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1 Abstract

This document contains a functional description of the XML reports generated by the Reporting Engine of the M7 Trading Module. This includes report subscription, report generation, report structure, available report types and their contents. It requires a familiarity with the XML standard, as defined by the World Wide Web Consortium (W3C, see <http://www.w3.org/XML> for more information).

Note: Data contained in graphics and examples are for illustrative purposes only.

2 Introduction

2.1 General

The M7 Trading Module enables the trading of energy products and commodity derivatives between different market areas.

All trading related activities, like order entry, order modification or the generation of trades, are documented in XML reports which are generated based on data from the M7 Trading Module and can be downloaded via the WebGUI.

Reports are generated for report users who can belong to a non-Admin member or to market operations (Admin members).

3 XML Report Layout

3.1 General

The XML report layout consists of the basic elements: structures and data fields, whilst each XML element occurs in a sequence defined by the main report structure.

3.2 Structure Elements

Structures are ordered collections of structure members (see 3.3 *Structure Members*) and may contain data fields and/or other structure elements (substructures).

3.3 Structure Members

A structure member is either a data field or another structure element. A structure member may be enriched by attributes to define report specific properties.

Data fields are elements which contain data as defined by their data type (see 3.4 *Data Types*).

Substructures may occur zero, once or multiple times inside a structure (see 3.5 *Structure Cardinality*).

All elements may be mandatory or optional (see 3.6 *Usage Code*). Optional elements may be omitted in the XML report.

3.4 Data Types

The following table contains a definition of all data types as used in the description of each report:

Format	Short Description	Description	Example
alphanumeric n	AN [n]	Text of maximum length <i>n</i> , encoded as string.	A tag with the format "AN 6" may contain the values "TRD001" or "ABC" or "".
Numeric n [.m]	NUM	A number with <i>n</i> significant digits and, if given, precision <i>m</i> . The number is encoded as a string containing the decimal point if applicable.	A tag with the format "numeric 5, 2" might contain the values "314.15" or "3.14" or "0.00".
numeric signed n [.m]	NS	Signed number with <i>n</i> significant digits and, if given, precision <i>m</i> . The number is encoded as a string prefixed with the "+" or "-" sign and containing the decimal point if applicable.	A tag with the format "numeric signed 5, 2" may contain the values "+314.15", "+3.14", "-314.15" or "+0.00".
Date Format	DATE	Date, encoded as a string in the format YYYY-MM-DD, unless it is specified otherwise. In case the date format contains the time, the time is followed by the UTC offset.	"2015-03-28" "2015-03-28 10:40:11.102+02:00"
Time Format	TIME	Time, encoded as a string in the format hh:mm:ss.ccc All times contain the UTC offset.	In GMT: "23:59:59.999+00:00" In CET and BST:

Format	Short Description	Description	Example
			"23:59:59.999+01:00" In CEST: "23:59:59.999+02:00"

3.5 Structure Cardinality

Any substructure may occur zero, one or multiple times in a structure.

The XML report structure descriptions in this document contain the cardinality information in the column "No.", which can contain the following values:

Value	Description
0..1	Substructure occurs exactly one time or not at all
1	Substructure occurs exactly one time
0..n	Substructure does not occur, occurs at least one time, and a maximum of n times
1..n	Substructure occurs at least one time, and a maximum of n times

3.6 Usage Code

The XML report descriptions contain usage codes for each tag. These codes provide information on whether a tag is mandatory or optional. The table below lists all applicable usage codes and provides a description.

Usage Code	Explicit	Field Usage Description
m	mandatory	The tag occurs always if it is part of an existing structure (but may contain an empty string)
o	optional	The tag may be omitted

3.7 Basic Structure

The basic structure of each report is:

1. All content is enclosed by a tag with the report name code (<rptName>),
2. Each report contains a header enclosed in the header tag (<rptHeader>),
3. After the header, the main report data is enclosed by the tag <rptNameGrp>.

<rptName>

<rptHeader>

(header content)

</rptHeader>

<rptNameGrp>

(data content)

</rptNameGrp>

</rptName>

4 Report Subscription and Download

In the WebGUI of the M7 Trading Module, a report user can manage the subscriptions to the XML reports and download the generated subscribed reports.

After logging into the WebGUI, a window with the following two sections is displayed:

- Subscribe Reports
- Download Reports



4.1 Subscription

In the "Subscribe Reports" section, a report user can subscribe to one or more daily reports.

The subscription area of the report page contains a table with the following columns:

- **ID**
An identification code for each report type.
- **Freq**
Indicates the generation frequency of each report. All reports are generated daily which is indicated by the value "D".
- **Name**
The report name.
- **Subscribe**
The checkbox to subscribe/unsubscribe a report.

The report user can subscribe and unsubscribe to report types by selecting/deselecting the respective report type checkbox (/) and by confirming the settings by clicking the button labelled "Save subscriptions".

For each exchange, the system operator can configure that the same or a different set of report types will be available for subscription by the market operations report users and non-Admin report users. A later change to the configured set would require a downtime.

4.1.1 Subscriptions for Non-Admin Report Users

For a report user belonging to a non-Admin member, only the subscribed reports are generated in the next report generation process. In case of a Broker report user, one report will be generated for each selected report type which will contain both broker's own trading actions as well as actions performed on behalf of other traders.

Non-Admin report users do not have any subscriptions by default; they must explicitly make their subscriptions to the report types in the WebGUI (see *4.1 Subscription*).

During the user suspension, the subscriptions are cleared out; therefore, the subscriptions to reports must be renewed after the report user was reactivated after being suspended.

4.1.2 Subscriptions for Market Operations (ADMIN)

For a market operations report user (report users of the ADMIN member), the M7 system will always generate the whole set of reports (as configured by the system operator) in every report generation process.

The subscription area for Admin users is displayed in a read-only mode, so all checkboxes for all shown report types are ticked.

4.2 Download

Already generated reports that are ready for download are listed below the subscription area in a table labelled "Download Reports". Each report remains in the download area for 5 trading days after its generation, meaning the report user is able to download the reports for the last 5 trading days.

The number of days available in the "Download Reports" is configurable by the system operator. The change would require a downtime of the Reporting Engine module. The request would also need to be first assessed by DBAG, because the number of days may be limited by the file system where the reports are stored.

The "Download Reports" table contains the following columns:

- **ID**
An identification code for each report type.
- **Size**
Size of the report file.
- **Date**
Creation date of the report.
- **Filename**
Filename of the report.

5 Report Generation

5.1 Trading Day

While contracts in M7 are traded based on the product time zone, reports generated by the Reporting Engine module use the market time zone (i.e. CET/CEST) and the market trading day configuration (00:00:00 CET/CEST - 23:59:59 CET/CEST on the same calendar day).

The M7 system supports 24/7 trading, i.e. trading around the clock and on each day of the week.

5.2 Report Generation

The reports are used to display data for the generated trades and bids, or order maintenance during the last (full) trading day. They are automatically generated once a day at the preconfigured time. The time is configured by DBAG at the exchange level and applies to all report types.

Since the report generation timer is based on UTC (Coordinated Universal Time), the actual time of report generation will differ in Central European Summer Time (CEST) and during Central European Time (CET). During CEST, the reports will be generated one hour later in comparison to CET. In other words, the reports with the generation time configured to hh:mm:ss (UTC) will be generated at (hh+1):mm:ss during CET and at (hh+2):mm:ss during CEST. **Example:** Assuming the configured report generation time is 3:00 am UTC, in May the reports will be generated at 5:00 am whereas in November at 4:00 am.

For market operations report users, the reports are generated regardless of the user status. The appropriate <Login ID> will appear in the file name when an ADMIN report user is available; in case of multiple report users, the reports will be named based on the first active user found by the system. If there is no report user at the time of the report generation, the file name will contain the string "UNKNOWN" instead of <Login ID>. The existing reports will not be renamed after an ADMIN report user is available.

For a non-Admin report user, the reports for the trading day t are only generated if both the report member and the appropriate report user were active at the time of the generation on $t-1$.

Note: The reports can be generated the second time for the same trading day or retrospectively only with the assistance of DBAG and upon request of the customer. In case a report for the same trading days is generated again, the first one will be renamed to ~.bak and will not be available for direct download.

6 XML Report Descriptions

6.1 TC540 Daily Order Maintenance

Description	<p>The report contains a list of all active¹ orders which have been modified for each member during the trading day.²</p> <p>For a report user belonging to a Regular member, the report is arranged by traders and contracts and lists all measures taken for the maintenance of orders during the trading day.</p> <p>For a market operations report user, the report is an aggregation of the order data of all members, arranged by the member code and then as described above.</p> <p>For a report user belonging to a Broker member, the report contains the broker's order maintenance actions performed on behalf of other members, and, in case of own trading, also such actions performed by the broker's own member. The report is arranged in the same way as for the market operations.</p>
Frequency	Daily
Generation	Triggered by timer
Availability	Report user of a non-Admin member + market operations report user

6.1.1 TC540 Selection Criteria and Target Group

The report is generated as member-specific as well as for market operations. The latter receives the report as an aggregation of all generated member reports.

6.1.2 TC540 Structural Logic

For each member, a <tc540Grp> contains all orders that have been modified by the member's users. Inside this group tag, the orders are sorted by a combination of the user code and contract. Each such combination is defined by a <tc540Grp1>. Finally, within this group tag, each maintenance action is listed individually inside a <tc540Rec> tag. All <tc540Rec> inside a <tc540Grp1> appear in chronological order (earliest first). To ensure such ordering, the actions are ordered by their revision.

One report does not necessarily contain the complete lifecycle of an order, as it lists only the maintenance actions for one trading day, which is displayed in the tag <rptPrntEffDat>.

In the report for the market operations, a member will appear if and only if at least one of its users performed an order maintenance action (or the action was performed on behalf) during the last (full) trading day. In this regard, the status in which the (trading) member or its user is at the time of the report generation is irrelevant.

For remote orders, the report contains only the maintenance actions performed by XBID rather than local M7 maintenance actions. Remote orders for which M7 has not received a response due to a disconnection event from XBID and which have not resulted in a trade, will not be reported.

6.1.3 TC540 Example

Member A has two traders called Trader I and Trader II. Trader I performed two maintenance actions on an order for contract X and trader II performed one maintenance action on an order for the same contract X and two maintenance actions on an order for contract Y. Some of the orders have been *entered* the day before. However, the TC540 only contains the actions that were performed on the orders on the trading day stated in the "rptPrntEffDat" field. The resulting report structure is:

¹ Outright orders are active orders. Implied orders are non-active orders until they get lifted and become active.

² After a disconnection event from XBID, M7 calculates the missing order history based on information received about currently active and hibernated remote orders, as well as matched trades. In a few scenarios, some maintenance actions will not be included in the report, e.g. when an order had been hibernated prior to its deletion by XBID, the hibernation action will not appear in TC540. Another very rare scenario would be when M7 sends a request to XBID but it is disconnected before receiving a response. This is because not all of the information may be retrieved from XBID ex-post.

<tc540Grp>	contains all actions for Member A
<tc540Grp1>	contains the actions of Trader I for contract X
<tc540Rec>	the first action of Trader I on contract X
<tc540Rec>	the second action of Trader I on contract X
<tc540Grp1>	contains the actions of Trader II for contract X
<tc540Rec>	an action of Trader II on contract X
<tc540Grp1>	contains the actions of Trader II for contract Y
<tc540Rec>	the first action of Trader II on contract Y
<tc540Rec>	the second action of Trader II on contract Y

6.1.4 TC540 Structure

XML Tag	m/o	no.	Type	Condition the optional tag is present (if)..
tc540	m	1	Structure	
rptHdr	m	1	Structure	
exchNam	m	1	Data	
envText	m	1	Data	
rptCod	m	1	Data	
rptNam	m	1	Data	
rptPrntEffDat	m	1	Data	
rptPrntRunDat	m	1	Data	
tc540Grp	o	0..n	Structure	an order was modified on <rptPrntEffDat>
tc540KeyGrp	m	1	Structure	
membExclcdCod	m	1	Data	
tc540Grp1	m	1..n	Structure	
tc540KeyGrp1	m	1	Structure	
partIdCod	m	1	Data	
instTitl	m	1	Structure	
isinCod	m	1	Data	
currTypCod	m	1	Data	
product	m	1	Data	
tc540Rec	m	1..n	Structure	
tranTim	m	1	Data	
mktArea	m	1	Data	
tso	m	1	Data	
balGrp	m	1	Data	
clgHse	o	0..n	Structure	a clearing house was specified as part of the order
clgHseCode	m	1	Data	
clgAcct	m	1..n	Structure	
clgAcctId	m	1	Data	
entTim	m	1	Data	
actnCod	m	1	Data	the "actnCod" of the order is either "M" (full match) or "P" (partial match).
aggressorIndicator	o	0..1	Data	
revisionNo	m	1	Data	
listID	o	0..1	Data	the order is a part of a basket
listExeclnst	o	0..1	Data	the order is a part of a basket

	ordrNo	m	1	Data	
	ordrInitialNo	m	1	Data	
	ordrParentNo	o	0..1	Data	the order was modified which led to a new order with a new order number
	preAotId	o	0..1	Data	the order has been added as a result of the automatic order transfer
	remoteOrdrNo	o	0..1	Data	the order has been communicated to the XBID SOB
	remoteRevisionNo	o	0..1	Data	the order has been communicated to the XBID SOB
	ordrBuyCod	m	1	Data	
	openCloseInd	o	0..1	Data	the order was submitted with a valid value in the "Open Close Indicator" field
	acctTypCodGrp	m	1	Data	
	ordrQty	m	1	Data	
	peakSizeQty	o	0..1	Data	<ordrTypCod> is "I" (iceberg order)
	totalRemQty	o	0..1	Data	<ordrTypCod> is "I" (iceberg order)
	stopPrc	o	0..1	Data	<ordrTypCod> is "S" (stop limit order)
	ppd	o	0..1	Data	<ordrTypCod> is "I" (iceberg order)
	ordrTypCod	m	1	Data	
	quote	o	0..1	Data	the order is a quote
	ordrExePrc	m	1	Data	
	tradMtchPrc	o	0..1	Data	<actnCod> is either: "M" (full match) or "P" (partial match)
	ordrResCod	o	0..1	Data	<ordrResCod> is either: "A" (AON), "F" (FOK) or "I" (IOC)
	ordrValCode	m	1	Data	
	applicationId	o	0..1	Data	always, except for orders submitted or maintained before the migration to M7 6.0.
	applicationVer	o	0..1	Data	the application version was provided in the API.
	valDat	o	0..1	Data	<ordrValCode> is "GTD"
	text	o	0..1	Data	the text field is not empty
	membExclCodOboMs	o	0..1	Data	the maintenance step was performed by a user on behalf of the order owner
	partIdCodOboMs	o	0..1	Data	the maintenance step was performed by a user on behalf of the order owner
	aot	o	0..1	Data	the indicator whether the order shall be automatically transferred to the corresponding linked contract after the trading in the specific delivery area ends in XBID.
	prioChange	o	0..1	Data	the order has been added or deleted as a result of an order modification which lead to a priority change of the order.

6.2 TC810 Daily Trade Confirmation

Description	<p>This report contains an inventory of all of the trades of each member during the trading day. The report shows all unmodified, modified, recalled, cancelled and matched trades (including on-exchange prearranged trades (OPT)), private and confidential trades (PNC) and approved OTC trades whenever these are supported by the exchange. In case cross-product matching or trade decomposition has been configured and such a trade was matched, only the trades resulting from the trade decomposition will appear in the report.</p> <p>For a report user belonging to a Regular member, this report contains the trade data just for this member.</p> <p>For a market operations report user, this report is an aggregation of trade data of all members.</p> <p>For a report user belonging to a Broker member, the report contains the trades and actions performed</p>
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	on these trades by the broker on behalf of other members. If the broker was also trading on his own behalf, the actions performed by its own member will be included in the report as well.
Frequency	Daily
Generation	Triggered by timer
Availability	Report user of a non-Admin member + market operations report user

6.2.1 TC810 Selection Criteria and Target Group

This report can be generated as member-specific as well as for market operations. The latter receives the report with the trades of all members.

This report shows the trades of the last closed trading period (day).

6.2.2 TC810 Structural Logic

Each <tc810Grp> contains all trades for a member/contract combination. Inside this group tag, the trades are organized by traders into different <tc810Grp1>. Inside this structure, the trades themselves are listed in the last hierarchy level, each in a separate <tc810Rec>.

In general, all trades identified by their "tranIdNo", are only present once. The only exception are recalled trades, which can be identified by the value "R" in the field <tranTypCod> and cancelled trades which can be identified by the value "C" in the field <tranTypCod>.

6.2.3 TC810 Examples

6.2.3.1 Report Structure

Member A has two traders, Trader 1 and 2. For contract X, Trader 1 has two trades; for contract Y, Trader 1 and Trader 2 have one trade each.

The resulting report structure is (key groups are not displayed here):

```

<tc810>
  <tc810Grp>                                contains all trades for Member A and contract X
    <tc810Grp1>                              contains all trades of Trader 1 for contract X
      <tc810Rec>                             the first trade of Trader 1 for contract X
      <tc810Rec>                             the second trade of Trader 1 for contract X
    <tc810Grp>                                contains all trades for Member A and contract Y
      <tc810Grp1>                              contains all trades of Trader 1 for contract Y
        <tc810Rec>                             a trade of Trader 1 for contract Y
      <tc810Grp1>                              contains all trades of Trader 2 for contract Y
        <tc810Rec>                             a trade of Trader 2 for contract Y

```

6.2.3.2 Cross-Product Matching and Trade Decomposition

Cross-product matching between an hourly product and a quarterly product is enabled. Member A has one trader, Trader A, who placed an hourly buy order for the contract 12-13. Member B has one trader, Trader B who placed three quarterly (3x15 minutes) sell orders for the contracts 12Q1, 12Q2 and 12Q3. Member C has one trader, Trader C who placed one quarterly (1x15 minutes) sell order for the contract 12Q4. The buy order and the four sell orders were matched into a trade. As a result of the cross-product matching process, the hourly buy trade was decomposed into four quarterly trades. The report contains only the trades for the quarterly contracts.

The resulting report (for market operations) contains the following trades:

```

<tc810>
  <tc810Grp>                                contains all trades for Member A and contract 12Q1

```

<tc810Grp1>	contains all trades of Trader A for contract 12Q1
<tc810Rec>	(buy side of) trade of Trader A for contract 12Q1
<tc810Grp>	contains all trades for Member A and contract 12Q2
<tc810Grp1>	contains all trades of Trader A for contract 12Q2
<tc810Rec>	(buy side of) trade of Trader A for contract 12Q2
<tc810Grp>	contains all trades for Member A and contract 12Q3
<tc810Grp1>	contains all trades of Trader A for contract 12Q3
<tc810Rec>	(buy side of) trade of Trader A for contract 12Q3
<tc810Grp>	contains all trades for Member A and contract 12Q4
<tc810Grp1>	contains all trades of Trader A for contract 12Q4
<tc810Rec>	(buy side of) trade of Trader A for contract 12Q4
<tc810Grp>	contains all trades for Member B and contract 12Q1
<tc810Grp1>	contains all trades of Trader B for contract 12Q1
<tc810Rec>	(sell side of) trade of Trader B for contract 12Q1
<tc810Grp>	contains all trades for Member B and contract 12Q2
<tc810Grp1>	contains all trades of Trader B for contract 12Q2
<tc810Rec>	(sell side of) trade of Trader B for contract 12Q2
<tc810Grp>	contains all trades for Member B and contract 12Q3
<tc810Grp1>	contains all trades of Trader B for contract 12Q3
<tc810Rec>	(sell side of) trade of Trader B for contract 12Q3
<tc810Grp>	contains all trades for Member C and contract 12Q4
<tc810Grp1>	contains all trades of Trader C for contract 12Q4
<tc810Rec>	(sell side of) trade of Trader C for contract 12Q4

6.2.4 TC810 Structure

XML Tag	m/o	no.	Type	Condition the optional tag is present if..
tc810	m	1	Structure	
rptHdr	m	1	Structure	
exchNam	m	1	Data	
envText	m	1	Data	
rptCod	m	1	Data	
rptNam	m	1	Data	
rptPmtEffDat	m	1	Data	
rptPmtRunDat	m	1	Data	
tc810Grp	o	0..n	Structure	at least one trade was matched, trade cancelled, or trade recall was granted on <rptPmtEffDat>
tc810KeyGrp	m	1..n	Structure	
membExclCod	m	1	Data	
membClgldCod	m	1	Data	
stlldAct	m	1	Data	
stlldLoc	m	1	Data	
instTitl	m	1	Structure	
isinCod	m	1	Data	
cntcUnt	m	1	Data	
product	m	1	Data	
currTypCod	m	1	Data	
tc810Grp1	m	1	Structure	
tc810KeyGrp1	m	1	Structure	
partldCod	m	1	Data	
tc810Rec	m	1..n	Structure	
mktArea	m	1	Data	
tso	m	1	Data	
balGrp	m	1	Data	
clgHseCode	o	0..1	Data	a clearing house code was specified as part of the respective order
clgAcctld	o	0..1	Data	a clearing account ID was specified as part of the respective order
tranTim	m	1	Data	
tranldNo	m	1	Data	

	tranIdSfxNo	m	1	Data	
	remoteTranIdNo	o	0..1	Data	the trade was executed or modified by XBID SOB
	remoteTranIdSfxNo	o	0..1	Data	the trade was executed or modified by XBID SOB
	tranTypCod	m	1	Data	
	typOrig	m	1	Data	
	aggressorIndicator	m	1	Data	
	ordrNo	m	1	Data	
	acctTypCodGrp	m	1	Data	
	ordrBuyCod	m	1	Data	
	openCloseInd	o	0..1	Data	the respective order was submitted with a valid value in the "Open Close Indicator" field
	tradMtchQty	m	1	Data	
	tradMtchPrc	m	1	Data	
	tradPhase	m	1	Data	
	stlDate	m	1	Data	
	feeAmt	m	1	Data	
	membCtpyldCod	m	1	Data	
	text	o	0..1	Data	the text field is not empty
	membExclCodOboMs	o	0..1	Data	the trade was cancelled or a trade recall was granted by an admin user
	partIdCodOboMs	o	0..1	Data	the trade was cancelled or a trade recall was granted by an admin user
	brokerMembIdCod	o	0..1	Data	the trade was modified by a broker user on behalf of another user
	brokerUserIdCod	o	0..1	Data	the action was modified by a broker user on behalf of another user
	selfTrade	o	0..1	Data	
	sumPartTotBuyOrdr	m	1	Data	
	sumPartTotSellOrdr	m	1	Data	
	sumMembTotBuyOrdr	m	1	Data	
	sumMembTotSellOrdr	m	1	Data	

6.3 TC820 Daily Open OTC Maintenance

Description	The report contains a list of all OTC orders which have been modified for each member during the trading day. For each member, this report is arranged by traders and contracts and lists all measures taken for the maintenance of OTC orders during the trading day. For market operations, the report is an aggregation of all member reports, arranged by members and then as described previously.
Frequency	Daily
Generation	Triggered by timer
Availability	Report user of a non-Admin member + market operations report user

6.3.1 TC820 Selection Criteria and Target Group

This report can be created to be member-specific, as well as for market operations. The latter receives the report with the OTC orders for all members.

This report shows all maintenance actions for OTC orders for the last closed trading period (day) in continuous trading.

6.3.2 TC820 Structural Logic

For each member, a <tc820Grp> contains all open OTC orders that have been modified by its users. Inside this group tag, the orders are separated by the user's code, where the orders of each individual user are listed in an extra <tc820Grp1>. Inside this group, the orders for one trader but different contracts as listed in separate <tc820Grp2> tags.

Finally, inside each of these tags, the orders are listed inside the <tc820Rec>, while each maintenance action performed on an order is listed in an individual record.

The report does not necessarily contain the complete lifecycle of an OTC order, as it lists only the maintenance actions for one trading day, which is displayed in the tag <rptPrntEffDat>.

6.3.3 TC820 Example

Member A has two traders called Trader I and Trader II. Trader I performed two maintenance actions on an OTC order for contract X and Trader II performed one maintenance action on an OTC order for the same contract X and two maintenance actions on an OTC order for contract Y. Some of the orders have been *entered* the day before. However, the TC820 only contains the actions that were performed on the trading day stated in the "rptPrntEffDat" field.

The resulting report structure is:

<tc820Grp>	contains all actions of Member A
<tc820Grp1>	contains all actions of Trader I
<tc820Grp2>	contains all actions of Trader I on contract X
<tc820Rec>	the first action of Trader I on order of contract X
<tc820Rec>	the second action of Trader I on order of contract X
<tc820Grp1>	contains all actions of Trader II
<tc820Grp2>	contains all actions of Trader II on contract X
<tc820Rec>	an action of Trader II on order of contract X
<tc820Grp2>	contains all actions of Trader II on contract Y
<tc820Rec>	the first action of Trader II on order of contract Y
<tc820Rec>	the second action of Trader II on order of contract Y

6.3.4 TC820 Structure

XML Tag	m/o	No.	Type	Condition the optional tag is present if..
tc820	m	1	Structure	
rptHdr	m	1	Structure	
exchNam	m	1	Data	
envText	m	1	Data	
rptCod	m	1	Data	
rptNam	m	1	Data	
rptPrntEffDat	m	1	Data	
rptPrntRunDat	m	1	Data	
tc820Grp	o	0..n	Structure	an order was modified on <rptPrntEffDat>
tc820KeyGrp	m	1..n	Structure	
membExclIdCod	m	1	Data	
tc820Grp1	m	1..n		
tc820KeyGrp1	m	1		
partIdCod	m	1	Data	
tc820Grp2	m	1..n	Structure	
tc820KeyGrp2	m	1	Structure	
instTitl	m	1	Structure	
isinCod	m	1	Data	
product	m	1	Data	
currTypCod	m	1	Data	
tc820Rec	m	1..n		
mktArea	m	1	Data	
tso	m	1	Data	
balGrp	m	1	Data	
clgHseCode	o	0..1	Data	a clearing house code was specified as part of the order
clgAcctId	o	0..1	Data	a clearing account ID was specified as part

						of the order			
					aggressorIndicator	m	1	Data	
					tranTim	m	1	Data	
					tranTypCod	m	1	Data	
					otcTrdTim	o	0..1	Data	an OTC order was accepted by the counterparty
					tranIdNo	m	1	Data	
					ordrBuyCod	m	1	Data	
					acctTypCodGrp	m	1	Data	
					ordrQty	m	1	Data	
					ordrExePrc	m	1	Data	
					ordrValCode	m	1	Data	
					valDat	o	0..1	Data	the validity restriction ("ordrValCode") is "GTD"
					ctpyMembPartIdCod	m	1	Structure	
					membExclCod	m	1	Data	
					mktArea	m	1	Data	
					balGrp	m	1	Data	
					clgHseCode	o	0..1	Data	a clearing house code was specified as part of the counterparty's order
					clgAcctId	o	0..1	Data	a clearing account ID was specified as part of the counterparty's order
					aggressorIndicator	m	1	Data	
					stlDate	m	1	Data	
					setlmCod1	m	1	Data	
					text	o	0..1	Data	the text field is not empty
					membExclCodOboMs	o	0..1	Data	the maintenance step was performed by an admin or a trader user that performed an on behalf action
					partIdCodOboMs	o	0..1	Data	the maintenance step was performed by an admin or a trader user that performed an on behalf action

7 XML Report Tag Descriptions

Field Name	Description	Format	Valid Values	Value Description	Reports
acctTypCodGrp	The account type group	AN 1-2	"A" or "A1".. "A9"	Agent account	TC540
			"P" or "P1".. "P9"	Proprietary account	TC810 TC820
actnCod	The action code of a maintenance step for an order or matching of a quote	AN 1	"A"	Add (also used when activating an order)	TC540
			"C"	Change	
			"D"	Delete	
			"H"	Hibernation (deactivation) or Disconnection from XBID	
			"I"	Insertion of new slice (iceberg orders)	
			"M"	Full match of an order or quote	
			"P"	Partial match of an order or quote	
			"X"	System deletion (order expiration)	
aggressorIndicator	Indicates whether the executed order was as a trade aggressor or as a trade originator.	AN 1	"Y"	Trade aggressor	TC540
			"N"	Trade originator	TC810 TC820
			"U"	Unknown, used for executed orders of remote products, orders transferred to linked contracts and data before migration	
aot	the indicator whether the order shall be automatically transferred to the corresponding linked contract after the trading in the specific delivery area ends in XBID		True; False		TC540
applicationId	TC540: Application ID which the user used to perform the maintenance step.	AN 128	A valid application ID		TC540
applicationVer	TC540: The version of the application which the user used to perform the maintenance step.	AN 16	An application version		TC540
balGrp	TC540, TC810 and TC820: Balancing Group for which the order was entered.	AN 32			TC540 TC810 TC820
brokerMemblCod	The "Member ID" of the broker	AN 5	A valid "Member ID" (of a broker member)		TC810
brokerUserldCod	The "User Code" of the broker	AN 6	A valid "User Code" (of a broker user)		TC810
clgAcctId	The ID of the clearing account for which the order was entered, respectively modified; or for which the trade was executed, respectively modified.	AN 32			TC540 TC810 TC820
clgHseCode	The code of the clearing house for which the order was entered, respectively modified; or for which the trade was executed, respectively modified.	AN 32			TC540 TC810 TC820

Field Name	Description	Format	Valid Values	Value Description	Reports
cntcUnt	The "Contract Unit" field contains the number of traded contract units/delivery units of a product in relation to basic period. This value is defined by product attribute "Delivery Units", which is set during the product configuration. Example: If the basic period is 1 month, for 3 month products cntcUnt is 3. For a UDDP block order, the value is calculated from the delivery start and delivery end of the block. In case of remote Commodities products, the cntcUnt is assumed to be equal to the delivery period length, expressed as a number of hours. For a UDB contract, the value is equal to the appropriate multiple of delivery periods of the underlying Commodities product. For more information, please refer to MFG130.	NUM			TC810
currTypCod	TC540 and TC820: Currency Type Code contains the currency in which the product is traded. TC810: Currency Type Code contains the currency in which the product is traded and the related fees are charged.	AN 3	A valid ISO code		TC540 TC810 TC820
entTim	The entry time of an order. If the price/time mechanism of an order is modified, it is deleted and a new one (with a new order entry time) is entered instead. For orders created by M7 as a result of AOT it is the entTim of the related remote order before the AOT has been performed.	TIME	Any time		TC540
envText	The technical environment where the report was generated.	AN 1	"D" "A" "S" "P"	Development Acceptance Simulation Production	TC540 TC810 TC820
exchNam	The name of the exchange the report was created for.	AN 4			TC540 TC810 TC820
feeAmt	The fee amount	NUM	Always "0"		TC810
isinCod	The contract identifier. It is the long name of the contract.	AN 128			TC540 TC810 TC820
listExecInst	The execution instruction of a basket order.	AN 6	"IMPL" "LINKED" "NONE" "VALID"	The order is an implied order. All orders of the basket or none will be executed. No execution instruction Either all orders of the basket are valid or all orders are rejected.	TC540
listID	The "Basket ID" of a basket order.	NUM	A valid "Basket ID"		TC540
mktArea	The market area	AN 6	A valid market area (short name)		TC540 TC810 TC820
membClgldCod	The "Member ID" of the clearing member	AN 5	A valid "Member ID"		TC810
membCtpyldCod	The "Member ID" of the trade's counterparty	AN 5	A valid "Member ID"		TC810

Field Name	Description	Format	Valid Values	Value Description	Reports
membExclCod	TC540 and TC810 : The "Member ID" of the latest order owner. For orders created by M7 as a result of AOT, it is the "Member ID" of the order owner before the AOT has been performed. TC820 : The "Member ID" of the order owner. If contained in the tag <ctpyMembPartIdCod>, the field contains the "Member ID" of the order owner's counterparty.	AN 5	A valid "Member ID"		TC540 TC810 TC820
membExclCodOboMs	TC540 and TC820 : The "Member ID" of the user who performed a maintenance action on behalf of the order owner. For orders created by M7 as a result of AOT, it is the "Member ID" of the order owner before the AOT has been performed. TC810 : The "Member ID" of the admin user who granted a recall or cancelled a trade.	AN 5	A valid "Member ID"		TC540 TC810 TC820
openCloseInd	The open close indicator. It shows whether the order is linked to an open or close position.	AN 1	"O"	Open position indicator	TC540 TC810
			"C"	Close position indicator	
ordrBuyCod	Order Buy Code. It indicates whether the order is a buy or a sell order.	AN 1	"B"	Buy order	TC540 TC810 TC820
			"S"	Sell order	
ordrExePrc	TC540 : The limit price of an order. For orders created by M7 as a result of AOT it is the last ordrExePrc of the related remote order before the AOT has been performed. TC820 : The limit price and execution price of the OTC order (OTC orders are always matched at the initial limit price).	NS 13,2			TC540 TC820
ordrInitialNo	The "ordrInitialNo" equals to the "ordrNo" that was assigned to an order when it was entered for the very first time or when it was created by M7 as a result of AOT. It remains the same even if the order is modified.	NUM 13			TC540
ordrNo	The "Order ID". It may be changed when the order is modified.	NUM 13			TC540 TC810
ordrParentNo	The field is displayed only if the maintenance step led to a new "ordrNo". In such case, it contains the "ordrNo" of the previously modified order. In case an order has been created by M7 as a result of AOT, the ordrParentNo of the related remote order is not present. Example : An order with the "ordrNo" 100 is modified leading to a new "ordrNo" 101. In the TC540Rec for this maintenance step, the field "ordrNo" will contain the value 101 and the field "ordrParentNo" will contain the value 100.	NUM 13			TC540

Field Name	Description	Format	Valid Values	Value Description	Reports
ordrQty	The order quantity in "qtyUnit". After a trade, the quantity is reduced by the amount executed in the last trade until the order is fully matched (quantity = 0.0). For iceberg orders it is the current exposed quantity (the current size of the active slice). For orders created by M7 as a result of AOT it is the last ordrQty of the related remote order before the AOT has been performed.	NUM 16,3			TC540 TC820
ordrResCod	The restriction code of an order	AN 1	"A" "I" "F" "S"	AON: "All or Nothing" IOC: "Immediate or Cancel" FOK: "Fill or Kill" STP: "Stop order"	TC540
ordrTypCod	The order type code	AN 1	"B" "H" "I" "L" "P" "S"	Balance order for local products User Defined Block order in case of remote Commodities products Hit and lift order Iceberg order Limit order OTC order Stop order	TC540
otcTrdTim	The OTC trade time. It is the time when the OTC order was accepted by the counterparty.	TIME	Any time		TC820
ordrValCode	The validity restriction of an order.	AN 4	"GFS" "GTD" "NON"	"Good For Session" "Good Till Date" "None", if the execution restriction is "IOC" or "FOK".	TC540 TC820
partIdCod	The "User Code" of the latest order owner. For orders created by M7 as a result of AOT, it is the "User Code" of the latest order owner before the AOT has been performed.	AN 6	A valid "User Code"		TC540 TC810 TC820
partIdCodOboms	TC540 and TC820: The "User Code" of the user who performed a maintenance action on behalf of the order owner. For orders created by M7 as a result of AOT it is the string "SYSTEM". TC810: The "User Code" of the admin user who granted a recall or cancelled a trade.	AN 6	A valid "User Code"		TC540 TC810 TC820
peakSizeQty	The peak size quantity of an iceberg order in "qtyUnit". For orders created by M7 as a result of AOT it is the last peakSizeQty of the related remote order before the AOT has been performed.	NUM 16,3			TC540
ppd	The peak price delta of an iceberg order	NUM 16,3			TC540
preAotId	The local Id of the remote order from which the current order has been created as a result of the automatic order transfer. For more details on the automatic order transfer see <i>DFS160a</i> .	NUM 13			TC540
prioChange	An indicator of whether the order has been added or deleted as a result of an order modification which lead to a priority change of the order.	Boolean	Always true		TC540
product	The name of the product	AN 32			TC540 TC810 TC820
quote	A flag indicating that the order is a quote.	NUM 1	Always "1"		TC540

Field Name	Description	Format	Valid Values	Value Description	Reports				
remoteOrdrNo	An "Order ID" assigned to the order by XBID SOB. It may be changed when the order is modified. The field is not present for orders created by M7 as a result of AOT.	NUM 13			TC540				
remoteRevisionNo	The revision value for each order maintenance step. The field is not present for orders created by M7 as a result of AOT.	NUM	Initial value is 1. When an order is modified in XBID, value is increased by one. In case of a disconnection event from XBID, M7 calculates the missing order history based on information received from XBID on orders and trades after the reconnection, including the external revision numbers for the missing events.		TC540				
remoteTranldNo	A unique identifier of a trade per day assigned by XBID SOB ("Trade ID")	NUM			TC810				
remoteTranldSfxNo	The Remote Transaction ID Suffix Number. The field contains the revision number of the trade on the XBID SOB.	NUM	Usually "1", the value changes e.g. when a trade recall is granted by XBID Central Admin.		TC810				
revisionNo	TC540: The revision value for each maintenance step.	NUM	TC540: Initial value is 1. When a local order or an order created by M7 as a result of AOT is modified, the value is increased by one. When a remote order is modified, the value may be increased by more than one, because the maintenance actions that were performed only locally (e.g. storing an order locally on M7 before forwarding it to XBID) are excluded from the report.		TC540				
rptCod	The naming code of the XML report	AN 5	Allowed values: "TC540", "TC810", "TC820"		TC540 TC810 TC820				
rptNam	The XML report name	AN 53	A valid report long name		TC540 TC810 TC820				
rptPrntEffDat	The print effective date of the XML report. All data in the report refers to this trading day.	DATE	Any date		TC540 TC810 TC820				
rptPrntRunDat	The run date of the XML report. This is the day when the report was created.	DATE	Any date		TC540 TC810 TC820				
selfTrade	The flag if trade is a self-trade: <ul style="list-style-type: none"> Trade inside one balancing group or Trade between two different balancing groups within one member 	AN 1	<table border="1"> <tr> <td>"Y"</td> <td>Yes</td> </tr> <tr> <td>"N"</td> <td>No</td> </tr> </table>	"Y"	Yes	"N"	No		TC810
"Y"	Yes								
"N"	No								
setlmCod1	The settlement code	AN 3	Always "DVP"		TC820				
stlDate	The settlement date. It is defined by the delivery start date of the contract.	DATE	Any date		TC810 TC820				
stlIdAct	The Settlement ID Account	AN 4	Always "0000"		TC810				
stlIdLoc	The Settlement Location ID	AN 3	Always "ECC"		TC810				
stopPrc	The stop price of a stop limit order	NS 13, 2			TC540				
sumMembTotBuyOrdr	The total quantity bought by a member in "qtyUnit" per contract on the trading day contained in the "rptPrntEffDat" field.	NUM 16,3			TC810				
sumMembTotSellOrdr	The total quantity sold by a member in "qtyUnit" per contract on the trading day contained in the "rptPrntEffDat" field.	NUM 16,3			TC810				
sumPartTotBuyOrdr	The total quantity bought by the user (the respective "partIdCod" field) in "qtyUnit". The quantity is reported per contract for the trading day stated in the "rptPrntEffDat" field.	NUM 16,3			TC810				

Field Name	Description	Format	Valid Values	Value Description	Reports																						
sumPartTotSellOrdr	The total quantity sold by the user (the respective "partIdCod" field) in "qtyUnit". The quantity is reported per contract for the trading day contained in the "rptPrntEffDat" field.	NUM 16,3			TC810																						
text	The text entered in the text field of an order. For orders created by M7 as a result of AOT it is the last "text" of the related remote order before the AOT has been performed.	AN 250	Any text		TC540 TC810 TC820																						
totalRemQty	The total remaining quantity of an iceberg order in "qtyUnit". For orders created by M7 as a result of AOT it is the last totalRemQty of the related remote order before the AOT has been performed.	NUM 16,3			TC540																						
tradMtchPrc	The trade match price. This is the price at which the trade was executed.	NS 13,2			TC540 TC810																						
tradMtchQty	The trade match quantity. This is the quantity executed in the trade in "qtyUnit".	NUM 16,3			TC810																						
tradPhase	The trade phase in which the trade was executed.	AN 10	"Auction" "Balancing" "Continuous" "SDAT" – Same Delivery Area Trading		TC810																						
tranIdNo	TC810: A unique identifier of a trade per day ("Trade ID") TC820: An "Order ID" of an OTC order	NUM			TC810 TC820																						
tranIdSfxNo	The Transaction ID Suffix Number. The field contains the revision number of the trade.	NUM	Usually "1", the value changes e.g. when a trade recall is granted by a Market Operator.		TC810																						
tranTim	The transaction timestamp. TC540: For local orders, the exact time when the maintenance action, trade execution or modification was performed. For orders created by M7 as a result of AOT it is the time of the order transfer (time of transfer from remote contract (XBID) to linked contract (local)). For remote orders, the exact time when M7 received the information on the maintenance action from XBID. Note: This time may differ from the actual time of processing the maintenance action by XBID. Such information is not available from XBID therefore M7 cannot provide it instead. TC810 and TC820: The exact time when the trade execution or modification was performed.	TIME	Any time in the format hh:mm:ss:ccc.		TC540 TC810 TC820																						
tranTypCod	TC810: The transaction type code describes the action performed on a trade. TC820: The transaction type code describes the maintenance action performed on an OTC order.	AN 1	<table border="1"> <thead> <tr> <th colspan="2">TC810</th> </tr> </thead> <tbody> <tr> <td>" "</td> <td>Regular trade execution</td> </tr> <tr> <td>"P"</td> <td>Trade cancellation/reversion approved on LTS and sent for approval to XSOB exchange</td> </tr> <tr> <td>"R"</td> <td>Reversed trade</td> </tr> <tr> <td>"C"</td> <td>Cancelled trade</td> </tr> <tr> <th colspan="2">TC820</th> </tr> <tr> <td>"A"</td> <td>Add</td> </tr> <tr> <td>"C"</td> <td>Change</td> </tr> <tr> <td>"D"</td> <td>Delete</td> </tr> <tr> <td>"H"</td> <td>Hibernation (deactivation)</td> </tr> <tr> <td>"I"</td> <td>Insertion of new slice (iceberg orders)</td> </tr> </tbody> </table>	TC810		" "	Regular trade execution	"P"	Trade cancellation/reversion approved on LTS and sent for approval to XSOB exchange	"R"	Reversed trade	"C"	Cancelled trade	TC820		"A"	Add	"C"	Change	"D"	Delete	"H"	Hibernation (deactivation)	"I"	Insertion of new slice (iceberg orders)		TC810 TC820
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Field Name	Description	Format	Valid Values	Value Description	Reports
			"M"	Full match	
			"P"	Partial match	
			"X"	System deletion (order expiration)	
tso	The short name of a delivery area	AN 4			TC540 TC810 TC820
typOrig	The transaction type indicates whether the trade is an OTC or a non-OTC trade.	AN 1	" "	Matched trade	TC810
			"O"	OTC trade	
valDat	If the validity restriction of an order ("ordrValCode") is "GTD", the "valDat" field will contain the data and time when an order will be deleted.	DATE	Format is: "YYYY-MM-DD hh:mm+hh:mm" where "YYYY-MM-DD hh:mm" is the timestamp in CET/CEST, and "+hh:mm" is the UTC offset		TC540 TC820