The Derivatives Service Bureau (DSB)

FIX Rules of Engagement

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Proprietary Information

Contents

Preface

Change History

Date	Change	Version	Author	Revision Details
20 September 2016	Creation	0.1	Yuval Cohen	Initial Version
27 March 2017	Amendments	1.0 RC1	Yuval Cohen	Minor corrections Addition of error scenarios Additions of message samples Additional information about Product definitions Support FIX version 4.4 Branded for DSB Amended examples based on new product schema
2 May 2017	Minor typos	1.01 RC1	Yuval Cohen	Minor typo corrections
10 May 2017	Amendment	1.02 RC1	Yuval Cohen	Added AssetClass(1938) to SecurityDefinition[35=d]
19 June 2017	Amendment	1.02 RC1	Sheryl Tan	Added NoRelatedSym (146) Added "2 = No Instruments found that match selection criteria" to SecurityRequestResult (560)

1 Introduction

1.1 Document Purpose

This specification defines the implementation of the Financial Information eXchange (FIX) protocol by the DSB [The Derivatives Service Bureau (DSB) limited] for the purpose of determining the ISIN for a financial instrument. In doing so it aims to provide a comprehensive reference guide to any such institutions who wish to establish FIX connectivity to the DSB.

FIX is a public-domain specification owned and maintained by FIX Protocol, Ltd. For more information about the FIX protocol, including a list of vendors providing support, see http://www.fixtradingcommunity.org.

1.2 Intended Audience

Anyone with an interest in determining ISINs for financial OTC derivatives instruments using the FIX Protocol.

1.3 Scope

This document focuses on the use of the FIX Protocol to define and query for ISINs for OTC derivative financial products.

1.4 Contact Information

Please direct your questions on the FIX interface via email technical.support@anna-dsb.com

1.5 Functional Summary

The DSB FIX interface provides a near real time service to determine ISINs for OTC derivative financial instruments. The financial instrument is defined by a set of attributes determined by the

industry as required to assure uniqueness for each type of financial instrument supported by the DSB service.
The interface is based on the FIX Protocol and once connected to DSB, the client is able to create a new ISIN, search for one (or more) ISINs or subscribe to all ISINs.

1.6 Activity Diagram Summary

The following diagram illustrates, the DSB FIX interface:

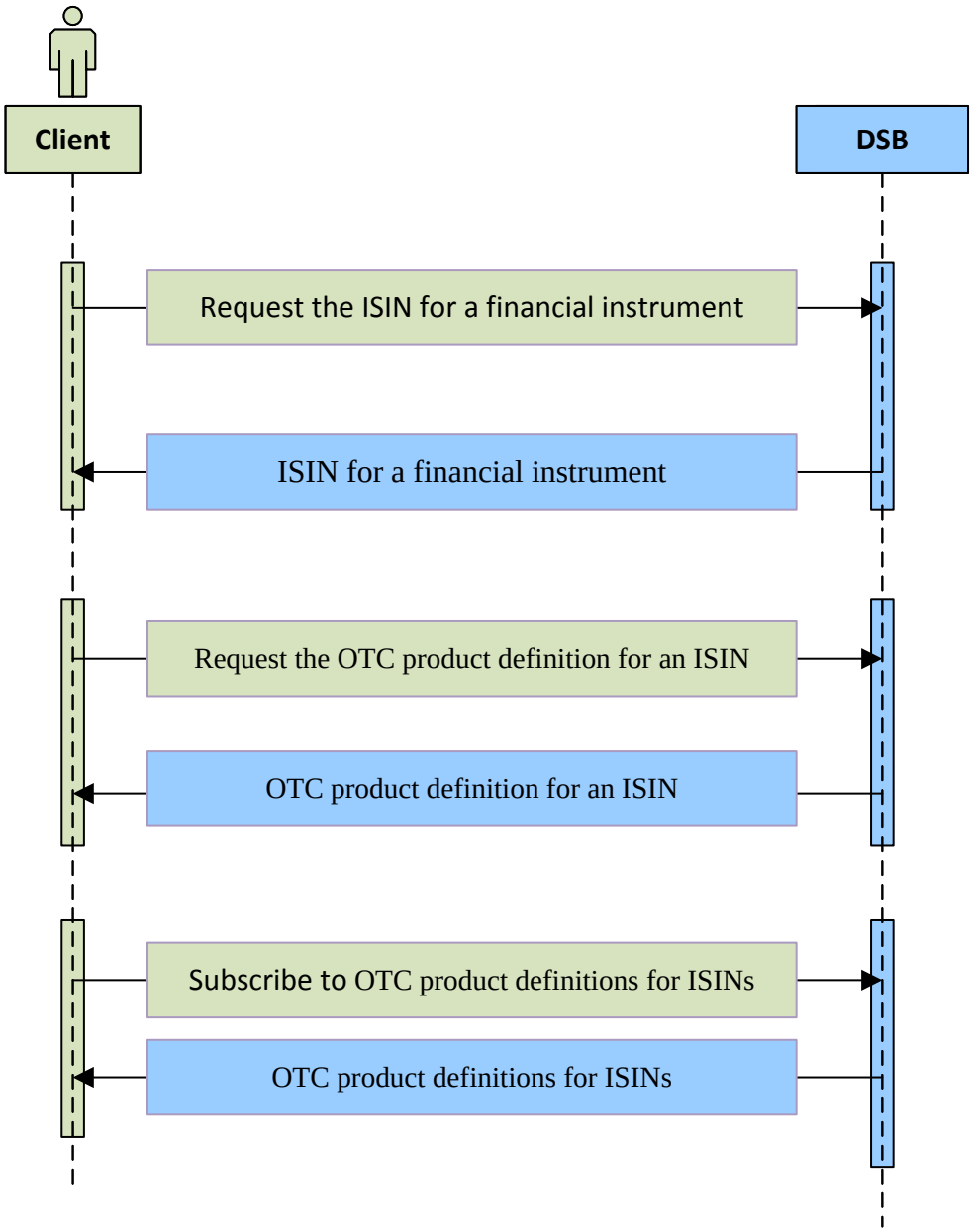

Diagram 1: Activity Diagram

1.7 Document Structure

This document contains the following sections:

Section Number	Title	Description
Section 1	Introduction	A brief introduction to this document providing background to the purpose of the document and the DSB FIX interface.
Section 2	Site Preparation	Provides details of the FIX implementation and the tasks that are required before connectivity can take place.
Section 3	FIX Session Messages	Documents the messages that are employed in the FIX Session Layer and some notes on message formatting.
Section 4	FIX Application Messages	Provides details of the application message flows that are supported DSB.
Section 5	FIX Message Reference	Contains the definitions of the application messages that are supported by the DSB FIX interface including all attributes and enumerations.
Section 6	Message Samples	Some sample FIX messages that illustrate the possible contents of the supported FIX messages.

2 Site Preparation

2.1 Introduction

The following preparation is required in order to connect to the DSB FIX interface:

- Select the FIX version to use: DSB FIX interface supports FIX5.0SP2 as well as FIX 4.4
- DSB operations will provide the following connectivity parameters:
    - FIX specific “channel identifier” that the counterparty will use to communicate with DSB FIX interface.
    - Company identifiers (CompID); These are used throughout the FIX messages and commonly configure in the FIX engine
    - IP addresses of the DSB FIX engine
    - Encryption methodology and parameters i.e. either TLS(SSL) keys or VPN configuration
- Make any network/firewall configuration changes required to connect to the DSB FIX service. Verify that the DSB IP FIX service addresses/port numbers are open and visible from any machine that needs to connect to the FIX service.
- Configure the local FIX engine with the DSB CompID accordingly.

2.2 JSON Product Definitions Representation as JSON Schema

2.2.1 Product Definitions

The DSB Product Committee defines the set of Product Definitions for all OTC derivatives in scope and any future changes or additions will be made under the advisement of the Product Committee. Each Product Definition can be identified by:

- Asset Class
- Instrument Type

- Use case
- Level

Further information about the Product Definition will be available on our web-site.

2.2.2 JSON and JSON Schema

JSON is a text format that is completely language independent but uses conventions that are familiar to programmers of the C-family of languages, including C, C++, C#, Java, JavaScript, Perl, Python, and many others. JSON Schema describe existing data format in a clear, human and machine readable documentation and provides complete structural validation which are useful to validate the client submitted data.

JSON standards are available in ECMA-404 as well as in RFC-7159.

JSON Schema standards are available in: JSON-SCHEMA-04

2.2.3 Product Definition as JSON Schema

The Product Definitions are formatted as a machine readable format in a set of JSON schema files, which are made available by the DSB system. Users are expected to use these JSON schema when requesting an ISIN numbers via FIX messaging.

For each Product Definition there are two JSON schema files:

1	**File**: Request schema file **Description**: a schema that defines the attributes in order to request a new ISIN **Naming Convention**: Request.<AssetClass>.<InstrumentType>.<UseCase>.<Level>.json **Example of a name:** Request.Rate.Swap.FixedFloatPlainVanilla.InstRefDataReporting.json
2	**File**: Record schema file **Description**: a schema that defines the attributes in the ISIN record which is returned from the DSB **Naming Convention**: <AssetClass>.<InstrumentType>.<UseCase>.<Level>.<Version>.json **Example of a name:** Rate.Swap.FixedFloatPlainVanilla.InstRefDataReporting.V1.json

The example for the name above is for a Product Definition where:

- Asset Class = Rate
- Instrument Type = Swap
- Use Case = FixedFloatPlainVanilla
- Level = InstRefDataReporting

The (Template) Version is added for backwords compatibility to the record file only

- Template Version = V1

2.2.4 Using JSON Schema

This subsection lists some of the main tasks and procedures to interact with the DSB system

1. User needs to obtain the up-to-date JSON schema
   I. JSON schema are available to download from the DSB web-site (in the file-download section)
   II. JSON schema are also available through GitHub in: https://github.com/ANNA-DSB
2. In order to request for a new ISIN, user needs to:

I. Select a 'Request' JSON schema which matches his needs. Each Request JSON Schema can be uniquely identified by four attributes:
   - Asset Class
   - Instrument Type
   - Use Case
   - Level

II. Format the required instrument and supply its attributes as a valid *JSON request for an instrument record* based on the Request JSON Schema

III. "Wrap" the *JSON request for an instrument record* within a SecurityDefinitionRequest FIX message [message type = c]

3. User may send the SecurityDefinitionRequest over the FIX session to DSB. This message contains a *JSON request for an instrument record* in tag SecurityXML(1185)
4. The DSB will reply with a SecurityDefinition FIX message [message type = d]
5. In case the Security Definition Request succeeds, then the SecurityDefinition FIX message contains a *JSON instrument record* in FIX tag SecurityXML (1185)
6. To parse the *JSON instrument record,* the user needs to:

I. Extract the TemplateVersion attribute and Header which contains:
   - Asset Class
   - Instrument Type
   - Use Case
   - Level

II. Select the relevant JSON record schema that matches above attribute

III. Continue to parse additional attributes in the *JSON instrument record* as it must be a valid record based on the schema found above

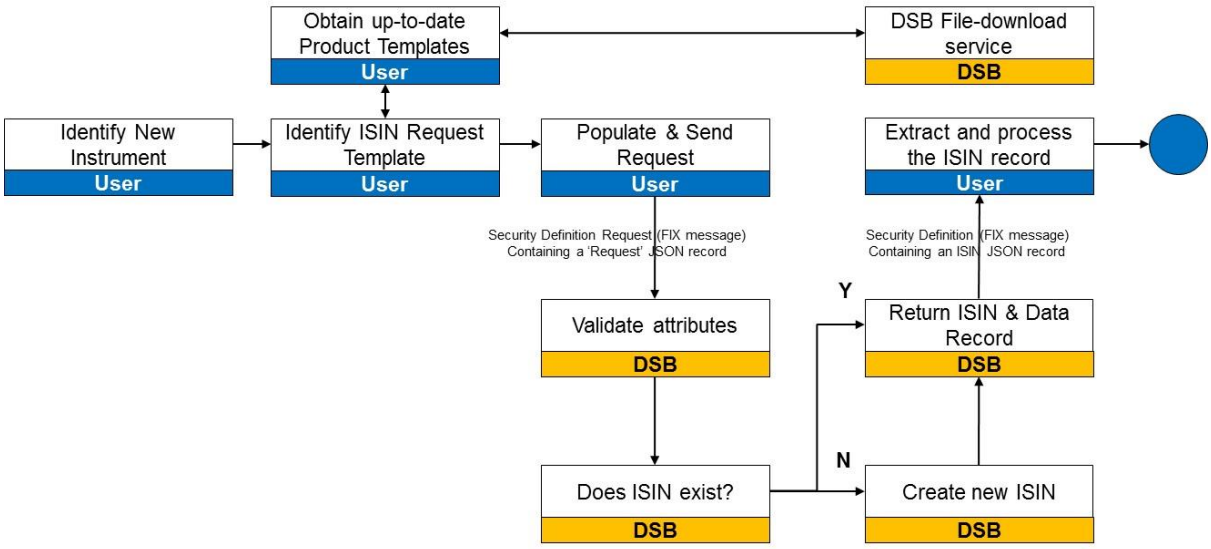

Diagram 2: Using JSON Schema

2.3 FIX Protocol Implementation Notes

The DSB FIX interface supports a subset of the FIX specification. The latest versions of the FIX specification documents can be found at http://www.fixtradingcommunity.org
This document is not meant to restate the FIX specification, but rather to explain how DSB FIX service has chosen to interpret certain aspects of the protocol.

2.3.1 Data Format Notes

DSB FIX interface supports tag/value formatting. No FIXML support.

2.3.2 Data Encryption

Internal FIX encryption (using Logon field 98) will not be supported by the DSB FIX interface implementation. Data security is addressed at the communications level through the use of private circuits.

3 FIX Session Messages

3.1 Standard Header Fields

The message header contains information necessary for routing of all FIX messages.
Fields that are defined in the FIX specification but are not included in the following table will be ignored.

Name	Datatype	Tag	Rq	Description
BeginString	String	8	Y	FIX 5.0: Always set to: FIXT.1.1 FIX 4.4: Always set to: FIX4.4
BodyLength	Length	9	Y	Message length, in bytes, forward to the CheckSum field. Always the second field of the message.
MsgType	String	35	Y	Always the third field of the message. Supported values: 0 = Heartbeat 1 = TestRequest 2 = ResendRequest 3 = Reject 4 = SequenceReset 5 = Logout A = Logon j = BusinessMessageReject c = SecurityDefinitionRequest d SecurityDefinition x = SecurityListRequest y = SecurityList
ApplVerID	String	1128	Y	FIX 5.0: Field must contain: 9 = FIX50SP2 FIX 4.4: Field must contain: 6 = FIX44
SenderCompID	String	49	Y	Assigned value used to identify firm sending message.
TargetCompID	String	56	Y	Assigned value used to identify receiving firm
MsgSeqNum	SeqNum	34	Y	Integer message sequence number.
PossDupFlag	Boolean	43	N	Indicates possible retransmission of message with this sequence number. Supported values: N = Original transmission Y = Possible duplicate
SendingTime	UTCTimestamp	52	Y	Time of message transmission.
OrigSendingTime	UTCTimestamp	122	N	Original time of message transmission when retransmitting as the result of a resend request.
SenderSubID	String	50	N	According to the FIX Standard
SenderLocationID	String	142	N	According to the FIX Standard
TargetSubID	String	57	N	According to the FIX Standard
TargetLocationID	String	143	N	According to the FIX Standard

3.2 Standard Trailer Fields

The message trailer is included on all FIX messages.

Name	Datatype	Tag	Rq	Description
CheckSum	String	10	Y	As per FIX specification

3.3 Heartbeat (35=0) Message

Heartbeat messages are sent at regular intervals to maintain a FIX session during periods of inactivity and to validate both parties are connected. The processing of these messages is per the FIX specification and the heartbeat interval is specified in the HeartBtInt (108) field of the Logon message.

3.4 Logon (35=A) Message

Logon message contains authentication information for a user attempting to establish a FIX connection. FIX counterparties should not send any FIX messages to DSB FIX interface until after a Logon acknowledgment has been received.

The Logon message is used to establish a FIX session and the session is always initiated by the counterparty. DSB FIX interface will always be the server listening for Logon requests. Each time a connection is established to the DSB FIX interface, the counterparty must send a Logon message. DSB FIX interface will send a Logon message in response to indicate that a session has been successfully established (or re-established).

Name	Data Type	Tag	Rq	Description
<StandardHeader> component			Y	MsgType = A
EncryptMethod	int	98	Y	This will be set to 0. 0 = None / Other
HeartBtInt	int	108	Y	DSB FIX interface will set this value to 30 seconds by default.
ResetSeqNumFlag	Boolean	141	N	Indicates both sides of a FIX session should reset sequence numbers N = No Y = Yes, reset sequence numbers
MaxMessageSize	Length	383	N	Can be used to specify the maximum number of bytes supported for messages received
Username	String	553	**Y**	Userid or Username Mandatory for Logon messages from the sender.
Password	String	554	**Y**	Mandatory for Logon messages from the sender.
DefaultApplVerID	String	1137	Y	FIX 5.0: Field must contain: 9 = FIX50SP2 FIX 4.4: Field must contain: 6 = FIX44
<StandardTrailer> component			Y	

Notes:

- If a counterparty's Logon request cannot be accepted because a session is already active, the communications line will be dropped immediately.
- If a counter party's Logon request cannot be accepted due to an authentication failure, the communications line will be dropped immediately.
- FIX sessions will be reset each weekend. Message sequence numbers are assumed to begin with "1" at the start of each session. In some cases, FIX sessions may be reset during the day upon re-connection.

3.5 TestRequest (35=1) Message

DSB FIX interface will send a TestRequest message to force a Heartbeat message from the client if inactivity is detected for a period longer than the specified interval in the client's Logon message. If inactivity continues for a second heartbeat interval,
DSB FIX interface will send a Logout message and break the TCP/IP connection. The client is required to implement the same logic.

3.6 ResendRequest (35=2) Message

ResendRequest messages can be sent and received by DSB FIX interface. The processing of these messages is as per the FIX specification.

3.7 Reject (35=3)

Reject messages can be sent and received by DSB FIX interface. The processing of these messages is as per the FIX specification.

3.8 SequenceReset (35=4) Message

SequenceReset messages can be sent and received by DSB FIX interface. The processing of these messages is as per the FIX specification.

3.9 Logout (35=5) Message

Logout messages can be sent and received by DSB FIX interface. The processing of these messages is as per the FIX specification.

4 FIX Message Flows

4.1 Introduction

This section looks at the messages that will be supported by DSB FIX interface.

4.2 Request the ISIN for a financial instrument

The SecurityDefinitionRequest(35=c) is used to determine the ISIN for a financial instrument. The financial instrument is defined by a JSON object provided in the SecurityXML(tag 1185) field. Each financial instrument type has its own set of attributes that are used to determine uniqueness.

The following diagram illustrates the workflow:

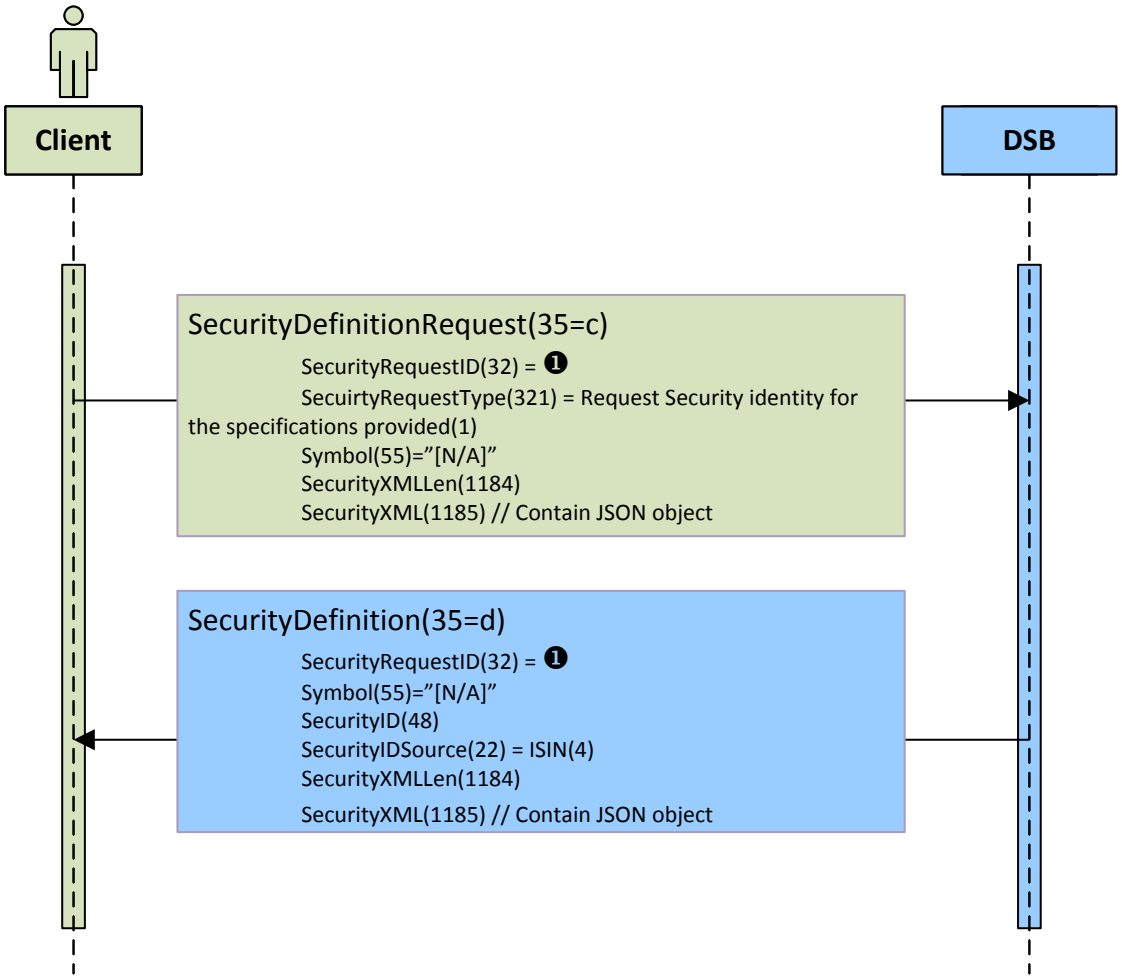

Diagram 3: Request the ISIN for a financial instrument

4.2.1 Expected Results

The following table contains possible attributes' values of the SecurityDefinition (35=D) message:

Scenario	Security Request Result (560)	Information is available in Text(58) attribute	Expected user action
Valid request: ISIN and JSON payload are available	Valid request(0)	✘	
Conditional attribute is missing **Malformed of JSON product payload** **Invalid value in one of the JSON product payload**	Invalid Or Unsupported Request(1)	✓	Correct the FIX message or the payload
User is not permitted to create an ISIN	Not Authorized To Retrieve Instrument Data (3)	✓	Check tags: Username(553) and Password(554) on the Logon message. Call support
System is unavailable **Any other internal error**	Instrument Data Temporarily Unavailable(4)	✘	Call support

4.3 Request the OTC product definition for an ISIN

The SecurityDefinitionRequest(35=c) is also used to return the unique attributes that define a financial instrument for an existing ISIN. The ISIN is specified in SecurityID(tag 48). The SecurityIDSource(tag 22) is set to ISIN (22=4).

The following diagram illustrates the workflow:

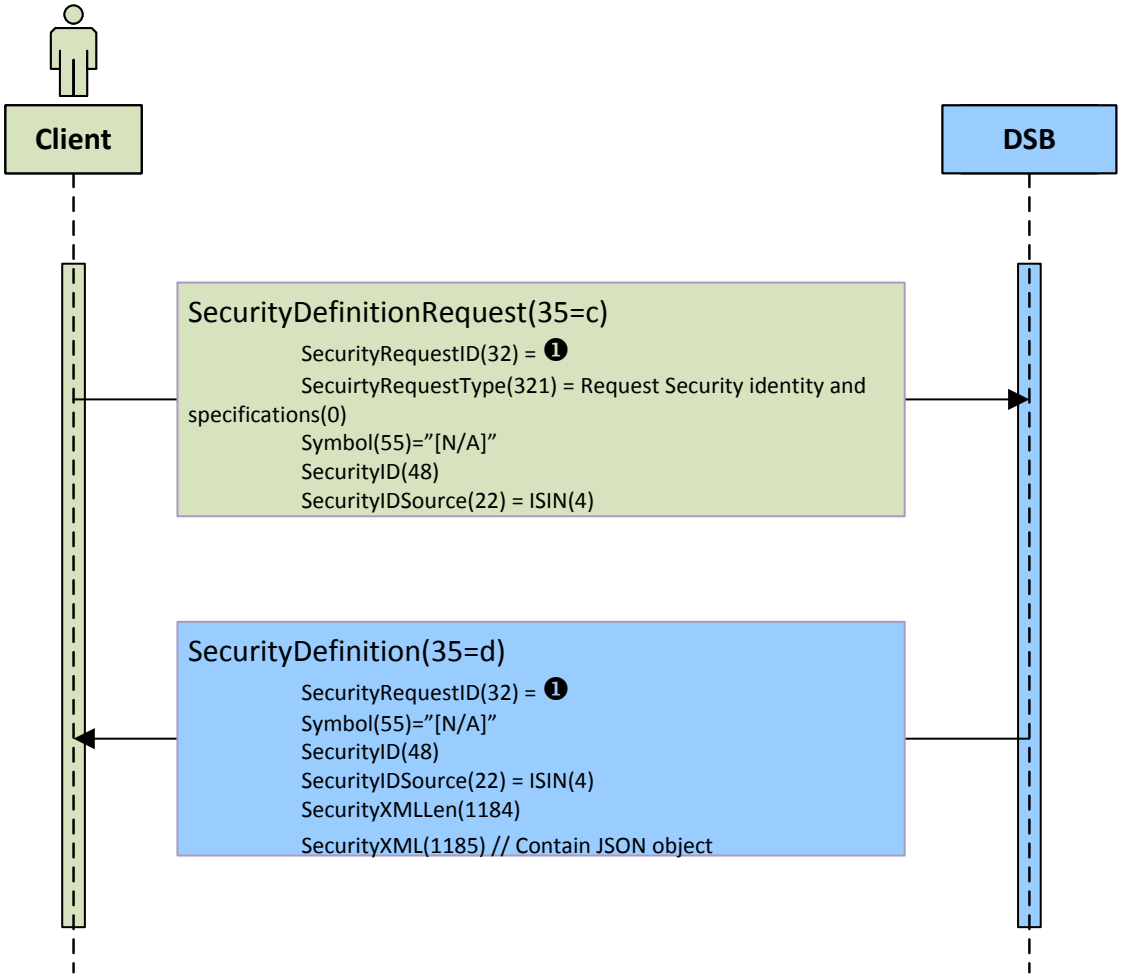

Diagram 4: Request the OTC product definition for an ISIN

4.3.1 Expected Results

The following table contains possible attributes' values of the SecurityDefinition (35=D) message:

Scenario	Security Request Result (560)	Information is available in Text(58) attribute
ISIN and product definitions are available	Valid request(0)	✘
ISIN does not exist	No Instruments Found(2)	✓

4.4 Subscribe to OTC product definitions for ISINs

The SecurityListRequest(35=x) is used to subscribe to OTC product definitions for ISINs. The list of ISINs that were created today (UTC time) are returned in SecurityList(35=y) message(s). The client can subscribe to receive either a snapshot or snapshot + updates i.e. new ISINs being created. Clients may filter the request to retrieve products of only a single asset class by attaching AssetClass(1938) attribute to the message.

The OTC product definitions may be sent by the server in several SecurityList(35=y) messages. The server by default will not send more than fifty OTC products definitions in a single SecurityList(35=y) message.

OTC products definitions that were created in previous days can be downloaded through the file download service and will not be provided through this workflow.

The following diagram illustrates the workflow:

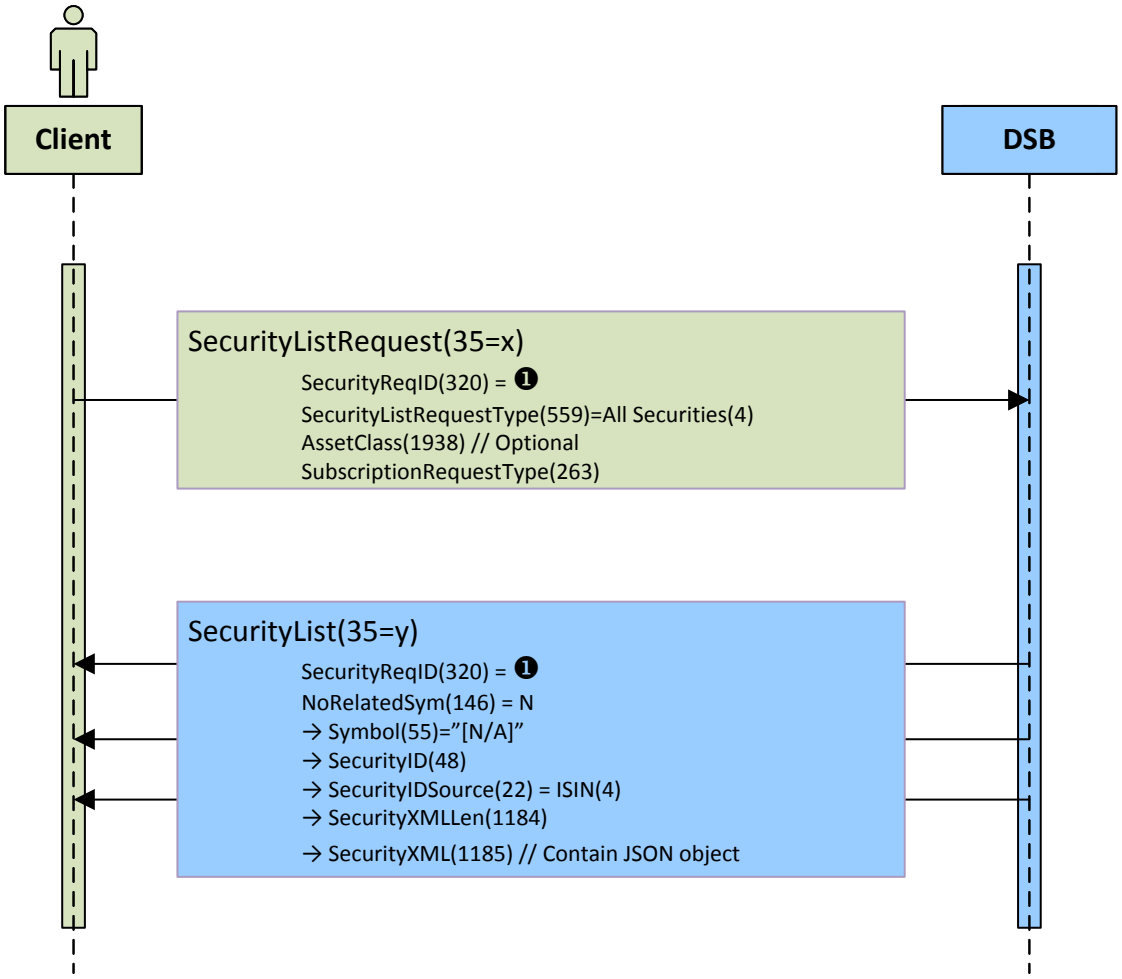

Diagram 5: Subscribe to OTC product definitions for ISINs

4.4.1 Expected Results

The following table contains possible attributes' values of the SecurityDefinition (35=D) message:

Scenario	Security Request Result (560)	Expected user action
Valid Request	Valid request(0)	
Conditional attribute is missing **Invalid attributes' value on the Request**	Invalid Or Unsupported Request(1)	Correct the FIX message
System is unavailable **Any other internal error**	Instrument Data Temporarily Unavailable(4)	Call support

5 FIX Message Reference

5.1 Introduction

This section details the FIX Protocol messages that are used by DSB FIX interface.

5.2 SecurityDefinitionRequest (35=c)

The SecurityDefinitionRequest(35=c) message is used for the following:

- Request the attributes for a previously defined financial instrument as identified by its ISIN.
- Request (or create) the ISIN for an OTC derivative financial instrument as identified by its unique attributes

Name	Data Type	Tag	Rq	Description
<StandardHeader> component			Y	MsgType = c
SecurityReqID	String	320	Y	Identifies the request ID
SecurityRequestType	Int	321	Y	0 = Request Security Identity And Specifications 1 = Request Security Identity For Specifications Provided
<Instrument> component				
→|Symbol	String	55	Y	Use: "[N/A]"
→|SecurityID	String	48	N	Conditionally required if SecurityRequestType(321)=0 ISIN
→|SecurityIDSource	String	22	N	Conditionally required if SecurityRequestType(321)=0 SecurityIDSource(22)=ISIN number(4)
→| < SecurityXM> component				
→|→|SecurityXMLLen	Int	1184	N	Conditionally required if SecurityRequestType(321)=1
→|→|SecurityXML	String	1185	N	Conditionally required if SecurityRequestType(321)=1
<StandardTrailer> component			Y	

5.3 SecurityDefinition (35=d)

The SecurityDefinition(35=d) message is used for the following:

- Return the attributes for a previously defined financial instrument as identified by its ISIN
- Return the ISIN for a financial instrument as identified by its unique attributes
- Report an error in SecurityDefinitionRequest (35=c) message (see below)

Name	Data Type	Tag	Rq	Description
<StandardHeader> component			Y	MsgType = d
SecurityReqID	String	320	Y	Identifies the request ID
SecurityRequestResult	String	560	Y	0 = Valid request 1 = Invalid or unsupported request 2 = No Instruments found that match selection criteria 3 = Not authorized to retrieve instrument data 4 = Instrument data temporarily unavailable
<Instrument> component				Conditionally required if SecurityRequestResult(560) = Valid request(0)
→|Symbol	String	55	Y	Use: "[N/A]"
→|SecurityID	String	48	Y	ISIN
→|SecurityIDSource	String	22	Y	SecurityIDSource(22)=ISIN number(4)
→|AssetClass	String	1938	N	Filter the request to products of a single asset class 1 = Interest rate 2 = Currency (Foreign Exchange) 3 = Credit 4 = Equity 5 = Commodity
→| <SecurityXM> component				
→|→|SecurityXMLLen	Int	1184	Y	Length of JSON record payload
→|→|SecurityXML	String	1185	Y	JSON record payload
Text	String	58	N	Free format text string that elaborates on an error
TransactTime	UTC Timestamp	60	Y	
<StandardTrailer> component			Y	

5.4 SecurityListRequest (35=x)

The SecurityListRequest(x) message is used to subscribe to a list of securities from the DSB FIX interface that match criteria provided on the request

Name	Data Type	Tag	Rq	Description
<StandardHeader> **component**			Y	MsgType = x
SecurityReqID	String	320	Y	Identifies the request ID
SecurityListRequestType	Int	559	Y	2= Product: Filter the request to products of a single asset class 4 = All Securities (that were created today, i.e. since midnight).
<Instrument> **component**				
→|**Symbol**	String	55	N	Conditionally required if AssetClass(1938) exists Use: "[N/A]"
→|**AssetClass**	String	1938	N	Filter the request to products of a single asset class 1 = Interest rate 2 = Currency (Foreign Exchange) 3 = Credit 4 = Equity 5 = Commodity
SubscriptionRequestType	Char	263	Y	0 = Snapshot 1 = Snapshot + updates 2 = Unsubscribe
<StandardTrailer> **component**			Y	

5.5 SecurityList(35=y)

The Security List message is used to return a list of securities that matches the criteria specified in a Security List Request or to report an error in the SecurityListRequest (35=x) message.

Name	Data Type	Tag	Rq	Description
<StandardHeader> **component**			Y	MsgType = y
SecurityReqID	String	320	Y	Identifies the request ID
NoRelatedSym	Int	146	N	Specifies the number of repeating symbols specified
SecurityRequestResult	Int	560	Y	0 = Valid request 1 = Invalid or unsupported request 2 = No Instruments found that match selection criteria 3 = Not authorized to retrieve instrument data 4 = Instrument data temporarily unavailable
TransactTime	UTC Timestamp	60	Y	
<SecListGrp> **component**				
→|**TotNoRelatedSym**	Int	393	N	Conditionally required if SecurityRequestResult = 0
→|→|<Instrument> **component**				Conditionally required if SecurityRequestResult = 0
→|→|**Symbol**	String	55	Y	Use: "[N/A]"
→|→|**SecurityID**	String	48	Y	ISIN
→|→|**SecurityIDSource**	String	22	Y	SecurityIDSource(22)=ISIN number(4)
→|→|**AssetClass**	String	1938	Y	Filter the request to products of a single asset class 1 = Interest rate 2 = Currency (Foreign Exchange) 3 = Credit 4 = Equity 5 = Commodity
→|→|→| **<SecurityXM> component**				
→|→|→|**SecurityXMLLen**	Int	1184	Y	Length of JSON record payload
→|→|→|**SecurityXML**	String	1185	Y	JSON record payload
<StandardTrailer> **component**			Y	

6 FIX Message Samples

6.1 Introduction

This section contains FIX message samples.

The table below provides explanation of the samples content:

Field	Content / Highlighted	Comment
FIX delimiter	^	ascii 0x001
SenderCompID(49) ⇔ **TargetCompID(56)**	Client ⇔ DSB	Client Comp ID Configured for each client The DSB comp ID
SenderSubID(49) ⇔ **TargetSubID(57)**	Subclient ⇔ Demo	Client Sub Comp Configured for each client ⇔ The DSB Sub Comp ID is configured for each environment (i.e.: Demo / UAT / Prod / Prod2)
Username(553)	USERNAME	Configuration send by DSB
Password(554)	PASSWORD	Configuration send by DSB
SecurityXML(1185)	{"Header": {"AssetClass": "Rates","InstrumentType": "Forward","UseCase": "Debt_FRA","Level": "InstRefDataReporting"},"Attributes":{"NotionalCurrency": "CHF","ExpiryDate": "20171231","DeliveryType": "Physical","FirstLegReferenceRate": "CHF-LIBOR-BBA","FirstLegReferenceRateTerm": {"Unit":"MNTH","Value":6}}}	Request Product payload is highlighted in yellow
SecurityXML(1185)	{"Header": {"AssetClass": "Rates", "InstrumentType": "Forward", "UseCase": "Debt_FRA", "Level": "InstRefDataReporting"},"Attributes": {"NotionalCurrency": "CHF", "ExpiryDate": "20171231", "DeliveryType": "Physical", "FirstLegReferenceRate": "CHF-LIBOR-BBA", "FirstLegReferenceRateTerm": {"Unit": "MNTH", "Value":6}},"ISIN": {"ISIN": "EZ00000001D8", "Status": "New"},"TemplateVersion":1,"Derived":{"ISOFirstLegReferenceRate": "LIBO","CommoditiesDerivativesIndicator": "FALSE","Issuer": "NA","UnderlyingAssetType": "Interest Rate Index","ReturnPayout": "Forward price of underlying	Record Payload is highlighted in yellow

	instrument","PriceMultiplier":1,"LongName": "RatesForwardFRA_Index_CHFCHF-6MNTH20171231","FISN": "NA/ForwardCHF20171231","CFI": "JRIXFP"}}	

6.2 Logon message

The following is a sample of a Logon message (35=A)

```
8=FIXT.1.1^9=149^35=A^34=1^49=Client^50=Subclient^52=20170105-
06:26:05.345^56=DSB^57=Demo^98=0^108=30^553=USER^554=PASSWORD^1137=9^10=068
```

6.3 Heartbeat message

The following is a sample of a Heartbeat message (35=0)

```
8=FIXT.1.1^9=78^35=0^34=39^49=DSB^50=Demo^52=20170105-
07:00:21.260^56=Client^57=Subclient^10=082
```

6.4 Security Definition Request message having a product payload

The following is a sample of a SecurityDefinitionRequest message (35=c) having a product payload

```
8=FIXT.1.1^9=504^35=c^34=300^49=Client^50=Subclient^52=20170105-
09:09:01.859^56=DSB^57=Demo^55=[N/A]^320=DREQ3^321=1^1184=306^1185={"Header":{"As
setClass":"Rates","InstrumentType":"Forward","UseCase":"Debt_FRA","Level":"
InstRefDataReporting"},"Attributes":{"NotionalCurrency":"CHF","ExpiryDate":
"20171231","DeliveryType":"Physical","FirstLegReferenceRate":"CHF-LIBOR-
BBA","FirstLegReferenceRateTerm":{"Unit":"MNTH","Value":6}}}^10=004
```

6.5 Security Definition Request message having an ISIN

The following is a sample of a SecurityDefinitionRequest message (35=c) having an ISIN

```
8=FIXT.1.1^9=120^35=c^34=14^49=Client3^50=Subclient^52=20170216-
11:22:41.745^56=DSB^57=Demo^22=4^48=EZ0000000037^320=DREQ1^321=0^10=089
```

6.6 Security Definition message

The following is a sample of a SecurityDefinition message (35=d)

```
8=FIXT.1.1^9=889^35=d^34=301^49=DSB^50=Demo^52=20170105-
09:09:01.700^56=Client^57=Subclient^22=4^48=EZ00000001D8^55=[N/A]^320=DREQ3^560=0^1
184=686^1185={"Header":{"AssetClass":"Rates","InstrumentType":"Forward","Use
Case":"Debt_FRA","Level":"InstRefDataReporting"},"Attributes":{"NotionalCur
rency":"CHF","ExpiryDate":"20171231","DeliveryType":"Physical","FirstLegRef
erenceRate":"CHF-LIBOR-
BBA","FirstLegReferenceRateTerm":{"Unit":"MNTH","Value":6}},"ISIN":{"ISIN":
"EZ00000001D8","Status":"New"},"TemplateVersion":1,"Derived":{"ISOFirstLegR
eferenceRate":"LIBO","CommoditiesDerivativesIndicator":"FALSE","Issuer":"NA
","UnderlyingAssetType":"InterestRateIndex","ReturnPayout":"Forwardpriceofu
nderlyinginstrument","PriceMultiplier":1,"LongName":"RatesForwardFRA_Index_
CHFCHF-
6MNTH20171231","FISN":"NA/ForwardCHF20171231","CFI":"JRIXFP"}}^1938=3^10=055
```

6.7 Security List Request message

The following is a sample of a SecurityListRequest message (35=x). The request is for a snapshot of FX instruments

```
8=FIXT.1.1^9=104^35=x^34=3^49=Client^50=Subclient^52=20170202-
12:04:07.548^56=DSB^57=Demo^263=0^320=LREQ1^559=2^1938=2^10=134
```

6.8 Security List message

The following is a sample of a SecurityList message (35=y)

```
8=FIXT.1.1^9=1967^35=y^34=3^49=DSB^50=Demo^52=20170216-
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About Derivatives Service Bureau (DSB)

The Association of National Numbering Agencies (“ANNA”), is founding the Derivatives Service Bureau (DSB), for the issuance and maintenance of International Securities Identification Numbers (ISINs) for OTC Derivatives. The DSB will rely on an automated platform capable of allocating ISINs in near real-time.