
Vendor Interface Specification

For

Shanghai Stock Exchange (SSE) Low Latency Data Distribution System (LDDS)

Status	☐ Draft ☐ Amend ☒ Distribution ☐ Void	Document Name	LDDS Vendor Interface Specification (Core)
		Version	1.2.3
		Author	SSEInfoNet
		Distributor	China Investment Information Services Ltd
		Date of Distribution	2026/06/11

Document History

Date	Version	Description
2017-02-09	1.0.0	Initial draft
2017-05-26	1.0.1	1. Remove the invalid network address 2. Add CSI reference link. 3.Add mktdt04.txt in Shanghai – Hong Kong Connect Reference Data 4.Add tag 50 in the standard message header information.
2018-05-14	1.0.2	1.Support the forward market data of Deutsche Börs and Moscow exchange 2.Upgrade Fixed Income Market Reference Document
2018-07-04	1.0.3	Modify the product categories of Bond Valuation Documents of CSI.
2019-02-11	1.0.4	1. Adjust the product categories of Level-2 data feed. 2. Adjust the integrated business scope, including pre-issuance of treasury bonds and after-market fixed price trading.
2019-10-11	1.0.5	Cancel Stock Options (Real) Quotes
2020-01-09	1.0.6	1. Cancel A+H quotes 2. Update contact information
2020-08-26	1.0.7	1. Update reference documents 2. Adjust the business scope to add SZSE Level-1, NEEQ, LSEand BSE
2020-11-13	1.0.8	Increase the release of master reference data
2021-05-10	1.0.9	1. Adjust product access methods and bandwidth requirements 2. Adjust the hardware and software configuration of the VDE deployment server
2021-09-24	1.1.0	1. Update system product category table 2. Add bond market interface 3. Add binary message format
2022-02-07	1.1.1	1. Adjust the scope of business, add Hang Seng Index and South African Exchange Quotes 2. SDS replaces DRS
2023-10-09	1.1.2	1. The Shenzhen Stock Exchange cash and option market data are separated, and new category number 26 is used to support the Shenzhen Stock Exchange option market product
2023-10-16	1.1.3	1. Add 9 into the auction Level-2 quote product category number
2024-05-09	1.1.4	1. New product category number 61 is added to support Beijing Stock Exchange bond market data 2. Add the description related to Beijing Stock Exchange market data

		3. South African Exchange quotes content offline 4. Related terminology and schematic adjustments
2024-07-01	1.1.5	1. Remove 7 and 58 in auction Level-2 quote product category number 2. Adjustment of some text descriptions
2024-12-16	1.1.6	1.Improve the business scope table and product category table, and add integrated services market data, etc. 2.Adjust some structures and text descriptions
2025-2-20	1.2.0	Update the information descriptions for some chapters.
2025-09-17	1.2.1	Added descriptions related to external source of market data.
2025-12-01	1.2.2	1. Adjusted some reference information explanations 2. End-of-day market data on the Brazilian Stock Exchange has been offline.
2026-06-11	1.2.3	To support the launch of the new fixed income market data, the following adjustments have been made: 1. Added real-time fixed income market data 2. Removed fixed income market data from the file 3. Adjusted some information descriptions

Chapter 1 Introduction

1.1 Purpose

The document introduces the Shanghai Stock Exchange's new generation of low latency data distribution system LDDS (Low latency Data Distribution System), and details the system access method and data exchange format, with the aim of guiding the development of an information service system that can receive market data.

1.2 Data Scope

For all Information Vendor (IV) and LDDS developer & technical support user.

1.3 Reference Document

Table1-1 List of reference document

Document Name	Source of Document
《IS105_上海证券交易所综合业务平台市场参与者接口规格说明书》	SSE Website
《IS109_固定收益平台外部数据接口规范》	SSE Website
《IS117_上海证券交易所港股通市场参与者接口规格说明书（港股交易）》	SSE Website
《IS124_上海证券交易所市场数据文件交换接口规格说明书》	SSE Website
《IS120_上海证券交易所行情网关BINARY 数据接口规范》	SSE Website
《上海证券交易所 LDDS 系统静态数据接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统 Level-1 FAST 行情接口说明书》	SSE Infonet Website
《上海证券交易所LDDS系统竞价Level-2行情接口说明书》	SSE Infonet Website
《上海证券交易所LDDS系统债券Level-2行情接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统股票期权行情接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统固定收益行情接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统港股商业行情接口说明书》	SSE Infonet Website

《上海证券交易所 LDDS 系统发布德意志证券交易所行情数据接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统发布莫斯科指数接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统恒生指数行情接口说明书》	SSE Infonet Website
《上海证券交易所 LDDS 系统新加坡交易所行情接口说明书》	SSE Infonet Website
《中证指数行情传输接口规范》	CSI Website
《深圳证券交易所Binary 行情数据接口规范》	SZSE Website
《全国中小企业股份转让系统交易支持平台数据接口规范》	NEEQ Website

SSE Infonet Ltd official website market service zone hyperlink:

<https://www.sseinfo.com/services/assortment/market/>

SSE's website technical development zone hyperlink:

<http://www.sse.com.cn/services/tradingtech/home/>

CSI's website technical development zone hyperlink:

<http://www.csindex.com.cn/zh-CN/downloads/other?show=2>

SZSE's website technical development zone hyperlink:

<http://www.szse.cn/marketServices/technicalservice/interface/>

NEEQ's website technical development zone hyperlink:

http://www.neeq.com.cn/rule/Tech_area.htm

1.4 Glossary

Table 1-2 Technical Short Name Glossary

Short Name	Description
SSE	Shanghai Stock Exchange
IDC	Information Data Centre
LDDS	Low-Latency Data Distribution System
DDS	Data Distribution Server
SDS	Static-data Distribution Server
VDE	Vendor Data Engine
VSS	Vendor Supplied System
STEP	STEP Protocol (FIX based Exchange protocol)
FAST	FIX Adapted for Streaming
HA	High Availability

1.5 Connection Enquiry

Information Vendor can also connect to HK's Information Distribution Centre (IDC) and receives SSE market data. All configurations at our HK's IDC remote are the same as Shanghai IDC, but only Citic Telecom CPC is supported.

Information vendors can connect to HK's IDC by using MPLS network located at two difference Data Centre. If you want to connect from Hong Kong, please contact CIIS marketing team (marketing@ciis.com.hk)

Table 1-3 Enquiry Information

Items	Enquiry Information
Tel:	SH Technical Team: 86-21-50722115 HK Technical Team: 852-25304876
E-Mail	SH Technical Team: level2@sse.com.cn HK Technical Team: technical@ciis.com.hk
QQ Group (Chinese Version Only)	Development Support: 558938392 Operation Support: 53255681
Web Address	www.sse.com.cn www.sseinfo.com www.ciis.com.hk

Chapter 2 System Overview

2.1 System Introduction

In order to meet the needs of business development and improve the level of market service, SSE Infonet developed and built a new generation of low-latency market release system (hereinafter referred to as LDDS system) in 2016. The LDDS system supports multiple sources and has the characteristics of low latency, large traffic, easy expansion, and high availability. The average latency of the system is less than 1 millisecond in a good network environment.

2.2 Business Scope

Table 2-1 LDDS system business scope

Category	Market Data Content
SSE Market Data	SSE Level-1 FAST Market Data
	SSE Level-2 Market Data
	SSE Stock Option Market Data
	Fixed Income Platform Market Data
	SSE Integrated Business Market Data (including Pre issuance of Treasury Bonds and after-market fixed price trading Market Data)
Third parties Real-time Market Data	Shanghai – Hong Kong Connect Reference Data
	Hong Kong Stock Business Market Data
	SZSE Level-1 Market Data
	Beijing Stock Exchange Market data/ NEEQ
	CSI Indexpress Market Data (including index press and bond valuation documents)

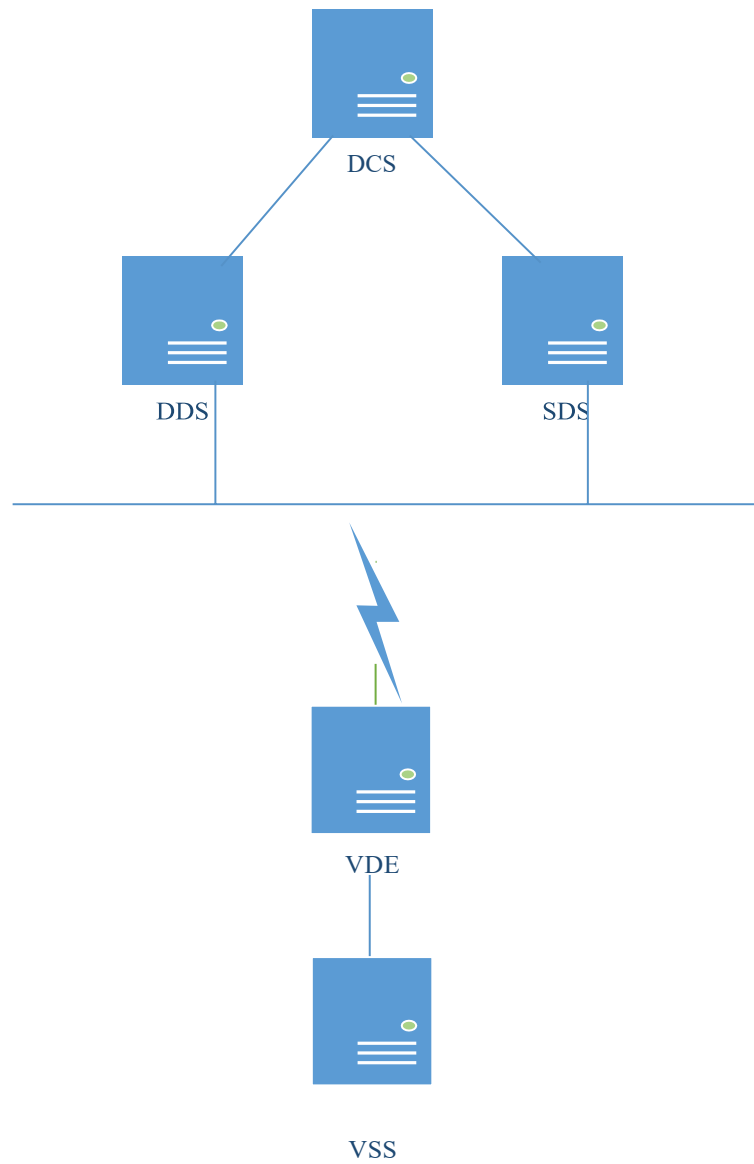
Table 2-2 LDDS support production category

Production Category	Product Number	Publishing Method	Reference Document
SSE static file	10	Static file	《上海证券交易所LDDS 系统静态数据接口说明书》
Level-1 Auction	47	Data Feed (Binary)	《IS120_上海证券交易所行情网关BINARY数据接口规范》
		Real-time file mkttdt00.txt	《IS124 上海证券交易所市场数据文件交换接口规格说明书》
	11	Data Feed (FAST)	《上海证券交易所LDDS系统 Level-1 FAST 行情接口说明书》
		Real-time file mkttdt00.txt	《IS124 上海证券交易所市场数据文件交换接口规格说明书》
Level-1 Bond	50	Data Feed (Binary)	《IS120_上海证券交易所行情网关BINARY数据接口规范》
		Real-time file mkttdt02.txt	《IS124 上海证券交易所市场数据文件交换接口规格说明书》
	54	Data Feed (FAST)	《上海证券交易所LDDS系统 Level-1FAST行情接口说明书》
		Real-time file mkttdt02.txt	《IS124 上海证券交易所市场数据文件交换接口规格说明书》
Level-2 Auction	6, 9, 56, 57	Data Feed (FAST)	《上海证券交易所LDDS系统竞价Level-2 行情接口说明书》
Level-2 Bond	38, 39	Data Feed (FAST)	《上海证券交易所LDDS系统债券Level-2 行情接口说明书》
Stock option	49	Data Feed (Binary)	《IS120_上海证券交易所行情网关BINARY 数据接口规范》
		Real-time file mkttdt03.txt	《上海证券交易所LDDS系统股票期权行情接口说明书》
	30	Data Feed (FAST)	《上海证券交易所LDDS系统股票期权行情接口说明书》
		Real-time file mkttdt03.txt	《上海证券交易所LDDS系统股票期权行情接口说明书》
Fix Income	66	Static file	《上海证券交易所LDDS系统静态 数据接口说明书》
	65	Data Feed (Binary)	《IS120_上海证券交易所行情网关 BINARY数据接口规范》

External Source	37	Data Feed (Binary)	《IS120_上海证券交易所行情网关BINARY 数据接口规范》
		Real-time file mktgte.txt	《IS124 上海证券交易所市场数据文件交换接口规格说明书》
Integrated services	48	Data Feed (Binary)	《IS120_上海证券交易所行情网关BINARY 数据接口规范》
		Real-time file mktgte01.txt	《IS105 上海证券交易所综合业务平台市场参与者接口规格说明书》
	17	Data Feed (FAST)	《上海证券交易所LDDS系统Level-1 FAST 行情接口说明书》
		Real-time file mktgte01.txt	《IS105 上海证券交易所综合业务平台市场参与者接口规格说明书》
Shanghai – Hong Kong Connect	4, 18	Static file	《IS117 上海证券交易所港股通市场参与者接口规格说明书（港股交易）》
		Real-time file trdses04.txt	
		Real-time file mktgte04.txt (Authorized securities firms only)	
Hong Kong Stock Quotes	8	Data Feed	《上海证券交易所LDDS系统港股商业行情接口说明书》
SZSE Level-1 Cash market data	25	Data Feed	《深圳证券交易所Binary行情数据接口规范》
SZSE Level-1 Option market data	26	Data Feed	《深圳证券交易所Binary行情数据接口规范》
Bond Valuation file of CSI	12	Static file	《上海证券交易所LDDS系统静态数据接口说明书》
CSI Index Press	23	Real-time file csiYYYYMMDD.txt	《中证指数行情传输接口规范》
NEEQ / Beijing Stock Exchange market data	51	Real-time file / Static file	《全国中小企业股份转让系统交易支持平台数据接口规范》
Beijing Stock Exchange bond market data	61	Data Feed	《北京证券交易所、全国中小企业股份转让系统行情数据接口规范（二进制）》

2.3 System Architecture

Picture 2-1 LDDS transmission system architecture. (For reference only)



2.4 Connection Configuration

2.4.1 Network Connection

LDDS system provide difference network connection method to serve for the user. Subscribers can apply for Citic Telecom CPC MPLS (For Production Platform), PCCW MPLS (For Testing Platform), HKEx X-Connect (For Production Platform TKO Data Centre only). For the details, please contact with our marketing team (Email: marketing@ciis.com.hk).

Each product type connection method can see at table 2-3.

Table 2-3 Product Type Connection Method

Item	Product Type	Connection Method	Suggest Bandwidth
1	Level-2 (with bond)	MPLS / X-Connect(TKO DC only)	20M
2	Level-1 (with bond)	Internet / MPLS	8M
3	Fixed Income	Internet / MPLS	4M
4	Stock option	Internet / MPLS	8M
5	CSI Index Press	Internet / MPLS	4M
6	Other third parties exchange market data	Internet / MPLS	10M

2.4.2 VDE Description

VDE is a dedicated access program for the LDDS system provided by our company to information providers. VDE is a pure Java program, and it is recommended to configure it with a BiSheng 8 or later environment (if using an Oracle environment, please verify the availability of each version yourself). It can run on any operating system that can normally deploy a Java environment. It is recommended that the server where VDE is installed be a PC Server with a memory of not less than 16G and a processor of not less than 8 cores. It is also recommended that the hard disk be configured in Raid5. After the information vendor completes the network connection, it must install the VDE program and obtain market data through the VDE program. After running the VDE program, VDE will automatically establish a long TCP/IP connection with the DDS server and make a short connection to the SDS server as needed.

2.4.3 VSS to VDE Connection

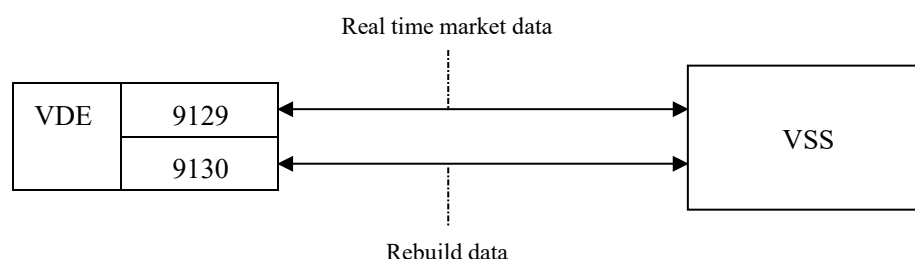
We call the access program of the information vendor the VSS program. VSS must obtain market data through the VDE interface program. VSS is usually deployed in the same LAN as VDE and connected through TCP/IP.

VDE provides two types of ports for VSS to connect, namely the real-time data port and the rebuild data port. The former provides a channel service for data publishing, and the latter provides a channel service for data rebuilding. VSS can connect to the above two types of ports of VDE at the same time, but each port can only establish a unique connection.

Currently, rebuilding data in Binary format is not supported.

The TCP/IP ports assignment is as follows:

Port	Connection
9129	Real-time market data Connection
9130	Rebuild Connection

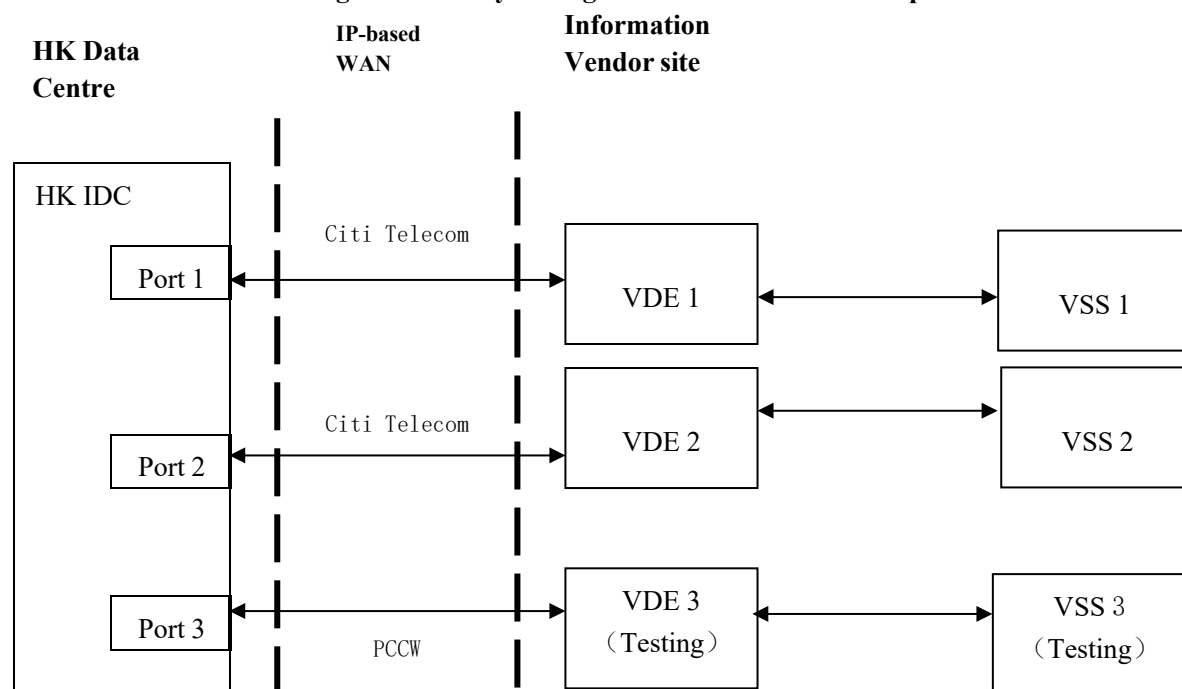


Picture 2-2 VSS to VDE connection Diagram

2.5 High Availability Configuration

The LDDS production system provides multiple completely independent data sources, supporting information vendors to access completely independent multi-channel systems to build high-availability business services. The LDDS system provides a parallel testing system for online system testing to help service providers develop, test and smoothly upgrade. The LDDS production system also deploys disaster recovery nodes and has disaster recovery capabilities for system switching services.

Picture2-3 High Availability Configuration with three VSS implemented



2.6 Data Security

Communication between HK IDC and information vendor site is secured by the SSE supplied VDE.

The VDE and the information vendor's VSS to receive data from the VDE should be co-located in a secure office.

2.7 Detect the connection status between VSS and VDE

VDE will send heartbeat messages to VSS during idle periods in the transmission of real-time market data. If VSS exceeds two heartbeat cycles without receiving any data, it can determine that the connection is abnormal and VSS needs to re-establish the market data session.

2.8 Detection of Packet Loss & Market Data Rebuild

VSS determines whether packet loss has occurred through message sequence numbers and other information. For Binary messages, the message sequence number typically starts at 1 for each session and increments sequentially throughout the entire session until the session concludes; For STEP messages, the message sequence numbers for the same product category should increase sequentially and remain continuous each trading day. If the publishing system undergoes an abnormal switchover, the message sequence numbers may roll back.

VSS can connect to VDE's rebuild market data port and send a data reconstruction request to retrieve missing data if packet loss is detected (snapshot data does not support reconstruction). For specific request parameters and methods, refer to the relevant sections in the message chapters.

2.9 Data exchange method

The LDDS system uses the TCP/IP communication method to exchange data in the form of binary data streams.

The LDDS system provides two data formats, namely the Binary format and the STEP format.

Chapter 3 LDDS Binary Message

Currently, the LDDS system supports Binary session protocol transmission. For details, refer to document 《IS120_上海证券交易所行情网关 BINARY 数据接口规范》.

Chapter 4 LDDS STEP Message

4.1 STEP Message Format

The STEP protocol is an extension of the FIX 4.4 protocol. This section describes the format of application-level messages defined in Level 2 data feed. For the description of the data type defined in STEP, please refer to the STEP protocol specification.

The data format is encapsulated using the STEP protocol. Except for system messages such as login and logout, the rest of the business data is basically in the form of STEP RawData and embedded in the STEP message through tag96. LDDS business data is encoded in FAST format, and other business data formats are defined by related businesses. The LDDS system only encapsulates and forwards in STEP format.

A STEP message consists of a message header, a message body, and a message trailer. STEP messages always start with a standard message header and end with a standard message trailer.

4.1.1 STEP Message Header

Each message has a message header, which defines the message type, length, destination, sequence number, starting point, time and other data fields, all of which are transmitted without encryption.

Table 4-1 Standard Message Header Format

Tag	Field Name	Req'd	Field Type	Comments
8	BeginString	Y	String	STEP.1.0.0
9	BodyLength	Y	Length	Message Body Length (Total message body length except for tag 8, 9 & 10)
35	MsgType	Y	String	Message Type
49	SenderCompID	Y	String	Sender Composite ID
56	TargetCompID	Y	String	Target Composite ID
34	MsgSeqNum	Y	SeqNum	Message Sequence Number
52	SendingTime	Y	LocalTimeStamp	Sending Time (Sender's machine timestamp)
347	MessageEncoding	N	String	Character encoding type of the encoding field in the message
50	SourceId	N	Int	Data source identifier

4.1.2 STEP Message Trailer

Each message has a message trailer and ends with it. The trailer is used to indicate the end of a message and contains the three digits to represent the Checksum value.

Table4-2 **Standard Message Trailer**

<i>Tag</i>	<i>Field Name</i>	<i>Req'd</i>	<i>Field Type</i>	<i>Comments</i>
10	Checksum	Y	String	The checksum is not encrypted and must be the last field (It is the remainder of 256 after adding up each byte of all fields except the tag 10. If the remainder is less than 3 digits, 0 is added in front).

4.1.3 FAST Format Description

Since the STEP data format has a large amount of redundancy, the LDDS system performs FAST encoding on the STEP data of real-time market information and embeds the encoded data into the STEP message. For more information about the FAST encoding protocol, please refer to the "FAST 1.1 规范中文版全文参考" or visit (<https://www.fixtrading.org/standards/fast/>). For C language programs related to FAST decoding, please refer to the link (<https://github.com/objectcomputing/quickfast>); for Java language programs, please refer to the link (<https://sourceforge.net/projects/openfast/>).

The message body of each STEP message of real-time market data contains one or more FAST messages of the same message type. Tag95 indicates the total length of the FAST message, and tag96 is the actual FAST message data. For example:

```
8=STEP.1.0.0<SOH>9=99<SOH>35=UA3115<SOH>49=VDE<SOH>56=VDR<SOH>34
=0<SOH>52=20101019-
09:07:11<SOH>10142=6<SOH>10072=4719<SOH>95=20<SOH>96=??D?0000?)S?Jo?<
SOH>10=052
```

The FAST data length is 20, and the binary data of tag96 is the market data that needs to be decoded (UA3115 message).

The template file required for FAST decoding is "template.xml". Please make sure that the appropriate template file has been used.

For all other data definition not list on the FAST XML template, please refer to the related message technical specification or message description.

4.2 Logon Message

After the VSS establishes a TCP/IP connection with the VDE real-time market port, the first message sent must be a Logon message. If VDE allows the VSS to connect, then VDE will also return a Logon message to the VSS as an acknowledgement of the login message, otherwise a Logout message is returned.

The Logon message between VDE and VSS is not accompanied by any authentication information and is only used to confirm that both VDE and VSS are ready to send and receive data. Therefore, VDE only checks the format of the STEP data sent by VSS, not the actual content.

All real time messages are pushed out from IDC DDS server, so VSS must send the unique logon request (Logon message) to ensure VSS is ready to receive data. Once the connection is established, VSS no need to send any other messages.

Static data can be obtained by sending request message directly, when the VSS establishes a TCP/IP connection with the VDE rebuild port (with or without sending a Logon message), and as long as the request message is legitimate, it can obtain the acknowledgement.

Table 4-3 Logon Message

Tag	Field Name	Req'd	Type	Comments
	Standard Header	Y		MsgType = A
98	EncryptMethod	Y	Int	Always 0 , unencrypted
108	HeartBtInt	Y	Int	Heart Beat Interval
	Standard Trailer	Y		

Request “Logon” message sample:

8=STEP.1.0.0<SOH>9=56<SOH>35=A<SOH>49=VSS<SOH>56=VDE<SOH>34=0<SOH>52=20101027-13:37:56<SOH>98=0<SOH>108=0<SOH>10=140<SOH>

Acknowledge “Logon” message sample:

8=STEP.1.0.0<SOH>9=56<SOH>35=A<SOH>49=VSS<SOH>56=VDE<SOH>34=0<SOH>52=20101027-13:37:56<SOH>98=0<SOH>108=0<SOH>10=140<SOH>

4.3 Logout Message

For all abnormal connection from VSS to VDE or VDE cannot get data from IDC, VDE will send out “Logout” message to VSS, then terminates an existing connection between VDE and VSS TCP/IP connection. In case VSS receive Logout message, VSS must reconnect to the VDE real time data port 9129 and resend Logon message.

After VSS sends a request for static data or rebuild data, because it is a short connection, VDE will always send a Logout message after each response data is returned to notify VSS that the request is completed and the connection can be disconnected.

The VSS may or may not send a Logout if it needs to actively disconnect from the VDE.

Table 4-4 Logout Message Format

Tag	Field Name	Req'd	Type	Comments
	Standard Header	Y		MsgType = 5
58	Text	Y	String	Text Empty if this message is sent from Vendor to VDE Reject reason if this message is sent from VDE to vendor
	Standard Trailer	Y		

Logout message sample :

8=STEP.1.0.0<SOH>9=73<SOH>35=5<SOH>49=VDE<SOH>56=VDR<SOH>34=0<SOH>
>52=<SOH>347=UTF-8<SOH>58=Data rebuild request responded.<SOH>10=185<SOH>

4.4 Heartbeat

The VSS can use Heartbeat messages to detect the status of the TCP connection with VDE. IDC's DDS also sends a heartbeat message to VDE at fixed intervals to verify the connection status between VDE and its upstream systems.

If VSS cannot receive the heartbeat message in a short period, please disconnect and go through “Logon” process again from port 9129.

Table 4-5 Heartbeat Message Format

Tag	Field Name	Req'd	Type	Comments
	Standard Header	Y		MsgType = UA1202
10072	MsgSeqID	Y	Int	Always -1 for system message
58	Text	N	String	Used to represent message code 1=Application level heartbeat message
	Standard Trailer	Y		

Heartbeat message sample:

```
8=STEP.1.0.0<SOH>9=82<SOH>35=UA1202<SOH>49=VDE<SOH>56=VDR<SOH>34=0<SOH>52=20101027-14:34:09<SOH>347=UTF-8<SOH>10142=0<SOH>10072=- 1<SOH>58=1<SOH>10=179<SOH>
```

4.5 Request static data or data rebuild message (Rebuild)

Under normal circumstances, VDE will automatically write static data (file data) to the local static directory, and VSS can also access real-time market data via the market data service port.

If request for static data (file base data) or rebuild market data, VSS makes a connection to the rebuild data port, 9130. After the connection is successful, VSS can directly send a Rebuild request of UA1201, and VDE will forward the request to the SDS server of IDC. If the parameters are correct, SDS will send the response data of the corresponding message to VSS through VDE. After the sending is completed, a UA1201 message will be returned; if the parameters are incorrect or the server does not have the corresponding data, a UA1201 message will be directly returned. VSS can check the value of tag10076 in the returned UA1201 message to determine whether the request is successful. If the request is for static data, it can further check tag58 to obtain the number of messages and decide whether to continue to obtain file data.

Regardless of whether the request is successful or not, SDS will send a Logout message after UA1201 returns, asking VSS to disconnect from VDE. Therefore, the data rebuild port connection between VSS and VDE is a short connection, and each request must be reconnected.

Table 4-6 Rebuild Message Format

Tag	Field Name	Req'd	Type	Comments
	Standard Header	Y		MsgType = UA1201
10075	RebuildMethod	Y	int	Rebuild Method 1. Rebuild by category and sequence number 2. Full images rebuilt. (Not support Snapshot market data rebuild.) 3. Tick-by-tick transaction rebuild
10142	CategoryID	Y	int	Category ID
10077	TradeChannel	N	int	Tick-by-tick transaction trade Channel
10073	BeginID	N	int	Begin ID
10074	EndID	N	int	End ID
10076	RebuildStatus	N	int	Status of a rebuild request. 1 = Success, all data returned 2 = Partial data returned 3 = Rejected 4 = No such data

58	Text	N	String	Text If the real-time data request is unsuccessful, this field indicates the reason for the failure; if the request is for a static data file, the number of messages in the product category (tag10142) is returned.
	Standard Trailer	Y		

Please refer to the specific business message instructions on how to set the Rebuild request parameters.

“Rebuild” static file data message sample:

```
8=STEP.1.0.0<SOH>9=89<SOH>35=UA1201<SOH>49=VDE<SOH>56=VSS<SOH>34=
0<SOH>52=<SOH>347=UTF-
8<SOH>10075=1<SOH>10142=10<SOH>10073=0<SOH>10074=0<SOH>10=173<SOH>
```

Rebuild acknowledge message sample (Return file is “Main Index reference”):

```
8=STEP.1.0.0<SOH>9=995<SOH>35=UA2001<SOH>49=VDE<SOH>56=VDR<SOH>34
=0<SOH>52=20110820-17:48:55<SOH>347=UTF-
8<SOH>10142=12<SOH>10072=0<SOH>10178=150947<SOH>1472=5002<SOH>10072
=0<SOH>16001=zsbox110816.txt<SOH>1474=utf-
8<SOH>61=1<SOH>16003=1<SOH>16005=1<SOH>10097=1<SOH>95=808<SOH>96=0
00010|上证180|180|6032.32|6.9|377.74|100.62|12.5|72.6|13.15|101000016|上证
50|50|1862.89|7.06|197.66|254.23|8.98|52.15|12.16|201000009|上证
380|380|3982.8|9.43|274.46|8.8|3.15|18.32|28.79|301000001|上证综指
|965|2608.17|7.45|906.11|23.93|17.21|100|15.62|1002000012|上证国债
|117|129.17|N/A|7.47|N/A|N/A|N/A|N/A|2002000011|上证基金
|33|4289.53|N/A|7.23|N/A|N/A|N/A|N/A|3002000013|上证企债
|409|145.2|N/A|5.2|N/A|N/A|N/A|N/A|4002<SOH>10=112<SOH>
```

```
8=STEP.1.0.0<SOH>9=101<SOH>35=UA1201<SOH>49=VDE<SOH>56=VDR<SOH>34
=0<SOH>52=<SOH>347=UTF-
8<SOH>10075=1<SOH>10142=10<SOH>10077=0<SOH>10073=0<SOH>10074=0<SOH>
>10076=1<SOH>58=163<SOH>10=187<SOH>
```

```
8=STEP.1.0.0<SOH>9=73<SOH>35=5<SOH>49=VDE<SOH>56=VDR<SOH>34=0<SO
H>52=<SOH>347=UTF-8<SOH>58=Data rebuild request
responded.<SOH>10=185<SOH>
```