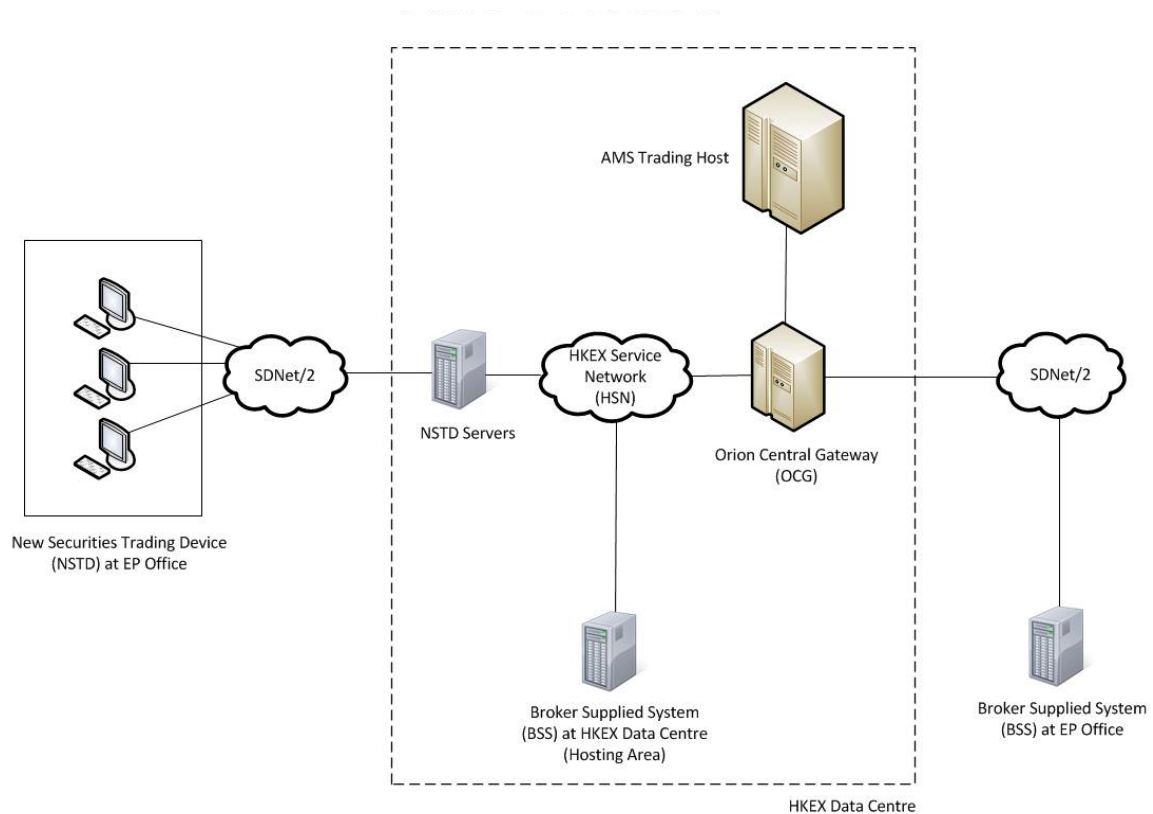


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**1. Introduction**

AMS/3 is the third generation of electronic stock trading system and was introduced by HKEX in October 2000. The system has gone through several upgrades with the latest version AMS/3.8 launched in December 2011. A consolidated view of trading facilities supported by AMS/3 is illustrated in the figure below.

AMS/3 System Overview



**2. Exchange Participant Access Method and Market Data**

Exchange Participants (EPs) are required to subscribe to Orion Central Gateway (OCG) session(s) and connect their Broker Supplied Systems (BSS) or New Securities Trading Device (NSTD) through OCG session(s) to AMS/3, which enables them to transmit and receive orders/transactions electronically. A BSS is a broker’s in-house developed system or a third-party software package developed by commercial vendors. A NSTD is a Window-based trading facility developed and supported by a third-party vendor appointed by HKEX.

The throughput rate of OCG messages into AMS/3 through OCG is governed by a throttle mechanism. EPs may purchase additional throttle(s) from HKEX to improve their throughput capacity to meet their needs.

OCG is used for trading and does not disseminate any securities market data or market status. EPs may receive market data and market status directly from HKEX Orion Market Data Platform – Securities Market (OMD-C) or indirectly via information vendors.

For more information about OCG, please refer to <http://www.hkex.com.hk/OCG>.

For more information about OMD-C, please refer to <http://www.hkex.com.hk/marketdata>.

### **3. Major Central Market Functions Provided by AMS/3**

AMS/3 is a stock trading system with a rich set of functionalities to satisfy existing market needs and future demands for new business initiatives. A high level summary of some of its key functions is described below:

#### **a) Multi-Market Support**

AMS/3 supports simultaneous operation of multi-markets each with its own trading timetable, trading methods and stock counters. The system is currently configured with four markets namely the main board, the growth enterprise market (GEM), the NASDAQ market and the ETS (Extended Trading Securities) market.

#### **b) Multiple Trading Methods**

AMS/3 allows multiple choices of trading methods to suit the characteristics and liquidity profile for different types of equity products. The trading methods supported include:

- automatic continuous matching on a price and time priority basis
- single price auction for pre-opening trading session and closing auction session for price discovery and trade execution at an equilibrium price
- semi-automatic matching for odd lots and special lots in a point and shoot manner.

#### **c) Multiple Product Support**

AMS/3 has the ability to handle a large variety of instrument types with different currencies. The system currently has a total number of more than 6,500 stock counters in the form of stocks, derivative warrants, bonds, exchange traded funds and callable bull/bear contracts etc.

#### **d) Multiple Order Types**

AMS/3 supports multiple types of order to suit different trading needs of EPs and their investor clients. These include limit order, enhanced limit order, special limit order, at auction order and at auction limit order. Execution outcome can further be controlled with the use of "all or nothing" qualifier during order input.

#### **e) Price Validation**

AMS/3 performs various price and consideration validations before the order is accepted into the order book according to different trading sessions. The system provides price warning messages to alert the EPs if the price input is significantly away from the market

price. The validation helps avoid invalid order prices or erroneous trades concluded from EP's input error. A Volatility Control Mechanism (VCM) is also applied on selected securities. If the price of an applicable security deviates more than a predefined percentage within a specific time frame, it will trigger a cooling-off period for five minutes where trading is allowed within a pre-defined price band.

**f) Order and Trade Confirmation**

Order input from trading devices through OCG session(s) is responded by the AMS/3 trading host with an immediate acknowledgement. Order and trade confirmations in the form of unsolicited messages are then sent out by the trading host to update EP trading devices of the processing status of the submitted order transactions as part of order execution. Furthermore, an EP can designate a particular OCG Drop-Copy session as the single point of consolidation to receive real-time notifications for trades originated from all OCG session(s) belonging to the EP.

**g) Disaster Recovery Capability**

AMS/3 supports disaster recovery with the use of a warm backup system. When fallback is required, the backup system can be activated to take over production trading after completion of the necessary process reconfiguration and recovery processing.