

User Guide

BTS® ORDERS AND TRADES REGISTER LAYOUTS

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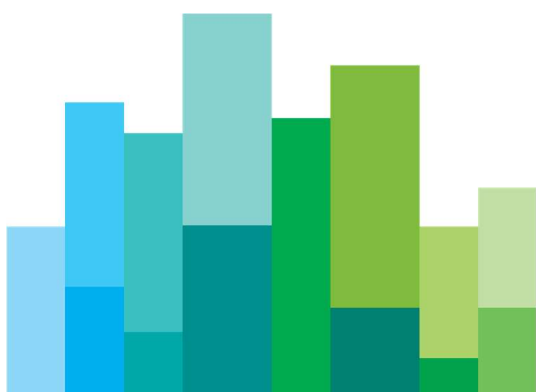
TABLE OF CONTENTS

TABLE OF CONTENTS	2
Revision History	3
1. Introduction	4
1.1 Purpose	5
1.2 Validity	5
1.3 References	5
2. General System Features.....	6
2.1 Content Description	7
2.2 How to Get Data	7
2.3 Data Management	8
2.4 File Format	8
2.5 APIs Functions	9
3. Cash markets Data Layout Description	10
3.1 Fields Description	14
3.2 Market Error Code Mapping	20
3.3 BTS® Server Error Code Mapping	21
4. Derivatives markets Data Layout Description	22
4.1 Fields Description	27
4.2 Market Error Code Mapping	34
4.3 BTS® Server Error Code Mapping	34
4.4 Notes	35

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	New format according to Corporate guidelines Added IDEM-IDEX-AGREX layouts	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 Added new values to Price Type and Request Category fields for cash markets	Borsa Italiana
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
10/02/2020	4.0	New fields TraderId, Clearing Instruction, ISIN, Instrument Code for Derivatives Offset and LastMarket removed for Cash Markets layout	Borsa Italiana
15/03/2021	4.1	URL changes section 3.2	Borsa Italiana
29/04/2021	4.2	Rebranding	Borsa Italiana

1. INTRODUCTION



1.1 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®.

1.2 Validity

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

1.3 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>
- [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

2. GENERAL SYSTEM FEATURES



2.1 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.

2.2 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.

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

- **<https://btsmil.borsaitaliana.it/<membercode>>** for Milan BTS® production (**<https://btsmil2.borsaitaliana.it/<membercode>>** in case of Disaster Recovery)
- **<https://btscds.borsaitaliana.it/<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

- ETLX = ETLX

Example: https://bts cds.borsaitaliana.it/8081/orderstrades/BIT_NTI

2.3 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 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).

2.4 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

2.5 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.

2.5.1 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.

2.5.2 Order/Trade Inquiry Layout

Class Name: **1571**

Input Fields: **Market**

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

2.5.3 Order/Trade Notification Layout

Class Name: **1570**

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

2.5.4 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").

3. 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
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 only) All or None (Fill or kill) = K At Open = O (BIT_NTI only) At Close = C (BIT_NTI only) Good For Auction = L (BIT_NTI only) Closing Price Uncrossing (CPX) = X (BIT_NTI only)

N°	Field	Len	Description
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)
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

N°	Field	Len	Description
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.
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,

N°	Field	Len	Description
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' SIZE Pre-trade SSTI transaction flag 'S' NLIQ Negotiated transaction in liquid financial instruments. 'N' OILQ Negotiated transaction in illiquid financial instruments. 'O'
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	not applicable	2	
51	not applicable	21	

3.1 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

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.

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 only)

K	= All or none (Fill or kill)
O	= At Open (BIT_NTI only)
C	= At Close (BIT_NTI only)
L	= Good For Auction (BIT_NTI only)
X	= Closing Price Crossing (BIT_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)

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.

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.

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, 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 'O' (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 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-tradeWaiver 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
 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.

3.2 Market Error Code Mapping

The MIT Market reject codes are described in **mit801 document file** available on Borsa Italiana website.

The error is contained in field 31 *Reject Code* (and in field 17 *PDN ID*) if the error message was generated by the central market system (field 3 *Message Type* set to 'C').

3.3 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
AUS00006	Maximum order daily amount reached
MMS00001	General error

4. 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 CPI = I
9	Price	15	If price type = L Order Price
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 CPI = I
11	Validity date	8	Validity date for VSD (YYYYMMDD)

N°	Field	Len	Description
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 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

N°	Field	Len	Description
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 X-CPI = X CPI = C
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.
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'

N°	Field	Len	Description
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 '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)
55	TraderID	8	Identifier of the trader: 4 first characters : Firm Identifier 4 Last characters: Trader Identifier
56	Clearing Instruction	12	client account numbe
57	ISIN	12	ISIN

N°	Field	Len	Description
58	Instrument Code	30	SOLA External Symbol

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
C = Error from the market
G = Error from BTS® server
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

7. *Quantity*

It is the order or trade quantity.

8. *Price type*

M = Market

L = Limit

A = At any price

B = Basis Trade

I = CPI

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

C = CPI only

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.

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).

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. 0201IA29).

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'*.

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.

In case of CPI Trade C will be used while X for X-CPI.

33. Stop Loss Condition Price

Price triggering the Stop Loss Condition.

34. Stop Loss Condition

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

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

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
- 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

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

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

55. TraderID

Identifies the trader:

4 first characters : Firm Identifier
4 Last characters: Trader Identifier

56. Clearing Instructions

The client account number.

57. ISIN

International Securities Identification Number (ISIN) that uniquely identifies an instrument.

58. Instrument Code

IDEM Naming convention:

Standard Future Series = Class Symbol + Maturity Year + Maturity Moth Code

Standard Option Series = Class Symbol + Maturity Year Code + Maturity Month Code + Strike Price

Flexible Future Series = Class Symbol + Maturity Year + Maturity Day + Maturity Month Code

Flexible Option Series = Class Symbol + Maturity Year Code + Maturity Day + Maturity Month Code + Strike Price + Option Style

4.2 Market Error Code Mapping

The SOLA Market reject codes are described in section 6.0 (Error Codes) of **Sail specification document file** available on Borsa Italiana website.

The error is 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').

4.3 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').

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

4.4 Notes

4.4.1 "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.

4.4.2 "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.

4.4.3 "Interbank" Order

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

4.4.4 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.

4.4.5 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.

4.4.6 Orders cancelled by a BTS[®] Supervisor

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

4.4.7 User ID field

Orders and Trades register file reports all those, and only those, orders and trades carried out by the member via BTS[®]: 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.

4.4.8 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

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