

# **Engineering Standard**

# Interface Specification of Data File Exchange of Shenzhen Stock Exchange 5th Trading System (Ver 1.30)

Shenzhen Stock Exchange

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#### **REVISION LIST**

Date of Issue	Version	Comments
Jan 2014	0.90	Establishment
Apr 2014	1.00 α	Amendment based on feedback on Ver0.90
Jun 2014	1.00 β	Field "SecurityType" in Securities Info changed from N2 to N4;
		Add the field "QtyUnit";
		Add an "additional shares listing (12)" in field "Status";
		The field "repo contract security" changed into RegularShare;
		Add a certain field for options;
		Auction Info file name changed into "Cashauction Info", and no longer including option auction info;
		The definition of field "Type of settings" is the same as "Trading phase code" in the snapshort data;
		Add "Derivative Auction Info (derivativeauction)" file;
		Add three fields "EnglishName", "SecurityIDSource" and "ClearingPrice" in the end-of-day market
		data file.
Sep 2014	1.00 γ	The field "WarrantClearingType" in "WarrantParams" of "Securities Info" is renamed to
		"DeliveryType"; "DeliveryMonth" in "OptionParams" of "Securities Info" is renamed to "DeliveryDay";
		Add the field "DeliveryType", "ExcerciseType" in "OptionParams";
		Add the field "Currency" in "IndexInfo";
		Add the field "MarginRatioParam1" & "MarginRatioParam2" in "Derivativeauctionparams";
		Add the field "PriceTick" in "negotiationparams";
		Delete the field "Lower limit of a buy amount" & "Lower limit of a buy quantity" in
		"afterhoursparams";
		Add the filed "SecurityType", "PrevClosePx" & "ContractPosition" in "securityclosemd"

Jan 2015	1.00 δ	Add the description of file exchange flow;
		Add the definition of Preferred stock params;
		Add the description of pcf file format;
		Information for Static Market Data is sent out twice before each trading day, related description is added.
		End-of-day static market data info is split into cash security file and derivative security file,
		"UnderlyingSecurityIDSource" is added in Securities Info; The English field name of "Whether support T+0" is changed from "DayTrade" to "DayTrading"; "share reform not complete", "first listing
		day of share reform resume" are deleted, and add three more statuses "refinancing", "online voting",
		"contract adjustment" in "Security Status"; add "PriceCheckMode"; The type of "Ratio of repo contract security" is changed from N6(5) to N5(4); add the field "QualificationFlag"; The type of
		"Accrued interest per 100 yuan" is changed from N8(4) to N12(8). Add "ListType", "DeliveryMonth", delete "Adjusted" in OptionParams;
		"SecurityIDSource" is added in Statistics Info;
		"SecurityIDSource" is added in Cash Auction Info;
		"SecurityIDSource" is added in Derivative Auction Info; The English name of "Price increasing limit"
		is changed from "RisePrice" into "PriceUpperLimit", English name of "Price falling limit" is changed
		from "FallPrice" into "PriceLowerLimit".
		"SecurityIDSource" is added in Negotiation Trade Info, the English name of "Price increasing limit"
		is changed from "PriceUpLimit" into "PriceUpperLimit", the English name of "Price falling limit" is
		changed from "PriceDownLimit" into "PriceLowerLimit".
		"SecurityIDSource" is added in "After-hours-trading Info";
		"SecurityIDSource" is added in Security Lending Info, the English name of "Rate" is changed from
		"Price" into "Rate";
		"SecurityIDSource", "EnglishName" are added in Online Issuance and Subscription Info; The
		English name of "Price up limit" is changed from "PriceUpLimit" into "PriceUpperLimit", English

		name of "Price down limit" is changed from o"PriceDownLimit" into "PriceLowerLimit";
		"SecurityIDSource", "EnglishName", "UnderlyingSecurityIDSource", "SecurityType" are added in
		"Bond Distribution Business Info". The field of "Bond code" is changed to "UnderlyingSecurityID",
		The English name of "Up limit of subscription quantity" is changed from "UpQty" into
		"QtyUpperLimit", the English name of "Total quantity of proxy issuance" is changed from
		"ProxylssueQty" into "ProxyListQty". The English name "Total quantity of self issuance" is changed
		from "SelfIssueQty" into "SelfListQty". "BrokerName" is deleted.
		"SecurityIDSource", "EnglishName", "UnderlyingSecurityIDSource" are added in "Online Voting
		Business Info";
		"SecurityIDSource", "EnglishName", "UnderlyingSecurityIDSource" are added in "Rights Issue
		Business Info".
Aug 2015	1.00	Online voting Reference Info "evoteparams" files are deleted, and replaced by "Tech spec of
J		shareholder meetings"
		Description of Cx character string is added.
		Name change of business rules of point-point data exchange.
		Definition of security firm short-term bonds, cash bond ETF and convertible bonds added.
		Field "SecurityType" is added in the "issueparams".
		In "Securities", "14-negotiable transfer after suspension" is added in "Status", 11- is deleted,
		"LastTradeDay" is added in "WarrantParams"; "Whether in a convertible repo period" is added in
		"PreferredStockParams".
		Security Type Name changes: Details in the document.
		"derivativeauctionparams" changes: Details in the document.
		"securityswitch" file is added.

Jun 2016	1.01	Execution Aggregate File is added.
		Online Voting Business Info is added.
		"9999"is added in the Code Source of Underlying Security of PCF
		Remarks of 4 Switch Type of Security Business Status is revised: Conversion, Resale, Cancellation
		of conversion, Cancellation of resale
Jun 2016	1.02	International Market Mutual Connect Status Info (imcparams) is added.
		International Market Mutual Connect Underlying Securities Info (imcsecurityparams) is added.
		Reference Data of Southbound Eligible Stocks file is added.
		End of day data file of HK stocks (hkexclpr04) is added.
Oct 2016	1.03	Execution File for HK Eligible Stocks(hkexecution_tax_memberID) is added.
		HK Connect related business docs list which is available by satellite connection is added.
May 2017	1.04	"QualificationClass" is added in Securities.
		"QualificationClass" is added in Bonddistributionparams.
July 2017	1.05	The information of share reduction quota (reducequota) is added.
Mar 2018	1.06	Front End Funding Risk Management Info (fundquota) is added.
May 2018	1.07	A new value of "36-Depository Receipts" is added to the SecurityType.
		"Stock Attribute" is added to the StockParams in Securities Info (securities).
		"Security Attribute" is added to the Online Issuance and Subscription Info (issueparams).
		"Subscription Unit" is added to the Rights Issue Business Info (rightsissueparams).
May 2018	1.08	Triparty Repo Basket Info (tripartyrepobasket) is added.
		The maturity date of REITS is added in "Securities".
		An example of share reduction quota is added.
June 2018	1.09	"NoProfit" and "WeightedVotingRights" are added in the StockParams of Securities Info.
		"NoProfit" and "WeightedVotingRights" are added in the issueparams of Online Issuance and
		Subscription Info.
July 2018	1.10	Definition of the record in Execution Aggregate File (execution_aggr) is modified

Jan 2019	1.11	Option Combination Strategy Info is added in the Securities Info file (securities);
		Option Combination Strategy Info file (optioncombinationstrategy) is added in chapter 3.20.
		Add two more types in Security Switch Info (securityswitch), options from ordinary to covered, & options
		from covered to ordinary.
Jan 2019	1.12	A new value is added in "Status" field of Securities Info (securities) file, "15: adjustment from
		two-way to single-way for transaction mode".
May 2019	1.13	"Discount Ratio" is added in "Real-time Open Subscription and Redemption of ETF Info" (pcf) file.
May 2019	1.14	A new value is added in "Status" field of Securities Info (securities) file, "16-specific bond transfer".
		An explanation is added to "Maturity Date" field extended for Bond and Asset-backed securities
		(ReitsParams) of Securities Info (securities) file, it explains when its value would be 0.
May 2019	1.15	Tenderer List fields are added in "Securities info" file in Chapter 3.1
Sep 2019	1.16	CNI Indices Information file is added.
Jan 2020	1.17	"Accrued interest per 100 yuan" changed into "Accrued interest per unit" in BondParams
		of securities.xml file, and three fields: "Whether in a conversion period", "Whether in a resale
		period", "Whether in a resale cancellation period" are added. The original filed "Whether in a
		convertible repo period" is not recommended anymore;
		New field "issuance type"is added in Issueparams.xml file;
		"34-resale cancellation" is added in securityswitch.xml file, "18-Cancellation of conversion",
		"19-Cancellation of resale" are deleted, "24-Split in real time" and "25-Combined in real time" are
		combined in .
		"Market code of Constituent stock" field is added in CNI Indices file.

April 2020	1.18	- Add a new value "17: Initial period ( within 10 trading days) from IPO" to the status field of securities.
		- Two fields "IsRegistration" and "IsVIE" are added to securities.xml and issueparams.xml files.
		- New fields such as "MarketBuyQtyUpperLimit","Type of auction reference price" are added to cashauctionparams.xml file.
		- Add new file 'fixedpriceparams.xml';
		- New switch type value of "35-Security lending" is added in securityswitch.xml;
		- Add Upper/lower limit of (tcr) security lending order Marketization flag Restricted share lending
		flag fields to securitylendingparams.xml files;
		- Add compatibility requirement;
		- Add new field "SymbolEx" to securities.xml、issueparams.xml、indexinfo.xml、stat.xml、
		bonddistibutionparams.xml 、 rightsissueparams.xml 、 evoteparams.xml 、 cnindex.xml 、
		cashsecurityclosemd.xml files.
May, 2020	1.19	- Add BuyQtyUpperLimit、SellQtyUpperLimit in file fixedpriceparams.xml;
		- Change the field name of BuyQtyUpperLimit from "Upper limit of buy quantity" to "Upper limit of
		limit buy quantity"、name of SellQtyUpperLimit from "Upper limit of limit sell quantity" to "Upper limit
		of limit sell quantity"、 name of BuyQtyUnit and SellQtyUnit to limit buy/sell quantity unit in
		cashauctionparams.xml file;
May, 2020	1.20	New value "37-ChiNext depository receipts" is added in SecurityType;
Aug, 2020	1.21	Add following value to 'Memo' field of 'Eligible HK stocks product information'
		4 <sup>th</sup> digit valid: Y means to participate in the opening period optimization
		N means no participation in the opening period optimization.
		5 <sup>th~</sup> 6 <sup>th</sup> digit valid: Tick size code, filled with zero from left if no more than 2 digits
		7 <sup>th~</sup> 8 <sup>th</sup> digit valid: Market fluctuation adjustment mechanism type
Sep, 2020	1.22	Add bondmbrinfo、bondinvestorinf, bondtraderinfo;
		Add value of "38-Infrastructure fund" in SecurityType;

Oct, 2020	1.23	Add value of "39-directional convertable bond" in SecurityType;
		Add "PurposeType" filed in Bondparams of SecurityType.
Nov, 2020	1.24	Add Tender info to ReitsParams in Table3-1.
Dec, 2020	1.25	Add new field "InvestorShortName" to Bondinvestorinfo.
Jan, 2021	1.26	Add new enumeration "18-the first day of delisting period" to Status of Securities.
Apr, 2021	1.27	Add bondtradingparams;
		Add bondrepoparams;
		Add "PricingMethod" filled in BondParams of securities, add "PricingMethod" 、
		"CouponRate"、"Interest"、"InterestAccrualDate" to ReitsParams in Table 3-1.
Jul, 2021	1.28	Add "PutbackResellFlag" in BondParams of securities and ReitsParams in Table3-1.
		Add "Bond put option and resale" in the Security Switch Type of the Real time Status of Security.
Jul, 2021	1.29	Change the description of the "QualificationClass" field.
Aug, 2021	1.30	All revisions are in red.
		Change the code for "Accrued interest" of ReitsParams in Table3-1 from N8(4) to N12(8).

Note: Please note that this English translation is for reference only and is not the official version issued by SZSE. In the event of any inconsistency or conflict between Chinese original version and English translation version, the terms and conditions contained in the official Chinese version shall prevail.

#### **GLOSSARY**

Abbreviation of Terms	Meanings
FTS	File Transfer System

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# Interface Specification of Data File Exchange of Shenzhen Stock Exchange 5th Trading System

#### 1 INTRODUCTION

This document is provided to our vendors and members ("members" hereinafter) to act as a guidance for their development of data exchange with SZSE 5th trading system via FTS. This specification document specifies contents of data file, necessary operation guidance, as well as data exchange format in details.

Files use UTF-8 encoding.

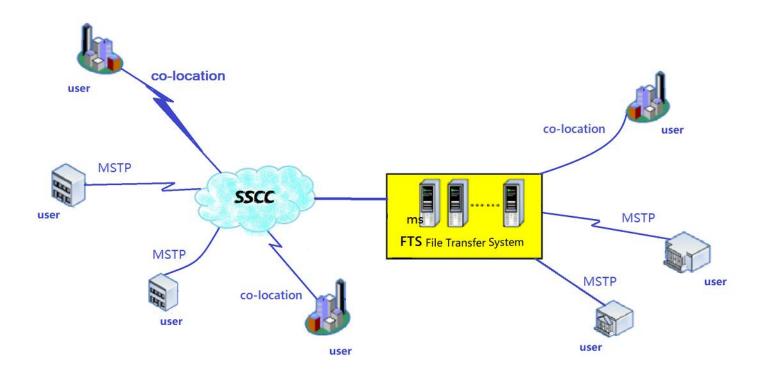
Unless expressed specially, xml files are case-sensitive.

#### 2 FILES EXCHANGE METHOD

#### 2.1 File Transfer System (FTS)

Files exchange is carried out through the FTS based on SZSE V5 Trading System. Brokers, banks, fund companies or future companies only need one line connection with this platform to deal with all kinds of financial business, which is called "one point connection" on communication and business.

Clients can choose the best suitable accessing method (co-location or WAN) according to their own needs. They can also apply for multiple accessing methods and back-ups.



#### 2.2 Group Sending by the Exchange

Group sending here means the Exchange shall send all the data files to all members through the FTS.

Group sending only allows the Exchange to send to all members, but not allow the latter to upload any files to the Exchange.

#### 2.3 Point-to-point Data Exchange

Point-to-point data exchange means the file exchange between the Exchange and individual member. Point-to-point business allows a member to upload files or receive files from the Exchange.

#### 2.3.1 Uploading Files

Uploading files means a member sends a file to the Exchange.

Members shall send the source files to the Exchange within designated time each day, together with the \*.flag file ("\*" here means the source file name without the extension) which describes the source files. The Exchange shall check the source file after receiving it. If the check review is okay, \*.suc file which is nil shall be returned. If any error is found, \*.err file shall be returned, which includes the detailed error description, and the member is required to resend the data files to the Exchange after receiving it.

After the Exchange receives the source files from members, if the check review is okay, the Exchange shall return the source files imported to the Trading System to the member for a confirmation. The file name is \*.reply which the same content and format as the source file.

Members can resend the source files to the Exchange in multiple times within designated time. The Exchange shall have the same flow chart as the first file received and shall regard the final file received as the right one.

The flag file \*.flag is xml file with the format as below.

Table 2-1 Definition of Flag File \*.flag

Field Name	English Field Name	Туре	Description		
File name	FileName	C128	Name of source file		
Date of file	FileDate	N8	YYYYMMDD, no check		
Time of file	FileTime	N6	HHMMSS, no check		
File bytes	FileBytes	N9	Number of bytes of files		
Check code	CheckSum	C32	MD5 check code with 32 bytes, in 16-band, each byte		
			represents a 16 character.		

The error return file \*.err is xml file with the format as below.

Table 2-2 Definition of Error File \*.err

Field	Name	English Field Name	Туре	Description
List o	of error info	Errors		
<b>→</b>	Error info	Error	C256	

#### 2.3.2 File Issuance

File issuance means the Exchange issues files to a member.

# 2.4 Descriptions of specific exchange methods of various files

Table 2-3 Descriptions of specific exchange methods of various files

File	•	Exchange Method	Business rules name via FTS	Memo
Information for static mark	Information for static market data		szse_marketdata	
EOD static market data		Exchange		
EOD report data	Online voting report	Point-to-point	Szse_trading_XXXXXX	XXXXXX is the 6 digits ID of
				market participants (member ID)
	Execution	Point-to-point	Szse_report_TGWID	TGWID is the gateway ID of the
	aggregate file			execution aggregate file
	Execution file for HK	Point-to-point	Szse_trading_XXXXXX	XXXXXX is the 6 digits ID of
	eligible stocks			market participants (member ID)
Risk management info	Share reduction	Point-to-point	Szse_trading_XXXXXX	XXXXXX is the 6 digits ID of
	quota info			market participants (member ID)
	Front end funding	Point-to-point	Szse_trading_XXXXXX	XXXXXX is the 6 digits ID of
	risk management			market participants (member ID)
	Info			

# 2.5 Compatibility requirement

- 1. OMS or VSS should have the ability to automatically neglect the new added files without program update, if these new files are not needed.
- 2. OMS or VSS should have the ability to automatically neglect the new added fields in existed XML files without program update, if these new fields are not needed.

3. OMS or VSS should have the ability to automatically neglect the new added fields at the tail of the TSV. CSV files without program update, if these new files are not needed.

#### 3 INFORMATION FOR STATIC MARKET DATA

All the Information for Static Market Data (excluding Real-time Open Subscription and Redemption of ETF Info PCF file) shall send out twice before market open at each trading day (T). Firstly sent out after the Exchange completes the main business data preparation (generally at the night of T-1), Secondly sent out before the market open at day T (generally in the morning of T).

The file name format of Information For Static Market Data at first time is as below, where YYYYMMDD is the date of T:

pre file ID YYYYMMDD.extension

for sample: pre securities YYYYMMDD.xml

The file name format of Information For Static Market Data at second time is as below, where YYYYMMDD is the date of T:

file ID YYYYMMDD.extension

for sample: securities YYYYMMDD.xml

Real-time Open Subscription and Redemption of ETF Info PCF file shall be sent out with the second Information for Static Market Data sending.

Comparing with the second data, the first data has a missing as below:

- ✓ NAV at T-1 in Securities Info could be inaccurate;
- ✓ Without Real-time Open Subscription and Redemption of ETF Info PCF file;
- ✓ Without international market mutual connect status info;
- ✓ Without international market mutual connect underlying securities info;
- ✓ Without international market mutual connect exchange rate info;

- ✓ Without reference data of southbound trading under SZ-HK Connect.
- ✓ Without CNI Indices info;

Due to business or technical reasons, the first data could have other differences from the second data, it is possible that only the second data is sent out without the first data. Members and other related participants should rely on the second data (without "pre" in the file name)

For the listed files below, market participants may also get access by the MDGW through satellite.

No.	File Name	File ID
1	Securities Info	Securities
2	Index info	Indexinfo
3	Statistics Info	Stat
4	Cash Auction Info	Cashauctionparams
5	Derivative Auction Info	derivativeauctionparams
6	Online Issuance and Subscription Info	Issueparams
7	Bond Distribution Business Info	Bonddistributionparams
8	Rights Issue Business Info	Rightsissueparams
9	EOD closing data of cash market	Cashsecurityclosemd
10	EOD closing data of derivative market	derivativesecurityclosemd
11	International Market Mutual Connect Status Info	imcparams
12	International Market Mutual Connect Underlying Securities Info	imcsecurityparams
13	International Market Mutual Connect Exchange Rate Info	imcexchangerate
14	Eligible HK stocks product information	hkexreff04
15	Tick Size File	hkexzxjc
16	End of day data of Eligible HK stocks	hkexclpr04
17	Option combination strategy info	optioncombinationstrategy

18	CNI Indices info	cnindex
19	Spot Bond Trading Business Params	bondtradingparams
20	Bond General Pledged Repo Business Params	bondrepoparams

# 3.1 Securities Info (securities)

The file ID is securities, extension name is xml.

Securities contain the basic information of all listed instruments on SZSE, but excluding the temporary listing code of some special business, like online voting, bond distribution, online issuance or subscription. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-1 Definition of Securities.xml

	Field Name	English Field Name	Type	Description
	Security code	SecurityID	C8	
	Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
	Security symbol	Symbol	U40	Could include Chinese characters, means
				40 UTF-8 characters at maximum
Fields available for	Security symbol (Extended)	SymbolEx	U40	Reserved for long symbol.
all securities				Same with Symbol field if long symbol not
				exists.
	English name	EnglishName	C40	For options, this field is the option
				contract number
	ISIN code	ISIN	C12	

	Underlying se	curity code	UnderlyingSecurityID	C8	
	Underlying se	curity code source	UnderlyingSecurityIDSource	C4	102=Shenzhen Stock Exchange
	Listing date		ListDate	N8	
	Security type		SecurityType	N4	
	currency		Currency	C4	Currency CNY=Ren Min Bi HKD=HongKong dollars
	Quantity unit		QtyUnit	N15(2)	For a certain security's order, the order quantity should be the integer multiplier of the quantity unit.
	Whether supp	ort T+0	DayTrading	C1	Y=support N=not support
	Previous close price		PrevClosePx	N13(4)	
	Security status		SecurityStatus		One security may have 0 or multiple status.
Fields available for all securities		Status	Status	N2	Security status code:  1: suspension 2: ex-rights 3: ex-dividend 4: ST 5: *ST 6: first listing day 7: refinancing 8: first day of listing resume 9: online voting 10: delisting transitional period

				12: additional shares listing 13: contract adjustment 14: negotiable transfer after suspension 15: adjustment from two-way to single-way for transaction mode ( That means only negotiation block trade business available ) 16: specific bond transfer 17: Initial period ( within 10 trading days ) from IPO 18: The first day of delisting period
	Total outstanding shares	OutstandingShare	N18(2)	
	Public negotiable shares	PublicFloatShareQuantity	N18(2)	
	Par value	ParValue	N13(4)	
	Whether as a margin security of	GageFlag	C1	Y: yes
	short selling/security lending			N: no
Fields available for	ratio of a margin security	GageRatio	N5(2)	
all securities	Whether as an underlying stock of	CrdBuyUnderlying	C1	Y: yes
	short selling			N: no
	Whether as an underlying stock of	CrdSellUnderlying	C1	Y: yes
	security lending			N: no
	Price check mode	PriceCheckMode	N2	0=no check
				1=no less than the latest price
				2=no less than previous close price
				3=no less than the highest bid
				4=no less than the lowest ask

	Whether pledged	PledgeFlag	C1	Y: yes
				N: no
	Ratio of repo contract security	ContractMultiplier	N5(4)	
	Repo contract security	RegularShare	C8	
	Flag of qualification management	QualificationFlag	C1	Whether need to do qualification management on this stock Y=yes N=no
	Investors qualification class	QualificationClass	N2	Qualification class of investors.  0=all investors including ordinary investors and professional investors  1=only professional investors  2=only institutional investors of the professional investors
		StockParams		
	Category of	code of related securities (1,2	2,3,4, 36, 37)	
StockParams	Industry classification	IndustryClassification	C4	
	Profit per share of previous year	PreviousYearProfitPerShare	N10(4)	Profit per unit for Depository Receipts (Security Type Code is 36)
	Profit per share of current year	CurrentYearProfitPerShare	N10(4)	Profit per unit for Depository Receipts (Security Type Code is 36)
	Whether in a tender offer period	OfferingFlag	C1	Y: yes N: no
	List of tenderer information	TendererList		One security could have more than one tenderers. For each tenderer there is a TendererList record.

<b>→</b>	Tenderer ID	TendererID	C6	
<b>→</b>	Tenderer Name	TendererName	U50	
<b>→</b>	Offering Price	OfferingPrice	N13(4)	
<b>→</b>	Begin Date	BeginDate	N8	
<b>→</b>	End Date	EndDate	N8	
Stock	Attribute	Attribute	N2	0=common stocks
				1=stocks of innovative firms
				This field is only applicable for those with
				a Security Type Code of 1, 2 or 3.
If any	profit	NoProfit	C1	Y=yes, no profit
				N=no, in profit
				This field is only applicable to ChiNext
				stocks stocks or depository receipts of
				innovative firms.
If any	difference of voting rights	WeightedVotingRights	C1	Y=have a difference
				N=no difference
				This field is only applicable to ChiNext
				stocks stocks or depository receipts of
				innovative firms.
				For ChiNext stocks, this field indicates if
				difference of decisive voting rights exists;
				For stocks or depository receipts of
				innovative firms, this field indicates if
				difference of voting rights exists;
If regi	stration	IsRegistration	C1	Y=Yes
				N=No

	If any Variable Interest Entities	IsVIE	C1	This field is only applicable to ChiNext stocks stocks or depository receipts of innovative firms.  Y=Yes
				N=No This field is only applicable to ChiNext stocks stocks or depository receipts of innovative firms.
		FundParams		
	Category code of re	lated securities (14,15,16,1	7,18,19,20,23,2	24,25,26)
fundparams	NAV of day T-1	NAV	N13(4)	For most funds, this field places NAV of T-1; For some funds (like funds investing in overseas market), it could be NAV of T-x (x>=1, for instance, for funds investing in US stocks, x=2)
		BondParams		
	Category code of	f related securities (5,6,7,8	,9,10,11, 34, 35	5、39)
	Coupon rate	CouponRate	N8(4)	
	Issue price with a discount	IssuePrice	N13(4)	
	Accrued interest per unit	Interest	N12(8)	The accrued interest for each issued bond or per hundred yuan face value issued bond.
	Interest accrual date or interest payment date	InterestAccrualDate	N8	
	Maturity date	MaturityDate	N8	The value would be fixed to 0, if a bond

			has a Status valued "16-specific bond transfer", and for other bonds, the value of this field would be their actual maturity date.
Whether in a convertible repo	OfferingFlag	C1	Y: yes N: no
Whether in a conversion period	SwapFlag	C1	Y: yes N: no
Whether in a resale period	PutbackFlag	C1	Y: yes N: no
Whether in a resale cancellation period	PutbackCancelFlag	C1	Y: yes N: no
Whether in a put option and resale period	PutbackResellFlag	C1	Y: yes N: no
Purpose Type	PurposeType	N2	This field is applicable to directional convertible bonds, its value defines as below:  1=re-financing  2=supporting financing  3=capital consideration  0=for other bonds ( meaningless )
Pricing Method	PricingMethod	N2	Refers to the pricing method used in bond transactions, its value defines as below: 1=net price 2=full price

		WarrantParams		
		Category code of related secu	urities (28)	
	Exercise price	ExercisePrice	N13(4)	
	Exercise ratio	ExerciseRatio	N10(4)	
	Exercise beginning date	ExerciseBeginDate	N8	
	Exercise ending date	ExerciseEndDate	N8	
	Call or put	CallOrPut	C1	C: call
				P: put
warrantparams	Delivery type	DeliveryType	C1	S: security clearing
				C: cash clearing
	clearing price	ClearingPrice	N13(4)	
	Exercise type	ExerciseType	C1	A: American style
				E: European style
				B: Bermuda style
	Last trading day	LastTradeDay	N8	
		RepoParams		
		Category code of related secu	urities (12)	
RepoParams	Expiration days	ExpirationDays	N4	
		OptionParams		
		Category code of related secur	rities (29,30)	
	Call or put	CallOrPut	C1	C: call
				P: put
OptionParams	Type of list	ListType	N2	1=new listing of new instrument
				2=add listing at expiration
				3=add listing of adjustment
				4=add listing of fluctuation

	Delivery day		DeliveryDay	N8	
	Delivery mont	h	DeliveryMonth	N6	Format is YYYYMM
	Delivery type		DeliveryType	C1	S=security settlement
					C=cash settlement
	Exercise begin	nning date	ExerciseBeginDate	N8	
	Exercise endir	ng date	ExerciseEndDate	N8	
	Exercise price		ExercisePrice	N13(4)	
	Exercise type		ExcerciseType	C1	A=American style
					E=European style
					B=Burmuda style
	Last trading da	ay	LastTradeDay	N8	
	Adjustment tin	nes	AdjustTimes	N2	
	Contract unit		ContractUnit	N15(2)	
	Previous settle	e price	PrevSettPrice	N13(4)	
	Contract posit	ions	ContractPosition	N18(2)	
	Combination S	Strategy Info	CombinationStrategy		List of combination strategies that the
					option contract supports. One contract
					can support multiple strategies and each
					one has one Strategy record.
	<b>→</b>	Strategy ID	StrategyID	C8	
	<b>→</b>	Automatic split day	AutoSplitDay	N8	After the automatic split day, the contract
					can not combined any more.
			PreferredStockParams	5	
		Cate	gory code of related secu	rities (33)	
PreferredStockPara	Interest of pre	ferred stocks	Interest	N8(4)	0.0000 represents floating interest
ms	Whether in	a convertible repo	OfferingFlag	C1	Y=yes

	period			N=no				
	ReitsParams							
	Category code of related securities (13、38)							
ReitsParams	Maturity Date	MaturityDate	N8	The value would be fixed to 0, if a asset-backed security has a Status valued "16-specific bond transfer", and for other asset-backed securities, the value of this field would be their actual maturity date.				
	Whether in a put option and resale period	PutbackResellFlag	C1	Y: yes N: no				
	Pricing Method	PricingMethod	N2	Refers to the pricing method used in asset-backed security transactions, its value defines as below:  1=net price  2=full price  And for infrastructure funds, the pricing method will be fixed as 0(meaningless)				
	Coupon Rate	CouponRate	N8(4)	For infrastructure funds, the coupon rate will be fixed as 0(meaningless), and for asset-backed security, the value of this field would be their actual coupon rate.				
	Accrued interest	Interest	N12(8)	Accrued interest on asset-backed securities issued per hundred yuan.  For infrastructure funds, the accrued interest will be fixed as 0(meaningless),				

					and for asset-backed security, the value of this field would be their actual accrued interest.
	Interest A	ccrual Date	InterestAccrualDate	N8	For infrastructure funds, the interest accrual date will be fixed as 0(meaningless), and for asset-backed security, the value of this field would be their actual interest accrual date.
	Whether in offering period  Tenderer list		OfferingFlag	C1	Y = yes N = no
			TendererList		Each security can have more than one tenderers. Each tenderer is recorded as one Tenderer record.
	<b>→</b>	Tenderer ID	TendererID	C6	ID of the tenderer
	<b>→</b>	Tenderer name	TendererName	U50	
	<b>→</b>	Offering price	OfferingPrice	N13(4)	
	<b>→</b>	Begin date	BeginDate	N8	
	<b>→</b>	End date	EndDate	N8	

#### Notes:

1) Definition of Securities Type Code is as follows.

Table 3-2 Definition of Securities Type

Name	Code
A shares on main board	1
SME shares	2

ChiNext shares	3
B shares on main board	4
Treasury bonds (including municipal bonds)	5
Enterprise bonds	6
Corporate bonds (including detachable)	7
Convertible bonds	8
SME private bonds	9
SME exchangeable private bonds	10
subordinated debts of security firms	11
Pledged repo	12
Asset-backed securities	13
ETFs of Shenzhen market	14
ETFs of cross market	15
Cross border ETFs	16
Physical bond ETFs of Shenzhen market	17
Cash bond ETF	18
Gold ETFs	19
Currency ETFs	20
Leverage ETF	21 (reserved)
Commodity future ETF	22
Standard LOF	23
Classified sub-funds	24
Close-ended funds	25
Funds only allowed for subscription and redemption	26
Warrants	28

Individual Stock options	29
ETF options	30
Preferred stocks	33
Security firm short-term bonds	34
Convertible bonds	35
Mainboard&SME depository receipts	36
ChiNext depository receipts	37
Infrastructure fund	38
Directional convertible bonds	39

# 3.2 Index info (indexinfo)

The file ID is indexinfo\_the extension name is xml,.

This message contains the basic information of index released by SZSE. This data is released in XML file before the market opens, one security for one index entry in XML file.

Table 3-3 Definition of indexinfo.xml

Field Name	Field English Name	Туре	Description
Index code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Index symbol	Symbol	U40	Could include Chinese characters, means 40 UTF-8
			characters at maximum
Index symbol (Extended)	SymbolEx	U40	Reserved for long symbol.
			Same with index symbol if long symbol not exists.

English name	EnglishName	C40	
Currency	Currency	C4	Currency
			CNY=Renminbi
			HKD=Hong Kong dollars
Previous close index	PrevCloseIdx	N18(5)	

# 3.3 Statistics Info (stat)

The file ID is stat\_the extension name is.xml.

This message contains the basic information of statistics released by SZSE. This data is released in XML file before the market opens, one security for one stat entry in XML file.

Table 3-4 Definition of stat.xml

Field Name	Field English Name	Туре	Description
Statistic code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Statistic symbol	Symbol	U40	Could include Chinese characters, means 40 UTF-8
			characters at maximum
Statistic symbol (Extended)	SymbolEx	U40	Reserved for long symbol.
			Same with statistic symbol if long symbol not exists.
English name	EnglishName	C40	

# 3.4 Cash Auction Info (cashauctionparams)

The file ID is cashauctionparams\_the extension name is xml.

This message contains the parameters of securities in the cash auction business, including spot(stocks and funds),etc. . This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-5 Definition of cashauctionparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Upper limit of limit buy quantity	BuyQtyUpperLimit	N15(2)	Upper limit of a limit buy order quantity
Upper limit of limit sell quantity	SellQtyUpperLimit	N15(2)	Upper limit of a limit sell order quantity
Limit buy quantity unit	BuyQtyUnit	N15(2)	Buy quantity unit of limit order.
			The quantity of each limit buy order should be integer
			multiple of this buy quantity unit.
Limit sell quantity unit	SellQtyUnit	N15(2)	Sell quantity unit of limit order.
			The quantity of each limit sell order should be integer
			multiple of this sell quantity unit.
Upper limit of market buy order quantity	MarketBuyQtyUpperLimit	N15(2)	Upper limit of a market buy order quantity.
Upper limit of market sell order quantity	MarketSellQtyUpperLimit	N15(2)	Upper limit of a market sell order quantity.
Market Buy quantity unit	MarketBuyQtyUnit	N15(2)	Buy quantity unit of market order.
			The quantity of each market buy order should be
			integer multiple of this market buy quantity unit.
Market Sell quantity unit	MarketSellQtyUnit	N15(2)	Sell quantity unit of market order.

				The quantity of each market sell order should be integer multiple of this market sell quantity unit.
Price tick		PriceTick	N13(4)	integer multiple of this market sell quantity unit.
	limit settings	PriceLimitSetting		
<b>→</b>	Type of settings	Туре	C1	O: opening auction
		7.		T: continuous auction
				C: ending auction
<b>→</b>	Has a price limit or not	HasPriceLimit	C1	Y: yes
				N: no
<b>→</b>	Type of reference price	ReferPriceType	C1	1: previous closing price
<b>→</b>	Type of up/down limit	LimitType	C1	1: extend/range (percent)
				2: price (absolute value)
<b>→</b>	Limit of up rate	LimitUpRate	N10(3)	
<b>→</b>	Limit of down rate	LimitDownRate	N10(3)	
<b>→</b>	Limit of up absolute	LimitUpAbsolute	N10(4)	
<b>→</b>	Limit of down absolute	LimitDownAbsolute	N10(4)	
<b>→</b>	Whether has a limit of auction	HasAuctionLimit	C1	Y: yes
				N: no
<b>→</b>	Type of auction limit	AuctionLimitType	C1	1: extend/range (percent)
				2: price (absolute value)
<b>→</b>	Type of auction reference price	AuctionReferPriceType	C1	1 = Use nearest price as reference price;
				2 = Use opposite best price as reference price;
<b>→</b>	Auction up or down rate	AuctionUpDownRate	N10(3)	See Note 1;
<b>→</b>	Auction up or down absolute	AuctionUpDownAbsolute	N10(4)	Calculation method is similar to that of up/down rate. Using absolute value to add/subtraction

Flag of market maker	MarketMakerFlag	C1	Mark if a market maker exits
			Y: yes
			N: no

#### Note:

- 1. Calculation example of auction limit price:
- > If AuctionReferPriceType = 1, AuctionUpDownRate = 0.100, reference price is 9.8400, and the price tick is 0.0100, then the limit price range is: [9.8400\*(1-0.100), 9.8400\*(1+0.100)], which is: [8.8600,10.8200]
- > if AuctionReferPriceType = 1, AuctionUpDownRate = 0.100, reference price is 9.8400, and the up limit is 8.0000, limit price of down absolute is 12.0000, price tick is 0.0100, then, the limit price range of buy order is: [Limit price of down absolute, 9.8400\*(1+0.010)], the result is: [8.0000,10.8200], the limit price range of sell order is: [9.8400\*(1-0.010), Limit price of up absolute], the result is: [8.8600,12.0000].

### 3.5 Derivative Auction Info (derivative auction params)

The file ID is derivative auction params\_the extension name is xml.

This message contains the parameters of securities in the derivative auction business, including only options at the moment. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-6 Definition of derivative auction params.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange

Upper limit of a buy quantity	BuyQtyUpperLimit	N15(2)	The upper limit of a buy order quantity under limitprice
under limitprice			
Upper limit of a sell quantity	SellQtyUpperLimit	N15(2)	The upper limit of a sell order quantity under limitprice
under limitprice			
Buy quantity upper limit under	MarketOrderBuyQtyUpperLimit	N15(2)	The upper limit of buy quantities under a market order
a market order			
Sell quantity upper limit under	MarketOrderSellQtyUpperLimit	N15(2)	The upper limit of sell quantities under a market order
a market order			
Buy quantity upper limit under	QuoteOrderBuyQtyUpperLimit	N15(2)	The upper limit of buy quantities under a quote order
a quote order			
Sell quantity upper limit under	QuoteOrderSellQtyUpperLimit	N15(2)	The upper limit of sell quantities under a quote order
a quote order			
Buy quantity unit	BuyQtyUnit	N15(2)	The quantity of each buy order should be integer multiple of
			the buy quantity unit.
Sell quantity unit	SellQtyUnit	N15(2)	The quantity of each sell order should be integer multiple of
			the sell quantity unit.
Price Tick	PriceTick	N13(4)	
Price increasing limit	PriceUpperLimit	N13(4)	
Price falling limit	PriceLowerLimit	N13(4)	
Sell margin of last day	LastSellMargin	N18(4)	
Sell margin of current day	SellMargin	N18(4)	
Margin ratio parameter 1	MarginRatioParam1	N4(2)	Percentage, for example:12.00% is recorded as 12.00 in
			the file
Margin ratio parameter 2	MarginRatioParam2	N4(2)	Percentage, for example:12.00% is recorded as 12.00 in
			the file
Flag of market maker	MarketMakerFlag	C1	Mark if a market maker exits

	Y: yes
	N: no

## 3.6 Negotiation Trade Info (negotiationparams)

The file ID is negotiationparams\_the extension name is xml.

This message contains the parameters of securities in the negotiation trading business. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-7 Definition of negotiationparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Buy quantity unit	BuyQtyUnit	N15(2)	The quantity of each buy order should be integer multiple
			of the buy quantity unit.
Sell quantity unit	SellQtyUnit	N15(2)	The quantity of each sell order should be integer multiple
			of the sell quantity unit.
Lower limit of a buy quantity	QtyLowerLimit	N15(2)	Should satisfy the quantity lower limit or amount lower
			limit
Lower limit of a buy amount	AmtLowerLimit	N18(4)	
Price increasing limit	PriceUpperLimit	N13(4)	
Price falling limit	PriceLowerLimit	N13(4)	
Price tick	PriceTick	N13(4)	

Flag of market maker	MarketMakerFlag	C1	Mark if a market maker exits
			Y: yes
			N: no

## 3.7 After-hours-trading block trade Info (afterhoursparams)

The file ID is afterhoursparams, the extension name is xml.

This message contains the parameters of securities in the after-hour block trade business. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-8 Definition of afterhoursparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Buy quantity unit	BuyQtyUnit	N15(2)	The quantity of each buy order should be integer multiple of
			the buy quantity unit.
Sell quantity unit	SellQtyUnit	N15(2)	The quantity of each sell order should be integer multiple of
			the sell quantity unit.

## 3.8 Security Lending Info (securityledingparams)

The file ID is securitylendingparams, the extension name is xml.

This message contains the underlying security info of security lending. This data is released in XML file before the market opens, one Security code, ExpirationType and ExpirationDays for one security entry in XML file.

Table 3-9 Defintiion of securityledingparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Expiration type	ExpirationType	C1	Type of expiration
			1: fixed term
Expiration days	ExpirationDays	N4	
rate	Rate	N13(4)	
Upper limit of lending quantity for	TcrOrderSellQtyUpperLimit	N15(2)	Upper limit of lending quantity for trade-confirm-record
tcr sell order			sell order
Lower limit of lending quantity for	TcrOrderSellQtyLowerLimit	N15(2)	Lower limit of lending quantity for trade-confirm-record
tcr sell order			sell order
Quantity unit for tcr sell order	TcrOrderSellQtyUnit	N15(2)	The quantity of each lending order should be integer
			multiple of this quantity unit.
Upper limit of lending quantity for	SellQtyUpperLimit	N15(2)	Upper limit of lending quantity for sell order
sell order			
Lower limit of lending quantity for	SellQtyLowerLimit	N15(2)	Lower limit of lending quantity for sell order
sell order			
Quantity unit for non-tcr sell order	SellQtyUnit	N15(2)	The quantity of each lending order should be integer
			multiple of this quantity unit.
Marketization flag	MarketizationFlag	C1	Whether marketization security lending is implemented?
			Y=Yes

			N=No
Restricted share lending flag	RestrictedShareLendingFlag	C1	Whether restricted share lending is allowed?
			Y=Yes
			N=No

# 3.9 Real-time Open Subscription and Redemption of ETF Info (pcf)

Each ETF corresponds to a PCF file.

The name of PCF file is pcf\_NNNNNNNN\_YYYYMMDD.xml, where NNNNNNNN is the ETF code, (if the ETF code is not enough for 8 digits, then uses 6 digits. i.e. PCF file of 159901 should be pcf 159901 YYYYMMDD.xml), YYYYMMDD is the corresponding trading day.

Table 3-10 Definitiion of pcf\_\*.xml

Field Name	Field English Name	Туре	Description
Version code	Version	C8	Fixed value at 1.0
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Fund symbol	Symbol	U40	
Name of fund management company	FundManagementCompany	U30	
Code of underlying security	UnderlyingSecurityID	C8	
Code source of underlying security	UnderlyingSecurityIDSource	C4	101=Shanghai Stock Exchange
			102=Shenzhen Stock Exchange
			103=HK exchange
			9999=others
Minimum unit of creation & redemption	CreationRedemptionUnit	N15(2)	Number of ETF for each basket (Minimum unit of creation &

			redemption), should be positive integer
Estimated cash balance	EstimateCashComponent	N11(2)	Estimated cash balance of each basket at day T.
Maximum ratio of cash replacement	MaxCashRatio	N6(5)	Maximum ratio of cash replacement, i.e. 5.551% is
			recorded as 0.05551 in the file.
Whether publish IOPV	Publish	C1	Y=yes
			N=no
Whether creation is allowed	Creation	C1	Y=yes
			N=no
Whether redemption is allowed	Redemption	C1	Y=yes
			N=no
Number of constituents in Shenzhen	RecordNum	N4	Means the constituents number of Shenzhen market in a
market			basket (including 159900 security)
Number of all constituents	TotalRecordNum	N4	Means the number of all constituents in a basket (including
			159900 security)
Trading day	TradingDay	N8	Format is YYYYMMDD
Previous trading day	PreTradingDay	N8	Date format for day T-X is YYYYMMDD, where X is
			confirmed according to the fund valuation time by the fund
			management company
Cash component	CashComponent	N11(2)	Cash component of subscription & redemption unit at day
			T-X
NAV per unit of subscription &	NAVperCu	N12(2)	NAV of subscription & redemption unit at day T-X
redemption			
NAV	NAV	N8(4)	NAV of funds at day T-X
Dividend	DividendPerCU	N12(2)	Dividend of of subscription & redemption unit at day T
Limit of accumulated subscription value	CreationLimit	N18(2)	Upper limit of accumulated fund shares allowed for
			subscription. "0" represents no limit, only could be integer

					currently
Limi	t of a	ccumulated redemption value	RedemptionLimit	N18(2)	Upper limit of accumulated fund shares allowed for redemption. "0" represents no limit, only could be integer
					currently
Limi	t of a	accumulated subscription value	CreationLimitPerUser	N18(2)	Upper limit of accumulated fund shares allowed for
per	user				subscription for each user. "0" represents no limit, only
					could be integer currently
Limi	t of a	accumulated redemption value	RedemptionLimitPerUser	N18(2)	Upper limit of accumulated fund shares allowed for
per	user				redemption for each user. "0" represents no limit, only could
					be integer currently
Limi	t of n	et subscription value	NetCreationLimit	N18(2)	Upper limit of fund shares in net subscription. "0"
					represents no limit, only could be integer currently
Limi	t of n	et redemption value	NetRedemptionLimit	N18(2)	Upper limit of fund shares in net redemption. "0" represents
					no limit, only could be integer currently
Limi	t of n	et subscription value per user	NetCreationLimitPerUser	N18(2)	Upper limit of fund shares in net subscription of each user.
					"0" represents no limit, only could be integer currently
Limi	t of n	et redemption value per user	NetRedemptionLimitPerUser	N18(2)	Upper limit of fund shares in net redemption of each user.
					"0" represents no limit, only could be integer currently
Con	stitue	ents list	Components		
<b>→</b>	Con	stituents info	Component		
<b>→</b>	<b>→</b>	Code of underlying security	UnderlyingSecurityID	C8	
<b>→</b>	$\rightarrow$	Code source of underlying	UnderlyingSecurityIDSource	C4	101=Shanghai Stock Exchange
		security			102=Shenzhen Stock Exchange
					103=HK exchange
<b>→</b>	$\rightarrow$	Short name of underlying	UnderlyingSymbol	U40	
		security			

<b>→</b>	<b>→</b>	Flag of cash substitute	SubstituteFlag	C1	0=no cash substitute (have to own securities)
					1=cash substitute allowed (first use securities, cash
					substitute is used when security is in shortage)
					2=cash substitute is requried
<b>→</b>	<b>→</b>	Number of constituents	ComponentShare	N15(2)	Number of constituents in each subscription basket.
					This field is only valid when "SubstituteFlag" is 0 or 1.
-	-	Premium ratio	PremiumRatio	N7(5)	The increased ratio on price when cash substitute is used.
					For example, 2.551% in the file is represented as 0.02551,
					2.1% in the file is represented as 0.02100. This field is only
					valid when "SubstituteFlag" is 1.
<b>→</b>	<b>→</b>	Discount Ratio	DiscountRatio	N7(5)	This value is the discount ratio when using cash to
					substitute component security shares to redeem ETF. For
					example, 2.551% is representing as 0.02551, 2.1% is
					representing as 0.02100 in the file.
					This field is optional. It is only valid when " SubstituteFlag "
					is 1, and " Code source of underlying security " is not "102".
					This field is filled in by ETF fund companies as per
					business requirement, used as a reminder to investors.
					Clients' system should not use this value to process any
					order or trade.
<b>→</b>	<b>→</b>	Subscription cash substitute	CreationCashSubstitute	N18(4)	Total value required to subscribe this security when it is
					required to use cash as a substitute. This field is only valid
					when "SubstituteFlag" is 2.
<b>→</b>	<b>→</b>	Redemption cash substitute	RedemptionCashSubstitute	N18(4)	Total value required to redeem this security when it is
					required to use cash as a substitute. For example, 2000 is
					representing as 2000.0000 in the file. This field is 0.0000

		fe	for cross-border ETF, cro	ross-market ETF,	gold	ETF	and
		C	cash bond ETF.				
		Т	This field is only valid whe	en "SubstituteFlag	" is 2.		

## 3.10 Online Issuance and Subscription Info (issueparams)

The file ID is issueparams, the extension name is xml.

This message contains the related information of all online issuance and subscription on each trading day, including IPO, additional issuance, LOF issuance, subscription of convertible bonds etc. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-11 Definition of issueparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Security symbol	Symbol	U40	
Security symbol (Extended)	SymbolEx	U40	Reserved for long symbol.
			If long symbol not exist, this value will be the
			same with Symbol.
English name	EnglishName	C40	
Issuance Type	IssueType	N4	1 = refinancing issuance
			2 = initial issuance
			3 = LOF issuance
Underlying security code	UnderlyingSecurityID	C8	Used during additional offering
Total outstanding shares	OutstandingShare	N18(2)	

Price up limit	PriceUpperLimit	N13(4)	
Price down limit	PriceLowerLimit	N13(4)	
Unit of a subscription	Unit	N15(2)	The subscription quantity should be integer multiple of the quantity unit.
Up limit of each subscription quantity	QtyUpperLimit	N15(2)	
Down limit of each subscription quantity	QtyLowerLimit	N15(2)	
Starting date of issuance	StartDate	N8	
Ending date of issuance	EndDate	N8	
Whether permit a cancel	CancelPermit	C1	Y: yes
			N: no
Whether permit re-subscription	ReApplyPermit	C1	Y: yes
			N: no
Security attribute	Attribute	N2	0=others
			1=stocks of innovative firms
			This field is only applicable for those with a
			Security Type Code of 1, 2 or 3.
If any profit	NoProfit	C1	Y=yes, no profit
			N=no, in profit
			This field is only applicable to CNiNext stock,
			stocks or depository receipts of innovative firms.
If any difference of voting rights	WeightedVotingRights	C1	Y=have a difference
			N=no difference
			This field is only applicable to CNiNext stock,
			stocks or depository receipts of innovative firms.

			For CNinext stocks, it indicates whether difference of decisive voting right exists; For stocks or depository receipts of innovative firms, it indicates whether difference of voting right exists.
If registration	IsRegistration	C1	Y=Yes N=No This field is only applicable to ChiNext stocks stocks or depository receipts of innovative firms.
If any Variable Interest Entities	IsVIE	C1	Y=Yes N=No This field is only applicable to ChiNext stocks stocks or depository receipts of innovative firms.

#### Note:

- 1) If there is no issuance on the current day, a XML file with no entries shall also be sent out.
- 2) Issuance mode can be decided by SecurityType and IssueType.

Issuance mode	SecurityType	IssueType
IPO	1、2、3、36 or 37	2
Additional issuance	1、2、3、36 or 37	1
Subscription of convertible bonds	8	1
Subscription of exchangeable bonds	35	2
Issuance of fund	14、15、16、17、18、19、20、22、23、24、25 or 26	3

# 3.11 Bond Distribution Business Info (bonddistributionparams)

The file ID is bonddistributionparams, the extension name is.xml.

This message contains the related information of all bond distributions on each trading day. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-12 Definition of bonddistributionparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Security symbol	Symbol	U40	Name of underwriters Could include Chinese characters, means 40 UTF-8 characters at maximum
Security symbol (Extended)	SymbolEx	U40	Reserved for long symbol.  If long symbol not exist, this value will be the same with Symbol.
English name	EnglishName	C40	
underlying security ID	UnderlyingSecurityID	C8	Listing code of bonds
Code source of underlying security	UnderlyingSecurityIDSource	C4	102=Shenzhen Stock Exchange
type of security	SecurityType	N4	
Up limit of subscription quantity	QtyUpperLimit	N15(2)	
Total quantity of proxy issuance	ProxyListQty	N18(2)	
Total quantity of self issuance	selfListQty	N18(2)	
Starting date of bond distribution	StartDate	N8	

Ending date of bond distribution	EndDate	N8	
Broker PBU	BrokerPBU	C6	
Investors qualification class	QualificationClass	N2	Qualification class of investors.
			0=all investors including ordinary investors and
			professional investors
			1=only professional investors
			2=only institutional investors of the professional
			investors

If there is no bond distribution on the current day, a XML file with no entries shall also be sent out.

## 3.12 Rights Issue Business Info (rightsissueparams)

The file ID is rightsissueparams, the extension name is.xml.

This message contains the related information of all rights issue of stocks and convertible bonds on each trading day. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-13 Definition of rightsissueparams.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Security symbol	Symbol	U40	Could include Chinese characters, means 40
			UTF-8 characters at maximum
Security symbol (Extended)	SymbolEx	U40	Reserved for long symbol.

			If long symbol not exist, this value will be the same with Symbol.
English name	EnglishName	C40	
Underlying security code	UnderlyingSecurityID	C8	Corresponding underlying security code with the rights issue
Code source of underlying security	UnderlyingSecurityIDSource	C4	102=Shenzhen Stock Exchange
Price of rights issue	Price	N13(4)	
Subscription unit	Unit	N15(2)	The subscription quantity must be an integer multiple of the base number.

If there is no rights issue on the current day, a XML file with no entries shall also be sent out.

### 3.13 International Market Mutual Connect Status Info (imcparams)

The file ID is imcparams, the extension name is.xml.

This message contains related information of the international market mutual connect. This message is released in XML file before market open, one market corresponds to one market entry in XML file.

Field Name	Field English Name	Туре	Description
Market code	MarketID	C8	XHKG=HK Connect
Whether open or not	OpenFlag	C1	Y=yes
			N=no
Initial amount	ThresholdAmount	N18(4)	

### 3.14 International Market Mutual Connect Underlying Securities Info (imcsecurityparams)

The file ID is imcsecurityparams, the extension name is.xml.

This message contains the underlying securities related information of the international market mutual connect. This message is released in XML file before market open. One market corresponds to one market entry in XML file.

Field Name	Field English Name	Туре	Description
Market code	MarketID	C8	XHKG=HK Connect
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	103=HK exchange

### 3.15 International Market Mutual Connect Exchange Rate Info (imcexchangerate)

The file ID is imcexchangerate, the extension name is.xml.

This message contains the exchange rate information of the international market mutual connect. This message is released in XML file before market open. The exchange rate for each pair of currencies corresponds to one exchangerate entry in XML file.

Field Name	Field English Name	Туре	Description
Source currency	FromCurrency	C4	HKD=HK currency
			CNY=renminbi
Target currency	ToCurrency	C4	HKD=HK currency
			CNY=renminbi
Bid rate of reference exchange rate	BidRate	N15(5)	

Offer rate of reference exchange rate	OfferRate	N15(5)	
Middle rate of reference exchange rate	MidPointRate	N15(5)	

#### Note:

- 1) This file is the estimated exchange rate under the daily quota of the international market mutual connect.
- 2) The exchange rate in this file is the rate of one source currency to one target currency. For example, for southbound eligible stocks trading under HK Stock Connect, the quota is counted by using HKD as the source currency, RMB as the target currency.

### 3.16 Southbound Eligible HK Stocks Trading Info

#### 3.16.1 Eligible HK stocks product information (hkexreff04)

The file ID is hkexreff04, the extension name is.txt.

This message contains the basic information of HK stocks product. This message is released in txt file before market open on the trading day ( should also be the trading day on HKex) (day T). One security corresponds to one entry. The format is row style, the fields are differentiated by separator " | ", fixed at length, using 0x0A as the meaning of a new line.

This file is produced by HK exchange, redistributed by SZSE.

No.	Field Name	Length	Field Description	
1	Type of data	C5	R0401	
2	Security code	C5	Security code, filled with zero from left if no more than 5 digits e.g. 00012	
3	ISIN code	C12	ISIN code (e.g.: HK000000012)	
			Nil if the security has no ISIN code.	

4	Chinese short name	C40	Security name (simplified Chinese, 8 Chinese characters at most, GBK	
			coding)	
5	English short name	C15	Security short name in English.	
6	English full name	C40	Security full name in English.	
7	Supplementary security code	C5	Underlying stock code of a warrant.	
8	Market category	C4	MAIN: main board	
			GEM: ChiNext	
			ETS: extensible traded security	
			NASD: Nasdaq AMX	
9	Security type	C4	BOND Bond	
			BWRT Basket Warrant	
			EQTY Equity	
			TRST Trust	
			WRNT Warrant	
10	Currency	C3	HK dollars: HKD	
			US dollars: USD	
			Renminbi: CNY	
			Australian dollars: AUD	
			Canadian dollars: CAD	
			Japanese Yuan: JPY	
			Singapore Dollar: SGD	
			British Pound: GBP	
			Euro: EUR	
11	Currency unit	C1	Currency unit is the unit of previous closing price field. When currency unit is	
			zero, previous closing price equals the value of previous closing price	
			multiplied by the 0 power of 10. When currency unit is 1, previous closing	

			price equals the value of previous closing price multiplied by the 1 power of
			10, and so on.
12	Par Value	N15(8)	Par value of a stock, the unit is Yuan. If no par value, it's zero.
			The integer bit is no longer than 6.
13	Par value currency	C3	HK dollars: HKD
			US dollars: USD
			Renminbi: CNY
			Nil if it has no par value.
14	Interest	N15(8)	Interest at the delivery date for bonds.
			This is only for bonds with interest settled via CCASS system. For other
			situations, this field is zero.
15	Listing date	C8	The initial trading date on HK exchange, YYYYMMDD
16	Bid offer unit	N6	round lot
			Order quantities of bid/offer should be an integer multiple of this unit.
17	Previous closing price	N10(3)	ex- dividend (ex-interest) closing price
			(If any ex-dividend or ex-interest, it's closing price ex-dividend, ex-interest.)
18	Memo	C50	1 <sup>st</sup> digit valid: Y means suspension, N means non-suspension
			2 <sup>nd</sup> digit valid: Y means to participate in the market fluctuation adjustment
			mechanism; N means no participation in the market fluctuation adjustment
			mechanism.
			3 <sup>rd</sup> digit valid: Y means to participate in the closing auctions period
			N means no participation in the closing auctions period.
			4 <sup>th</sup> digit valid: Y means to participate in the opening period optimization
			N means no participation in the opening period optimization.
			5 <sup>th</sup> ~ 6 <sup>th</sup> digit valid: Tick size code, filled with zero from left if no more than 2
			digits

	7 <sup>th~</sup> 8 <sup>th</sup> digit valid: Market fluctuation adjustment mechanism type
	Reserved field, invalid.

#### Note:

- 1) For field of "Previous Closing Price"
  - This field is the ex-dividend (interest) closing price at day T-1.
  - If the product is suspended on T-1, the "previous closing price" in this file on T day is the ex-dividend or ex-interest "previous closing price" on day T-1 (trading day), and so on if it is also suspended on day T,.
- 2) If the security is delisted on day T, this file received on day T doesn't contain this security data.
- 3) The security code is unique and cannot be nil.
- 4) The length and format of the security par value in the HK Exchange Clearing System: the integer digit is 8 (including decimal point) and decimal places of 5 (round up). Generally, if the actual par value of this security is less than 5 decimal places, e.g. 0.000003, the par value shall be recorded as the lowest value 0.00001 or 0.
- 5) During a corporate action (for example merge, split etc.) the par value and currency will be updated and reflected in the current day's file at the effective date of this event. The data for interim code product will be included in this file at the previous day.

#### 3.16.2 Tick Size File (hkexzxjc)

The file ID is hkexzxjc, the extension name is.txt.

This message contains the tick size (the minimum change unit of order price) of all HK stock products, which is released in txt format before market opens of the trading day (should also the trading day on HKex). One security type corresponds to one entry. The format is row style, the fields are differentiated by separator " | ", fixed at length, using 0x0A as the meaning of a new line.

This file is produced by HK exchange, redistributed by SZSE.

No.	Field Name	Length	Field Description
1	Type of data	C5	R0403
2	Tick size table code	C2	Tick size code, filled with zero from left if no more than 2 digits
			e.g.
			01: equity securities
			02: debt securities
			03: stock options
3	Lowest down limit price	N10(3)	The lowest execution price allowable for this Tick Size Table Code.
4	Highest up limit price	N10(3)	The highest execution price allowable for this Tick Size Table Code.
5	Threshold price	N10(3)	The minimum price of this Tick Size Code.
6	Number of tick size group	N2	Here is the number of actual tick size group available in this Tick Size Table.
			(Number is from 1 to 52.)
7	Tick size group: (52 groups in	total, repeated)	
7a	Group ending price	N10(3)	The highest price of this tick size group
			When the group number exceeds the number of tick size group, this value is
			000000.000
7b	Value of tick size	N6(3)	Value of tick size is the difference between the last group ending price and
			this group ending price. (e.g. 12.456)
			When the group number exceeds the number of tick size group, this value is
			00.000
7c	Number of tick size	N6	The number of tick size in this group
			When the group number exceeds the number of tick size group, this value is
			000000

# 3.17 Security Switch Info (securityswitch)

The file ID is securityswitch, the extension name is.xml.

This message contains all the security code related switch information. This message is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-14 Definition of securityswitch.xml

Field N	ame	Field English Name	Туре	Description
Security	y code	SecurityID	C8	
Security	y code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
				103=Hong Kong Exchange
Security	y switch	SecuritySwitch		One security may have zero or multiple switches
<b>→</b>	Switch category	Swtich	N2	Switch
<b>→</b>	Whether switch is turned	Status	C1	Y=yes
	on			N=no

#### Note:

Table 3-14-1 List of Switch Type of Security Business Status

Type of Switch	Type Code	Remarks	
Margin buy	1	Applicable to the underlying security of margin buy	
Short sell	2	Applicable to the underlying security of short selling	
Issue Subscription	3	Applicable to ETF, LOF and other open-ended funds	
		Here means cash subscription for gold ETF	
Redemption	4	Applicable to ETF, LOF and other open-ended funds	

		Here means cash redemption switch for gold ETF	
Subscription	5	Applicable to subscription code for online issuance	
Conversion	6	Applicable to convertible bonds, directional convertible bond, preferred stocks in conversion resale; and exchangeable private bonds, exchangeable corporate bonds in exchange period	
Resale	7	Applicable to enterprise bonds, corporate bonds, convertible bonds, directional convertible bond, private bonds, exchangeable private bonds, subordinated debts, ABS, preferr stocks, security firm short-term bonds, and exchangeable corporate bonds in conversion resale	
Warrant exercise	8	Applicable to warrant or options in exercise period	
Buy open	10	Applicable to derivatives like options	
Sell open	11	Applicable to derivatives like options	
Subscription of gold ETF in physical	12	Applicable to gold ETF	
Redemption of gold ETF in physical	13	Applicable to gold ETF	
Pre-accepted tender offer	14	Applicable to equities in tender offer	
Cancellation of tender offer	15	Applicable to equities in tender offer	
Pledge	20	Applicable to Pledge-style Repo securities	
Release of pledge	21	Applicable to Pledge-style Repo securities	
Voting rights	22	Applicable to preferred stocks	
Equity pledge-style Repo	23	Applicable to securities allowed for equity pledge-style repo business	
Covered opening	26	Applicable to derivatives like options	
market-maker quotation	27	Applicable to securities supported for market-maker quotation, like options	
round lot buy of eligible HK stocks	28	Applicable to southbound eligible stocks under HK Stock Connect	
round lot sell of eligible HK stocks	29	Applicable to southbound eligible stocks under HK Stock Connect	
Odd lot buy of eligible HK stocks	30	Applicable to southbound eligible stocks under HK Stock Connect	

Odd lot sell of eligible HK stocks	31	Applicable to southbound eligible stocks under HK Stock Connect	
Options from ordinary to covered	32	Applicable to options transferring from ordinary to covered.	
Options from covered to ordinary	33	Applicable to options transferring from covered to ordinary.	
Resale Cancellation	34	Applicable to enterprise bonds, corporate bonds, private bonds, exchangeable private bonds, subordinated debts, ABS, security firm short-term bonds, and exchangeable corporate bonds in resale cancellation period.	
Security lending	35	Applicable to contractual order or non-contractual order of securities lending or borrowing.	
Bond put option and resale	36	Applicable to bonds and asset-backed securities in the put option and resale period.	

# 3.18 Online Voting Business Info (evoteparams)

The definition of Online Voting Business Info format please refer to "Listed Company Shareholder Meeting Data Spec". This file is released only once at night.

## 3.19 Triparty Repo Basket Info (tripartyrepobasket)

The file ID is tripartyrepobasket, the extension name is xml.

This message contains the pledged securities basket info of the triparty repo business. This message is released in XML file before the market opens, one basket for one basket record in XML file and each basket contains multiple securities codes.

Field Name Field English Name	Туре	Description
-------------------------------	------	-------------

Basket ID		BasketID	N2	
Basket nar	ne	Name	C20	
Discount ra	atio	Ratio	N5(4)	0.2500 means 25%. If a bond valuation is X, the discounted value should be X*(1-25%)
Security lis	t	SecurityList		
<b>→</b>	Security code	SecurityID	C8	

# 3.20 Option Combination Strategy Info (optioncombinationstrategy)

The file ID is optioncombinationstrategy, the extension name is xml.

This message contains the option combination strategy info. This message is released in XML file before the market opens, one combination strategy for one strategy record in XML file.

Field Name	Field English Name	Туре	Description
Combination strategy ID	StrategyID	C8	
Combination strategy name	StrategyName	U40	
Combination automatic split day	AutoSplitDayParam	N2	This field is the number of days in prior to the contract maturity
Parameter			(E day).
			It is 0 when the combination automatically splits after the market
			close on E day. It is 1 if the combination automatically splits
			after the market close on E-1 day, and so on.
Restriction on last trading day of	LastTradeDayParam	C1	S= The last trading day for all Legs should be the same
the legs			D= The last trading day for all Legs should not be the same.

				N=No Restriction on the last trading day of contracts
Rest	riction on underlying	UnderlyingSecurityParam	C1	S= The underlying securities should be the same for all Legs
secu	rities of the legs			D= The underlying securities should not be the same for all
				Legs.
				N=No Restriction on the underlying securities of the Legs
Non-	standard option applicable	NonStandardOptionFlag	C1	Y=YES, N=NO
or no	t			
Unde	erlying Security List	UnderlyingSecurityList		one underlying security corresponds to one UnderlyingSecurity
				record
$\rightarrow$	Underlying Security ID	UnderlyingSecurityID	C8	
$\rightarrow$	Underlying Security ID	UnderlyingSecurityIDSource	C4	102 = Shenzhen Stock Exchange (SZSE)
	Source			
Leg I	ist	LegList		The leg list of this combination, one leg corresponds to one
				record
$\rightarrow$	Call Or Put	LegCallOrPut	C1	C = Call, P = Put
$\rightarrow$	Leg Side	LegSide	C1	1=long position, 2=short position
$\rightarrow$	Quantity of the legs in one	LegPositionQty	N15(2)	
	combination strategy			
$\rightarrow$	Sequence of the legs'	LegExercisePriceSeq	N2	It is numbered from 1. Value "1" means the highest exercise
	exercise price			price, "2" means the second highest, and so on. Same number
				indicates the same exercise price.
$\rightarrow$	Sequence of the legs' last	LegLastTradeDaySeq	N2	This field is valid only if "LastTradeDayParams" is "D".
	trading day			It is numbered from 1. The earliest last trading day has value "1"
				in this field, the second earliest has "2", and so on. Same
				number indicates the same last trading day.

# 3.21 CNI Indices Info (cnindex)

The file ID is cnindex, the extension name is xml.

This message contains the information of CNI Indices distributed via SZSE exchanging system. This message is released in XML file before the market opens, one index for one index record in XML file.

Field Name	Field English Name	Туре	Description
Index Code	SecurityID	C8	
Security Code Source	SecurityIDSource	C4	102 = Shenzhen Stock Exchange
Index symbol	Symbol	U40	
Index symbol (Extended)	SymbolEx	U40	Reserved for long symbol.
			If long symbol not exist, this value will be the same with
			Symbol.
English Name	EnglishName	C40	
Index Type	IndexType	C2	01 = share index
			02 = bond index
			03 = fund index
			04 = other index
Currency	Currency	C4	CNY = Renminbi (RMB)
			HKD = Hong Kong dollars
			USD = US dollars
			The value reference ISO4217.
			For indices that not involving exchange rate, or its price is
			calculated in RMB, the value of this field would be CNY. For
			indices whose price are calculated in foreign currency, the

			value would be that currency.
Previous Close Point	PrevCloseIdx	N18(5)	
Market Code of Constituent	ConstituentSource	C2	01 = Shenzhen market
stock			02 = Shanghai market
			03 = Shenzhen & Shanghai
			04 = Shenzhen & Shanghai & HongKong
			05 = Shenzhen & HongKong
			06 = HongKong market
			07 = Greater China
			08 = Asia-Pacific
			09 = Global
			10 = Others

# 3.22 After-hours-fixed-price-trading Info (fixedpriceparams)

The file ID is fixedpriceparams, the extension name is xml.

This message contains the parameters of securities in the after-hours-fixed-price-trading business. This data is released in XML file before the market opens, one security for one security entry in XML file.

Table 3-15 Definition of after-hours-trading information

Field Name	Field English Name	Type	Description
Index Code	SecurityID	C8	
Security Code Source	SecurityIDSource	C4	102 = Shenzhen Stock Exchange
Upper limit of buy quantity	BuyQtyUpperLimit	N15(2)	Upper limit of buy order quantity

Upper limit of sell quantity	SellQtyUpperLimit	N15(2)	Upper limit of sell order quantity
Buy quantity unit	BuyQtyUnit	N15(2)	The quantity of each buy order should be integer multiple of
			the buy quantity unit.
Sell quantity unit	SellQtyUnit	N15(2)	The quantity of each sell order should be integer multiple of
			the sell quantity unit.

## 3.23 Member Info of bond market (bondmbrinfo)

The file ID is bondmbrinfo, the extension name is xml.

This message contains the members' info who take part in the bond market trading business. This data is released in XML file before the market opens, one member for one entry in XML file.

Field Name	Field English Name	Туре	Description
ID of the member	MemberID	C6	
Short name of the member	ShortName	U20	
Name of the member	Name	U50	

## 3.24 Investor info of bond market (bondinvestorinfo)

The file ID is bondinvestorinfo, the extension name is tsv.

This message contains the investors' info who take part in the bond market trading business. This data is released in TSV file before the market

opens, one investor under one dealer for one entry in tsv file.

Field Name	Field English Name	Туре	Description	
Investor's ID	InvestorID	C10		
Member's ID	MemberID	C6		
Investor's Name	InvestorName	U100		
Investor's Short name	InvestorShortName	U100		
Investor's Type	InvestorType	C2	01=Self-employed	
			02=Asset Management	
			03=Institutional Broker	
			04=Personal broker	

# 3.25 Trader info of bond market (bondtraderinfo)

The file ID is bondtraderinfo, the extension name is tsv.

This message contains the traders' info who take part in the bond market trading business. This data is released in TSV file before the market opens, one trader for one entry in tsv file.

Field Name	Field English Name	Туре	Description
Trader's code	TraderCode	C8	One trader can belong to one member only.
Trader's name	TraderName	U50	
ID of the trader's member	MemberID	C6	

## 3.26 Reference information for spot bond trading (bondtradingparams)

The file ID is bondtradingparams, the extension name is xml.

This information contains business-related parameters of securities participating in the spot bond trading business, including bonds and asset-backed securities, etc. This data is released in XML file before the market opens, one security for one security entry in xml file.

Table 3-16 Definition of bondtradingparams.xml

Field Name	ı	Field English Name	Туре	Description
Security cod	de	SecurityID	C8	
Security cod	le source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Trading para	ams	TradingParams	N15(2)	Each trading method correspond to one TradingParams record.
<b>→</b>	Trading type	TradingType	N2	1 = matching deal
				2 = negotiated deal
				3 = click to deal
				4 = inquiry deal
				5 = bidding deal
<b>→</b>	Price tick	PriceTick	N13(4)	
<b>→</b>	Upper limit of price	PriceUpperLimit	N13(4)	Upper limit of price
<b>→</b>	Lower limit of price	PriceLowerLimit	N13(4)	Lower limit of price
<b>→</b>	Upper limit of buy	BuyQtyUpperLimit	N15(2)	Upper limit of buy order quantity
	quantity			
<b>→</b>	Upper limit of sell	SellQtyUpperLimit	N15(2)	Upper limit of sell order quantity

	quantity			
<b>→</b>	Lower limit of buy order quantity	BuyQtyLowerLimit	N15(2)	Lower limit of buy order quantity
<b>→</b>	Lower limit of sell order quantity	SellQtyLowerLimit	N15(2)	Lower limit of sell order quantity
<b>→</b>	Buy quantity unit	BuyQtyUnit	N15(2)	The quantity of each buy order should be integer multiple of the buy quantity unit.
<b>→</b>	Sell quantity unit	SellQtyUnit	N15(2)	The quantity of each sell order should be integer multiple of the sell quantity unit.

## 3.27 Reference information for bond general pledged repo (bondrepoparams)

The file ID is bondrepoparams, the extension name is xml.

This information contains business-related parameters of securities participating in the bond general pledged repurchase business, including pledged repo, etc. This data is released in XML file before the market opens, one security for one security entry in xml file.

Table 3-17 Definition of bondrepoparams.xml

Field Name		Field English Name	Туре	Description
Security code		SecurityID	C8	
Security code source		SecurityIDSource	C4	102=Shenzhen Stock Exchange
Trading params		TradingParams	N15(2)	Each trading method correspond to one TradingParams record.
<b>→</b>	Trading type	TradingType	N2	1 = matching deal

<b>→</b>	Price tick	PriceTick	N13(4)	
<b>→</b>	Upper limit of price	PriceUpperLimit	N13(4)	Upper limit of price
<b>→</b>	Lower limit of price	PriceLowerLimit	N13(4)	Lower limit of price
<b>→</b>	Upper limit of buy quantity	BuyQtyUpperLimit	N15(2)	Upper limit of buy order quantity
<b>→</b>	Upper limit of sell quantity	SellQtyUpperLimit	N15(2)	Upper limit of sell order quantity
<b>→</b>	Lower limit of buy order quantity	BuyQtyLowerLimit	N15(2)	Lower limit of buy order quantity
<b>→</b>	Lower limit of sell order quantity	SellQtyLowerLimit	N15(2)	Lower limit of sell order quantity
<b>→</b>	Buy quantity unit	BuyQtyUnit	N15(2)	The quantity of each buy order should be integer multiple of the buy quantity unit.
<b>→</b>	Sell quantity unit	SellQtyUnit	N15(2)	The quantity of each sell order should be integer multiple of the sell quantity unit.

### **4 RISK MANAGEMENT INFO**

# 4.1 Share Reduction Quota Info (reducequota)

The file name is reducequota\_memberID\_YYYYMMDD.csv, where memberID is the member ID number of the market participant at SZSE, and YYYYMMDD is the corresponding trading day. This file is released before market open on each trading day.

The records in the file of "reducequota" are arranged in ascending order by clear PBU, security account, security code. When the shares under all clear PBU of the market participants have no reduction quota, an empty file with a zero record is released.

Table 4-1 Definition of reducequota\_\*.csv

Field Name	Field English Name	Туре	Description	
Clear PBU	ClearPBU	C6		
Security Account	AccountID	C12		
Security code	SecurityID	C8		
Total quantity of unrestricted tradable shares	TotalQty	N18(2)	The total quantity of unrestricted tradable shares under custody.	
The frozen quantity of unrestricted tradable shares	FrozenQty	N18(2)	Shares which are frozen by the non-trading business amore the unrestricted tradable shares under custody.	
Share quantity 1	ShareQty1	N18(2)	The quantity of non-transferable shares prior to the due date excluded the frozen shares by CSDC. e.g. restricted shares owned by assignees from the block trade share reduction	
Share quantity 2	ShareQty2	N18(2)	The quantity of restricted shares which can only be reduced by block trade (should also meet the requirement of the reduction quota) and the frozen shares have been excluded. e.g. the 50% share of the non-public offering within one year after the restriction release.	
Share quantity 3	ShareQty3	N18(2)	The quantity of restricted shares which can be reduced by auctions or block trades (should also meet the requirement of the reduction quota) and the frozen shares have been excluded.	

Share quantity 4	ShareQty4 N18(2)		The quantity of unrestricted shares which can be reduced by
			auctions or block trades with the frozen shares excluded.
			e.g. The shares previously bought by auctions.
Share quantity 5	ShareQty5	N18(2)	The reduction quota of the restricted shares by auctions=(1%-the sum of reduction ratio of restricted shares
			by auctions during the last 89 days) * total shares
Share quantity 6	ShareQty6	N18(2)	The reduction quota of the restricted shares by block
			trades=(2%-the sum of reduction ratio of restricted shares
			by block trades during the last 89 days) * total shares
Share quantity 1 (including the frozen shares)	OrigShareQty1	N18(2)	The quantity of original Share Quantity 1 before frozen
			shares excluded.
Share quantity 2 (including the frozen shares)	OrigShareQty2	N18(2)	The quantity of original Share Quantity 2 before frozen
			shares excluded.
Share quantity 3 (including the frozen shares)	OrigShareQty3	N18(2)	The quantity of original Share Quantity 3 before frozen
			shares excluded.
Share quantity 4 (including the frozen shares)	OrigShareQty4	N18(2)	The quantity of original Share Quantity 4 before frozen
			shares excluded.

## 4.2 Front End Funding Risk Management Info (fundquota)

The file is named fundquota\_memberID\_YYYYMMDD.xml, where memberID is the member ID number of the market participant at SZSE, and YYYYMMDD is the corresponding trading day. This file is released before market open on each trading day.

The file of front end funding risk management includes the self-set fund quota by participants carrying out the front-end funding risk management, as

well as the list of PBUs in monitor and is released in xml format before the market open. One type of monitor corresponds to one record in xml files. A monitor type includes multiple PBUs indicating that front end funding risk management is required. This file is only for market participants to do self-set fund quota review.

Table 4-2 Definition of fundquota.xml

	Field Name	Field English Name	Туре	Description
Type of monitor		MonitorType	N2	1=security business on its own account (members) 2=asset management business (members) 3=institutional business
Self-set fund quota		FundQuota	N18(4)	
List of Participant Business Unit (PBU)		PBUList		
<b>-&gt;</b>	Participant Business Unit	PBUID	C6	

### 5 END-OF-DAY STATIC MARKET DATA INFO

It contains the static market data files issued after market close of each trading day.

### 5.1 end-of-day market data of cash securities (cashsecurityclosemd)

The file name is cashsecurityclosemd\_YYYYMMDD.xml, where YYYYMMDD is the corresponding trading day.

This message contains the end-of-day data of all cash securities in the SECURITIES file (securities). This data is released in XML file after the market

closed one security for one security entry in XML file.

Table 5-1 Definition of cashsecurityclosemd\_\*.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Security symbol	Symbol	U40	Could include Chinese characters, means 40 UTF-8 characters at maximum
Security symbol (Extended)	SymbolEx	U40	Reserved for long symbol.
			If long symbol not exist, this value will be the same with Symbol.
English name	EnglishName	C40	For options, this field is the option contract number
Security type	SecurityType	N4	Value is for other security types except for 29(individual
			stock options), 30(ETF options)
Previous close price	PrevClosePx	N13(4)	
Open price	OpenPrice	N13(3)	
Closing price	ClosePx	N13(4)	
Number of trades	NumTrades	N18	
Total volume of trade	TotalVolumeTrade	N15(2)	
Total value of trade	TotalValueTrade	N18(4)	

#### Note:

For securities traded in cash auction, the number of trades, total volume of trade and total value of trade in this cashsecurityclosemd file doesn't contain the number, volume and value of trade in the after-hours-fixed-price-trading period.

## 5.2 end-of-day market data of derivative securities (derivativesecurityclosemd)

The file name is derivativesecurityclosemd\_YYYYMMDD.xml, where YYYYMMDD is the corresponding trading day.

Security closing market data file contains all derivatives closing data in Securities Info. This message is sent out in XML format after market close, with one security related to one security record in XML.

Table 5-2 Definition of derivativesecurityclosemd\_\*.xml

Field Name	Field English Name	Туре	Description
Security code	SecurityID	C8	
Security code source	SecurityIDSource	C4	102=Shenzhen Stock Exchange
Security symbol	Symbol	U40	
English name	EnglishName	C40	For options, this field is the option contract number
Type of security	SecurityType	N4	Value is 29 (individual stock options), 30 (ETF options)
Previous closing price	PrevClosePx	N13(4)	
Open price	OpenPrice	N13(4)	
Closing price	ClosePx	N13(4)	
Number of trades	NumTrades	N18	
Total volume traded	TotalVolumeTrade	N15(2)	
Total value traded	TotalValueTrade	N18(4)	
Clearing price	ClearingPrice	N13(4)	
Position of a contract	ContractPosition	N18(2)	

## 5.3 End of day data of Eligible HK stocks (hkexclpr04)

The file ID is hkexclpr04, the extension name is.txt.

This message contains the end-of-day closing data of eligible HK stocks, which is released in txt format after market close of the trading day (should also the trading day on HKex). One security corresponds to one entry. The format is row style, the fields are differentiated by separator " | ", fixed at length, using 0x0A as the meaning of a new line.

This file is produced by HK exchange, redistributed by SZSE.

Table 5-3 Definition of hkexclpr04\_\*.xml

No.	Field Name	Length	Field Description
1	Type of data	C5	R0402
2	Security code	C5	Security code
3	Closing price	N10(3)	
4	currency	C3	Hong Kong Dollars: HKD
			American Dollars: USD
			Renminbi: CNY
			Australian Dollars: AUD
			Canadian Dollars: CAD
			Japanese Yuan: JPY
			Singapore Dollars: SGD
			British Pound: GBP
			Euro: EUR

#### 6 END-OF-DAY REPORT DATA

This data mainly includes the report data sent in batches after market close on each trading day.

# 6.1 Online Voting Report

The file name is evotereport\_YYYYMMDD.csv, where YYYYMMDD is the trading day.

The online voting report file includes the accumulated pre-processed results of online voting orders via the trading system. For example, if a listed online voting time is  $[V_1, V_n]$  then all the processed results of online voting orders via trading system during the period from  $V_1$  to  $V_m$  shall be sent out at day  $V_m$  (1 $\leq$ m $\leq$ n).

This data is released in csv file after the market closed one security for one security entry in XML file.

Table 6-1 Definition of Online Voting Report Data evotereport\_\*.xml

Field Name	Туре	Description
SubmittingPBUID	C6	Submitted PBU
SecurityID	C8	Online voting code
SecurityIDSource	C4	Source of security code
OwnerType	N4	Type of order owner
TransactTime	N17	Original transaction time of online voting
		Format is YYYYMMDDHHMMSSsss
OrderID	C16	Order number

ClOrdID	C10	Client order number
ExecID	C16	Exercise number
ЕхесТуре	C1	Type of exercise
		0=New valid voting records
		8=Rejected invalid voting records
OrdRejReason	N5	Code of rejection reasons, valid when ExecType is 8
AccountID	C12	Security account
BranchID	C4	Security branch ID
VotingProposal	N4	Number of voting proposals, positive number
		1-99 means specific proposal number
		100 means the summary proposal
VotingSubProposal	N4	Number of voting sub-proposal, positive number
		0 means all sub-proposals
		>0 means other specific sub-proposals
VotingPreference	C1	Preference of voting
		1 means agree, 2 means reject, 3 means waive
OrderQty	N15(2)	Quantity of votings

#### Notes:

- 1) If the valid declaration of part of sub-proposals under the successive voting bills is earlier than the declaration of successive voting bills, then the declaration of successive voting bills is partly valid, multiple reports are returned. Every sub-proposal with valid declaration previously shall return a cancellation report, and every sub-proposal with no valid declaration previously shall return a valid declaration report.
- 2) If investors submit "summary proposal voting" to all proposals, voting is regarded as successful and only one success report is returned. If investors make a valid voting for part of proposals before submitting "summary proposal voting" order, then this voting order is regarded as partly valid and multiple reports shall be returned. Every sub-proposal with valid declaration previously shall return a cancellation report,

and every sub-proposal with no valid declaration previously shall return a valid declaration report. If investors make valid voting for all the proposals before submitting "summary proposal voting" order, then this order is regarded as repeated and a cancellation report shall be returned.

- 3) If the online voting ending date is later than the trading system voting date, and the period between is not trading day (e.g. Trading system voting ending date is Friday, while online voting ending date is Sunday), then the accumulated results of trading system votings shall be returned on the following trading day of the trading system ending date.
- 4) If the market participants don't have any online voting report data, then a file with record "zero" shall be sent to the market participants.
- 5) Definition list of invalid reasons for online voting

Table 6-2 Definition List of Invalid Reasons for Online Voting

OrdRejReason	Name of	Description
	Reasons	
20201	incorrect	1.The proposal code shall be the same as the code of proposals in the announcements
	proposal code	2. The proposal code and sub-proposal code can be the successive summary proposal code and
		successive sub-proposal code in the announcements
		3. The proposal code should be the proposal code of candidates in the announcements
		4. Except for the above, all other proposal code and sub-proposal code are regarded as incorrect,
		especially when the accumulated voting summary proposal code is entered as the proposal code.
20202	Incorrect voting	For common proposals and successive voting, the preferred voting can only be 1 or 2 or 3, otherwise
		it's regarded as incorrect voting.
		For accumulated voting, voting number should not be larger than the number of shares on account
		times the selected people, otherwise it's regarded as incorrect voting.
20203	Non	If the security account number in the voting records is not the security account number of company
	participating	shares on record date, it's regarded as non participating shareholders.
	shareholders	

20204	Repeated	Voting for one proposal can be declared only once. The first declaration shall be dominated if there
	voting	are multiple declarations, which shall be regarded as repeated.
		If the valid declaration of proposals under the successive voting bills is earlier than the declaration of sub-proposals, the declaration of sub-proposals is repeated voting.
		If the valid declaration of all sub-proposals under the successive voting bills is earlier than the declaration of successive voting bills, then declaration of successive voting is regarded as repeated.
		If an investor votes via the trading system and online system repeatedly, voting results shall be counted in chronological order.
		If investors submit "summary proposal voting" to all proposals, voting is regarded as successful and only one success report is returned. If investors make a valid voting for part of proposals before submitting "summary proposal voting" order, then this voting order is regarded as partly valid and multiple reports shall be returned. Every proposal with valid declaration previously shall return a cancellation report, regarded as repeated voting.
		If investors make valid voting for all the proposals before submitting "summary proposal voting" order, then this order is regarded as repeated and a cancellation report shall be returned.
20205	Incorrect	Accumulated judgement is carried after judgement on the validation of single record.
	accumulated	The number of shares on record date times the selected number of people is the election poll. If the
	number of	voting number is larger than the number of shares they hold, it's regarded as incorrect accumulated
	people	number of people.
20206	Incorrect	Accumulated judgement is carried after judgement on the validation of single record.
	accumulated	The number of registered shares on record date times the number of people is regarded as the

	number of	electoral votes. If the number of votes by the share holder exceeds the electoral votes he has, it's
	stocks	regarded as Incorrect accumulated number of stocks
20070	Invalid account	Unqualified accounts are not permitted for online voting via trading system
29999	Other errors	Invalid voting under circumstance out of the above scope

### 6.2 Execution Aggregate File (execution\_aggr)

The Execution Aggregate File provides the execution aggregate service in file format. Except for channel and format, the file spec is as same as the stream spec in terms of record content and sequence.

The Execution Aggregate File is named as "execution\_aggr\_TGWID\_N\_YYYYMMDD.tsv", where TGWID is the related gateway ID, N is the business platform code (Definition please refer to "Interface Specification of BINARY Market Trading Data Feed of SZSE 5th Trading System"), YYYYMMDD is the related trading day. Each business platform defined by SZSE trading system is corresponded to one execution aggregate file. A nil file will be sent over even if there is no report record of this platform on that day.

The Execution Aggregate File is txt file. Each record (one row) is one execution. For definition of the record content please refer to the definition of binary execution message in "Interface Specification of BINARY Market Trading Data Feed of SZSE 5th Trading System". Comparing with the binary message, all fields are one-to-one sequentially, expect the differences below.

- 1) The records in file have no "BodyLength" field in binary message header .
- 2) The records in file have no binary message tail.
- 3) The records in file have no "PartitionNo" field in binary message body.
- 4) "ReportIndex" field is in sequential serial number starting from 1 for each file, while "ReportIndex" in the binary message is in sequential serial number starting from 1 for every partition of each business platform.

See chapter 8 for "Specification of tsv File Format" . Take the following two messages for example.

Table 6-3 Order Execution Report BINARY Message Sample of Cash Auction Business

Field Name	Value
MsgType	200115
BodyLength	153
PartitionNo	1
ReportIndex	1
AppIID	010
ReportingPBUID	000100
SubmittingPBUID	000100
SecurityID	000001
SecurityIDSource	102
OwnerType	1
ClearingFirm	01
TransactTime	20130228144215555
UserInfo	Test
OrderID	6B4569CDNB009C03
ClOrdID	A0000001
ExecID	110000000004124
ЕхесТуре	F
OrdStatus	1
LastPx	171000
LastQty	30000

LeavesQty	90000
CumQty	30000
Side	1
AccountID	0100004698
BranchID	AA
CashMargin	1
Checksum	

Field Name	Value
MsgType	200115
BodyLength	153
PartitionNo	2
ReportIndex	1
ApplID	010
ReportingPBUID	000200
SubmittingPBUID	000200
SecurityID	000001
SecurityIDSource	102
OwnerType	1
ClearingFirm	01
TransactTime	20130228144215555
UserInfo	test
OrderID	6B4569CDNB009C03
ClOrdID	A0000001

ExecID	120000000004124
ЕхесТуре	F
OrdStatus	1
LastPx	171000
LastQty	30000
LeavesQty	90000
CumQty	30000
Side	1
AccountID	0100004698
BranchID	AA
CashMargin	1
Checksum	

### 6.3 Execution File for HK Eligible Stocks(hkexecution\_tax\_memberID)

As per the related previsions and business requirements, CSDC will provide the execution files for HK eligible stocks to SZSE after the market settlement on each trading day. SZSE will distribute such execution files to the market via members (including non-members) after market close on each trading day.

The execution file format is txt and the file name is: hkexecution\_tax\_memberID\_yyyymmdd.tsv where MemberID is the ID number of each member registered at SZSE, yyyymmdd represents the related trading day. No matter whether there is any execution records of HK eligible stocks or not, an execution file shall always be sent out (When there is no execution record of HK eligible stocks, a null file will be sent out).

For the specification of tsv file format, please refer to "Specification of tsv File Format".

Table 6-4 Definition of Execution File for HK Eligible Stocks

Field Name	Type of Length	Value
Security code	C8	
Date of file	C8	In YYYYMMDD
Execution date	C8	In YYYYMMDD
Number of execution	C16	
PBU	C6	
Number of execution	N15(2)	
Execution price	N13(4)	In HK dollars
Execution amount	N18(4)	In HK dollars
Execution time	C6	In HHMMSS
Stamp duty	N18(4)	In HK dollars
Delivery date	C8	In YYYYMMDD
Note 1	C80	The stamp duty fee in this sheet
		has been or will be paid via
		HKex.
Note 2	C80	The execution sheet is produced
		by the subsidiary of SZSE as per
		the execution results of HK

		eligible stocks sent out by HKex.
Note 3	C80	SZSE members etc shall
		authorize the subsidiary of SZSE
		to send the orders of HK stocks
		to HKex and complete the
		trading.

#### 7 DATA DICTIONARY

The data type of all fields in the file is explained as follows.

- ✓ Cx stands for ASCII character string, 'x' stands for the max length of string.
- ✓ Ux stands for UTF-8 character string, 'x' stands for the max length of string.
- ✓ Nx stands for decimal integer, 'x' stands for the maximum number of digits (not including Plus-Minus sign). Integers can be positive or negative numbers unless it is expressly stated.
- ✓ Nx(y) stands for floating numbers, 'x' stands for the total digit number of integer and decimal, not including the decimal point. 'y' stands for the digit number of decimal, zeros should be added when there are no adequate number. The floating number can be positive or negative, unless it is expressly stated.

# 8 Specification of tsv File Format

The specification of tsv file format is as follows.

- ✓ In a record, fields are separated by "TAB(0x09)". Each record is ended by line separator "0x0A". There is no separator "TAB" before the first field and after the last field, but do have a line separator after the last record.
- For fixed point number Nx(y) with decimals, decimals should be completed with zeros but not the case for integers, e.g. a sample of N13(4) "15.2300" or "-14.0210". For integers it only includes the actual number without any spaces, e.g. "1500"; For character strings it includes the actual character string value without any spaces.
- ✓ Clients' system should be able to support for a record of new fields extension, and may also ignore the new extended fields automatically without any actions in case of no use of newly extended fields.

## 9 Appendix

### 9.1 Example of Share Reduction Quota Info

Please refer to the Chinese version for more details.

THE END