compensation Fund for a total sum of less than HK\$4 million and all of the claims made were met in full.

#### **BUSINESS OPERATION STRUCTURE**

Upon completion of the merger of the Exchanges and Clearing Houses on 6th March, 2000, the business organisation of the Group followed its legal structure with the Stock Exchange Group, the Futures Exchange Group and the HKSCC Group retaining separate organisational responsibilities. The Board has recently formally adopted, in principle, a proposal to implement a business organisation structured around three dimensions: strong, integrated and balanced leadership; focused and commercially driven business units ("BUs") directly supervised and controlled by the Group's management and the Board; and effective centralised staff and administrative functions. The Group is currently in the process of implementing this proposal and it is expected that this will be completed before mid-2002.

The overall organisational structure of the Group is summarised below:



The Group's activities are being organised within the following five distinct and commercially driven BUs, namely Cash markets, Derivatives markets, Clearing, IT/Systems, and E-Business and Information Services:

#### (a) Cash markets BU

 covering all the products traded on the cash market platforms: equities, warrants, debt securities, unit trusts and mutual funds; and

- organised functionally into five departments:
  - Issuers Marketing: responsible for marketing to prospective issuers and others the benefits of listing on the main board of the Stock Exchange and GEM;
  - Marketing and Customer Service: responsible for attracting new market participants, marketing new and existing products and ensuring that adequate trading services are provided;
  - Product Development and Planning: responsible for expanding the range of cash products available for trading in order to grow the revenue base of the Group;
  - Trading Operations: responsible for monitoring the ongoing trading of securities to ensure that the trading environment is transparent, fair and efficient according to the rules and regulations established by the Group; and
  - IT/Operations Support: responsible for liaising on behalf of the Cash markets BU with the IT/Systems BU to ensure that the Cash markets BU enjoys the IT/Systems support that it requires at competitive prices.

## (b) Derivatives markets BU

- covering all derivative products, including the option contracts and futures contracts traded on the two Exchanges; and
- organised functionally into four departments:
  - Marketing and Customer Service: responsible for ensuring that adequate trading services are provided, marketing existing and new products and attracting new market participants;
  - Product Development: responsible for expanding the range of derivative products available for trading in order to expand the revenue base of the Group;
  - Trading Operations: responsible for monitoring the ongoing trading of futures and equity options to ensure that the trading environment is transparent, fair and efficient according to the rules and regulations established by the Group; and
  - IT/Operations Support: responsible for liaising on behalf of the Derivatives markets BU with the IT/Systems BU to ensure that the Derivatives markets BU gets the IT/Systems support that it requires at competitive prices.

## (c) Clearing BU

 responsible for clearing, settlement and custodian activities and related risk management. This maximises the ability of the Group to capture synergy potential, including strategic alliances and partnerships. In addition, consolidation of all the Group's clearing functions within one BU facilitates cross-margining and enhances users' capital efficiency; and

• through the cash and derivative clearing functions, developing and implementing risk management strategies, as well as credit and operational controls, and controlling the daily margin requirements.

# (d) IT/Systems BU

- offering first line support and serving as a business partner of the other BUs by planning the medium and long-term requirements for system developments and information technology; and
- other tasks including:
  - contributing to the corporate development of the other BUs by focusing on the strategic planning of their information technology requirements;
  - ensuring that all the Group's information technology systems are operated and maintained to meet the routine and emergency needs of the various BUs;
  - identifying opportunities for enhancing the Group's information technology operations and procedures, and carrying out feasibility studies on recommendations; and
  - overseeing the development and implementation of the Group's information technology related training programmes.

### (e) E-Business and Information Services BU

- the prime mover for the development and promotion of e-commerce within the Group, working closely with the other BUs to develop business opportunities in this area;
- responsible for identifying marketing and/or product related opportunities, and initiating and managing projects aimed at increasing revenues for the Group's e-commerce related businesses; and
- other tasks including developing, promoting, selling and distributing various real-time and historical data, and standardised or customised data analysis software and services.

#### **BOARD COMPOSITION**

The Board shapes policies on major strategic, financial, regulatory, risk management, commercial and operational issues. The current Board comprises six Directors returned by the shareholders of HKEx, eight Government appointees ("Government appointed directors") representing public and market interests and the Chief Executive of HKEx who is an ex-officio member, giving a total board of fifteen. All the Directors, other than the Chief Executive of HKEx (who is an ex-officio member of the Board) and Mr. Lee Hon Chiu (appointed until 31st December, 2000) have been appointed for an approximately three year term expiring at the

end of the annual general meeting of the Company in 2003. The total number of Government appointed directors on any future Board after the annual general meeting of the Company in 2003 will be no more than the total number of Directors returned by the shareholders of HKEx.

The Chief Executive of HKEx will remain an ex-officio member of future Boards.

The current Chairman of the Board is a Government appointed director whose election by the Directors as Chairman was approved by the Chief Executive of Hong Kong. Subsequent chairmen will also be elected by the Directors, subject to the approval of the Chief Executive of Hong Kong. The Board is empowered to remove the Chairman by a two-thirds majority vote and the Chief Executive of Hong Kong may remove him on grounds of public interest, the interest of the investing public or the proper regulation of markets in securities or futures contracts. Under the articles of association of HKEx each Chairman of the Board must be a non-executive Director and appointed for an initial term coinciding with his term as a non-executive Director. The Chairman may be re-appointed for a further period or periods up to a maximum of the longer of six consecutive years or six consecutive annual general meetings (including the initial term but disregarding any annual general meeting held in the year 2000). A person who has served as Chairman for the maximum consecutive period referred to above is not eligible for reappointment until the later of one year after he ceases to be Chairman, or the next annual general meeting after he ceases to hold such office.

Each current Director may be re-appointed or re-elected for further terms.

Details of the experience and qualifications of the current Directors are set out in the section of this document headed "Directors, Senior Management and Staff".

The Company's Chief Executive and Chief Operating Officer are appointed by the Board on the recommendation of the Chairman of the Board, subject to approval by the SFC. The Board is able to remove the Company's Chief Executive or Chief Operating Officer by a simple majority upon a recommendation from the Chairman of the Board, and the SFC may remove them on grounds of public interest, the interest of the investing public or the proper regulation of markets in securities or futures contracts after consultation with the Chairman of the Board and the Financial Secretary (subject, in the case of removal by the SFC, to appeal to the Chief Executive of Hong Kong in Council).

### TRANSACTIONS WITH CONNECTED PERSONS

## **Connected transactions**

The following transactions may continue to be carried out between the Group and connected persons of the Group (as defined in the Listing Rules) after the listing of the Shares on the Stock Exchange:

(a) Transactions with holders of Trading Rights, Exchange Participants and Clearing Participants

Directors for the time being and/or their associates as defined in the Listing Rules ("Associates") may be holders of Trading Rights, Exchange Participants and/or Clearing Participants. The business of these Exchange Participants and/or Clearing Participants involves the trading and settlement of securities, option contracts and/or futures contracts through the facilities of the Exchanges and Clearing Houses.

Under the Listing Rules, the directors of any member of the Group (including any person who was within the preceding 12 months a director of any member of the Group) and their Associates are connected persons of the Group and any transaction between such persons and a member of the Group will constitute a connected transaction. Accordingly, connected persons will regularly enter into various transactions with the Group, including without limitation:

- the payment of subscription fees imposed by the Group from time to time;
- the payment of transaction levies, margin, fees and charges to the Exchanges and Clearing Houses, as required by the Group from time to time;
- the provision of any undertaking, guarantee or similar indemnity to the Exchanges and Clearing Houses, as required by the Group from time to time;
- the settlement of securities and futures trades with the relevant Clearing House which acts as the settlement counterparty to the buying or selling participant through novation of the relevant contract as provided in the rules of the relevant Clearing House from time to time; and
- the provision of information or data services by the Group to Exchange Participants and/or Clearing Participants.

## (b) Transactions with listing applicants and listed companies

In addition to transactions with holders of Trading Rights, Exchange Participants and Clearing Participants, the Group may enter into transactions with companies which are applying for the listing of their securities on the Stock Exchange or which already have securities listed on the Stock Exchange. Such transactions include the payment of initial, additional and/or annual listing fees by the relevant company to the Stock Exchange in accordance with the fees set out in the Listing Rules.

Directors of HKEx may have Associates which are listed companies and may in the future have Associates which are listing applicants. As such Associates would be connected persons of the Group, any transaction between such persons and a member of the Group would constitute a connected transaction.

## (c) Transactions with buy-in brokers

When a CCASS Participant fails to deliver securities on time for settlement under the CNS System or the Isolated Trades System, HKSCC may arrange on behalf of such participant a "buy-in" to purchase the relevant securities required for settlement pursuant to the CCASS rules and procedures. Secondly, HKSCC may arrange, on behalf of a CCASS Participant, for the purchase and sale of securities in connection with the liquidation of the positions of a CCASS Participant that has been declared by HKSCC to be in default. Thirdly, HKSCC may arrange for the sale of entitlements on behalf of CCASS Participants holding securities through CCASS. For these purposes HKSCC will, on behalf of that CCASS Participant, instruct other Broker Participants to assist.

Currently, HKSCC has entered into its own standard form contracts ("Buy-in Contracts") with approximately 170 Broker Participants ("Buy-in Brokers") for the purposes of assisting HKSCC to execute the buy-in and other transactions referred to above.

HKSCC's practice is to use Buy-in Brokers on a rotational basis (i.e. HKSCC selects the broker at the top of the list at any given time (unless the order is too large for that broker in view of its liquid capital or that broker itself has unsettled positions subject to buy-in) who, after executing a transaction for HKSCC, will then move to the bottom of the list).

Directors of HKEx may have Associates who are Buy-in Brokers or may in the future have Associates who will enter into Buy-in Contracts with HKSCC. When such broker enters into the Buy-in Contract or executes a transaction pursuant to the Buy-in Contract, the transaction (a "Buy-in Transaction") will constitute a connected transaction. Buy-in Brokers are paid commission on the trades executed on behalf of HKSCC at the standard commission rate prescribed by HKSCC. The commission rate is set at 0.25 per cent., which is the minimum brokerage commission rate under the rules of the Stock Exchange.

In the opinion of the Directors, including the independent non-executive Directors, and the Sponsors, the connected transactions referred to above are entered into in the Group's ordinary course of business and on normal commercial terms and the terms on which such transactions are currently entered into are fair and reasonable and in the interests of the shareholders of the Group as a whole.

#### Waivers and conditions

As the connected transactions outlined above are ongoing transactions which are entered into regularly in the ordinary course of business, the Directors (including the independent non-executive Directors) consider that strict compliance with the requirements of the Listing Rules would be impracticable and that incurring the costs that would be involved with strict compliance would not be of benefit to the Company's shareholders. Accordingly, the Company has applied for a waiver from the relevant requirements of the Listing Rules in respect of the following transactions:

- all transactions between a connected person and the Group arising from or in connection with that person's use, or proposed use, of (i) the facilities provided by the Group for the trading, clearing and/or settling of securities and futures products and transactions, and (ii) all services offered by the Group which are ancillary, incidental or otherwise related to the foregoing;
- all transactions between a connected person and the Group arising from or in connection with that person's listing, or proposed listing, of securities on a market maintained by the Group and all services offered by the Group which are ancillary, incidental or otherwise related to the foregoing; and
- all transactions between a connected person and the Group arising from or in connection with HKSCC's arrangement on behalf of a clearing participant of a Buy-in Transaction.

The SFC has granted the requested waiver subject to the following conditions:

- the transactions being:
  - in the ordinary and usual course of business of the relevant Group company and conducted on an arm's length basis;
  - in respect of transactions other than Buy-in Transactions, in accordance with the rules and regulations of the relevant Group company governing such transactions and where the rules and regulations do not govern those transactions in full, in accordance with the standard terms and conditions of the relevant Group company relating to such transactions;
  - in respect of transactions which are Buy-in Transactions, in accordance with the standard terms and conditions of HKSCC applicable generally to all Buy-in Brokers in such transactions for and on behalf of HKSCC and at the standard commission rate payable by HKSCC in respect of all such Buy-in Transactions; and
  - in the opinion of the Directors, fair and reasonable so far as the shareholders of the Company are concerned;
- details of the connected transactions (except for Buy-in Transactions) as set out in Rule 14.25(1)(A) to (D) of the Listing Rules shall be disclosed in the Company's subsequent annual reports, provided however that specific details of the dates of the transactions and the total consideration need not be disclosed but instead there should be disclosure of the period during which the transactions are conducted;
- details of the connected transactions (which are Buy-in Transactions) as set out in Rule 14.25(1)(A) to (D) of the Listing Rules shall be disclosed in the Company's subsequent annual reports, provided however that specific details of the dates of the transactions need not be disclosed but instead there should be disclosure of the period during which the transactions are conducted;
- at least two of the independent non-executive Directors shall review annually the connected transactions and confirm in the Company's next following annual report that they were conducted in the manner as stated in the first condition above; and
- the auditors of the Company shall review annually the connected transactions and provide the Directors with a letter confirming that:
  - the connected transactions have received approval from the Directors; and
  - the connected transactions are in accordance with the relevant rules and regulations of the relevant Group company governing fees for the applicable facilities, services or goods provided by, or to, the Group and where the rules and regulations do not govern the transaction in full, are in accordance with the standard terms and conditions of the relevant Group company relating to the applicable facilities, services or goods provided by, or to, the Group.

In so far as the waiver relating to Buy-in Transactions is concerned, such waiver has been granted for the period up to 1st April, 2002 subject, however, to review by the SFC on the expiration of that period. Notwithstanding the foregoing, the SFC reserves the right to review or revise any of the conditions related to the waiver if there are any changes that may affect any of them including changes to the rules or procedures governing the fees or procedures of the Stock Exchange, Futures Exchange or the Clearing Houses.

Save as disclosed above, there are no connected transactions of which the Directors are aware which may continue after the listing of the Shares on the Stock Exchange.