



Ecosystem Forum 2015

Market Data Update

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22 April 2015



1.

General Business Updates

2.

Market Data Distribution in HKEx – OMD Becomes Unique Ticker Plant

3.

Shanghai-Hong Kong Stock Connect Market Data Programmes

4.

Non-Display

5.

Application Service Provider (ASP) Licence

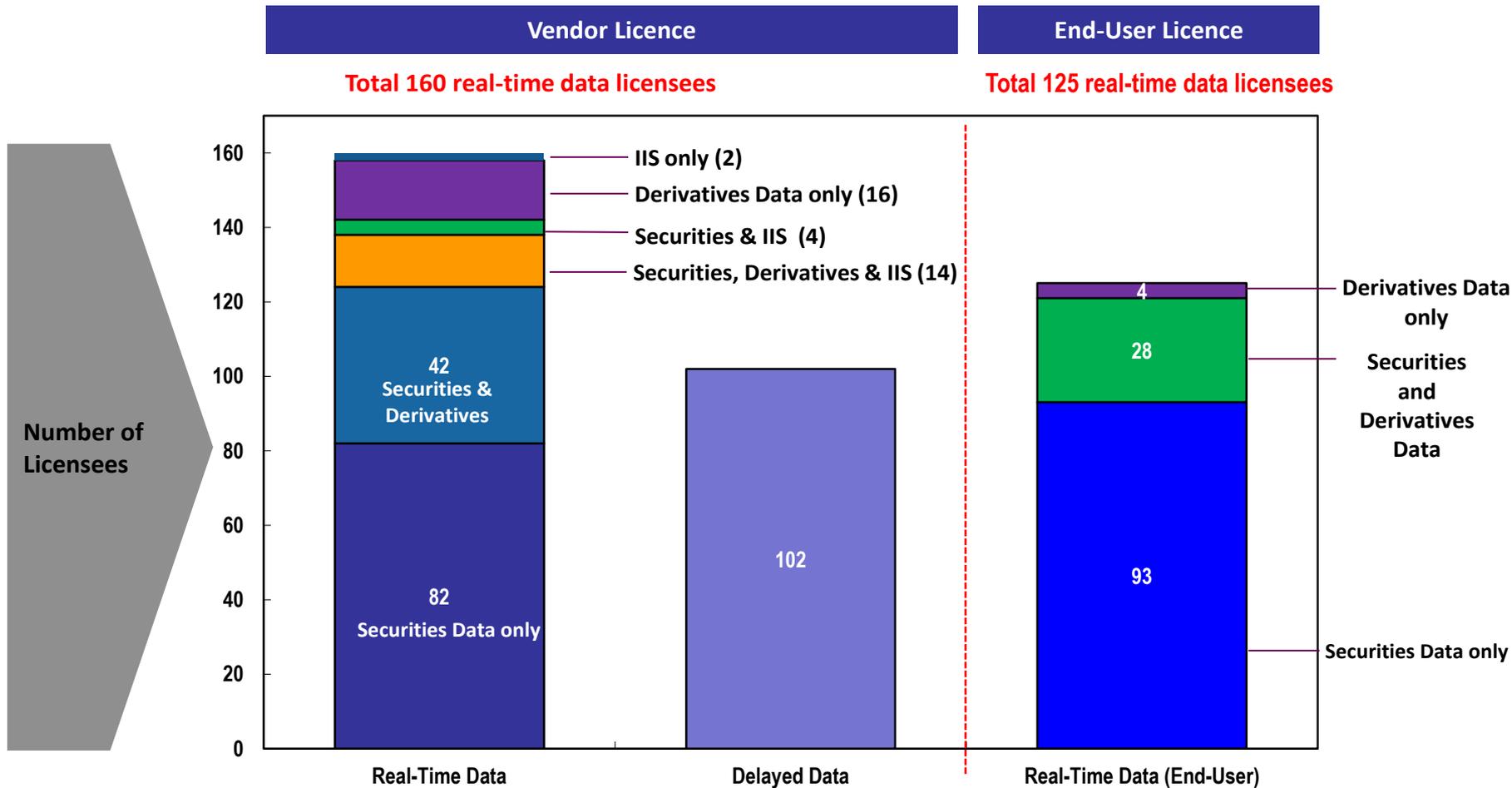
6.

Market Data End-User Licence

General Business Updates

- Vendor Licence and End-user Licence

As of March 2015

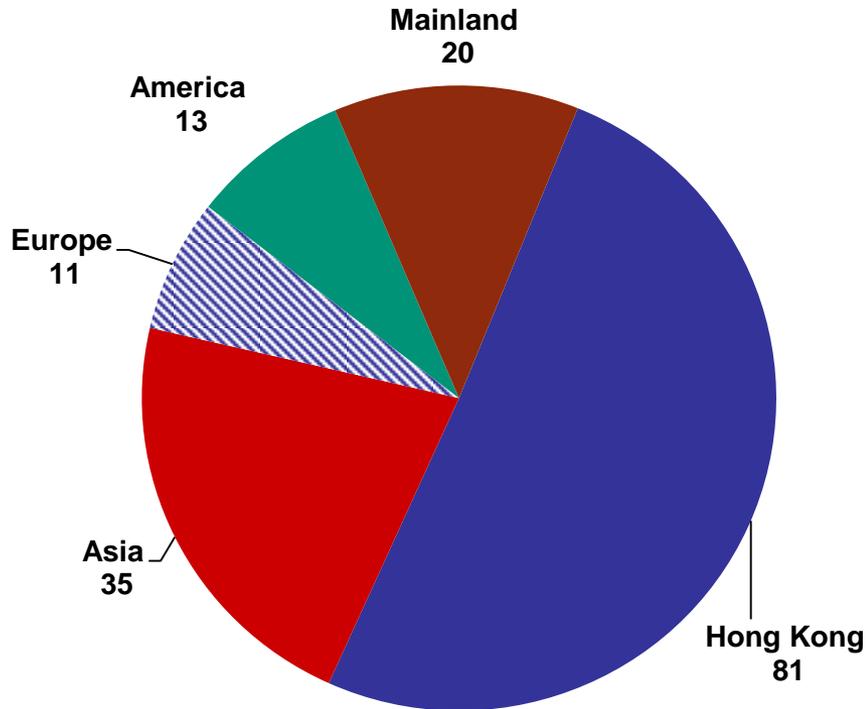


General Business Updates

- Classification

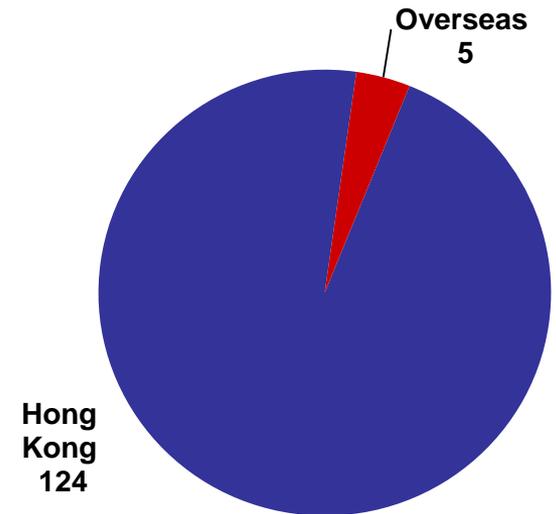
As of March 2015

Real-time Information Vendors



Information business	50	Telecommunications service providers	5
SEHK EPs & affiliates	30	System vendors	10
Banks, buy-sides & other financial institutions	49	Niche players	3
Media	13		

End-Users



Exchange Participants	123
Non-Exchange Participants	6

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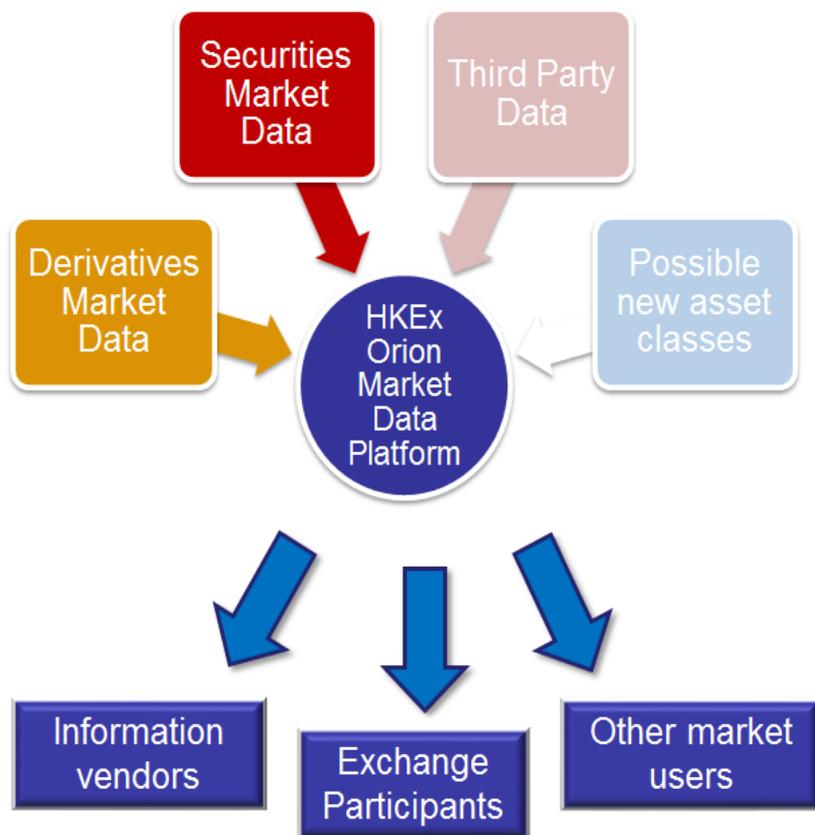
Application Service Provider (ASP) Licence

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Market Data End-User Licence

Single Market Data Platform

- HKEx Orion Market Data Platform (OMD)



- Single, integrated platform for all subscribers
- Low-latency
- Multiple datafeed products
- Deeper market depths
- Multiple asset classes
- Common message protocol

Major milestones of Orion Market Data Platform (OMD)

- Securities Market / Index (OMD-C) datafeed products rolled out in September 2013
- Derivatives Market (OMD-D) datafeed products rolled out in December 2014

OMD offers deeper market depth, low latency and multiple products to improve transparency

Securities Market (OMD-C)

Derivatives Market (OMD-D)

Real-time

Historical



Securities Standard (SS)

- Market by price (10 depth), conflated feed



Derivatives Standard (DS)

- Market by price (10 depths), conflated feed



Securities Premium (SP)

- Market by price (10 depths), streaming feed



Derivatives Premium (DP)

- Market by price (10 depths+>10 aggregate), streaming feed



Securities FullTick (SF)

- Market by order (full depths), streaming feed



Derivatives FullTick (DF)

- Market by order (full depths), streaming feed



Securities Historical FullBook

- every order and trade of every trading day since Oct 2013



Derivatives Historical FullBook

- every order and trade of every trading day since Dec 2014



Securities Trades / Trade Tickers File

- all trades / trade tickers of every trading day since Oct 2013



Derivatives Trades File

- all trades / trade tickers of every trading day since Dec 2014

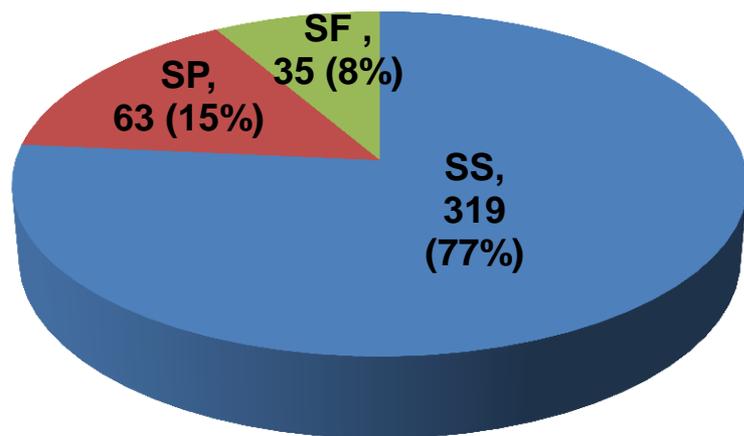
Lower Latency, Deeper Market Depth

OMD-C & OMD-D Subscription Status

As of March 2015

OMD-C Subscription Status

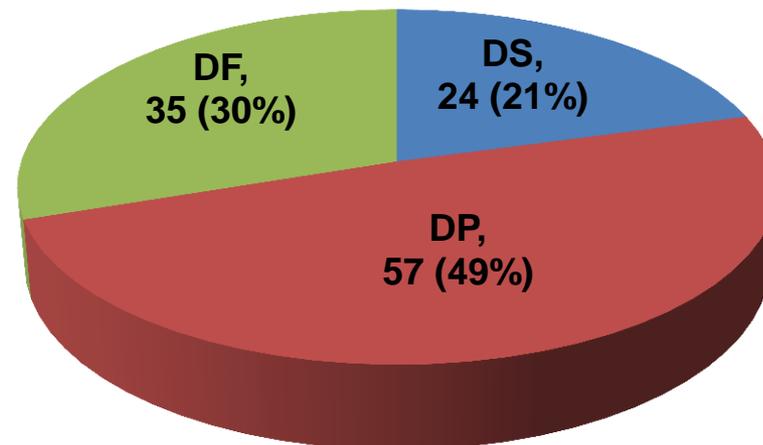
No of Connection Set



■ Securities Standard ■ Securities Premium
■ Securities Fulltick

OMD-D Subscription Status

No of Connection Set



■ Derivatives Standard ■ Derivatives Premium
■ Derivatives Fulltick

Cash Participants contribute to most of the Securities Standard subscriptions whilst Derivatives Participants prefer the Derivatives Premium/FullTick feeds.

OMD Becomes a Unique Ticker Plant - Securities Market



Tentative Schedule		From 2013 Sep	From 2014 Jun	2015 Mar	2015 Sep	2017 or beyond
Market Data Source Available / Event		OMD-C Launch	OCG Batch Rollout	Migration to NSTD		OG Phase out
				Replacement for MWS	Replacement for Trading Terminal	
AMS	OG/BSS	√	√	√	√	
	Trading Terminal	√	√	√		
	OG/MWS	√	√			
OMD-C	Direct with HKEX	√	√	√	√	√
	Via IVs	√	√	√	√	√

More and more EPs will be migrating to OMD-C for securities market data

OMD Becomes a Unique Ticker Plant - Derivatives Market



Tentative Schedule		2013 Oct	2014 Dec	Tentatively 2017
Market Data Source Available / Event		CG Rollout	OMD-D Launch	Network Gateway Retirement
HKATS	Network Gateway (NG)	√	√	
	Direct with HKEx	<i>Through PRS Plus / PRS</i>	√	√
OMD-D	Via IVs	<i>Through PRS Plus / PRS</i>	√	√

More and more EPs will be migrating to OMD-D for derivatives market data

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New Item

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Market Conditions

3.2

Southbound Trading: Market Data - Action Plan

3.3

Comparison between Daily Charge Service and Fixed Fee Package

3.4

Other Marketing Programmes

Southbound Trading – Market Data Service

- Market Condition



Background	Market Feedback	Service Implementation
<ul style="list-style-type: none"> - Mainland investors are accustomed to viewing free 5-depths market data. 1-depth data under the exchange programme is not enough - Brokers are willing to bear the market data cost for customers - Broker has offered 10-depths market data service free of charge to customers under Level 2 Free Trial Programme. However, due to the large number of mainland retail investors, Brokers are worried about potential future costs 	<ul style="list-style-type: none"> - Broker expects to provide better service to customers with controllable costs - They would need cheaper services or to provide market data at a fixed fee. 	<ol style="list-style-type: none"> <u>1. Daily charge service (via SSE cloud platform/ IVs' services)</u> <u>2. Fixed fee package of 5-depths eligible stocks</u>

Southbound Trading: Market Data

- Action Plan



Private and confidential

Applicable to all information vendors

Daily Charge Service

(10 depths L2 streaming data of all stocks)

Program Period: Mar 2015 to end 2017

Special Promotion : Mar - Dec 2016

Fees: HK\$3.5/day

[HK\$6.5 or RMB 5 via SSE cloud platform]

Min. Subscription: 2,000 days/month/broker

After promotion period: HK\$5/day [via SSE cloud platform: HK\$10/day or RMB 8/day]

Applicable to Mainland Brokers who have joined Stock Connect

Fixed Fee Package

(5-depths streaming data of SB eligible stocks*)

Marketing Period: Mar 2015 to end 2017

Special Promotion: Mar - Dec 2016

Fees: HK\$125,000/month/broker (~RMB 1.2Mn/annum)

After promotion period: HK\$250,000/month/broker (~RMB 2.4Mn/annum)

* Eligible stocks = single shares and ETFs eligible for southbound trading, exclude structured products

New Stock Connect Market Data Programmes

- Comparison between Daily Charge Service and Fixed Fee Package



	Daily Charge Service	Fixed Fee Package
Price depth	10-depths streaming data	5-depths streaming data
Data coverage	all instruments traded on SEHK	Southbound eligible stocks only
Service target	Mainland customers of all licensed information vendors	Mainland customers of Mainland Brokers who have joined Stock Connect
Mainland brokers minimum fee	Special Discount: HK\$3.5 per Subscriber per day Regular charge: HK\$5 per Subscriber per day [minimum 2,000 connection days per month]	Special Discount: HK\$125,000 per broker per month Regular charge: HK\$250,000 per broker per month [minimum subscription not required]

New Stock Connect Market Data Programmes

- Other Programmes



Apart from the Fixed Fee Package and Daily Charge Service, we have also introduced other marketing programmes to increase market data coverage under Stock Connect:

1. Issuer Information Feed Service (IIS News) Promotion Programme

- To further enhance the accessibility of IIS News
- To provide investors with more news on Hong Kong listed companies to further support Southbound trade

2. Enhanced Features of Basic Market Prices (BMP) Service

- Volume Discount Promotion Programme on Subscriber Fees to BMP Third Party Services
- Inclusion of Odd Lot Information in BMP Service
- Display of Top 20 Eligible Stocks for Southbound Trading

3. Volume Discount Promotion Programme

- To help Information Vendors promote HKEx real-time Level 2 securities market data to retail and corporate investors

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When?

- Non-display usage fee became effective from January 2013

Who?

- Licensed Information Vendors (IVs), Licensed End-Users (EUs), IV's subscribers and Exchange Participants (EPs) who access and use HKEx real-time market data for non-display usage are subject to the new Fees.

How?

- The new fees are charged based on the following 3 categories:
 - Automated Trading Application
 - Derived Data (with Tradable Products)
 - Others

Fee Schedule for Non-display usage

	Real-Time	
	Securities Data	Derivatives Data
Automated Trading Applications	\$20,000 per firm per month	\$10,000 per firm per month
Derived Data with Tradable Products	\$20,000 per firm per month	\$10,000 per firm per month
Others	\$400 per firm per month	\$150 per firm per month

Guiding Note on Non-Display Usage is published on HKEx website:

- Products & Services > Data Products > Licences > Licence Agreement & Guiding Notes (Vendor Licence) > Guiding Notes
(http://www.hkex.com.hk/eng/prod/dataproduct/la/licagt/gn/GuidingNotes_MDVLA.htm)

1

Automated Trading Application

Any application that accesses HKEx real-time market data for automatic calculation, processing and analysis, and that application will determine the **quantity, price and timing** of order execution, will be regarded as the Automated Trading Application.

Examples include:

- Algorithmic trading
 - Online trading platform where orders are initiated by human
 - MMs/LPs who use the data for market making/liquidity providing.
- but exclude:

3

Others

Any other non-display data usage that does not fall under Category (1) & (2)

Examples include:

- Risk management systems
- Portfolio management applications
- Back office support etc.

(EPs will be exempted from this category of fee)

2

Derived Data (with Tradable Product)

Any work created using HKEx real-time market data to partly or wholly derive the price of a tradable product or value of the underlying instrument of a tradable product.

Examples include:

- Calculation of Indices with tradable products (e.g. HSI, FTSE, MSCI etc.)
- Creation of investable instruments such as spread betting

Non-Display Usage commonly used by EPs:

1. Automated Trading Application

- Algorithmic / Black box trading

2. Others

- Risk management systems
- Portfolio management applications
- Back office support etc.
- *Market Making*

Non-Display Usage Policy – Exemptions



There are certain scenarios that companies are not subject to non-display fees:

- **Companies that are using our real-time data for market making/liquidity providing purposes**

- EPs who are market makers/liquidity providers
- Companies who are approved affiliates or corporate entities of market making EPs

- **EPs who are using our real-time data for Category “Others”**

- **Companies who are trading clients of HKFE EPs and are getting real-time derivatives data via EP’s trading Gateway (i.e. OAPI) for non-display purpose**

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Application Service Provider (ASP) acts as a business enabler to facilitate the trading participants easier and faster access to the HKEx market systems.

- Benefits:
 - To shorten the lead time required for getting Exchange Participants (EPs)' on-boarding.
 - To reduce EPs' cost in infrastructural setup and maintenance.
 - To ease the market readiness of implementing upcoming HKEx's system initiatives.
 - To promote the access of market data from overseas.

- ASPs play an important part in HKEx's trading ecosystem
 - They supply systems to EPs
 - They can bring new global clients to our markets
 - They can provide access to participants of new asset classes

- Under the proposed ASP framework
 - ASPs can establish direct connectivity to HKEx which can be shared by their customers
 - ASPs can re-distribute market data to their customers (where they are HKEx-IS licensees) without becoming an Information Vendor

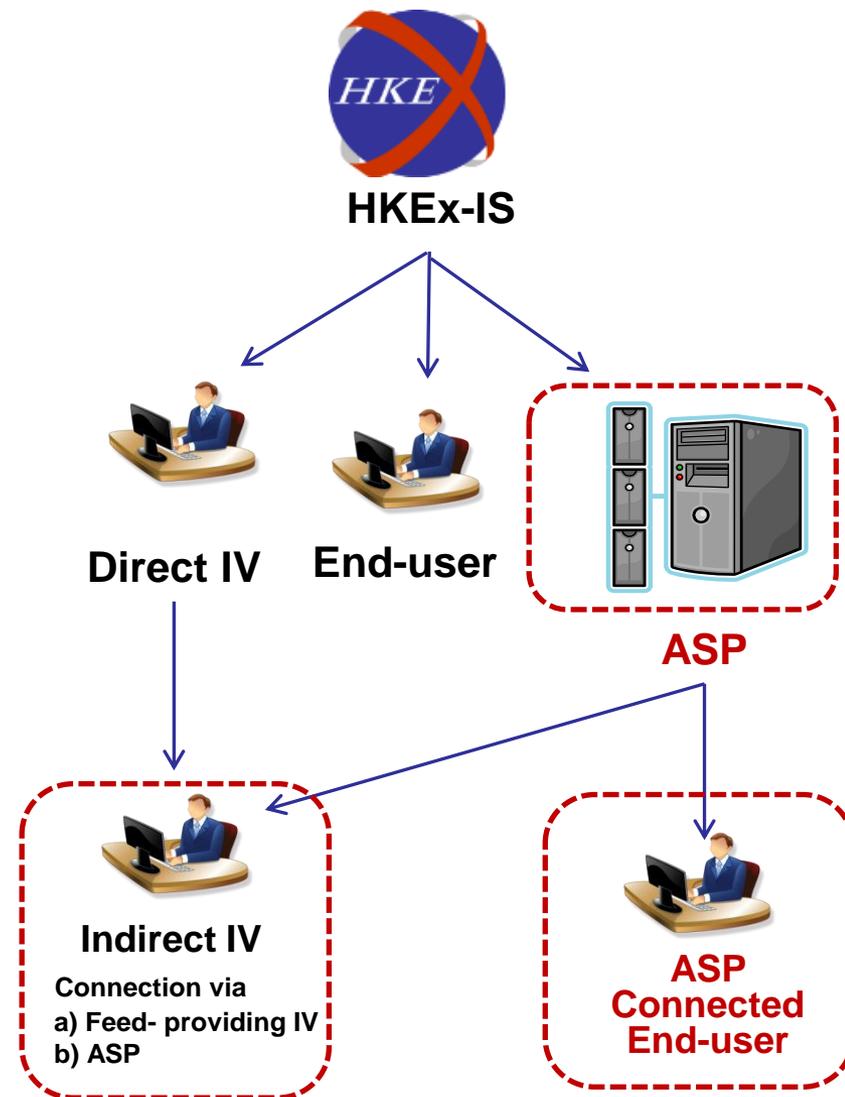
Application Service Provider (ASP) – Market Data

■ Definition:

- ASP is a service provider providing shared infrastructural setup and connectivity to multiple clients accessing market data and trading either through SDNet or through HKEx Hosting Service.

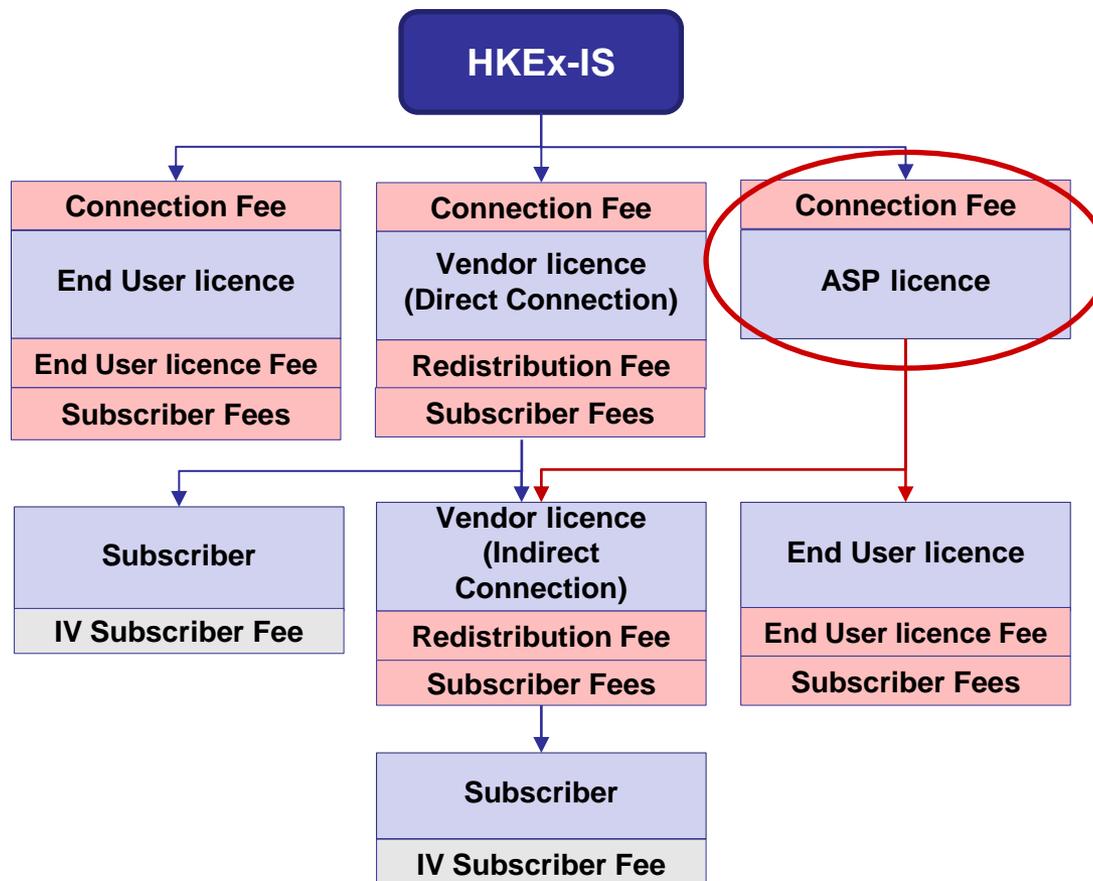
■ Scope:

- Market Data License: ASP is only entitled to pass through the market data to the clients having direct market data license with HKEx-IS. ASP Connected Clients will need to sign End-User License Agreement or Vendor License Agreement with HKEx-IS if they use the market data for internal use or external redistribution respectively.
- Production Access for Market Data: ASP can connect to the market data system with at least one set of production connections for serving multiple ASP Connected Clients (should it be EPs or other market users).
- Test Access for Market Data: ASP can access the market data test service for certifying or self-verifying their system prior to getting access to production market data.



Application Service Provider (ASP) – Market Data – Licence Fees

In contrast with vendor licence in which direct connection Information vendors are required to pay the Redistribution Fee, Connection Fee and Subscriber Fee, ASPs are only subject to the Connection Fee of the respective datafeed(s).



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Market Data End-User Licence

- Overview



For any companies that would like to obtain direct market data connection for **internal** use

End-User Licence (for internal use)

Licence Fee (Quarterly charged)

* Exchange Participants who are also Market Maker or Liquidity Provider may enjoy a discount on Licence Fee

Connection Fee (Quarterly charged)

Individual User Fees (Monthly charged)
(based on the individual user usage)

Fixed Fee

Variable Fee

Fee Table: http://www.hkex.com.hk/eng/prod/dataproduct/la/prices/Fee_Schedule.htm

Orion Central Gateway (OCG) and HKATS Central Gateway (CG)



Special arrangement for Exchange Participants with OCG or CG

Exchange Participants (EPs) are required to apply for the Market Data End User Licence (End User Licence) if:

- SEHK EPs who migrate to OCG but wish to obtain real-time securities market data directly through HKEx
- HKFE EPs who migrated to CG but wish to obtain real-time derivatives data directly through HKEx

We offer fee waivers to EPs who apply for our Standard datafeed:

- Waiver on Licence Fee and Connection Fee
- Waiver on Individual User Fees for Display terminals

Orion Central Gateway (OCG) and HKATS Central Gateway (CG)



Clients migrating to OCG and getting OMD Securities Standard (SS)

1. Waiver on Licence Fee and Connection Fee

- End User Licence Fee and Connection Fee are waived for EPs using OCG (for first 2 sets of OMD SS only)

2. Waiver on Individual User Fees for Display BSS terminals/workstations

- Similar to the arrangement under OG, EPs using OCG are entitled to 2 free terminals for display usage for each Stock Exchange Trading Right.

Clients migrating to HKATS CG and getting OMD Derivatives Standard (DS)

1. Waiver on Licence Fee and Connection Fee

- End User Licence Fee and Connection Fee are waived for EPs using HKATS CG (for first 2 sets of OMD DS only)

2. Waiver on Individual User Fees for Display BSS terminals/workstations

- Similar to the arrangement in Securities Market, EPs using HKATS CG are entitled to 2 free terminals per EP for display usage.

Q & A

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Thank You!