

# BTS<sup>®</sup> Orders and trades register layouts

Manual

v. 3.9

July 2020



**London**  
Stock Exchange Group

# Contents

---

## Index

---

<b>1</b>	<b>Revision History</b>	<b>3</b>
----------	-------------------------	----------

<b>2</b>	<b>Introduction</b>	<b>5</b>
----------	---------------------	----------

2.1	Purpose	5
2.2	Validity	5
2.3	References	5

---

<b>3</b>	<b>General System Features</b>	<b>7</b>
----------	--------------------------------	----------

3.1	Content Description	7
3.2	How to Get Data	7
3.3	Data Management	8
3.4	File Format	9
3.5	APIs Functions	9

---

<b>4</b>	<b>Cash markets - Data Layout Description</b>	<b>11</b>
----------	---	-----------

4.1	Fields Description	15
4.2	Market Error Code Mapping	23
4.3	BTS® Server Error Code Mapping	36

---

<b>5</b>	<b>Derivatives markets - Data Layout Description</b>	<b>38</b>
----------	--	-----------

5.1	Fields Description	42
5.2	Market Error Code Mapping	50
5.3	BTS® Server Error Code Mapping	53
5.4	Notes	54

# BTS® Orders and trades register layouts

July 2020

## 1 Revision History

Date	Version	Description	Author
18/02/2009	1	Trade Elect Phase 2 – First Release.	
28/03/2012	2.0	Migration to MIT market platform	
09/06/2014	3.0	<ul style="list-style-type: none"><li>• New format according to Corporate guidelines</li><li>• Added IDEM-IDEX-AGREX layouts</li></ul>	Borsa Italiana
29/11/2014	3.1	Added ETLX market	Borsa Italiana
29/04/2016	3.2	Added SOLA 7 changes  BTS® registered trademark update	Borsa Italiana
27/02/2017	3.3	New file for RFQ trades	Borsa Italiana
19/07/2017	3.4	Added MIFID II fields	Borsa Italiana
01/08/2017	3.4 rev2	Correction to values of Client Identification Code PNAL/AGGR	Borsa Italiana
10/04/2018	3.5	Updated references list (par. 2.3)  Extended to all BTS® supported markets (par. 3.2)  New tree structure to retrieve files (par. 3.2)  Added new values to Trade Type field for derivatives markets	Borsa Italiana
01/06/2018	3.6	Added new value to Account Type field for ETLX market	Borsa Italiana

---

## BTS® Orders and trades register layouts

July 2020

		Added new values to Price Type and Request Category fields for cash markets	
31/01/2020	3.7	Added new SOLA 14 fields	Borsa Italiana
15/06/2020	3.8	Added new cash market fields	Borsa Italiana
01/07/2020	3.9	Added Offset field on cash markets, amended error on Last Market field	Borsa Italiana

---

## 2 Introduction

### 2.1 Purpose

The purpose of this document is to supply order/quote and trade register layouts description. These data are produced by BTS® application servers for operation in markets supported by BTS®.

### 2.2 Validity

The information contained in this document is related to the markets supported by multimarket BTS® application.

### 2.3 References

- [1] Borsa Italiana S.p.A. - "Rules of the Markets organised and managed by Borsa Italiana"  
<http://www.borsaitaliana.it/borsaitaliana/regolamenti/regolamenti/regolamentoborsa-istruzionalregolamento.en.htm>
  
- [2] Borsa Italiana S.p.A. – “Instructions accompanying the Rules of the Markets organised and managed by Borsa Italiana”  
<http://www.borsaitaliana.it/borsaitaliana/regolamenti/istruzioni/istruzioni.en.htm>

---

## BTS® Orders and trades register layouts

July 2020

- [3] EuroTLX SIM S.p.A. - EuroTLX Rule Book entered into force on 6 October 2014  
[http://www.eurotlx.com/sites/default/files/02%20Regolamento\\_EuroTLX\\_ENG\\_14102016%20no%20evidence\\_1.pdf](http://www.eurotlx.com/sites/default/files/02%20Regolamento_EuroTLX_ENG_14102016%20no%20evidence_1.pdf)
- [4] Rules of the London Stock Exchange, July 1<sup>st</sup> 2019  
<http://www.londonstockexchange.com/traders-and-brokers/rules-regulations/rules-lse.pdf>
- [5] Turquoise Rule Book, January 2<sup>nd</sup> 2020  
<https://www.lseg.com/sites/default/files/content/documents/Turquoise%20Rule%20Book%20-%20effective%20Jan%202020.pdf>

---

# BTS® Orders and trades register layouts

July 2020

---

## 3 General System Features

### 3.1 Content Description

The BTS® server daily produces and updates a log file in ASCII format. It contains all the information related to the transactions executed through the BTS® system.

It contains:

- Order/quote inserted, modified and deleted;
- Notification messages related to order/quote inserted, modified and deleted;
- Order/quote notification messages related to order/quote executed;
- Local or market order/quote reject messages;
- Notification messages related to trades executed through the RFQ workflow.

In the rest of this document, the word “order” means order/quote.

The sequence of these messages is chronological. The log-file record format is unique and it does not depend on the kind of message received. The information contained in each message allows to rebuild the original order, including its parameters; this information is needed from back office and risk management systems during the business day.

### 3.2 How to Get Data

Files are available in three ways:

1. for look-up: it is possible to look up the file directly from the browser;
2. through HTTPS: downloading files via HTTPS;
3. through interconnection (APIs): it is possible to get the same information through APIs (\*)

(\*) APIs are not available for the RFQ trades file.

Access credentials are provided upon request.

---

# BTS® Orders and trades register layouts

July 2020

The above mentioned file will be available in a standard web URL:

- <https://btsmil.lseg.com/<membercode>> for Milan BTS® production  
(<https://btsmil2.lseg.com/<membercode>> in case of Disaster Recovery)
- <https://btslon.lseg.com/<membercode>> for London BTS® production  
(<https://btslon2.lseg.com/<membercode>> in case of Disaster Recovery)
- <https://btstest.lseg.com/<membercode>> for CDS

Under the above mentioned URL root, files are stored in the folder structure <service>/<market>, where <service> can be “orderstrades” or “rfqtrades” and <market> can be one of the following:

- BIT\_DER = Borsa Italiana: IDEM / IDEX / AGREX
- BIT\_NTI = Borsa Italiana: MTA, MOT/EuroMOT, ETFPlus, MIV, SeDeX, , AIMItalia
- CURVE = CurveGlobal
- ETLX = ETLX
- LSEG\_DER = London Stock Exchange Derivatives Market (LSEDM)
- LSE\_NTI = LSE: SETS, IOB,ORB
- TQ = Turquoise

Example: [https://btstest.lseg.com/8081/orderstrades/BIT\\_NTI](https://btstest.lseg.com/8081/orderstrades/BIT_NTI)

### 3.3 Data Management

Files (and the related data flow) are created at system start up following the characteristics mentioned in the configuration file and they are updated in near real time (up to five minutes delay) using APPEND operations. This is not valid for the RFQ trades file which is available at EOD only (18.00 CET).

The file field 26 (for cash markets) or 24 (for derivatives markets) is a progressive number that allows to identify uniquely a record in the sequence. For instance, if a user proprietary system accesses periodically the file (for example every five minute) or queries the system through APIs, it should store the number of



---

# BTS® Orders and trades register layouts

July 2020

the last record read and start from the next one in the following read access.

The system guarantees that previous records will never be modified (only append operations allowed).

Fields are divided by a separator (the character '|') and they have a fixed length obtained by padding with spaces (on the left for numeric fields, on the right for string fields).

## 3.4 File Format

The system creates a different file for each combination of <company, market, business day> available via https.

The file naming is:

export\_<MARKET>\_<COMPANY>\_<YYYYMMDD>.txt for orders/trades files or

rfqtrades\_<MARKET>\_<COMPANY>\_<YYYYMMDD>.txt for RFQ trades files where:

- MARKET is the market considered (as described in 'How to Get Data' chapter)
- COMPANY is the CED code of the company;
- YYYYMMDD is the business day.

Examples :

- export\_BIT\_NTI\_8081\_20180522.txt
- export\_BIT\_DER\_8081\_20180522.txt
- rfqtrades\_BIT\_NTI\_8081\_20180522.txt

## 3.5 APIs Functions

In order to integrate the back-office information, three APIs classes are available:

1. A subscription (1569) class: when back-office information is subscribed, asynchronous data are received via callbacks;
2. An inquire (1571) class : to query all the back-office data;
3. A response (1570) class : it contains the data coming from the inquiry and the subscription class.

APIs are not available for the RFQ trades file.

---

## BTS® Orders and trades register layouts

July 2020

### 3.5.1 Order/Trade Subscription Layout

Class Name: **1569**

Input Fields: **SeqNum; Market**

This class has to be subscribed with SeqNum = 1 in order to receive all the orders/trades made in the business date including the ones made from the market opening till the subscription time. To minimize the data flow in recovery time, data may be required from the next entry starting from the last one received by setting SeqNum to the last SeqNum received + 1.

### 3.5.2 Order/Trade Inquiry Layout

Class Name: **1571**

Input Fields: **Market**

Class to be used to receive synchronously all the business date data.

### 3.5.3 Order/Trade Notification Layout

Class Name: **1570**

Output Fields: **SeqNum; Market; Data**

### 3.5.4 Data Dictionary

**SeqNum:** it is a string that contains an integer (the first number of the sequence is 1)

**Market:** it is a string that contains the market to be queried.

**Data:** It contains data according with the format layout described in the following chapters ("Data Layout description").

## BTS® Orders and trades register layouts

July 2020

### 4 Cash markets - Data Layout Description

The following table describes the file layout for all events (order insert, modify, delete, executions, ...) for transactions on cash markets.

N°	Field	Len	Description
1	User ID	20	BTS® user
2	Instrument	12	Market Instrument Identifier
3	Message type	1	Market answer = A Execution notification = R (*) Error from the market = C Error from BTS® = G Market Notification = B  (* ) all records included in the RFQ trade files have the Message Type set to R
4	Answer type	1	If message type = A Deletion confirm = 1 (requested by the user) Order deleted = 2 Insert confirm = 4
5	Function type	1	If message type = A Insert = 0 Delete = 1 Modify = 2 BTS® Supervisor Removal = 3
6	Side	1	Buy = 0 Sell = 1
7	Quantity	20	Total order quantity
8	Price type	1	Market = M Limit = L Market to Limit = K (BIT_NTI only) Stop = S (BIT_NTI only) Stop Limit = X (BIT_NTI only) Unpriced Limit = U (BIT_NTI only)
9	Price	21	If price type = L Order Price

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
10	Parameter	1	Good Till Cancel = R (BIT_NTI only) Good Till Day = J Immediate or Cancel (IOC) = E Good Till Date/Time = D (BIT_NTI and LSE_NTI only) All or None (Fill or kill) = K At Open = O (BIT_NTI and LSE_NTI only) At Close = C (BIT_NTI and LSE_NTI only) Good For Auction = L (BIT_NTI only) Closing Price Uncrossing (CPX) = X (BIT_NTI and LSE_NTI only) Good for Intraday Auction (GFX) = I (LSE_NTI only) Good For Auction (GFA) = L (LSE_NTI only) Good for Scheduled Auction (GFS) = S (LSE_NTI only) Closing Price Uncrossing (CPX) = X (BIT_NTI and LSE_NTI only)
11	Validity date	8	Validity date for GTD/GTT (YYYYMMDD) (BIT_NTI only), otherwise 0
12	Validity Time	6	Validity time for GTT (HHMMSS) (BIT_NTI only), otherwise 0
13	Displayed quantity	20	Quantity displayed in the market, otherwise 0
14	Account Type	1	Third Party Account = C Own Account = N Proprietary = P (ETLX only) Matched Principal = M Unmatched Principal = U (ETLX only)
15	Client order ref.	10	Free-format Text Field sent to the market
16	Order ID	25	Order Identifier
17	PDN ID	12	Order Identifier assigned by the market
18	Modified PDN ID	12	Modified Order Identifier assigned by the market.
19	Trade ID	12	Contract Identifier (message type = R)
20	Insert Time	20	Order Insert Time (YYYYMMDDHHMMSSuuuuuu) (Message type = A)

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
21	Trade Time	20	Trade Execution Time (YYYYMMDDHHMMSSuuuuuu) (Message type = R)
22	Remaining quantity	20	Remaining Order Quantity
23	Executed Quantity	20	Trade Quantity (Message type = R)
24	Execution Price	21	Trade Price (Message type = R)
25	Counterparty code	11	Code of the Counterparty user of the trade (Message type = R) (for markets where it is enabled)
26	Sequence number	6	Message Sequence Number
27	TraderID	11	TraderID
28	Clearing Account	1	Client = C House = H
29	Trade Type	1	(Message type = R) Trade Executed = '' Trade Deleted = A RFQ Trade = R
30	Request Category	1	Simple Order = O Care Order = S Request for Quote = R
31	Reject Code	10	Code of rejection
32	Reject Time	20	Time of rejection notified by the market (YYYYMMDDHHMMSSuuuuuu)
33	Reject Command Type	1	Answer on order insert = 0 Answer on order cancel = 1 Answer on order modify = 2
34	Free info	20	Internal Free-format Text Field
35	SubMarket	10	SubMarket where available (AIM, ETF, EUROMOT, MOT, MTA, SEDEX, TAH for BIT_NTI, DBB, DCE, DCF, DGS, etc. for ETLX)
36	Care Order ID	25	Care Order Identifier
37	Client Identification Code	10	Code used to identify the client of the member or participant of the trading venue. If Account Type='Client' this field Text would be mandatory, else it would be inactive.

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
38	Client Identifier	1	Possible values are: 'F' Firm or Legal Entity, 'P' (Natural Person) or '0' (to be intended as blank)
39	Investment Decision Qualifier (Party Role Qualifier)	1	Whenever the Investment Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'
40	Investment Decision Code	10	Code used to identify the person or algorithm of the Firm responsible for the investment decision. in case Account Type='Client' this field Text would be mandatory, else would be inactive.
41	Execution Decision Qualifier	1	Possible values are: 'A' (Algorithm), 'P' (Natural Person) or '0' (to be intended as blank) Whenever the Execution Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'
42	Execution Decision Code	10	Code used to identify the person or algorithm within the member of the trading venue who's responsible for the execution. in case Account Type='Client' this field Text would be mandatory, else would be inactive.
43	Algo Flag	1	Flag to indicate whether the order has been entered as part of an algorithm strategy. Possible value: Y/N,
44	DEA Flag	1	Indication of whether the order was submitted using a DEA. Possible value: Y/N,
45	Liquidity Provision Flag	1	Indication of whether the order has been entered as part of a liquidity provision activity. Possible value: Y/N,
46	Pre-tradeWaiver indicator flag	1	ILQD Pre-trade Illiquid instrument transaction flag 'I' SIZEPre-trade SSTI transaction flag 'S' NLIQ Negotiated transaction in liquid financial instruments. 'N' OILQ Negotiated transaction in illiquid financial instruments. 'O'

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
47	AutoRFQExecStrategy	1	Applicable Auto RFQ Execution Strategy Sub LIS Auction = 1 LIS Winner Takes All = 4
48	Contra Order Book	2	Order book of the contra party of an RFQ execution Regular = 1 RFQ Trade book = -
49	AvgPx	21	Volume Weighted Average Price
50	LastMarket	2	Market (Segment MIC) where execution took place (valid if Exec Type is F = Trade) (LSE only) XLON (LSE RM) = 21 XLOM (Non-AIM MTF) = 22 AIMX (AIM MTF) = 23
51	Offset	21	(LSE ATC orders only) Offset to be applied to the Dynamic Reference price at closing auction time in terms of percentage value change applied

### 4.1 Fields Description

#### 1. User ID

Identifier of the BTS® client user who entered the current order (BTS® client login name)

#### 2. Instrument

Native market code of an instrument

#### 3. Message type

A = Market answer

B = Market notification

C = Error from the market

G = Error from BTS® server

R = Execution notification

---

## BTS® Orders and trades register layouts

July 2020

Records with type set to 'G' are orders inserted via the BTS® client, but locally refused by the BTS® server and they are not to be sent to the market.

If market surveillance or the central system deletes a trade, a record with type 'R' and *Trade Type* (field 29) set to 'A' will be added.

#### 4. *Answer type*

1 = Deletion confirm

2 = Order deleted

4 = Insert confirm

If the user or an OAA (market supervisor user) has issued the deletion request, the message is 1.

If the market surveillance has deleted the order, the *Answer type* is 2.

#### 5. *Function type*

If the "Message type" is A

0 = Insert

1 = Delete

2 = Modify

3= BTS® Supervisor Removal

This field specifies if the order has been inserted, modified or deleted and if the deletion was issued by a user or by a company supervisor.

#### 6. *Side*

0 = Buy

1 = Sell

#### 7. *Quantity*

It is the order or trade quantity.



---

# BTS® Orders and trades register layouts

July 2020

## 8. Price type

M = Market

L = Limit

K = Market to Limit (BIT\_NTI only)

S = Stop (BIT\_NTI only)

X = Stop Limit (BIT\_NTI only)

U = Unpriced Limit (BIT\_NTI only)

## 9. Price

If *Price type* is set to 'L', it contains the order price.

## 10. Parameter

R = Good Till cancel (BIT\_NTI only)

J = Good Till Day

E = Immediate or Cancel

D = Good Till Date/Time (BIT\_NTI and LSE\_NTI only)

K = All or none (Fill or kill)

O = At Open (BIT\_NTI and LSE\_NTI only)

C = At Close (BIT\_NTI and LSE\_NTI only)

L = Good For Auction (BIT\_NTI only)

X = Closing Price Crossing (BIT\_NTI and LSE\_NTI only)

I = Good for Intraday Auction (LSE\_NTI only)

L = Good For Auction (LSE\_NTI only)

S = Good for Scheduled Auction (LSE\_NTI only)

## 11. Validity date

If *Parameter* is set to 'D', it contains the expiry date in the format YYYYMMDD. (BIT\_NTI only)

## 12. Validity time

If *Parameter* is set to 'D', contains the expiry time in the format HHMMSS (BIT\_NTI only)

---

## BTS® Orders and trades register layouts

July 2020

### 13. *Displayed quantity*

Quantity displayed in the market for iceberg orders.

### 14. *Account type*

The default value for this field is C (Third party account).

C = Third party account

N = Own account

M = Matched Principal

P = Proprietary (ETLX only)

U = Unmatched Principal (ETLX only)

### 15. *Client order ref*

The user can specify this field when entering an order. This value is added to each record related to the order.

### 16. *Order ID*

Order identifier assigned by the BTS® platform.

For quotes the same OrderID is assigned to both sides of the quote.

### 17. *PDN ID*

Order identifier assigned by the market (unique per instrument).

In case of a modify notification it contains the new order identifier, whereas field 18 contains the native order number.

If a market error code (field 3 equal to 'C') is received, this field contains the market error code. For further information look at "Market error code mapping".

### 18. *Modified PDN ID*

In case of a modify notification it contains the native order identifier.

If it is a message type R for an iceberg order, it contains the new PDN identifier.

---

## BTS® Orders and trades register layouts

July 2020

### 19. Trade ID

It contains the market trade number (unique per instrument). In case of a delete notification, it contains the trade identifier of the deleted contract.

### 20. Insert Time

It contains the order insert time for *Message type 'A'*, returned by the market or the deletion time returned by the market (format YYYYMMDDHHMMSSuuuuuu).

### 21. Trade Time

It contains the trade execution time for *Message type 'R'* (format YYYYMMDDHHMMSSuuuuuu).

### 22. Remaining quantity

It contains the remaining order quantity.

If the message is related to a cancel operation (*Message type 'A'* and *Answer type '1'*), it contains the quantity of the deleted order.

### 23. Executed quantity

It contains the executed order quantity for *Message type 'R'*.

### 24. Execution price

It contains the trade execution price

### 25. Counterparty code

It contains the market counterparty code for *Message type 'R'*. If the message is related to a cancel operation, the field is empty.

### 26. Sequence number

It contains the message sequence number (unique in the BTS® platform) of market answers.

### 27. TraderID

It identifies the trader who entered the order.

---

## BTS® Orders and trades register layouts

July 2020

### 28. Clearing Account

It contains the settlement account for the order.

C = Client

H = House

### 29. Trade Type

It is used to distinguish a trade from a trade deletion for *Message type* 'R'..

### 30. Request Category

It identifies whether the order insert is a normal order.

- O = Simple Order
- S = Care Order

### 31. Reject Code

It contains the rejection code of the order returned by the market.

### 32. Time Reject

It contains the time of the reject returned by the market (format YYYYMMDDHHMMSSuuuuuu).

### 33. Reject Command Type

0 = Answer on order insert

1 = Answer on order cancel

2 = Answer on order modify

### 34. Free Info

Free field available on order insertion added to each record related to the order.

### 35. SubMarket

A code which identifies a BIT sub-market (AIM, ETF, EUROMOT, MOT, MTA, SEDEX, TAH, BIT\_NTI only) or an ETLX sub-market (DBB, DCE, DCF, DGS, EEQ, FBB, FBP, FCE, FCF, FGS,

---

## BTS<sup>®</sup> Orders and trades register layouts

July 2020

FPR, ETLX only).

### 36. *Care Order ID*

Identifier of the care order who is parent order of the current order.

### 37. *Client Identification Code*

Code used to identify the client of the member or participant of the trading venue.

Values reserved for this field:

0: NONE

1: AGGR

2: PNAL

3: CLIENT

### 38. *Client Identifier*

Possible values are: 'F' Firm or Legal Entity, 'P' (Natural Person) or '0' (to be intended as blank)

### 39. *Investment Decision Qualifier (Party Role Qualifier)*

Whenever the Investment Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'

### 40. *Investment Decision Code*

Code used to identify the person or algorithm of the Firm responsible for the investment decision.

in case Account Type='Client' this field Text would be mandatory, else would be inactive.

Values reserved for this field:

0: NONE

1: AGGR

2: PNAL

3: CLIENT

### 41. *Execution Decision Qualifier*

Possible values are: 'A' (Algorithm), 'P' (Natural Person) or '0' (to be intended as blank)

Whenever the Execution Decision Code is populated with one the reserved values, the field

---

## BTS® Orders and trades register layouts

July 2020

Investment Code Qualifier has to be populated with '0'

### 42. Execution Decision Code

Code used to identify the person or algorithm within the member of the trading venue who's responsible for the execution.

in case Account Type='Client' this field Text would be mandatory, else would be inactive.

Values reserved for this field:

0: NONE

1: AGGR

2: PNAL

3: CLIENT

### 43. Algo Flag

Flag to indicate whether the order has been entered as part of an algorithm strategy. Possible values: Y/N.

### 44. DEA Flag

Indication of whether the order was submitted using a DEA. Possible values: Y/N.

### 45. Liquidity Provision Flag

Indication of whether the order has been entered as part of a liquidity provision activity. Possible values: Y/N.

### 46. Pre-trade Waiver indicator flag

ILQD Pre-trade Illiquid instrument transaction flag 'I'

SIZE Pre-trade SSTI transaction flag 'S'

NLIQ Negotiated transaction in liquid financial instruments. 'N'

OILQ Negotiated transaction in illiquid financial instruments. 'O'

### 47. Auto RFQ Execution Strategy

Applicable Auto RFQ Execution Strategy:

Sub LIS Auction with Order Book Sweep 1

---

# BTS® Orders and trades register layouts

July 2020

LIS Winner Takes All 4

Not be populated for manual RFQs and for Auto RFQ Winner Takes All for Equities & DRs Value.

## 48. *Contra Order Book*

Order book of the contra party of an RFQ execution. This field will only be populated in the Execution Report sent to the requestor when an RFQ executes with an order in the normal book.

Absence of this field is interpreted as RFQ Trade book for RFQ related executions. Possible values:

Regular 1

## 49. *Average Price*

Volume Weighted Average Price of all the executions reported so far for an RFQ on the requestor side. It will be the executed price on the quote side.

## 50. *Last Market*

Market (Segment MIC) where execution took place (disregard if Exec Type is not F = Trade) (LSE only)

XLON (On Exchange LSE RM) 21

XLOM (On Exchange Non-AIM MTF) 22

AIMX (On Exchange AIM MTF) 23

## 51. *Offset*

Percentage offset to be applied to the Dynamic Reference Price (DRP) at Closing Auction time (LSE ATC orders only).

Note: the offset value sent to the market is the corresponding value converted in basis points as reported in this field for BUY orders, only. In case of SELL orders, the offset sign sent to the market is reversed.

## 4.2 Market Error Code Mapping

The codes described in this section are contained in field 31 *Reject Code* (and in field 17 *PDN ID*) if the

## BTS® Orders and trades register layouts

July 2020

error message was generated by the central market system (field 3 *Message Type* set to 'C').

Error Code	Description
000001	Invalid User ID or password
000002	ALREADY_LOGGED
000004	USER_NOT_FOUND
000005	FLAGGED_FOR_DELETION
000006	BROKER_SUSPENDED
000008	ACCOUNT_LOCKED
000009	ACCOUNT_EXPIRED
000010	UNAUTHORIZED_MACHINE
000011	UNAUTHORIZED_FE
000014	MIN_PSWD_LEN
000015	MAX_PSWD_LEN
000016	MIN_PSWD_DIGITS
000017	MIN_PSWD_DIFF
000019	INVALID_PROCESS
000020	NO_TIME_ZONE
000022	USER_LOGGEDIN
000023	USER_NOT_LOGGEDIN
000024	INIT_USER_LOGIN
000026	PAM_SAME_AS_OLD
000027	PAM_PALINDROME
000028	PAM_CASE_CHANGES_ONLY
000029	PAM_TOO_SIMILAR
000030	PAM_TOO_SIMPLE
000031	PAM_ROTATED_VERSION
000032	USER_NOT_LOCKED
000033	INVALID_FE_VERSION
000050	LOGIN_CONTEXT_NOT_FOUND



## BTS® Orders and trades register layouts

July 2020

Error Code	Description
000051	INVALID_LOGIN_PRIV_CODE
000052	MISMATCH_IN_CONTEXT_ID
000053	ROLE_FLAGGED_FOR_DELETE
000054	NODE_SUSPENDED
000055	NODE_HIERARCHY_SUSPENDED
000056	NODE_FLG_DELETE
000057	NODE_HIERARCHY_FLG_DELETE
000100	Cannot login to recovery channel without logged in to real time channel
000101	Invalid message length
000102	Message not supported
000103	Invalid message version
000105	Login request being processed
000107	Not logged in
000115	Required field not set
000200	Instrument index not set
000201	Segment not set
000203	Invalid request type
000624	UNAUTHORIZED_GATEWAY
000625	USER_ROLE_NOT_FOUND
000626	ACCOUNT_SUSPENDED
000627	ACCOUNT_DELETED
000628	ACCOUNT_INACTIVATED
000630	SYSTEM_END_OF_DAY
001000	Invalid order size (= zero)
001001	Invalid order size (< minimum size)
001002	Invalid order size (not multiple of lot size)
001003	Invalid order size (> maximum size)
001004	Invalid order size

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
001005	Invalid order size (> maximum order value)
001006	Invalid order size (will breach maximum gross consideration)
001007	Invalid order size (< minimum reserve order value)
001008	Invalid order size (< minimum reserve order size)
001100	Invalid display size (< zero)
001101	Invalid display size (> order size)
001102	Invalid display size (not multiple of lot size)
001103	Invalid display size
001104	Orders with hidden size not permitted during auction call
001105	Iceberg orders disabled for instrument
001106	Fully hidden orders disabled for instrument
001107	New hidden orders not permitted during auction call
001108	Orders with hidden sizes not permitted for order book
001150	Invalid minimum size (> order size)
001151	Invalid minimum size (not multiple of lot size)
001152	Orders with minimum size not permitted during auction call
001153	Orders with minimum size not permitted during Pause session
001154	Minimum fill orders disabled for instrument
001155	Orders with minimum size not permitted for order book
001201	Invalid limit price (not multiple of tick)
001202	Invalid limit price (price band breached)
001203	Invalid limit price (> maximum price)
001204	Invalid limit price (< minimum price)
001205	Invalid limit price (short sale failed tick test)
001206	Invalid limit price (short sale failed bid test)
001207	Invalid limit price (not equal to closing price)
001300	Invalid stop price (= zero)
001301	Invalid stop price (not multiple of tick)

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
001400	Invalid order type (unknown)
001401	Invalid order type (market or stop order with a limit price)
001402	Invalid order type (market or limit order with a stop price)
001403	Market orders disabled for instrument
001404	Stop orders disabled for instrument
001405	Market to limit orders disabled for instrument
001406	Invalid order type (market to limit order with limit price)
001407	Stop orders are not permitted during this session
001408	Market orders are not permitted during an auction call
001409	Invalid type (only limit orders permitted for order book)
001427	Maximum stop order limit reached for instrument
001500	Invalid TIF (unknown)
001501	Invalid expire time (elapsed)
001502	Invalid expire time (time is for a future date)
001503	Invalid expire date (elapsed)
001505	Invalid TIF (OPG stop orders not permitted)
001506	Invalid TIF (IOC & FOK not permitted during auction calls)
001507	Invalid TIF (OPG not permitted outside opening auction call)
001508	Invalid TIF (invalid date format)
001509	No time qualifier specified
001511	Invalid TIF (GFA orders not supported)
001513	Invalid TIF (ATC stop orders not permitted)
001514	Invalid TIF (GFA stop orders not permitted)
001515	Invalid TIF (IOC & FOK not permitted during Pause session)
001516	GTD orders disabled for instrument
001517	GTT orders disabled for instrument
001518	FOK orders disabled for instrument
001519	GTC orders disabled for instrument

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
001520	OPG orders disabled for instrument
001521	ATC orders disabled for instrument
001522	Invalid TIF (Not permitted for order book)
001523	Invalid TIF (CPX stop orders not permitted)
001524	Invalid TIF (not permitted during CPX session)
001525	Invalid TIF (GFA market to limit orders not permitted)
001526	CPX orders disabled for instrument
001527	Maximum parked order limit reached for instrument
001550	Expired (end of day)
001700	Invalid clearing details (details not provided or invalid)
001800	User not registered to submit interest for instrument
001801	User not registered to submit interest for
001802	Invalid order type for sponsored user (market order)
001803	Invalid order type for sponsored user (stop order)
001804	Invalid order type for sponsored user (quote)
001806	Not registered to submit orders for instrument
001808	Invalid order for sponsored user (multi-legged instrument)
001809	Invalid order for sponsored user (market to limit order)
001900	Invalid side
001901	Invalid order status
001902	Received Prior to First Trading Date of instrument
001903	Last Trading Date of instrument elapsed
001904	Invalid order capacity
001905	Invalid instrument set up (no tick structure)
001906	Short sales disabled for instrument
001907	Named orders disabled for instrument
001908	Only named orders permitted for order book
001909	Short sales disabled (reference price unavailable)

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
001910	Short sale market order failed tick test (invalid best bid)
001911	Short sale market orders disabled (bid test enabled)
001912	Monitoring user from sponsoring firm not connected
001913	Monitoring user from sponsoring firm disconnected
001914	Invalid order source
001915	Invalid side (Sell short sales not permitted for order book)
001927	Maximum active order limit reached for matching thread
002000	Order not found (too late to cancel or unknown order)
002001	User not registered to mass cancel interest
002002	User not registered to mass cancel interest for firm
002003	Unknown user (submitting Trader ID)
002004	Unknown instrument
002005	Unknown underlying
002006	Unknown segment
002007	Unknown firm
002008	Unknown clearing mnemonic
002009	Unknown user (target Owner ID)
002010	Unknown user (target Trader ID)
002011	Invalid mass cancel type
002012	No orders for instrument/underlying
002014	Unknown Node ID
002099	Other
003000	Invalid order size (< filled size)
003100	Invalid display size (> order size)
003101	Conversion of fully hidden order to iceberg order prohibited
003102	Conversion of fully hidden order to fully visible prohibited
003103	Conversion of iceberg order to fully hidden order prohibited
003104	Conversion of fully visible order to fully hidden prohibited

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
003700	Invalid owner (different from original order)
003800	User not registered to manage interest for instrument
003801	User not registered to manage interest for
003900	Invalid side (different from original order)
003902	Side may not be amended (order is a short sale)
003903	Stop orders may not be amended during this session
003904	Price amendment prohibited (order eligible for CPX session)
003905	Invalid price (price may not be better than closing price)
003906	Order type may not be amended
003907	Stop price of an elected stop order may not be amended
004000	Invalid bid size (> maximum size)
004001	Invalid offer size (> maximum size)
004002	Invalid bid size (not multiple of lot size)
004003	Invalid offer size (not multiple of lot size)
004004	Invalid Level ID <Level ID>
004005	Invalid bid size (< minimum size)
004006	Invalid offer size (< minimum size)
004200	Invalid bid price (= zero)
004201	Invalid offer price (= zero)
004202	Invalid bid price (not multiple of tick)
004203	Invalid offer price (not multiple of tick)
004204	Invalid offer price (quote is locked or crossed)
004205	Exceeds maximum quote spread
004300	Invalid time qualifier (unknown)
004302	Invalid expire time (elapsed)
004303	Invalid TIF (OPG quotes not permitted for order book)
004305	Invalid quote price (Exceeds maximum quote spread)
004306	Invalid TIF (GFA Quotes are not supported)

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
004307	Anonymity indication may not be amended
004800	User not registered to submit quotes for instrument
004900	Quote does not include a bid
004901	Quote does not include an offer
004902	Quote is same as previous quote
004904	Invalid quote (not submitted as a limit order)
004905	Invalid quote (submitted with stop price)
004906	Invalid quote (amend order message used to update quote)
004907	Invalid quote (submitted in an agency capacity)
004908	Quotes disabled for instrument
004909	Mass quotes not permitted for order book
004910	Quotes not permitted during CPX session
006000	User not registered to submit RFQs for instrument
006002	Received Prior to First Trading Date of instrument
006003	Last Trading Date of instrument elapsed
008001	Invalid client order ID
009000	Unknown instrument
009001	Unknown order book
009002	Instrument halted
009003	Instrument halted or suspended
009004	Instrument halted (last trading day reached)
009005	Market is closed
009006	Instrument halted (market suspended)
009007	Instrument halted (invalid trading session)
009008	Session is closed
009009	Instrument halted (order book in invalid state)
009011	Instrument in Post-Close session
009012	Instrument halted (invalid set up)

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
009013	Instrument halted (invalid order book set up)
009014	Instrument in Pre-Trading session
009015	Instrument in Closing Price Publication session
009100	Unknown user (Owner ID)
009101	Unknown user (Trader ID)
009102	User suspended
009103	User inactive
009104	Invalid user (not attached to trading firm)
009105	Firm inactive
009200	Invalid trading session (unknown)
009201	Invalid new order message
009202	Invalid amend order message
009203	Invalid cancel order message
009900	Required field is missing
009901	Field validation failed
009903	Concurrent login limit reached
009904	Invalid gateway (not configured for sponsored access)
009905	System unavailable (to sponsored users)
009906	Logons not allowed at this time
009990	Maximum message rate exceeded
009996	Quote locked or crossed
009998	Matching partition suspended
009999	System suspended
010010	Unknown Segment
111000	Invalid reserve value (< minimum reserve order value)
111001	Invalid qty (>max order qty)
111101	Invalid display size (pegged orders cannot be displayed)
111102	Invalid display size (> order size)



## BTS® Orders and trades register layouts

July 2020

Error Code	Description
111103	Invalid order (unpriced order with hidden quantity)
111300	Invalid amend (cannot amend stop price of elected order)
111400	Invalid order type (named orders are not allowed)
111401	Invalid order type (stop/stop limit orders are not allowed)
111402	Invalid order type (not allowed in the session)
111403	Invalid order type (pegged orders cannot be stop orders)
111404	Invalid amend (cannot amend order type)
111405	Invalid order (maximum number of stop order limit reached)
111406	Invalid order type for sponsored user (pegged order)
111500	Invalid amend (cannot amend TIF)
111501	Invalid TIF (relevant session elapsed/not found)
111502	Invalid TIF (not allowed for the session)
111503	Invalid TIF (maximum order duration is set)
111504	Invalid expiry date (maximum order duration is violated)
111505	Invalid TIF (not allowed for stop/stop limit orders)
111506	Invalid TIF (not permitted for pegged orders)
111600	Invalid session (cannot enter orders/quotes)
111601	Invalid session (orders are not allowed)
111602	Invalid session (aggressive orders are not allowed)
111800	Invalid session (cannot cancel/amend orders/quotes)
111801	Invalid clearing set up (clearing information not defined)
111900	Invalid account type (unknown)
111901	Invalid capacity (unknown)
111902	No internal mid-point established
114000	Invalid bid size (< minimum quote size)
114001	Invalid offer size (< minimum quote size)
114003	Invalid bid size (not multiple of lot size)
114004	Invalid bid size (< exchange market size)

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
114005	Invalid offer size (not multiple of lot size)
114006	Invalid bid size (< exchange market size)
114007	Invalid offer size (< exchange market size)
114008	Invalid bid size (> max qty)
114009	Invalid offer size (> max qty)
114200	Invalid bid price (not multiple of tick)
114201	Invalid offer price (not multiple of tick)
114202	Invalid offer price (quote is locked or crossed)
114300	Invalid quote (TIF is not allowed for quotes)
114400	Invalid quote (quote type is not allowed)
114401	Invalid quote (quote type is not allowed)
114800	Invalid quote (both bid and offer sizes are zero)
114801	Invalid quote (no privileges to submit this quote type)
114802	Invalid clearing set up (clearing information not defined)
114900	Invalid account type (unknown)
114901	Invalid capacity (unknown)
114902	Invalid quote spread (> max spread floor or max spread %)
114903	Invalid quote spread (> max spread floor)
114904	Invalid quote spread (> max spread %)
130001	Quantity Not Matched for Committed Cross/BTF
130002	Invalid Order Size (< Minimum BTF Size)
130003	Quantity Not Matched for Internal Cross/BTF
130004	Accounting OPA Limit Order Qty is Less Than Cum Contra Qty
130151	Limit Price Not Matching OPA Price
130152	Price Not Matched for Committed Cross/BTF
130153	Price Outside BBO for Cross/BTF Order
130251	Invalid Order Type for OPA
130252	GFA Orders Disabled for Instrument

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
130253	MTL Orders Not Allowed During Continuous Trading
130254	Duplicate Cross ID specified for Cross/BTF Order
130301	Only GTC Orders Allowed for OPA Auction
130302	Invalid TIF for Orders in TAH
130303	Invalid TIF (Only DAY Allowed for Committed Cross/BTF)
130304	ExpireTime amendment not allowed for Order's TIF
130305	ExpireDate amendment not allowed for Order's TIF
130351	Instrument in Trading Stop
130352	Instrument in Resume Order Deletion Period
130353	Invalid Session (Cross/BTF Order are Not Allowed)
130401	Invalid Trading Party
130451	Trading Party Only Authorized to Submit Limit Orders
130452	Trading Party Only Authorized to Submit Market Orders
130453	Trading Party Only Authorized to One Limit Order
130454	Trading Party Not Authorized to Submit Named Orders
130455	Not Allowed to Enter Buy Orders for OPA
130456	Not Allowed to Enter Sell Orders for OPA
130501	Limit Order for OPA Only Allowed on Last Trading Day
130503	Instrument ID Not Matched for Committed Cross/BTF
130504	Firm ID Not Matched for Committed Cross/BTF
130505	Firm ID Not Specified for Cross/BTF Order
130506	Cannot Enter Cross/BTF Orders (BBO Not Available)
130507	Principal vs Principal Internal Cross/BTF Order Not Allowed
130508	Cross Id Not Specified
130509	Firm ID Not Matched for Internal Cross/BTF
130510	Market Orders for OPA Not Allowed on Last Trading Day
130511	Cross Type Not Specified
130515	CIOrdID Not Specified

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
130516	Committed Cross Orders Cannot Have Both Buy Sell ClOrdIDs
130517	A Committed Cross Order Already Received for the Same Side
130518	Incorrect Party Roles
130519	ClOrdID not Specified
130520	Maximum number of Stop Orders per book breached
130521	Active order limit per thread breached
130522	Active Order limit per trader per thread breached
130601	Only Order Qty and Client ID of an OPA Order Can be Amended
130602	Can't Amend/Cancel Mkt Orders for Accounting OPA on Last Day
130701	Cannot Amend Cross/BTF Orders
130951	Cannot amend user name/trader group
131250	Cannot Amend Quote Qualifier for Quotes
131251	Invalid TIF for Quotes in TAH
131351	Quotes Allowed during Auction Calls Only
131352	Cannot Amend Pre Trade Anonymity
131501	Trading Party Not Authorized to Submit Anonymous Quotes
131502	Trading Party Not Authorized to Submit Named Quotes

### 4.3 BTS® Server Error Code Mapping

The codes described in this section are contained in field 31 *Reject Code*, (and in field 17 *PDN ID*) if the error message was generated by the BTS® server (*Message type 'G'*).

Error code	Description
AUS00001	Maximum order number per second reached
AUS00002	Maximum daily quantity reached
AUS00003	Maximum order quantity reached
AUS00004	Maximum order deviation reached
AUS00005	Maximum order amount reached

---

## BTS® Orders and trades register layouts

July 2020

Error code	Description
AUS00006	Maximum order daily amount reached
MMS00001	General error

## BTS® Orders and trades register layouts

July 2020

### 5 Derivatives markets - Data Layout Description

The following table describes the file layout for all events (order insert, modify, delete, executions, ...) for transactions on derivatives markets.

N°	Field	Len	Description
1	User ID	20	BTS® user
2	Instrument	32	Market Instrument Identifier
3	Message type	1	Market answer = A Execution notification = R Error from the market = C Error from BTS® = G
4	Answer type	1	If message type = A Deletion confirm = 1 (requested by the user) Order deleted = 2 Insert confirm = 4 Stop Order Activation = A
5	Function type	1	If message type = A Insert = 0 Delete = 1 Modify = 2 BTS® Supervisor Removal = 3 Removed by SEP Rule = 4
6	Side	1	Buy = 0 Sell = 1
7	Quantity	10	Total order quantity
8	Price type	1	Market = M Limit = L At any price = A Exchange for Physical = P Basis Trade = B
9	Price	15	If price type = L Order Price

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
10	Parameter	1	Good Till Cancel = R Good Till Day (VSD) = J Fill and Kill = E Good Till Time = D All or None (Fill or kill) = K Good Till Expiration = R Good Till Session = W Immediate Or Cancel
11	Validity date	8	Validity date for VSD (YYYYMMDD)
12	Account Type	1	Third Party Account = C Own Account = N Matched Principal = M
13	Client order ref.	40	Free-format Text Field sent to the market
14	Order ID	25	Order Identifier
15	PDN ID	17	Order Identifier assigned by the market
16	Modified PDN ID	17	Modified Order Identifier assigned by the market.
17	Trade ID	14	Contract Identifier (message type = R) instrument ID (Sico) + Trade number
18	Quotation request	1	Quotation Request Indicator = 1
19	Insert Time	20	Order Insert Time (YYYYMMDDHHMMSSuuuuuu) (Message type = A)
20	Trade Time	20	Trade Execution Time (YYYYMMDDHHMMSSuuuuuu) (Message type = R)
21	Remaining quantity	10	Remaining Order Quantity
22	Executed Quantity	10	Trade Quantity (Message type = R)
23	Execution Price	10	Trade Price (Message type = R)
24	Sequence number	6	Message Sequence Number
25	Not used	1	
26	Not used	9	
27	Interbank Counterparty	6	Interbank Counterparty Identifier (for Interbank, Bundle and Third Party)
28	Position	1	Open position (normal) = O

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
			Closed position = F
29	Order Category	1	Simple Order = O Off Exchange = A Care Order = S RFQ Request = R
30	Trade Type	1	(Message type = R) Trade Executed = '' Trade Deleted = A Approved and published = U Approved and deferred = B Waiting for approval = Q Parked = P
31	Customer Code	10	Order final customer or give up code (in case of give up)
32	Conditional Code	1	Normal = N BTF (Block Trade Facility) = B Flexible Unpublished Crossed Block = 3 Flexible Unpublished Committed Block = 4
33	Stop Loss Condition Price	15	Price where Stop Loss condition is applied
34	Stop Loss Condition	1	Bid = B Ask = A Last = L
35	Reject Code	10	Code of rejection
36	Reject Time	20	Time of rejection, as notified by the market (YYYYMMDDHHMMSSuuuuuu)
37	Reject Command Type	1	Answer on order insert = 0 Answer on order cancel = 1 Answer on order modify = 2
38	Free info	40	Internal Free-format Text Field
39	Care Order ID	25	Care Order Identifier
40	Client Identification Code	10	Code used to identify the client of the member or participant of the trading venue. If Account Type='Client' this field Text would be mandatory, else it would be inactive.



## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
41	Client Identifier	1	Possible values are: 'F' Firm or Legal Entity, 'P' (Natural Person) or '0' (to be intended as blank)
42	Investment Decision Qualifier (Party Role Qualifier)	1	Whenever the Investment Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'
43	Investment Decision Code	10	Code used to identify the person or algorithm of the Firm responsible for the investment decision. in case Account Type='Client' this field Text would be mandatory, else would be inactive.
44	Execution Decision Qualifier	1	Possible values are: 'A' (Algorithm), 'P' (Natural Person) or '0' (to be intended as blank) Whenever the Execution Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'
45	Execution Decision Code	10	Code used to identify the person or algorithm within the member of the trading venue who's responsible for the execution. in case Account Type='Client' this field Text would be mandatory, else would be inactive.
46	Algo Flag	1	Flag to indicate whether the order has been entered as part of an algorithm strategy. Possible value: Y/N,
47	DEA Flag	1	Indication of whether the order was submitted using a DEA. Possible value: Y/N,
48	Liquidity Provision Flag	1	Indication of whether the order has been entered as part of a liquidity provision activity. Possible value: Y/N,
49	Trade types Flag	1	'T' Package Transaction 'X' Exchange For Physical ' ' Blank
50	Waiver indicator flag	1	'L' LRGS

## BTS® Orders and trades register layouts

July 2020

N°	Field	Len	Description
			'O' OILQ 'S' SIZE
51	Physical Leg	20	It specifies the physical leg
52	Execution Source Code	1	It identifies the type of brokerage activity for each order/quote/trade (FIA value). Possible values are: ' ' None 'W' Desk 'Y' Electronic 'C' Vendor Provided Platform billed By ExecutingBroker 'G' Sponsored Access By ExecutingBroker 'H' Premium AlgoTrading Provider billed By ExecutingBroker 'D' Other
53	Liquidity Status	1	'A' Add 'R' Remove ' ' None
54	RegulatoryTradeID	16	Trading Venue Transaction Identification Code (TVTIC)

### 5.1 Fields Description

1. *User ID*

Identifier of the BTS® client user who entered the current order (BTS® client login name)

2. *Instrument*

Native market code of an instrument

3. *Message type*

A = Market answer

C = Error from the market

G = Error from BTS® server

---

## BTS® Orders and trades register layouts

July 2020

R = Execution notification

Records with type set to 'G' are orders inserted via the BTS® client, but locally refused by the BTS® server and they are not to be sent to the market.

If market surveillance or the central system deletes a trade, a record with type 'R' and *Trade Type* (field 30) set to 'A' will be added.

#### 4. *Answer type*

1 = Deletion confirm

2 = Order deleted

4 = Insert confirm

A = Stop Order Activation

If the user or an OAA (market supervisor user) has issued the deletion request, the field value is 1.

If the market surveillance has deleted the order, the *Answer type* is 2.

#### 5. *Function type*

If "Message type" is A

0 = Insert

1 = Delete

2 = Modify

3 = BTS® supervisor user deletion

4 = Removed by SEP Rule

This field specifies if the order has been inserted, modified or deleted and if the deletion was issued by a user or by a company supervisor.

#### 6. *Side*

0 = Buy

1 = Sell

---

## BTS® Orders and trades register layouts

July 2020

### 7. *Quantity*

It is the order or trade quantity.

### 8. *Price type*

M = Market

L = Limit

A = At any price

B = Basis Trade

### 9. *Price*

If *Price type* is set to 'L', it contains the order price.

### 10. *Parameter*

R = Good Till cancel

J = Good Till Day

E = Fill and Kill

D = Good Till Time

K = All or none (Fill or kill)

W = Good Till Session

### 11. *Validity date*

If *Parameter* is set to 'D', it contains the expiry date in the format YYYYMMDD.

### 12. *Account type*

C = Third party account

N = Own account

### 13. *Client order ref*

The user can specify this field when entering an order. This value is added to each record related to the order.

---

## BTS® Orders and trades register layouts

July 2020

### 14. Order ID

Order identifier assigned by the BTS® platform.

For quotes the same OrderID is assigned to both sides of the quote.

### 15. PDN ID

Order identifier assigned by the market (unique per instrument).

In case of a modify notification it contains the new order identifier, whereas field 16 contains the native order number.

If a market error code (field 3 equal to 'C') is received, this field contains a market error code of OMxxxxxx type identifying the error type reported by the market. For further information look at "Market error code mapping".

### 16. Modified PDN ID

In case of a modify notification it contains the native order identifier.

### 17. Trade ID

It contains the instrument ID (Sico) + market trade number (unique per instrument). In case of a delete notification, it contains the trade identifier of the deleted contract.

### 18. Quotation Request

1 = Quotation Request Indicator

### 19. Insert Time

It contains the order insert time for *Message type* 'A', as returned by the market (AAAAMMGGHHMMSS formatuuuuuu) or the deletion time as returned by the market (YYYYMMDDHHMMSS formatuuuuuu).

### 20. Trade Time

It contains the trade execution time for *Message type* 'R' as returned by the market (format YYYYMMDDHHMMSSuuuuuu).

---

## BTS® Orders and trades register layouts

July 2020

### 21. *Remaining quantity*

It contains the remaining order quantity.

If the message is related to a cancel operation (*Message type 'A'* and *Answer type '1'*), it contains the quantity of the deleted order.

### 22. *Executed quantity*

It contains the executed order quantity for *Message type 'R'* .

### 23. *Execution price*

It contains the trade execution price for *Message type 'R'* .

### 24. *Sequence number*

It contains the message sequence number (unique in the BTS® platform) of IDEM market answers.

### 25. *Not used*

### 26. *Not used*

### 27. *Interbank Counterparty*

If the entry is an interbank cross trade leg it reports the trader of the second leg counterparty (e.g. 02011A29).

### 28. *Position*

It contains the trade execution position for *Message type 'R'* , it contains the Insert Request for *Message type 'A'* .

### 29. *Order Category*

A = Off Exchange

S = Care Order

O = Simple Order

R = RFQ Request

### 30. *Trade Type*

It is used to distinguish the trade type for *Message type 'R'* .

# BTS® Orders and trades register layouts

July 2020

## 31. Customer Code

It reports the final order client or the give up code in case of give up.

## 32. Conditional Code

In case of Internal and Interbank Orders it specifies whether the Block Trade Facility Flag was used (B) or not (N), unpublished trades will be also distinguished between Crossed (3) and Committed (4) Block

## 33. Stop Loss Condition Price

Price triggering the Stop Loss Condition.

## 34. Stop Loss Condition

<b>CASE</b>	<b>BUY Order Condition</b> TriggerPrice = Field 33	<b>SELL Order Condition</b> TriggerPrice = Field 33	<b>Field Value</b>
<b>Stop Loss</b>	Last >= triggerPrice	Last <= triggerPrice	<b>L</b>
<b>Take Profit</b>	Last <= triggerPrice	Last >= triggerPrice	<b>L</b>
<b>Stop ON Bid</b>	Bid >= triggerPrice	Bid <= triggerPrice	<b>B</b>
<b>Stop ON Ask</b>	Ask >= triggerPrice	Ask <= triggerPrice	<b>A</b>
<b>Take Profit ON Bid</b>	Bid <= triggerPrice	Bid >= triggerPrice	<b>B</b>
<b>Take Profit ON Ask</b>	Ask <= triggerPrice	Ask >= triggerPrice	<b>A</b>

## 35. Reject Code

It contains the rejection code of the order returned by the market.

## 36. Reject Time

It contains the time of the reject returned by the market (format YYYYMMDDHHMMSSuuuuuu).

## 37. Reject Command Type

0 = Answer on order insert

1 = Answer on order cancel

---

## BTS<sup>®</sup> Orders and trades register layouts

July 2020

2 = Answer on order modify

### 38. *Free Info*

Free field available on order insertion added to each record related to the order.

### 39. *Care Order ID*

Identifier of the current care order.

### 40. *Client Identification Code*

Code used to identify the client of the member or participant of the trading venue.

Values reserved for this field:

0: NONE

1: AGGR

2: PNAL

3: CLIENT

### 41. *Client Identifier*

Possible values are: 'F' Firm or Legal Entity, 'P' (Natural Person) or '0' (to be intended as blank)

### 42. *Investment Decision Qualifier (Party Role Qualifier)*

Whenever the Investment Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'

### 43. *Investment Decision Code*

Code used to identify the person or algorithm of the Firm responsible for the investment decision.

in case Account Type='Client' this field Text would be mandatory, else would be inactive.

Values reserved for this field:

0: NONE

1: AGGR

2: PNAL

3: CLIENT



---

## BTS® Orders and trades register layouts

July 2020

### 44. Execution Decision Qualifier

Possible values are: 'A' (Algorithm), 'P' (Natural Person) or '0' (to be intended as blank).

Whenever the Execution Decision Code is populated with one the reserved values, the field Investment Code Qualifier has to be populated with '0'.

### 45. Execution Decision Code

Code used to identify the person or algorithm within the member of the trading venue who's responsible for the execution.

in case Account Type='Client' this field Text would be mandatory, else would be inactive.

Values reserved for this field:

0: NONE

1: AGGR

2: PNAL

3: CLIENT

### 46. Algo Flag

Flag to indicate whether the order has been entered as part of an algorithm strategy. Possible values: Y/N.

### 47. DEA Flag

Indication of whether the order was submitted using a DEA. Possible values: Y/N.

### 48. Liquidity Provision Flag

Indication of whether the order has been entered as part of a liquidity provision activity. Possible values: Y/N.

### 49. Trade types Flag

'T' Package Transaction

'X' Exchange For Physical

' ' Blank

---

## BTS® Orders and trades register layouts

July 2020

### 50. Waiver indicator flag

'L' LRGS

'O' OILQ

'S' SIZE

### 51. Physical Leg

It specifies the physical leg

### 52. Execution Source Code

It identifies the type of brokerage activity for each order/quote/trade (FIA value). Possible values are:

- '' None
- 'W' Desk
- 'Y' Electronic
- 'C' Vendor Provided Platform billed By ExecutingBroker
- 'G' Sponsored Access By ExecutingBroker
- 'H' Premium AlgoTrading Provider billed By ExecutingBroker
- 'D' Other

### 53. Liquidity Status

- 'A' Add (Maker)
- 'R' Remove (Taker)
- '' None

### 54. RegulatoryTradeID

- Trading Venue Transaction Identification Code (TVTIC) as calculated by the Exchange

## 5.2 Market Error Code Mapping

The codes described in this section are contained in field 31 *Reject Code* (and in field 15 *PDN ID*) if the error message was generated by the central market system (field 3 *Message Type* set to 'C').

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
OM110023	Illegal transaction at this time
OM420007	Illegal crossing
OM420009	Quantity is too small
OM420011	Premium is required
OM420013	An RTR transaction timed out
OM420015	Alter is not allowed with retained priority
OM420017	Transaction type is not yet implemented
OM420019	An order was overbid.
OM420021	Transaction type is unknown
OM420023	Order must specify bid or ask.
OM420025	Given time validity is not allowed
OM420027	Market price orders must have zero time validity in this trading state
OM420029	Given premium is not allowed
OM420031	The series (and its underlying) is stopped
OM420033	All or None order cannot have a time limit
OM420035	Illegal block size for this instrument
OM420037	Too many or too few legs for a nonstandard combination
OM420039	Non-standard combination must be fill or kill.
OM420041	Time limit not allowed for non-standard combinations.
OM420043	Size of combo is not a multiple of part size.
OM420045	Illegal quantity in order
OM420047	Order exists in this series, cannot be removed
OM420049	Premium was off market
OM420051	Order book volume was too low to fill order
OM420053	Trade report with price outside the current spread
OM420055	Illegal instrument type for inter-bank trade report
OM420057	Premium differs from the order premium in the orderbook
OM420059	Order to accept does not exist

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
OM420061	Number of legs differs from the order in orderbook
OM420063	The price for a leg in a combo had not been set to zero
OM420065	Corresponding leg not found
OM420067	Quantities in the legs must not differ
OM420069	Too many legs in the combination is outside current spread.
OM420071	Order book operation attempted on expired series
OM420073	Volume is required
OM420074	Crossing not allowed for standard combinations
OM420076	Unknown order type
OM420078	A market order must specify a zero price.
OM420079	No closing price exists.
OM420081	Guaranteed fill balance could not be filled
OM420083	Cop less than intrinsic value
OM420085	Max limit of the COP changes is exceeded
OM420087	Fill or kill and fill and kill orders are not allowed in pre open
OM420089	Invalid expiration date was given a TM trade report
OM420091	A passive order must not be entered with crossed price.
OM420093	Too many legs for a block order.
OM420095	Series appears twice on the same side in a block order.
OM420097	Limit orders are not allowed in the current trading state for this instrument.
OM420099	Market orders are not allowed in the current trading state for this instrument.
OM420101	Fill and/or kill orders are not allowed in the current trading state for this instrument.
OM420103	This combination exists as a standard combination
OM420105	This combination exists as a reversed standard combination
OM420107	This combination exists already as TM combination
OM420109	This combination exists already as a reversed TM combination already

## BTS® Orders and trades register layouts

July 2020

Error Code	Description
OM420111	The maximum number of TM combinations is reached
OM420113	Illegal ratio
OM420115	Illegal combination or value in buy or sell operation.
OM420117	Combination with different contract size in the legs is not allowed
OM420119	Order denied when corresponding TM combination is possible to create
OM420121	The same series is used in multiple combination legs
OM420123	The user is authorized only to remove TM combinations that he has created.
OM420125	No theoretical price exists.
OM420127	This combination may not have different underlyings
OM420129	Crossing own orders is not allowed in this instrument type.
OM420131	The premium is outside of the allowed price limits for this instrument.
OM420133	The given stop condition is not valid.
OM425004	The Order book has not been initialized
OM425007	The given series has not been defined ( in this instance )
OM475007	The PQR does not exists.
OM475009	The series has been locked for PQR's in the CDB.
OM475011	The user is not allowed to respond to the PQR.
OM475013	The user is not allowed to execute the order.
OM475015	The correct number of quotes was not given.
OM475017	The state of the PQR is not in accepting.
OM475019	The state of the PQR is not in trading.
OM475025	The requested volume is too small.

### 5.3 BTS® Server Error Code Mapping

The codes described in this section are contained in field 31 *Reject Code*, (and in field 15 *PDN ID*) if the error message was generated by the BTS® server (*Message type 'G'*).

## BTS® Orders and trades register layouts

July 2020

Error code	Description
AUS00001	Maximum order number per second reached
AUS00002	Maximum daily quantity reached
AUS00003	Maximum order quantity reached
AUS00004	Maximum order deviation reached
AUS00005	Maximum order amount reached
AUS00006	Maximum order daily amount reached
MMS00001	General error

### 5.4 Notes

#### 5.4.1 “Standard Combination” Order

The input of a standard combination order generates a single entry in the Orders and Trades register, its execution generates two entries relevant to each leg trades: these entries have the same Id PDN (field 15), since generated by the same order.

#### 5.4.2 “Internal” Order

Internal orders generate two entries (*Message Type* = A, field 3) and two further entries relevant to the trades (*Message Type* = R, field 3) where the *Contract ID* (field 17) has the same value.

#### 5.4.3 “Interbank” Order

In Interbank orders (*Message Type* = A, field 3) the field *Interbank Counterparty* (field 27) is not empty.

#### 5.4.4 Orders executed at input time

An example of this scenario is a Market Order producing a trade. Two entries will be generated, being the former generated for the order and the latter generated for the trade.

---

## **BTS® Orders and trades register layouts**

July 2020

### **5.4.5 Good Till Day Order**

Good Till Day orders entered in previous days are re-inserted, if still valid, at the beginning of a trading session with their changes and/or partial executions.

### **5.4.6 Orders cancelled by a BTS® Supervisor**

Orders canceled by BTS® Supervisor Operators have the *Function Type* (field 5) = 3.

### **5.4.7 User ID field**

Orders and Trades register file reports all those, and only those, orders and trades carried out by the member via BTS® or via FIX protocol interface (GFIXOR): the ID field always reports the name of the BTS® user.

Orders and Trades performed over a direct market interface (therefore with no BTS® mediation) are not captured in the register file.

### **5.4.8 Stop Loss Order Management**

When a Stop Loss order is entered, both stop Condition values (Stop Loss Price and Stop Loss) and Order parameters to be used at trigger time are recorded in an entry where the field Answer Type (field 4) = A.

---

## Disclaimer

This document contains text, data, graphics, photographs, illustrations, artwork, names, logos, trade marks, service marks and information (“Information”) connected with Borsa Italiana S.p.A. (“Borsa Italiana”). Borsa Italiana attempts to ensure Information is accurate, however Information is provided “AS IS” and on an “AS AVAILABLE” basis and may not be accurate or up to date. Information in this document may or may not have been prepared by Borsa Italiana and in this last case is made available without responsibility on the part of Borsa Italiana.

The publication of this document does not represent solicitation, by Borsa Italiana, of public saving and is not to be considered as a recommendation by Borsa Italiana as to the suitability of the investment, if any, herein described.

---

## Contact Details

Borsa Italiana Clients Technology Service team

Technical Account Management Italy  
clients-services@borsaitaliana.it  
+39 02 72426348/606/647

Service Desk Italy  
service-desk@borsaitaliana.it  
Toll Free: 0080026772000  
From mobile: +39 02 45411399



**London**  
Stock Exchange Group