

## Document title EURONEXT CASH MARKETS – OPTIQ <sup>®</sup> END OF DAY INTERFACE SPECIFICATIONS

Document type or subject

Optiq <sup>®</sup> End of Day Interface Specifications

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Preface

#### PREFACE

### PURPOSE

This document describes the files generated on a daily basis by the Optiq for the End Of Day (EOD) application and provided to the members of the Euronext Cash regulated markets.

## CONTACT INFORMATION

■ EUA and Production environments: <u>clientsupport@euronext.com</u> or +33 1 8514 8585.

## WHAT'S NEW?

The following lists only the most recent modification made to this version (full history is in the Appendix).

VERSION NO.	DATE	CHANGE DESCRIPTION	
<u>1.4.0</u>	24 Dec 2021	The following changes have been made to this version of the document:	
		In Day Order Files:	
		- Added fields LongClientID and STP ID	
		In Field Description:	
		- Added field Long Client ID	
		- Added field <u>, STP ID</u>	

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#### ASSOCIATED DOCUMENTS

The following lists the associated documents, which either should be read in conjunction with this document or which provide other relevant information for the user:

- Euronext Cash and Derivatives Markets Optiq File Specification
- Euronext Cash Markets Optiq OEG Client Specifications SBE Interface
- Euronext Cash Markets Optiq OEG Client Specifications FIX 5.0 Interface
- Euronext Cash Markets Optiq & TCS Error List

<u>Clients are advised to also refer to the Euronext Rules and Regulations documents for more details.</u> For the latest version of documentation please visit <u>http://www.euronext.com/optig</u>

#### Contents

## CONTENTS

1.	END OF DAY (EOD) APPLICATION OVERVIEW	4	
1.1	Target restrictions	4	
1.2	Format differences between Order file and Trade file fields5		
2.	HOW TO RETRIEVE EOD FILES		
2.1	Introduction	6	
2.2	Retrieving EOD files by Script	6	
2.2.1	Step 1 : Authentication	6	
2.2.2	Step 2 : File Download	7	
2.2.3	Complete Script		
3.	DAY ORDER FILES	11	
3.1	File description	11	
3.2	Fields Formats	11	
3.2.1	Functional Field Formats	12	
3.2.2	Technical Field Formats		
3.3	Order record in Optiq XML format	13	
4.	DAY TRADE FILE	19	
4.1	File description	19	
4.2	Field formats		
4.3	Trade record	20	
5.	WARRANTS & CERTIFICATES LCH FILES	23	
5.1	Files description	23	
5.2	Uncleared trade information file	23	
5.2.1	Uncleared trade File Name	23	
5.2.2	Uncleared Trade record	24	
5.3	Uncleared Netting information file	26	
5.3.1	5		
5.3.2	Uncleared Netting record	27	
5.4	Uncleared Outbound information file	29	
5.4.1	Uncleared Outbound File Name		
5.4.2	Uncleared Outbound record		
6.	ORDER FILE FIELD DESCRIPTIONS		
7.	TRADE FILE FIELD DESCRIPTIONS		
8.	WARRANTS & CERTIFICATES LCH FILES FIELD DESCRIPTIONS	<u>62</u> 61	

iii of 74

## 1. END OF DAY (EOD) APPLICATION OVERVIEW

The EOD is an application allowing a Member Firm to retrieve and download several files called "End Of Day" files, containing order and trade information belonging to its Member Firm code. The following files are made available for downloading on a daily basis:

- A file containing all orders entered by this member and remaining in the book for the next trading session for the following Optiq segments:
  - Equities
  - Funds
  - Fixed Income
- A file containing all orders entered by this member and remaining in the book for the next trading session for the Optiq segment of:
  - Warrants & Certificates
- A file containing all trades executed during the last Trading session in the Matching Engine for all the Optiq following segments
  - Equities
  - Funds
  - Fixed Income
  - Warrants & Certificates
  - Block

In addition to the trades executed during the last Trading session, the Member Firm has also access to the 4 previous Trading days' trade files (5 trade files are on-line and available for a given scope of Optiq segments).

EOD Application also hosts other files, that are described in their dedicated documentation.

#### 1.1 TARGET RESTRICTIONS

The description of the output files herein addresses all cash-related trading Optiq Segments.

- Some of the functionalities and messages in the document are applicable only when enabled for the specific scope of instruments;
- The functionalities follow the rules set out in the Euronext Trading manual and Rule books.

The following table lists Optiq Segment tags applicable to EOD application. Each tag is used to indicate data for which Optiq Segment is contained within it.

Text tags are used within individual fields to indicate

Optiq Segment	Image Tag	Text Tags
Equities	EQ	[EQ]
Funds	FUND	[FUND]
Fixed Income	FRM	[FRM]
Warrants & Certificates	SP	[SP]
Block	BLK	[BLK]

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End Of Day (EOD) Application Overview

## 1.2 FORMAT DIFFERENCES BETWEEN ORDER FILE AND TRADE FILE FIELDS

Field formats for similar concepts / fields between trade and order files are in progress of migration to the new format. Due to the transitional period, fields names / formats between files may be different and are provided in different dedicated sections.

The length of the numerical fields of the order files are indicated in number of bytes. For example an "enumerated" field of length "1" corresponds to 2^8 = 256 possible values.

Please find below the list of common fields between trade and order file that have such differences, and the guidelines on how to reconcile them:

Field	Difference	Guidelines for Reconciliation
EMM	Format: • Order file: Enumerated • Trade file: Int	The differences for this field are representative only. While the list of values in the Trade file contains additional values for Derivatives, the equivalent values between the files, and their meaning, are identical. E.g. value '1' will be present in both files, and will represent in both files the 'Cash and Derivatives Central Order book'
Account Type	Fields: Order file: Account Type & LP Role Trade file: Role80A Format: Order file: Enumerated Trade file: Char	While format is different between the fields, the matching walues provided will be the same, and will carry the same meaning. Due to migration to Optiq the value of RLO ('3') present in the field Rule80A of the Trade file is represented by values in two field in the Order file. To obtain equivalent of RLO values in the fields listed below should be combined: Account Type: '6' (Liquidity Provider) LPRole: '3' (Retail Liquidity Provider)
OnBehalfOfCompID	Fields: • Order file: OnBehalfOfCompID • Trade file: OnBehalfOfCompID8 Format: • Order file: Text • Trade file: String	The differences for this field are representative only. The format in which values are provided, field length, the values and their meaning are identical.
Symbol Index	Format: • Order file: Numerical ID • Trade file: Int Length: • Order file: 4 • Trade file: 10	The differences for this field are representative only. The format in which values are provided, field length, the values and their meaning are identical.

How to retrieve EOD files

## 2. HOW TO RETRIEVE EOD FILES

#### 2.1 INTRODUCTION

The EOD files application is an application allowing a Member Firm to retrieve and download several files called "End Of Day" (EOD) files, linked to its Member Firm code.

The five (5) latest daily files are made available within the EOD application. EOD files described in this document can be downloaded manually by logging into the EOD website, or by using a script. A sample script is described in a section below.

To obtain access to the EOD application clients may contact Customer Access Services at <a href="mailto:cas@euronext.com">cas@euronext.com</a>.

For all issues related to EUA and Productions environments, clients have to get in touch with OCS Team: <u>clientsupport@euronext.com</u>

#### 2.2 RETRIEVING EOD FILES BY SCRIPT

The following sections will describe how to retrieve EOD files via a sample script. First section is about how to authenticate successfully on the web server, second one how to download a file via script. The entire and complete script is also present in the last section as all the different steps described in the following sections are all part of one script.

Note: The sample bash script provides generic curl commands for use and can be adapted to different languages if required.

#### 2.2.1 Step 1 : Authentication

First step that must be completed to retrieve the files is authentication to the EOD application server.

In order to authenticate to the server http standards, including cookies, are used with a curl command.

Please note, whichever method or language is used to adapt the script, the use of cookies is mandatory in order to authenticate and download the files from the server.

#### Parameters

#!/bin/bash
<pre># IMPORTANT: set https_proxy if needed</pre>
_username="USERNAME"
_password="PASSWORD"
_website=" <u>https://eod-t.euronext.com</u> "
<pre>_cookies="eod_cookies.txt"</pre>
_headers="eod_headers.txt"
<pre>tmp file="eod file.tmp"</pre>

How to retrieve EOD files

#### Command

curl -c \${\_cookies} -X POST --data-urlencode "j\_username=\$\_username&j\_password=\$\_password" \
 -s -H "Content-Type: application/x-www-form-urlencoded" \
 \$\_website/Authentication

#### Possible Responses for Authentication:

Response Code	<b>Response Text</b>	Description
403	Forbidden	This code indicates an issue with the user account provided for the
		authentication step
200	ОК	In the authorization step this code indicates successful
		authentication to the EOD server

#### 2.2.2 Step 2 : File Download

Following successful authentication the necessary EOD files can be downloaded.

In order to download a file, a file type id and the trade date must be specified.

<u>File Type id</u>: The list of available file parameters is provided below. If new file types are added or removed, the existing file type ids remain the same. To download a specific file, the parameter of the file Type id, corresponding to the file name (as identified in the table below) should be passed via the command.

<u>Trade date</u>: the trade date id is provided in the format YYYYMMDD and identifies the trading session for which the file is to be retrieved. As identified elsewhere in the document, the files for the last five trading sessions are made available.

#### Parameters

# 1: Trades (RM) #11: Active Orders (RM) XML Optiq format #12: Active Orders (Warrant) XML Optiq format #13: New Uncleared Trades captured by LCH SA (Gross) #14: New Uncleared Net Instructions generated by LCH SA due to daily netting and regularizations #15: All MT5xx messages sent by LCH SA which related to both records 00280 and 00281 of the NET file

\_fileTypeId=0

# Trade Date (YYYYMMDD)
\_tradeDate=20170818

Values of fileTypeId are used for making the request and the file retrieved will have the full file name of the file requested.

How to retrieve EOD files

The correspondence of file names, parameters and types is provided in the table below:

Parameter	File Name	File Description
1	FTRRM	Trades (RM) in legacy format
10	FORDCOPT	Active Orders (RM) in legacy format
11	FORDCXML	Active Orders (RM) in XML Optiq format
12	FORDCWXML	Active Orders (Warrant) in XML Optiq format
14	FORDCWOPT	Active Orders (Warrant) in legacy format
15	LCH_EH_WCUTL	New Uncleared Trades captured by LCH SA (Gross)
16	LCH_EH_WCNET	New Uncleared Net Instructions generated by LCH SA due to daily
		netting and regularizations
17	LCH_EH_WCOBF	All MT5xx messages sent by LCH SA which related to both records
		00280 and 00281 of the NET file

#### Command

\_url="\$\_website/services/GetFileContent?fileTypeId=\$\_fileTypeId&tradeDate=\$\_tradeDate"
echo "Downloading: \$\_url"

```
curl -b ${_cookies} --compressed -s -X GET \
    --dump-header ${_headers} -o ${_tmp_file} $_url
```

#### Clean-up of the File name

Following retrieval of the file the section below provides sample lines for the clean-up of the obtained file name.

tmp=\$( grep "Content-Disposition: attachment;" \${\_headers} )

# Removing last \r
tmp=`echo \$tmp | sed 's/\\r//g'`

# Getting file name in the HTTP header IFS='=' read -ra array <<< "\$tmp" filename="\${array[1]}"

# Removing double quotes
filename=\$( eval echo \$filename )

mv "\${\_tmp\_file}" "\${filename}"

echo "Downloaded file: \${filename}"

# Removing temp files
rm -f \${\_cookies}
rm -f \${\_headers}

#### Possible Responses for the Retrieval Command:

Response Code	Response Text	Description
500	Internal Error	Request couldn't be handled as submitted
200	OK **	Request was processed without an error, but please note the
		following exception: If the header "Content-Disposition" is not present in the response
		– either incorrect fileTypeID or TradeDate was provided for the

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How to retrieve EOD files

	request. The request was handled without an error, but no file was
	sent back in the response.

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How to retrieve EOD files

2.2.3 Complete Script

<pre>#!/bin/bash # IMPORTANT: set https_proxy if neededusername="USERNAME"password="PASSWORD"website="https://cod-t.euronext.com"cookies="eod_headers.txt"tmp_file="eod_file.tmp" curl -c \${_cookies.txt"tmp_file="eod_file.tmp" curl -c \${_cookies} -X POSTdata-urlencode "j_usernames\$_usernames\$_password=\$_password" \     -s + "Content-Type: application/x-www-form-urlencoded" \     \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) MUL Optiq format #12: Active Orders (RM) MUL Optiq format #13: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET filefileTypeId=0 # Trade Date (YYYYMMDD)tradeDate=20170818url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \    dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\${ grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \n tmp="ceno \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='a' read -ra array &lt;&lt;&lt; "\$tmp" # Removing double quotes </pre>
<pre>_username="USERNAME" _password="PASSWORD" _website="https://eod-t.euronext.com" _cookies="eod_cookies.txt" _tmp_file="eod_file.tmp" cun1 -c \${_cookies}.xt05Tdata-urlencode "j_username=\$_username&amp;j_password=\$_password" \     -s ++ "content-Type: application/x-www-form-urlencoded" \     \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) ML Optiq format #12: Active Orders (RM) XML Optiq format #13: Active Orders (Warrant) NML Optiq format #14: Active Orders (Warrant) NML Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _uurl="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies} compressed -s -X GET \     -dump-header \${_tmp_file} \$_url tmp=\$ (grep "Content-Disposition: attachment;" \${_headers}) # Removing last \r tmp=`echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='' read -ra array &lt;&lt;&lt; "\$tmp"</pre>
<pre>password="PASSWORD" website="https://eod-t.euronext.com"cookies="eod_cookies.txt"headers="eod_headers.txt"tmp_file="eod_file.tmp" curl -c \${_cookies} - x POSTdata-urlencode "j_username=\$_username&amp;j_password=\$_password" \       -s - H "contentType: application/x-www-form-urlencoded" \       \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) NML Optiq format #12: Active Orders (Warrant) XML Optiq format #13: Active Orders (Warrant) legacy Optiq format #14: Active Orders (Warrant) legacy Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA (Gross) #17: All MT5xx messages sent by LCH SA related to both records @0280 and @0281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -S -X GET \      dump-header \${_theaders} -o \${_tmp_file} \$_url tmp=\$ (grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \r tmp=`echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS=' =' read -ra array &lt;&lt;&lt; "\$tmp"</pre>
<pre>_website="https://eod-t.euronext.com" _cookies="eod_cookies.txt" _headers="eod_file.tmp" curl -c \${_cookies} -X POSTdata-urlencode "j_username=\$_username&amp;j_password=\$_password" \ -s -H "Content-Type: application/x-www-form-urlencoded" \ \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) Mu Optiq format #11: Active Orders (RM) Mu Optiq format #12: Active Orders (RM) Mu Optiq format #13: Trades (KM) Mu Optiq format #14: Active Orders (Warrant) legacy Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \ dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\${ grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \c tmp=`echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='=' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
<pre>_cookies="eod_cookies.txt" headers="eod_headers.txt" _tmp_file="eod_file.tmp" Curl -c \$ (_cookie\$) -X POSTdata-urlencode "j_username\$_username&amp;j_password=\$_password" \ -s -H "Content-Type: application/x-www-form-urlencoded" \ \$_website/Authentication # 1: Trades (RM) #10: Attive Orders (RM) legacy Optiq format #11: Active Orders (RM) NML Optiq format #12: Active Orders (RM) apply Optiq format #13: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Net Instructions generated by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMWDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \ dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\${ grep "Content-Disposition: attachment;" \${_headers}}) # Removing last \r tmp="echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='s' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
<pre>_headers="eod_headers.txt" _tmp_file="eod_file.tmp" curl -c \${_cookies} -X POSTdata-urlencode "j_usernames\$_username&amp;j_password=\$_password" \ -s -H "Content-Type: application/x-www-form-urlencoded" \ \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) NML Optiq format #12: Active Orders (Warrant) XML Optiq format #13: New Uncleared Trades captured by LCH SA (Gross) #15: New Uncleared Trades captured by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \ dump-header \${_headers} -o \${_tmp_file} \$_url tmp={curb stmp !sed 's/\\r/g'` # Removing last \r tmp="echo \$tmp !sed 's/\\r/g'` # Getting file name in the HTTP header IFS='=' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
<pre>tmp_file="eod_file.tmp" curl -c \${_cookies} -X POSTdata-urlencode "j_username=\$_username&amp;j_password=\$_password" \ -s -H "Content-Type: application/x-www-form-urlencoded" \ \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) NML Optiq format #12: Active Orders (Warrant) NML Optiq format #13: Active Orders (Warrant) legacy Optiq format #14: Active Orders (Warrant) legacy Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Net Instructions generated by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file fileTypeId=0 # Trade Date (YYYYMMDD) tradeDate=20170818 url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \ dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\${ grep "Content-Disposition: attachment;" \${_headers}}) # Removing last \r tmp=`echo \$tmp   sed 's/\r//g'` # Getting file name in the HTTP header IFS='=' read -ra array &lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
<pre>curl -c \${_cookies} -X POSTdata-urlencode "j_username=\$_username&amp;j_password=\$_password" \     -s -H "Content-Type: application/x-www-form-urlencoded" \     \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) NML Optiq format #12: Active Orders (RM) The Uptiq format #14: Active Orders (Warrant) Egacy Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Net Instructions generated by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \    dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\$( grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \n tmp=' ceoh \$tmp   sed 's/\\r/g'` # Getting file name in the HTTP header IFS='s' read -ra array &lt;&lt;&lt; "\$tmp"</pre>
<pre>-s -H "Content-Type: application/x-www-form-urlencoded" \ \$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) NuL Optiq format #11: Active Orders (RM) XML Optiq format #12: Active Orders (Warrant) XML Optiq format #14: Active Orders (Warrant) legacy Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Net Instructions generated by LCH SA due to daily netting and regularizations #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_ccookies}compressed -s -X GET \    dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\$( grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \r tmp=' echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='s' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1}" </pre>
<pre>\$_website/Authentication # 1: Trades (RM) #10: Active Orders (RM) legacy Optiq format #11: Active Orders (RM) XML Optiq format #12: Active Orders (Marrant) XML Optiq format #12: Active Orders (Warrant) legacy Optiq format #14: Active Orders (Warrant) legacy Optiq format #15: New Uncleared Trades captured by LCH SA (Gross) #16: New Uncleared Trades captured by LCH SA (Gross) #17: All MT5xx messages sent by LCH SA related to both records 00280 and 00281 of the NET file _fileTypeId=0 # Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \    dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\$( grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \r tmp=`echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='=' read -ra array &lt;&lt;&lt; "\$tmp"</pre>
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<pre># Trade Date (YYYYMMDD) _tradeDate=20170818 _url="\$_website/services/GetFileContent?fileTypeId=\$_fileTypeId&amp;tradeDate=\$_tradeDate" echo "Downloading: \$_url" curl -b \${_cookies}compressed -s -X GET \ dump-header \${_headers} -o \${_tmp_file} \$_url tmp=\$( grep "Content-Disposition: attachment;" \${_headers} ) # Removing last \r tmp=`echo \$tmp   sed 's/\\r//g'` # Getting file name in the HTTP header IFS='=' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
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<pre># Getting file name in the HTTP header IFS='=' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
<pre>IFS='=' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
<pre>IFS='=' read -ra array &lt;&lt;&lt; "\$tmp" filename="\${array[1]}"</pre>
filename="\${array[1]}"
# Removing double quotes
# Removing double quotes
<pre>filename=\$( eval echo \$filename )</pre>
<pre>mv "\${_tmp_file}" "\${filename}"</pre>
echo "Downloaded file: \${filename}"
# Removing temp files
<pre>rm -f \${_cookies}</pre>
<pre>rm -f \${_headers}</pre>

Day Order Files

## 3. DAY ORDER FILES

#### 3.1 FILE DESCRIPTION

This chapter specifies the body record of the order files containing all orders remaining in the book for the next Trading Day (active orders).

The order files will be made available in both Optiq XML and 'legacy' UTP formats. The files will represent the same information, and are provided to reduce impact of migration to the Optiq format in future phase.

As only cash markets are concerned, enumerated values that are specific to derivatives instruments (flagged by [D] or 'Derivatives only' in the field descriptions) will never appear in the order files.

Two physical files for each format, with the same logical layout, are generated per member.

## ACTIVE ORDERS FOR EQUTIES, FUNDS AND FIXED INCOME SEGMENTS

Available for: EQ FUND FRM

XML File name ......FORDCXML

'Legacy' File name ......FORDCOPT

These file contain all orders remaining in the book for the next Trading Day for the Equities, Funds and Fixed Income Optiq segments.

For the legacy file - One order is wrapped in one Body record.

For the XML file – one record is provided per order.

## **ACTIVE ORDERS FOR WARRANTS & CERTIFICATES SEGMENT**

Available for: SP

XML File name ......FORDCWXML

'Legacy' File name ......FORDCWOPT

These files contain all orders remaining in the book for the next Trading Day for the Warrants & Certificates Optiq segment.

For the legacy file - One order is wrapped in one Body record.

For the XML file – one record is provided per order.

#### 3.2 FIELDS FORMATS

Section below provides functional and technical field formats identified in this specifications for the Order files (legacy and XML). The two field format could be used in combination, and are provided for each field in the Field description section of the Trade files.

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Day Order Files

#### 3.2.1 Functional Field Formats

#### The following functional field format types are used :

Functional Format	Description
Alphanumerical ID	String type identifying an element.
Amount	Signed numerical field representing an amount.
Bitmap	This format is not a true Bitmap as defined in SBE protocol, but rather its representation in text format. In files, i.e. for EOD Order file, the field uses similar logic to a Bitmap in SBE, however instead of bits, each character in the field represents a position in the field. The field from the left, starts with '0b' and each position following this provides the characters to represent each object indicated in the possible values. Only values zero (0) and one (1) are provided, and their meaning depends and is identified in the description of individual fields.
Boolean	Indicator having two possible values, either 'true - 1' or 'false - 0'. This value is set on the first bit of the byte (in Little-Endian).
Date	Date of an event.
Decimal Places	Number of decimals associated to a numerical field.
Enumerated	Information having a delimited set of possible values.
Epoch Time in Nanoseconds	UTC time in nanoseconds since 1970 January the 1st.
Integer Time in hhmmss	Time in an integer on 2 bytes expressed as hhmmss
Intraday Time in Seconds	UTC time in seconds since the beginning of the day.
Numerical	Generic numerical field.
Numerical ID	Numerical field identifying an element.
Price	Numerical field representing a price (either signed or not signed).
Quantity	Unsigned numerical field representing a quantity of elements (for example a number of shares).
Text	Text in UTF-8.
Timestamp	Time of an event.

#### 3.2.2 Technical Field Formats

The following technical field formats types are used:

- All integers are numeric (signed/ unsigned specified in each field format description) using two's complement method.
- -
- Binary data are in Intel byte order (Little-Endian). All "Alphanumerical ID" and "Text" fields are alphanumeric based on UTF-8. -

Technical Format	Description
character	Alphanumerical field containing only 1 character
signed integer 8	1 byte signed numerical field
signed integer 64	8 bytes signed numerical field
unsigned integer 8	1 byte unsigned numerical field
unsigned integer 16	2 bytes unsigned numerical field
unsigned integer 32	4 bytes unsigned numerical field
unsigned integer 64	8 bytes unsigned numerical field

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Day Order Files

## 3.3 ORDER RECORD IN OPTIQ XML FORMAT

For detailed information on the construction of Optiq XML files, please refer to the Euronext Cash and Derivatives Markets - Optiq File Specification.

eld	Short Description	Format	Values	Presence	Former UTP Field
ndOfDayOrderFile					
EndOfDayOrderUnitary					
OrderEntryTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	From 0 to 2^64-2	Mandatory	OrderEntryDate / OrderEntryTime Both fields are replaced by OrderEntryTime that provides Date and Time of order entry
<u>SenderCompID</u>	Identifier of the member firm that sends the message.	Text	Firm ID	Mandatory	SenderCompID
LogicalAccessID	Identifier of the Logical Access.	Numerical ID	From 0 to 2^32-2	Mandatory	OnBehalfOfLocationID
<u>ClientOrderID</u>	An identifier of a message assigned by the Client when submitting an order to the Exchange.	Numerical ID	From -2^63+1 to 2^63-1	Mandatory	ClOrdID
<u>OrderID</u>	Numerical order identifier assigned by the matching engine, unique per instrument and EMM.	Numerical ID	From 0 to 2^64-2	Mandatory	NSeqOm
OrderModificationTime	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)	Epoch Time in Nanoseconds	From 0 to 2^64-2	Optional	CancelReplaceTime / OrderModificationDate Both fields are replaced by OrderModificationTime that provides Date and Time of order modification
ModifiedSenderCompID	Identifier of the member firm that sends the message.	Text	Firm ID	Optional	SenderCompIDMod
ModifiedLogicalAccessI D	Identifier of the Logical Access.	Numerical ID	From 0 to 2^32-2	Optional	OnBehalfOfLocationIDMod
<u>OrderPriority</u>	Rank giving the priority of the order. The order with the lowest value of Order Priority has the highest priority.	Numerical ID	From 0 to 2^64-2	Mandatory	OrderPriorityTime

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Day Order Files

d	Short Description	Format	Values	Presence	Former UTP Field
EODOrderStatus	Order Status for End Of Day Order file	Enumerated	0 = New 1 = Partially Filled 2 = Replaced	Mandatory	OrdStatus
<u>OnBehalfOfCompID</u>	ID of the issuing firm when the message is sent through a third party.	Text	Firm ID	Optional	OnBehalfOfCompID
<u>OptiqSegment</u>	An Optiq segment is a universe of instruments sharing common trading properties.	Enumerated	1 = Equities 2 = Funds 3 = Fixed Income 4 = Warrants & Certificates	Mandatory	<b>NA</b> New Optiq field
SymbolIndex	Exchange identification code of the instrument.	Numerical ID	From 0 to 2^32-2	Mandatory	Symbol
EMM	Defines the Exchange Market Mechanism applied on each platform.	Enumerated	<ul> <li>1 = Cash and Derivative Central Order Book (COB)</li> <li>2 = NAV Trading Facility</li> <li>5 = Cash On Exchange Off book</li> <li>6 = Euronext off- exchange trade reports</li> <li>8 = ETF MTF - NAV Central Order Book</li> <li>99 = Not Applicable (For indices and iNAV)</li> </ul>	Mandatory	<b>NA</b> New Optiq field
<u>OrderSide</u>	Indicates the side of the order.	Enumerated	1 = Buy 2 = Sell 3 = Cross [i]	Mandatory	Side
OrderType	Type of Order.	Enumerated	(See field description)	Mandatory	OrderType / IcebergOr

Day Order Files

d	Short Description	Format	Values	Presence	Former UTP Field
ExecutionInstruction	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Bitmap	(See field description)	Mandatory	DisplayQtyRdm
<u>TimeInForce</u>	Specifies the maximum validity of an order.	Enumerated	0 = Day 1 = Good Till Cancel 2 = Valid for Uncrossing 3 = Immediate or Cancel 4 = Fill or Kill 5 = Good till Time 6 = Good till Date 7 = Valid for Closing Uncrossing	Mandatory	TimeInForce
TriggeredStopTimeInFor <u>ce</u>	Specifies the maximum validity of an triggered stop order.	Enumerated	0 = Day 1 = Good Till Cancel 6 = Good till Date	Conditional	<b>NA</b> New Optiq field
OrderExpirationDate	Field used as date of order expiration for GTD orders.	Date	From 0 to 2^16-2	Conditional	ExpireTime Split in OrderExpirationDat and OrderExpirationTime
OrderExpirationTime	Field used as time of order expiration for GTT orders.	Numerical ID	From 0 to 2^32-2	Conditional	ExpireTime Split in OrderExpirationDat and OrderExpirationTime
<u>OrderPrice</u>	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).	Price	From -2^63+1 to 2^63-1	Conditional	Price
StopTriggerPrice	Stop Trigger Price is mandatory for stop orders.	Price	From -2^63+1 to 2^63-1	Conditional	StopPx
PegOffset	(Future Use) Tick offset for a pegged order.	Numerical ID	From -127 to 127	Conditional	PegDifference

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Day Order Files

d	Short Description	Format	Values	Presence	Former UTP Field
<u>OrderQuantity</u>	Total order quantity, per quantity unit.(To be calculated with Quantity Decimals)	Quantity	From 0 to 2^64-2	Mandatory	OrderQty
<u>MinimumOrderQuantit</u> <u>Y</u>	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).	Quantity	From 0 to 2^64-2	Optional	MinQty
<u>DisclosedQuantity</u>	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)	Quantity	From 0 to 2^64-2	Conditional	MaxFloor
CumulatedQuantity	Cumulated quantity (to be calculated with Quantity Decimals).	Quantity	From 0 to 2^64-2	Mandatory	CumQty
<u>TechnicalOrigin</u>	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.	Enumerated	(See field description)	Optional	TechnicalOrdType
<u>AccountType</u>	Indicates the account type for which the order is entered. For example, an order can be entered for a client account, a house account or a liquidity provider account.	Enumerated	(See field description)	Conditional	Rule80A Split in AccountType and LPRole
<u>LPRole</u>	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".	Enumerated	1 = Liquidity Provider or Market Maker 3 = Retail Liquidity Provider [C]	Conditional	Rule80A Split in AccountType and LPRole
<u>AccountNumber</u>	Client account number identifying the investor's account. This field is part of the clearing aggregate.	Alphanumerical ID	Alphanumerical	Optional	Account
<u>ClientID</u>	Field used to identify the client (investor).	Alphanumerical ID	Alphanumerical	Optional	ClientID
<u>FreeText</u>	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.	Text	Free Text	Optional	FreeText
<b>ClearingFirmID</b>	Clearing firm ID.	Alphanumerical ID	Firm ID	Optional	ClearingFirm

Day Order Files

ld	Short Description	Format	Values	Presence	Former UTP Field
<u>OpenClose</u>	Open Close Indicator, Posting action. This field is part of the clearing aggregate.	Bitmap	(See field description)	Optional	OpenClose
<u>ClearingInstruction</u>	Clearing Instruction.	Enumerated	0 = Process normally (formerly Systematic posting) 8 = Manual mode 9 = Automatic posting mode 10 = Automatic give- up mode	Optional	ClearingHandlingType
PartitionID	Identifies uniquely an Optiq partition across all the Exchange partitions.	Numerical ID	From 0 to 2^16-2	Mandatory	EngineID
<u>LeavesQuantity</u>	Indicates the remaining quantity of an order, i.e. the quantity open for further execution.	Quantity	From 0 to 2^64-2	Mandatory	LeavesQty
<u>DisplayedQuantity</u>	Order quantity displayed to the market (Iceberg only)	Quantity	From 0 to 2^64-2	Mandatory	DisplayedQty
<u>DarkExecutionInstructio</u>	Field used as instruction for dark order handling (For Future Use). Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.	Bitmap	(See field description)	Mandatory	DarkIndicator DefTradReq MinQtyType DisplayedOrderInteractio SweepOrder
<u>UndisclosedPrice</u>	Optional price for the hidden part of an Iceberg order. (For Future Use)	Price	From -2^63+1 to 2^63-1	Optional	UndisclosedPrice
<u>UndisclosedIcebergTyp</u> <u>e</u>	Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity. (For Future Use)	Enumerated	1 = Limit 2 = Peg Mid-Point 3 = Peg Primary 4 = Peg Market	Optional	UndisclosedExecInst
LongClientID	Field used to identify the Client (investor), or trader's reference / posting order number for a pre- posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives.	<u>Alphanumerical ID</u>	(See field description)	<u>Optional</u>	

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Day Order Files

	Field	Short Description	Format	Values	Presence	Former UTP Field
-	<u>STP ID</u>	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.	<u>Numerical ID</u>	<u>02^16-1</u>	<u>Optional</u>	
_	/EndOfDayOrderUnitary					
	/EndOfDayOrderFile					

Day Trade File

## 4. DAY TRADE FILE

#### 4.1 FILE DESCRIPTION

This chapter specifies the Body record used by the trade files generated. It gives a logical description of each of these files. One trade is wrapped in one Body record.

Note that the information related to the order present in the trade file concerns member's order only and not the counterparty's order.

MATCHI	NG ENGINE TRADES
Available	e for: EQ FUND FRM SP BLK
File nam	e <b>FTRRM</b>
following – E – F – F – V	contains the trades executed during the last trading day in the Optiq Matching Engine in the g Cash Optiq Segments: iquities funds ixed Income Varrants & Certificates
As identi	slock fied elsewhere in this document, five trade files are available containing trades of the five last Days (one file per Trading Day).

## 4.2 FIELD FORMATS

Messages are structures of fields in ASCII format. The table below provides the details of Length and Format for the field format types used for the Trade file records.

Туре	Length	Format
Char	1	Alphanumerical
String	N>1	Alphanumerical
Int	Х	Binary



Page 19 of 74

18 February 2011

## Day Trade File

## 4.3 TRADE RECORD

Ofs	Field	Format	Length	Description	Values	Pge
0	EnsYRec	Int	2	Record Type.	'02' Body record	<u>53</u> 51
2	InstrMnemoCode	String	5	Mnemonic code of a cash instrument.	Alphanumerical	<u>55</u> 53
7	InstrMktPlace	Int	3	ID of the market place where instrument price is established.	Numerical	<u>54</u> 52
10	InstrLongID	String	12	Long ID of an instrument	Alphanumerical	<u>54<del>52</del></u>
22	Symbol	String	12	Instrument ID.	ISIN or ISIN-like	<u>58</u> 56
34	MIC	String	4	Market identification code.	ISO 10383 standard or 'SI'	<u>56</u> 54
38	Currency	String	3	Currency code.	ISO 4217 standard	<u>53</u> 51
41	TradeDate	String	8	Date of the trade	YYYYMMDD	<u>59</u> 57
49	TradeRefID	Int	10	Trade reference ID.	Numerical	<u>59</u> 57
59	LastShares	Int	12	Quantity of last fill.	Quantity	<u>56</u> 54
71	LastPx	Int	19	Price of last fill.	Price (1+18)	<u>55</u> 53
90	ITranYApl	Char	1	Trade type indicator.	(See field description)	<u>55</u> 53
91	FinancialMarketCode	String	3	Code of the financial market.	(See field description)	<u>54</u> 52
94	TradeDateTime	String	14	Date and time of the trade	YYYYMMDDHHMMSS	<u>59</u> 57
108	ClassID	String	2	Class identifier.	Alphanumerical	<u>52</u> 50
110	Side	Char	1	Order side.	'A' Buy 'V' Sell	<u>58</u> 56
111	SideTaker	Char	1	Taker order side.	'A' Buy 'V' Sell	<u>58</u> 56
112	OrderEntryDate	String	8	Date of order entry.	YYYYMMDD	<u>57</u> 55
120	NSeqOm10	Int	10	conversion into decimal of Optiq and SequenceNumber extracted from the Optiq internal OrderID	Numerical	<u>56</u> 54
130	TraderID	String	8	Trader ID.	Alphanumerical	<u>59</u> 57
138	OnBehalfOfCompID8	String	8	ID of the order's issuing firm.	Firm ID	<u>57</u> 55
146	Rule80A Rule80A Rule80A	Char	1	Order origin.	(See field description)	<u>57</u> 55
147	ССРІД	Char	1	Indicates the identification of the Clearing organization handling the trade.	(See field description)	<u>52</u> 50
148	SymbolIndex	Int	10	Instrument ID.	From 1 to 4280099999	<u>58</u> 56
158	ЕММ	Int	2	Defines the Exchange Market Mechanism applied on each platform.	(See field description)	<u>53</u> 51
160	WaiverIndicator	Char	4	Indication as to whether the transaction was	(See field description)	<u>60</u> 58

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164	TradeTimeSecondsGranularity	Int	6	executed under a pre- trade waiver in accordance with Articles 4 and 9 of Regulation (EU) 600/2014 Indicates the number of microseconds in the time at which the trade is generated (\$\$\$\$\$\$.	From 0 to 999999	<u>60</u> 58
170	TVTIC	String	22	Trading Venue Transaction Identification Code	Alphanumerical (without zero padding) Ex : 1FR000000012 1125FR000000013	
192	Filler	<u>String</u> String	30			
222	CounterpartFirmID	String	8	Counterpart Firm ID.	Alphanumerical	
230	Filler	String	1			
Total length						

Formatted: Pattern: Clear

Note that field "NSeqOm10" is an extraction from the OPTIQ field OrderID.

NSeqOM10 contains the sequence number and the EMM.

OrderID contains the sequence number and the EMM plus the trading date (EPOCH). Example:

Let's take the same example as the one present in glossary <u>OrderID</u>'s field description, i.e. an order submitted on 10/03/17 on EMM = 1 having a sequence number = 1234. The corresponding OrderID is 20703167315.

Now let's deduce the NSeqOm10 from the OrderID:

The OrderID 20703167315 in hexadecimal is 00 00 00 04 D2 01 43 53

The least-significant 2-bytes of OrderID include the relative calendar days number since 1-jan-1970 at 0:00 UTC (EPOCH) in hexa 43 53. This will **not** be part of the NseqOM10 field.

Then 1-byte of OrderID includes the EMM in hexa 01. This will be part of NseqOM10 field.

Then the remaining most-significant 5-bytes of OrderID contains the sequence number in hexa 4D2. This will be part of NseaOM10 field.

Finally, converting the hexa 4D201 (extraction of sequence number + EMM from OrderID) into decimals gives the NSeqOM10 value which is equal to 315905.

#### Mapping of Waiver Indicator values to the Types of TCS Trades and Instrument Types

Table below provides the correlation of Waiver indicator values, and the applicable rules in TCS. The value in the field are restricted to those identified in field 61 "Waiver Indicator" of the Table 2, Annex 1 of RTS22.

Waiver Indicator Value	Waiver Indicator Description	Applicable For
NLIQ	Negotiated transactions in liquid financial instruments	Equities & ETFs that are flagged by ESMA as being a <i>liquid</i> financial instrument, this waiver is set on Off- Market On-Exchange trades that are (1) not VWAP transactions and (2) not identified as the Large in Scale limit
OILQ	Negotiated transactions in illiquid financial instruments	Equities & ETFs that are flagged by ESMA as being an <i>illiquid</i> financial instrument, this waiver is set on Off- Market On-Exchange trades that are (1) not VWAP transactions and (2) not identified as Large in Scale limit

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## Day Trade File

PRIC	Negotiated transactions subject to conditions other than the current market price of that equity financial instrument	<ul> <li>Any operations done on Euronext Fund Services (Paris and Amsterdam), covering the Fund orders either in Quantity or in Cash</li> <li>VWAP transaction for Equities</li> <li>"Cash Legs" of Delta-neutral &amp; Exchange for Physical trades reported on an Equity and/or ETF underlying</li> </ul>
(blank)	No Waiver assigned	Cases when rules above are not met, including any transactions that are not identified as Large in Scale limit

## 5. WARRANTS & CERTIFICATES LCH FILES

#### 5.1 FILES DESCRIPTION

This chapter specifies the Uncleared market member reports.

The following reports are dedicated:

- Private File Uncleared Trade File Structure for Euronext Warrants & Certificates Activity Dedicated file for Uncleared Markets Trades.
- Private File Uncleared Netting File Structure for Euronext Warrants & Certificates Activity Dedicated file for Uncleared Markets Instructions
- Private File Uncleared Outbounds File for Euronext Warrants & Certificates Activity Dedicated file for Uncleared Markets providing all ISO15022 messages sent directly to Members / Settlement Agent.

#### 5.2 UNCLEARED TRADE INFORMATION FILE

This report file concerns particularly the Uncleared Trades which provides the members with all OTC Warrants & Certificates Trades Legs generated by LCH SA and sent to the settlement platforms.

The global rule is to send one file for each Trading and per business day.

The number of files will be 1 per Trading Member <sup>1</sup>.

The aim of this file is to give each Trading Member Firm the detail of its trades:

New Uncleared Trades captured by LCH SA (Gross)

This file is composed of 3 types of records.

- Two of them are main technical records: one header record and one footer record.
- One of them are functional records, aiming to provide the member's Uncleared Trades generated by LCH SA.

#### 5.2.1 Uncleared trade File Name

Name of th	ne file	Production description	Test description			
Uncleared Informatio		LCH_EP_*******WCUTL_date_version	LCH_EH*******WCUTL_date_version			

"\*\*\*\*\*\*\*" Member code 8 digits.

"date" Year (4 digits) month (2 digits) and day (2 digits). version nn (incremented version number for a business date from 01, 02, etc.)

<sup>1</sup> A Member is not entitled will receive an empty file: headers, footers, empty body

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## 5.2.1.1 Field formats

RULES FOR NUMERIC FIELDS ("TRADE AMOUNT" AND "TRADE QUANTITY")

The number of decimals in the "Trade amount" field is equal to the allowed number of decimals in T2S for the corresponding currency.

The "Trade quantity" is expressed without decimals.

5.2.2 Uncleared Trade record

File is plain CSV files (.csv) with semi colon separator.

#### 5.2.2.1 Main header

One Main Header is generated for each member file as follows:

Position	Field Name	Format	Length	Description
0	Record type	String	5	Type of record. Value '00000'
5	File type	String	3	Type of the file. Value 'UTL'
8	Date time creation	Int	14	Date and time of the creation of the file. Format: YYYYMMDDHHM MSS
22	Business date	Int	8	Reference day in Format: YYYYMMDD
30	Participant code	String	10	Code of the Member.
40	Participant BIC code	String	11	BIC Code of the Member

## 5.2.2.2 Main Footer

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One Main Footer is generated for each member file as follows:

Position	Field Name	Format	Length	Description	]		
0	Record type	<u>String</u> String	5	Type of the record. Value '99999'.		(	Formatted: Font: 10 pt
5	File type	<u>String</u>	3	Type of the file. Value 'UTL'		(	Formatted: Font: 10 pt
8	Line counter	Int	15	Number of lines in the file, including header and footer lines			

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## 5.2.2.3 Uncleared Trade detail

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Positio n	Field Name	Format	Length	Description	Possible Values	Pag
0	Record type	String	5	The type of record presented	'00275' – New Uncleared Trade	<u>67</u> €
5	External Trade Reference	String	15	Uncleared Trade External reference	Numerical	<u>63</u> 6
20	Member code	String	10	Uncleared Trade Member external code	Alphanumerical	<u>64</u> €
30	Member Trade Order number	String	16	Uncleared Trade order number	Alphanumerical	<u>66</u> €
46	Member Origin	Char	1	Uncleared Trade Member Origin Code	'M': House 'T": Market Maker 'C': Client	<u>65</u> €
47	Member Trade free text	String	18	Uncleared Trade Free text	Free Text	<u>66</u> €
65	Member Counterpart	String	10	Uncleared Trade Counterpart Member external code	Firm ID	<u>64</u> €
75	Member Counterpart Origin	Char	1	Uncleared Trade Member Counterpart Origin Code	'M': House 'T": Market Maker 'C': Client	<u>65</u> €
76	ISIN	String	12	ISIN of the instrument	Alphanumerical (InstrLongID)	<u>63</u> €
88	Trading code	String	12	Trading code of the Instrument	Symbol	<u>69</u> €
100	Buy/Sell Indicator	Char	1	Uncleared Trade Buy/Sell indicator	ʻBʻ: Buy 'Sʻ: Sell	<u>62</u> €
101	Trade Date	Int	8	Trade Date of Uncleared Trade	YYYYMMDD	<u>69</u>
109	Intended Settlement Date	Int	8	ISD of Uncleared Trade	YYYYMMDD	<u>63</u> €
117	Trade Quantity	String	18	Quantity of the Uncleared Trade	Quantity	<u>69</u> €
135	Trade Price	String	19	Uncleared Trade price	Price	<u>69</u> €
154	Trade Currency	Int	3	Uncleared Trade currency	ISO 4217 standard (Currency Field)	<u>68</u> €
157	Trade Amount	Int	18	Uncleared Trade Amount	Alphanumerical	<u>68</u> €
175	Uncleared Trade Timestamp Creation	String	16	Uncleared Trade Timestamp creation		<u>70</u> €
191	Related LCH SA instruction's reference	String	16	Outbound (SI) Reference	Alphanumerical	<u>67</u> €

Total length..... 207

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#### 5.3 UNCLEARED NETTING INFORMATION FILE

This report file concerns particularly the file "NETTING" which provides to Euronext with all instructions generated by LCH SA and sent to Members / Settlement Agent.

The global rule is to send one file for each Trading and per business day.

The number of files will be 1 per Trading Member<sup>2</sup>.

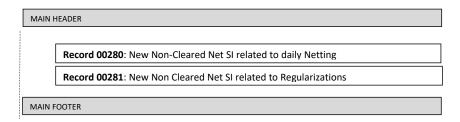
The aim of this file is to give each Trading Member Firm the detail of its trades and related settlement instructions:

- New Uncleared Net Instructions generated by LCH SA due to daily netting (record 00280)
- New Uncleared Net Instructions generated by LCH SA due to regularizations (record 00281)

This file is composed of 4 types of records.

- Two of them are main technical records: one header record and one footer record.
- Two of them are functional records, aiming to provide the member's settlement instructions generated by LCH SA.

All the records of type "00280" to "00281" are communicated by Member.



For the current business date (D), the file contains the following information, dispatched per distinct record types listed below:

**Record type "00280"**: These records provide to Euronext with all SI generated during the current business day (D) resulting from the netting process i.e. after the roll-up into the Delivery Account of current trading day Trades. The records are provided per Instruction Reference and Security id. Trade Date; Intended Settlement Date (ISD) and Counterpart are identical to the related constituent trades.

If for any reasons, if the netting result in Strange Net, Buy and Sell trades can aggregated separately (depending on Delivery Account settings). Therefore, two net settlement instructions can be sent when strange netting is not managed, or one settlement instructions can be sent when strange netting is managed.

**Record type "00281"**: These records provide to Euronext with all Net SI generated during the current business day (D) resulting from LCH SA operations other than netting, e.g. regularizations.

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<sup>&</sup>lt;sup>2</sup> A Member is not entitled will receive an empty file: headers, footers, empty body

If for any reasons LCH SA processes to such operations on a previously sent SI, the records 281 will provide the related SI data.

#### 5.3.1 Uncleared Netting File Name

Name of the file	Production description	Test description
Uncleared Netting (NET)	LCH_EP*******WCNET_date_version	LCH_EH******* <b>WCNET</b> _date_version

"\*\*\*\*\*\*\*" Member code 8 digits.

"date" Year (4 digits) month (2 digits) and day (2 digits). version nn (incremented version number for a business date from 01, 02, etc.)

#### 5.3.1.1 Field formats

Rules for numeric fields ("Cash amount" and "Quantity")

The number of decimals in the "Cash amount" field is equal to the allowed number of decimals in T2S for the corresponding currency.

The "Quantity" is expressed without decimals.

#### 5.3.2 Uncleared Netting record

File is plain CSV files (.csv) with semi colon separator.

## 5.3.2.1 Main header

Positio n	Field Name	Format	Length	Description	
0	Record type	String	5	Type of record. Value '00000'	
5	File type	String	3	Type of the file. Value 'NET'	
8	Date time creation	Int	14	Date and time of the creation of the file. Format: YYYYMMDDHHMMSS.	
22	Business date	Int	8	Reference day in Format: YYYYMMDD Code of the Member.	
30	Participant code	String	10		
40	Participant BIC code	String	11	BIC Code of the Member	

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## 5.3.2.2 Main Footer

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One Main Footer is generated for each member file as follows:

Position	Field Name	Format	Length	Description		
0	Record type	<u>String</u> String	5	Type of the record. Value '99999'.	 	Formatted: Font: 10 pt
5	File type	<u>String</u>	3	Type of the file. Value 'NET'	 	Formatted: Font: 10 pt
8	Line counter	Int	15	Number of lines in the file, including header and footer lines		

## 5.3.2.3 Uncleared Netting detail

Positio n	Field Name	Format	Lengt h	Description	Possible Values	Page
0	Record type	String	5	Indicator of the type of record presented	"00280" – New Uncleared Net SI related to netting "00281" – New Uncleared Net SI related to Regularizations	<u>67</u> 65
5	LCH SA instruction's reference	String	16	Outbound (SI) external reference	Alphanumerical	<u>64<del>62</del></u>
21	Trade Date	Int	8	Trade Date of the Net Trade Balance	YYYYMMDD	<u>69</u> 67
29	Member	String	10	Member external Code reference	Alphanumerical	<u>64</u> 62
39	Member Counterpart	String	10	Member Counterparty external Code reference	Alphanumerical	<u>64</u> 62
49	Settlement Instruction Type	String	3	Settlement Instruction Type	'RFP' - Receive Free of Payment 'DFP' - Delivery Free of Payment 'RVP' - Receive versus Payment 'DVP' - Delivery versus Payment 'RWP' - Receive with Payment 'DWP' - Delivery with Payment 'CPO' - Cash payment Only 'CRO '- Cash receive Only'	<u>68</u> 66
52	Member Settlement Agent Bic Code	ttlement String 11 owning the security Alphanumerical		<u>66</u> 64		
63	Member Security account at Settlement Agent	String	35	Participant security account of the Member.	Alphanumerical	<u>65</u> 63

Field Code Changed

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Warrants & Certificates LCH

Positio n	Field Name	Format	Lengt h	Description	Possible Values	Pag
98	BIC of the Counterpart Member Settlement Agent	String	11	Participant BIC code of settlement agent owning the security account of the Counterpart Member.	Alphanumerical	<u>62</u> 6
109	Counterpart Member security account at Settlement Agent	String	35	Participant security account of the Counterparty Member.	Alphanumerical	<u>.62</u> 6
144	ISIN	String	12	ISIN of the instrument	ISIN or ISIN-like	<u>63</u> 6
156	Intended Settlement Date	Int	8	ISD of Net Trade balance	YYYYMMDD	<u>69</u> €
164	Quantity	Int	18	Quantity of the Net SI balance	Alphanumerical	<u>67</u> €
182	Quantity unit	String	3	Quantity unit code of the Net Trade balance. (UNT)	Alphanumerical	<u>67</u> €
185	Cash amount	String	18	Cash amount of the Net Trade balance	Alphanumerical	<u>62</u> €
203	Payment currency	String	3	Payment currency of Net Trade balance	ISO 4217 standard	<u>66</u> €
206	Related LCH SA instruction's reference	String	16	Internal reference of the original Outbound (SI)	Alphanumerical	<u>67</u> €

## Field Code Changed

Field Code Changed

5.4 UNCLEARED OUTBOUND INFORMATION FILE

This report file concerns particularly the all "OUTBOUND INFORMATION" which provides to Euronext with all actual Settlement Outbounds generated by LCH SA and sent to the Members / Settlement Agent. The global rule is to send one file for each Trading Member Firm per business day.

The number of files will be 1 per Trading Member <sup>3</sup>

The aim of this file is to give each Trading Member Firm the detail of its Settlement Outbounds:

• All MT5xx messages sent by LCH SA which related to both records 00280 and 00281 of the NET file

This file is composed of MT5xx messages.

<sup>3</sup> A Member not entitled will receive an empty file: headers, footers, empty body

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## 5.4.1 Uncleared Outbound File Name

Name of the file	Production description	Test description
Uncleared Outbound File (OBF)	LCH_EP********WCOBF_date_version.txt	LCH_EH******** <b>WCOBF_</b> date_version.txt

"\*\*\*\*\*\*\*" Member code 8 digits.

"date" Year (4 digits) month (2 digits) and day (2 digits). version nn (incremented version number for a business date from 01, 02, etc.)

## 5.4.2 Uncleared Outbound record

File is text (.txt) file.

## 5.4.2.1 Main header

Position	Field Name	Format	Length	Description			
0	Record type	String	5	Type of record. Value '00000'			
5	File type	String	3	Type of the file. Value 'OBF'			
8	Date time creation	Int	14	Date and time of the creation of the file. Format: YYYYMMDDHHMMSS.			
22	Business date	Int	8	Reference day in Format: YYYYMMDD			
30	30 Participant code		10	Code of the Member.			
40	Participant BIC code	String	11	BIC Code of the Member			

## 5.4.2.2 Main footer

One Main Footer is generated for each member file as follows:

	Position	Field Name	Format	Length	Description		
	0	Record type	<u>String</u> String	5	Type of the record. Value '99999'.	 	Formatted: Font: 10 pt
	5	File type	<u>String</u> String	3	Type of the file. Value 'OBF'	 	Formatted: Font: 10 pt
ĺ	8	Line counter	Int	15	Number of messages in the file		

#### 5.4.2.3 Uncleared Outbound detail

Messages 15022 appears one behind the other without any specific separator character

Field Name Swift Tag	Tag Value MT540	Tag Value MT541	Tag Value MT542	Tag Value MT543	
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Warrants & Certificates LCH

16R: Start of block	:16R:GENL				
20C: Sender's reference	:20C::SEME//	Outbound internal reference	Outbound internal reference	Outbound internal reference	Outbound internal reference
23G: Function	:23G:NEWM	Telefenee		Tererence	reference
98A: Preparation Date	:98C:PREP//	Date/Time generation of Instruction message	Date/Time generation of instruction message	Date/Time generation of Instruction message	Date/Time generation of Instruction message
16S: End of block	:16S:GENL				
16R: Start of block	:16R:TRADDET				
94B:Place of Trade	94B::TRAD//EXCH	Place of Trade 'XMLI' Euron ext Paris.			
98A: Settlement date	:98A::SETT//	Intended settlement date	Intended settlement date	Intended settlement date	Intended settlement date
98A: Trade date	:98A::TRAD//	Trade date	Trade date	Trade date	Trade date
35B: Id of the financial instrument	:35B:	"ISIN" + " " + Instrument ISIN			
16S: End of block	:16S:TRADDET				
16R: Start of block	:16R:FIAC				
36B: Quantity of financial instrument	:36B::SETT	If Quantity unit code = "FMT" :36B::SETT//F AMT/Security quantity If Quantity unit code = "UNT" 36B::SETT//U NIT/ Security quantity	If Quantity unit code = "FMT" :36B::SETT//F AMT/Security quantity If Quantity unit code = "UNT" 36B::SETT//U NIT/ Security quantity	If Quantity unit code = "FMT" :36B::SETT//F AMT/Security quantity If Quantity unit code = "UNT" 36B::SETT//U NIT/ Security quantity	If Quantity unit code = "FMT" :36B::SETT//F AMT/Security quantity If Quantity Unit code = "UNT" 36B::SETT//U NIT/ Security quantity
97A: Account	:97A::SAFE//	Credited participant security account code	Debited participant security account code	Credited participant security account code	Debited participant security account code
16S: End of block	:16S:FIAC				
16R: Start of block	:16R:SETDET				
22F: Indicator	:22F::SETR//	Type of Settlement Transaction	Type of Settlement Transaction	Type of Settlement Transaction	Type of Settlement Transaction

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Warrants & Certificates LCH

		Indicator: 'TRAD' Trade	Indicator: 'TRAD' Trade	Indicator: 'TRAD' Trade	Indicator: 'TRAD' Trade
16R: Start of block	:16R:SETPRTY				
95P: Party	:95P::DEAG//	Debited BIC participant security account code	Not present	Debited BIC participant security account code	Not present
	Or				
	:95P::REAG//	Not present	Credited BIC participant security account code	Not present	Credited BIC participant security account code
16S: End of block	:16S:SETPRTY				
16R: Start of block	:16R:SETPRTY				
95P: Party (Buyer)	:95P::BUYR//	Buyer TMF BIC code	Buyer TMF BIC code	Buyer TMF BIC code	Buyer TMF BIC code
97A: Account	:97A::SAFE//	Credited participant security account code	Credited participant security account code	Credited participant security account code	Credited participant security account code
16S: End of block	:16S:SETPRTY				
16R: Start of block	:16R:SETPRTY				
95P: Party (Seller)	:95P::SELL//	Seller TMF BIC code	Seller TMF BIC code	Seller TMF BIC code	Seller TMF BIC code
97A: Account	:97A::SAFE//	Debited participant security account code	Debited participant security account code	Debited participant security account code	Debited participant security account code
16S: End of block	:16S:SETPRTY				
16R: Start of block	:16R:SETPRTY				
:95P:Party (Place of Settlement)	:95P::PSET//	CSD BIC code	CSD BIC code	CSD BIC code	CSD BIC code
16S: End of block	:16S:SETPRTY				
16R: Start of Block	:16R:AMT	Not present		Not present	

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1.4.0

Euronext Cash Markets – Optiq $\ensuremath{\,^{\otimes}}$  End Of Day Interface Specifications Files

Warrants & Certificates LCH

19A: Cash amount	:19A::SETT//	Not present	Payment currency + Cash amount of the Outbound with its decimal If settlement instruction type is 'DWP', amount is negatively	Not present	Payment currency + Cash amount of the Outbound with its decimal If settlement instruction type is 'DWP', amount is negatively
16S: End of block 16S: End of block	:16S:AMT :16S:SETDET	Not present	signed.	Not present	signed.

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## 6. ORDER FILE FIELD DESCRIPTIONS

## Α

## ACCOUNTNUMBER

Field Name	Account Number
Description	Client account number identifying the investor's account. This field is part of the clearing aggregate.
Used For	Cash and Derivatives
Format	Alphanumerical ID
Tech Format	character
Length	12
Possible Values	Alphanumerical
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

## ACCOUNTTYPE

Field Name	Account Type
Description	Indicates the account type for which the order is entered. For example, an order can be entered for a client account, a house account or a liquidity provider account.
	For Cross orders it specifies the account type for which the buy side of a cross order is entered.
	- Non-LP clients are not allowed to use the type '6' (Liquidity Provider).
	- Only members acting as Retail Member Organizations (RMO) can send '4' (RO) orders on behalf of their retail clients.
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	1 = Client
	2 = House
	4 = RO [C]
	6 = Liquidity Provider
	7 = Related Party [C]
	8 = Structured Product Market Maker [C]
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format



## CLEARINGFIRMID

Field Name	Clearing Firm ID
Description	Clearing firm ID.
	Identifier of the give-up firm when a give-up is executed (a give-up is a trade executed by a firm for the client of another firm, the latter being referred to as the give-up firm).
Used For	Cash and Derivatives

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## Order File Field Descriptions

Format	Alphanumerical ID
Tech Format	character
Length	11
Possible Values	Firm ID
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# CLEARINGINSTRUCTION

Field Name	Clearing Instruction
Description	Clearing Instruction.
	Indicates the pre-posting and give-up action to be taken by the clearing system when a trade has occurred.
	Process normally
	<ul> <li>Manual mode (pre-posting and/or pre-giveup)</li> </ul>
	<ul> <li>Automatic posting mode (trade posting to the position account number specified)</li> </ul>
	<ul> <li>Automatic give-up mode (trade give-up to the give-up destination number specified) [C]</li> </ul>
	<ul> <li>Automatic and account authorization [D]</li> </ul>
	<ul> <li>Manual and account authorization [D]</li> </ul>
	<ul> <li>Give-up to single firm [D]</li> </ul>
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 16
Length	4
Possible Values	0 = Process normally (formerly Systematic posting) [C]
	8 = Manual mode
	9 = Automatic posting mode
	10 = Automatic give-up mode [C]
	4008 = Automatic and account authorization [D]
	4009 = Manual and account authorization [D]
	4010 = Give-up to single firm [D]
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

## CLIENTID

Field Name	Client ID
Description	Field used to identify the client (investor).
Used For	Cash and Derivatives
Format	Alphanumerical ID
Tech Format	character
Length	11
Possible Values	Alphanumerical
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

## CLIENTORDERID

Field Name	Client Order ID
Description	An identifier of a message assigned by the Client when submitting an order to the Exchange.
	Clients must provide a Client Order ID in every inbound application message, otherwise the message will be immediately rejected by the OEG.
	Clients may provide any value that respects the Client Order ID format, which is an 8-byte signed integer, and the ranges as defined according to their access. The Exchange recommends setting an unique ID per order, Firm and Symbol Index.
	For order entry, the Client Order ID value is not checked by the Exchange, it is simply returned in the corresponding outbound message to allow clients to reconcile the response message with their original inbound request.
	For modification and cancellation using the Original Client Order ID as unique identifier, the value is checked by the Exchange for possible duplicates, i.e. different orders submitted with the same Client Order ID. In case of duplication, the inbound request is rejected with the according error code.
Used For	Cash and Derivatives
Format	Numerical ID
Tech Format	signed integer 64
Length	20
Possible Values	From -2^63+1 to 2^63-1
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

## CUMULATEDQUANTITY

Field Name	Cumulated Quantity
Description	Cumulated quantity (to be calculated with Quantity Decimals).
	Total number of shares filled. If an order is partially filled for a quantity q1, then partially filled for a quantity q2, in the first execution report, CumQty = q1 and in the second execution report, CumQty = q1 + q2.
Used For	Cash and Derivatives
Format	Quantity
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

## D

## DARKEXECUTIONINSTRUCTION

Field Name	Dark Execution Instruction
Description	Field used as instruction for dark order handling (For Future Use). Values specified, in the list of possible values, indicate the bit positions that should be used to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.
	- Dark Indicator: indicates whether the client requests its order to benefit from a Pre-Transparency waiver to match the order in the Dark. (0: No ; 1: Yes)

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	- Deferred Trade Indicator: indicates whether the client requests a deferred publication for a Hidden Order. (0: No ; 1: Yes)
	- Display Order Interaction: indicates whether the client requests its hidden order to match also with LIT orders. (0: No ; 1: Yes)
	- Sweep Order Indicator: indicates whether the client requests a sweep to his order between both LIT and the hidden pool of liquidity (Dark). (0: No ; 1: Yes)
	- Minimum Quantity Type: indicates whether the Minimum Quantity for a dark order is MES or MAQ. (0: MAQ ; 1: MES)
Used For	Cash
Format	Bitmap
Tech Format	unsigned integer 8
Length	15
Possible Values	0 = Dark Indicator
	1 = Deferred Trade Indicator
	2 = Displayed Order Interaction
	3 = Sweep Order Indicator
	4 = Minimum Quantity Type
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# DISCLOSEDQUANTITY

Field Name	Disclosed Quantity
Description	Maximum number of quantity units to be shown to market participants (Iceberg Order). (To be calculated with Quantity Decimals)
Used For	Cash
Format	Quantity
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

#### DISPLAYEDQUANTITY

Field Name	Displayed Quantity
Description	Order quantity displayed to the market (Iceberg only)
Used For	Cash
Format	Quantity
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# Ε

# EMM

Field Name	EMM
Description	Defines the Exchange Market Mechanism applied on each platform.
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	2
Possible Values	1 = Cash and Derivative Central Order Book (COB)
	2 = NAV Trading Facility [C]
	4 = Derivative Wholesales [D]
	5 = Cash On Exchange Off book [C]
	6 = Euronext off-exchange trade reports
	7 = Derivative On Exchange Off book [D]
	8 = ETF MTF - NAV Central Order Book [C]
	99 = Not Applicable (For indices and iNAV) [C]
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# ENSYREC

Field name	EnsYRec
Description	Record Type. Defines the type of record in a file.
Format	Int
Length	2
Possible values	(see record structures) 02' Body
Used in	Order record in 'Legacy' UTP format

# EODORDERSTATUS

Field Name	EOD Order Status
Description	Order Status for End Of Day Order file
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	0 = New
	1 = Partially Filled
	2 = Replaced
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

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# EXECUTIONINSTRUCTION

Fie	eld Name	Execution Instruction
De	escription	Field used as instruction for order handling. Values specified, in the list of possible values, indicate the bit
		positions that should be used to set zero (0) or one (1) values. A single field contains multiple values
		provided in different positions.
		- STP resting order: indicates whether the STP mechanism is "Cancel resting order" or not. (0: STP Resting
		Order mechanism deactivated ; 1: STP Resting Order mechanism activated)
		- STP incoming order: indicates whether the STP mechanism is "Cancel incoming order" or not. (0: STP Incoming Order mechanism activated)
		- Disclosed Quantity Randomization: indicates whether the client requests or not a randomization for the
		disclosed quantity of his iceberg order. (0: No ; 1: Yes)
		- Disabled Cancel On Disconnect Indicator: indicates whether the client sets his order to be persisted (is
		not in scope of the Cancel On Disconnect mechanism) or not. (0: Cancel on Disconnect enabled ; 1: Cancel
		on Disconnect disabled)
		- RFQ answer: indicates whether the message is an answer to a Quote Request (10) message or not. (0: No : 1: Yes)
		- RFQ confirmation: indicates whether the message is a confirmation of a Quote Request (10) message or
		not. (0: No ; 1: Yes)
		- Conditional order: indicates for Block segment whether the order is conditional or not. (0: Firm Order ; 1: Conditional Order)
		- STP both orders: indicates whether the STP mechanism is "cancel both orders" or not. (0: STP Both
		Orders mechanism deactivated ; 1: STP Both Orders mechanism activated)
		order handling. Values specified, in the list of possible values, indicate the bit positions that should be used
		to set zero (0) or one (1) values. A single field contains multiple values provided in different positions.
		STP resting order: indicates whether the STP rule is "cancel resting order" or not. (0: STP Resting Order
		deactivated ; 1: Cancel Resting Order)
		-STP incoming order: indicates whether the STP rule is "cancel incoming order" or not. (0: STP Incoming Order deactivated : 1: Cancel Incoming Order)
		Disclosed Quantity Randomization: indicates whether the client requests or not a randomization for the
		disclosed quantity of his iceberg order. (0: No ; 1: Yes)
		-Disabled Cancel On Disconnect Indicator: indicates whether the client sets his order to be persisted (is
		not in scope of the Cancel On Disconnect mechanism) or not. (0: Cancel on Disconnect enabled ; 1: Cancel
		on Disconnect disabled)
		-RFQ answer: indicates whether the message is, or not, a quote sent as an answer to a Quote Answer (10)
		message. (0: No; 1: Yes)
		- RFQ Confirmation: indicates whether the message is, or not, an order sent as a confirmation of a Request For Quote (0: No; 1: Yes).
	Used For	Cash and Derivatives
	Format	Bitmap
Tec	h Format	unsigned integer 8
	Length	6
Possib	le Values	0 = STP resting order [C]
		1 = STP incoming order [C]
		2 = Disclosed Quantity Randomization [C]
		3 = Disabled Cancel On Disconnect Indicator
		4 = RFQ Answer [C]
		5 = RFQ Confirmation [C]
		<u>6</u> = Conditional Order
		7 = STP both orders
	Used In	Order record in Optiq XML format
		Order record in 'Legacy' UTP format

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# F

# FREETEXT

Field Name	Free Text
Description	Free Text is manually entered by the trader issuing the order. This field is part of the clearing aggregate.
Used For	Cash and Derivatives
Format	Text
Tech Format	character
Length	18
Possible Values	Free Text
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# L

# **L**EAVESQUANTITY

Field Name	Leaves Quantity
Description	Indicates the remaining quantity of an order, i.e. the quantity open for further execution.
Used For	Cash and Derivatives
Format	Quantity
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# 

Field Name	Logical Access ID
Description	Identifier of the Logical Access.
Used For	Cash and Derivatives
Format	Numerical ID
Tech Format	unsigned integer 32
Length	10
Possible Values	From 0 to 2^32-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# LONGCLIENTID

Field Name Long Client ID

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#### Order File Field Descriptions

<u>Description</u>	Field used to identify the Client (investor), or trader's reference / posting order number for a pre-posting, entered as a free text used for clearing purposes. This field is part of the clearing aggregate for Derivatives.
Used For	Derivatives
<u>Format</u>	Alphanumerical ID
Tech Format	<u>character</u>
<u>Length</u>	<u>16</u>
Possible Values	
<u>Used In</u>	Order record in Optiq XML format

# LPROLE

Field Name	LP Role
Description	Liquidity Provider Role identifies the type of the Liquidity Provider when Account Type is equal to "Liquidity Provider".
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	1 = Liquidity Provider or Market Maker
	3 = Retail Liquidity Provider [C]
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# Μ

#### MINIMUMORDERQUANTITY

Field Name	Minimum Order Quantity
Description	Minimum quantity to be executed upon order entry (else the order is rejected), (To be calculated with Quantity Decimals).
Used For	Cash and Derivatives
Format	Quantity
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# MODIFIEDLOGICALACCESSID

Field Name	Logical Access ID
Description	Identifier of the Logical Access.
Used For	Cash and Derivatives
Format	Numerical ID
Tech Format	unsigned integer 32

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Length	10
Possible Values	From 0 to 2^32-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

#### MODIFIEDSENDERCOMPID

Field Name	SenderCompID
Description	Identifier of the member firm that sends the message.
	It is provided by the Exchange upon the registration of the Firm by the Membership department.
Used For	Cash and Derivatives
Format	Text
Tech Format	character
Length	8
Possible Values	Firm ID
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format



#### **ONBEHALFOFCOMPID**

Field Name	OnBehalfOfCompID
Description	ID of the issuing firm when the message is sent through a third party.
Used For	Cash and Derivatives
Format	Text
Tech Format	character
Length	8
Possible Values	Firm ID
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

### **OPENCLOSE**

Field Name	Open Close
Description	Open Close Indicator, Posting action. This field is part of the clearing aggregate.
	The first bit will be used to indicate whether this field is being actively used or not (1 = Actively Used ; 0 = Field Not Used).
	For each Leg 0 means Open and 1 means Close.
	Leg 2 to Leg 9 are not applicable for cash instruments.
Used For	Cash and Derivatives
Format	Bitmap
Tech Format	unsigned integer 16

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#### Order File Field Descriptions

Length	10
Possible Values	0 = Field Actively Used
	1 = Leg 1
	2 = Leg 2 [D]
	3 = Leg 3 [D]
	4 = Leg 4 [D]
	5 = Leg 5 [D]
	6 = Leg 6 [D]
	7 = Leg 7 [D]
	8 = Leg 8 [D]
	9 = Leg 9 [D]
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# **OPTIQSEGMENT**

Field Name	Optiq Segment
Description	An Optiq segment is a universe of instruments sharing common trading properties.
	Instruments have the flexibility to be moved from one partition to another within an Optiq segment.
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	2
Possible Values	1 = Equities
	2 = Funds
	3 = Fixed Income
	4 = Warrants & Certificates
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# ORDERENTRYTIME

Field Name	Book IN Time
Description	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)
Used For	Cash and Derivatives
Format	Epoch Time in Nanoseconds
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optig XML format Order record in 'Legacy' UTP format

#### ORDEREXPIRATIONDATE

Field Name Order Expiration Date

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#### Order File Field Descriptions

Field used as date of order expiration for GTD orders.
- Format : MMDD
- Minimum Value : 0101 (Jan 1st)
- Maximum Value : 1231 (Dec 31st)
Cash and Derivatives
Date
unsigned integer 16
5
From 0 to 2^16-2
Order record in Optig XML format
Order record in 'Legacy' UTP format

# ORDEREXPIRATIONTIME

Field Name	Order Expiration Time
Description	Field used as time of order expiration for GTT orders.
	- Format : HHMMSS
	- Minimum Value : 0 (00:00:00)
	- Maximum Value : 235959 (23:59:59)
Used For	Cash
Format	Numerical ID
Tech Format	unsigned integer 32
Length	10
Possible Values	From 0 to 2^32-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

#### ORDERID

Field Name	Order ID
Description	The Order ID used in the messages for trading purposes is a numerical order identifier assigned by the matching engine, unique per instrument over the entire lifetime of the order, which means that this value remains unchanged, even upon modifications of the.
	For reconciliation purposes with Euronext's clearing & settlement partners clients may obtain the Order Number and the Order Entry Date from the Order ID field, which is composed of three parts, as depicted below:
	<ul> <li>The least-significant 2-bytes include the relative calendar days number since 1-jan-1970 at 0:00 UTC (EPOCH); (Please note, currently the clearing partners may use the date corresponding to this value in ASCII format).</li> </ul>
	- Then 1-byte includes the EMM.
	- Then the remaining most-significant 5-bytes contain the Order Number which is a sequence number restarted at 1 at each start of day.
	Example:
	<ul> <li>Let's take an order submitted on 10/03/17 on EMM = 1 having a sequence number = 1234</li> <li>The corresponding OrderID assigned by Optiq in internal format is calculated as follows:         <ul> <li>The relative number of days of 10/03/20 since EPOCH is 17235 ===&gt; 43 53 in hexa</li> <li>The EMM = 1 ===&gt; 01 in hexa</li> </ul> </li> </ul>
	<ul> <li>Sequence number 1234 ====&gt; 04 D2 in hexa</li> </ul>
	<ul> <li>The internal representation of the OrderID in hexadecimal is then: 00 00 00 04 D2 01 43 53</li> </ul>

#### Order File Field Descriptions

	- The conversion in decimal of the OrderID is: 20703167315
Used For	Cash and Derivatives
Format	Numerical ID
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# ORDERMODIFICATIONTIME

Field Name	Book IN Time
Description	Matching Engine IN time (in ns), time at which the corresponding inbound message entered the Matching Engine. (Time in number of nanoseconds since 01/01/1970 UTC)
Used For	Cash and Derivatives
Format	Epoch Time in Nanoseconds
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# ORDERPRICE

Field Name	Order Price
Description	Instrument price per quantity unit (To be calculated with Price/Index Level Decimals).
	For the Market Data feed:
	-Set to Null Value for priceless orders.
	For the Order Entry
	-It is mandatory for priced orders (Limit, Stop-limit) and must be set to Null Value where the price is irrelevant (Market, Stop-market, Peg, MTL).
Used For	Cash and Derivatives
Format	Price
Tech Format	signed integer 64
Length	20
Possible Values	From -2^63+1 to 2^63-1
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# **ORDERPRIORITY**

Field Name	Order Priority
Description	Rank giving the priority of the order. The order with the lowest value of Order Priority has the highest
	priority.

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#### Order File Field Descriptions

	Order Priority is unique per Symbol Index and EMM, therefore, it is also used as the unique order identifier in the market data feed.
	Order Priority should then allow clients to reconcile their orders between private order entry and market data feed.
	Used in conjunction with Previous Priority, for market data only.
Used For	Cash
Format	Numerical ID
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

#### ORDERQUANTITY

Field Name	Order Quantity
Description	Total order quantity, per quantity unit.(To be calculated with Quantity Decimals)
Used For	Cash and Derivatives
Format	Quantity
Tech Format	unsigned integer 64
Length	20
Possible Values	From 0 to 2^64-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# ORDERSIDE

Field Name	Order Side
Description	Indicates the side of the order.
	Please note that the value Cross is used only for the Order Entry, it will never be populated in the Market Data feed.
Used For	Cash
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	1 = Buy
	2 = Sell
	3 = Cross [i]
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

#### ORDERTYPE

Field Name	Order Type
Description	Type of Order.

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#### Order File Field Descriptions

	Please note that the values Stop-market/Stop-market-on-Quote, Stop limit/Stop-limit-on-quote, Average Price, Iceberg and Mid-Point Peg are used only for the Order Entry, they will never be populated in the Market Data feed.
Used For	Cash
Format	Enumerated
Tech Format	unsigned integer 8
Length	2
Possible Values	1 = Market
	2 = Limit
	3 = Stop-market or Stop-market-on-quote [C]
	4 = Stop-limit or Stop-limit-on-quote [C]
	5 = Primary Peg [C]
	6 = Market to limit
	7 = Market Peg (For Future Use) [C]
	8 = Mid-Point Peg (For Future Use) [C]
	9 = Average Price (For Future Use) [C]
	10 = Iceberg [C]
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# Ρ

### PARTITIONID

Field Name	Partition ID
Description	Identifies uniquely an Optiq partition across all the Exchange partitions.
Used For	Cash and Derivatives
Format	Numerical ID
Tech Format	unsigned integer 16
Length	5
Possible Values	From 0 to 2^16-2
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

### PEGOFFSET

Field Name	Peg Offset
Description	(Future Use) Tick offset for a pegged order.
	Used to indicate the signed tick added to the peg reference for a pegged order.
Used For	Cash
Format	Numerical ID
Tech Format	signed integer 8
Length	4
Possible Values	From -127 to 127
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

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# S

# SENDERCOMPID

Field Name	SenderCompID
Description	Identifier of the member firm that sends the message.
	It is provided by the Exchange upon the registration of the Firm by the Membership department.
Used For	Cash and Derivatives
Format	Text
Tech Format	character
Length	8
Possible Values	Firm ID
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

### **STOPTRIGGERPRICE**

Field Name	Stop Trigger Price
Description	Stop Trigger Price is mandatory for stop orders.
Used For	Cash
Format	Price
Tech Format	signed integer 64
Length	20
Possible Values	From -2^63+1 to 2^63-1
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# <u>STP ID</u>

Field Name	<u>STP ID</u>
Description	Identifier of a group of Users or Traders sharing the same business activity at the same Firm.
Used For	Cash and Derivatives
<u>Format</u>	Numerical ID
Tech Format	unsigned integer 16
<u>Length</u>	2
Possible Values	From 0 to 2^16-1
Used In	Order record in Optig XML format

#### SYMBOLINDEX

Field Name	Symbol Index
Description	Exchange identification code of the instrument.

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#### Order File Field Descriptions

	This identifier is unique per triplet: MIC, ISIN and currency. The correspondence of the Symbol Index and with the instrument characteristics is provided in the standing data messages and associated files.
Used For	Cash and Derivatives
Format	Numerical ID
Tech Format	unsigned integer 32
Length	10
Possible Values	From 0 to 2^32-2
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

#### **TECHNICALORIGIN**

Т

Field Name	Technical Origin
Description	Indicates the origin of the order; for example, manual entry, or an order coming from a Program Trading system. This field is part of the clearing aggregate.
Used For	Cash
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	1 = Index trading arbitrage
	2 = Portfolio strategy
	3 = Unwind order
	4 = Other orders (default)
	5 = Cross margining
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

#### TIMEINFORCE

Field Name	Time In Force
Description	Specifies the maximum validity of an order.
Description	For Stop orders it provides the maximum validity when not triggered.
Used For	
Useu FUI	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	0 = Day
	1 = Good Till Cancel
	2 = Valid for Uncrossing [C]
	3 = Immediate or Cancel
	4 = Fill or Kill [C]
	5 = Good till Time [C]
	6 = Good till Date
	7 = Valid for Closing Uncrossing [C]
	8 = Valid for Session [D]

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Used In	Order record in Optiq XML format	
	Order record in 'Legacy' UTP format	

# TRIGGEREDSTOPTIMEINFORCE

Field Name	Triggered Stop Time In Force
Description	Specifies the maximum validity of an triggered stop order.
	If both Time In Force and Triggered Stop Time In Force are Good till Date they will both refer to the same Order Expiration Date (or Order Expiration Time) provided in the order. If Order Expiration Date is modified it will be for both untriggered stop and triggered stop, or only for the triggered stop if the order was previously triggered.
Used For	Cash and Derivatives
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	0 = Day
	1 = Good Till Cancel
	6 = Good till Date
Used In	Order record in Optiq XML format
	Order record in 'Legacy' UTP format

# U

#### UNDISCLOSEDICEBERGTYPE

Field Name	Undisclosed Iceberg Type
Description	(For Future Use) Order handling related to the undisclosed part of an Iceberg order eligible to a matching in the Dark pool of liquidity.
Used For	Cash
Format	Enumerated
Tech Format	unsigned integer 8
Length	1
Possible Values	1 = Limit
	2 = Peg Mid-Point
	3 = Peg Primary
	4 = Peg Market
Used In	Order record in Optig XML format
	Order record in 'Legacy' UTP format

# **UNDISCLOSEDPRICE**

Field Name	Undisclosed Price
Description	(For Future Use) Optional price for the hidden part of an Iceberg order.
Used For	Cash
Format	Price
Tech Format	signed integer 64

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Length	20	
Possible Values	From -2^63+1 to 2^63-1	
Used In	Order record in Optiq XML format	
	Order record in 'Legacy' UTP format	

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# 7. TRADE FILE FIELD DESCRIPTIONS

# C

Field name	CCPID ALL
Description	Indicates the identification of the Clearing organization handling the trade.
Format	Char
Length	1
Possible values	<ul> <li>'0' No CCP</li> <li>'1' LCH SA</li> <li>'6' EuroCCP</li> <li>'7' Euroclear</li> <li>'8' SIX x-clear</li> </ul>
Used in	Trade Record

# CLASSID

Field name	ClassID ALL
Description	Class identifier.
Format	String
Length	2
Possible values	Alphanumerical
Used in	Trade Record

# COUNTERPARTFIRMID

Field name	CounterpartFirmID ALL
Description	ID of the Counterpart Firm in specific cases described below. The counterpart identifier is provided in case the relaled trade is the result of: • the Internal Matching Service (IMS) without clearing, • the Internal Clearing Service (ICS) (For Future Use), • a transaction performed on the Public Auctions Market (VPU), • a transaction performed on a non-clearable instrument, • a transaction performed under a Bilateral Settlement agreement. If not filled, the field is blank padded.
Format	String
Length	8
Possible values	Alphanumerical
Used in	Trade Record

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# CURRENCY

Field name	Currency ALL
Description	Currency code. Identifies currency used for price. Future use > Absence of this field is interpreted as the default currency for the instrument. It is recommended that systems provide the currency value whenever possible.
Format	String
Length	3
Possible values	ISO 4217 standard
Used in	Trade Record

# Ε

# EMM

Field name	EMM ALL
Description	Defines the Exchange Market Mechanism applied on each platform.
Format	Int
Length	2
Possible values	'1'       Cash and Derivative Central Order Book (COB)         '2'       NAV Trading Facility         '4'       Derivative Wholesales         '5'       Cash On Exchange Off book         '6'       Euronext off-exchange trade reports         '7'       Derivative On Exchange Off book         '8'       ETF MTF - NAV Central Order Book         '99'       Not Applicable (For indices and iNAV)
Used in	Trade Record

# ENSYREC

Field name	EnsYRec ALL
Description	Record Type. Defines the type of record in a file.
Format	Int
Length	2
Possible values	(see record structures) '01' Header '02' Body '03' Footer
Used in	Trade Record

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# F

#### FINANCIAL MARKETCODE

Field name	FinancialMarketCode ALL
Description	Financial market from which the instrument belongs for a given Class.
Format	String
Length	3
Possible values	025: Paris - cash instruments (regulated and non-regulated markets)         277: Paris - Lending/Borrowing         278: Brussels - cash instruments         279: Amsterdam - cash instruments         290: Lisbon - cash instruments         274: Paris - MONEP instruments         276: Paris - MATIF instruments         277: Paris - MATIF instruments         278: Brussels - cash instruments         276: Paris - MATIF instruments         277: Paris - MATIF instruments         278: Brussels - cash instruments         278: Brussels - cash instruments         280: Brussels - cash instruments         280: Brussels - derivative instruments         281: Amsterdam - derivative instruments         290: Lisbon - cash instruments         291: Lisbon - derivative instruments         292: Luxembourg Cash markets         293: Luxempourg Cash markets         293: Europe
Used in	Trade Record

# I.

# INSTRLONGID

Field name	InstrLongID ALL
Description	Long ID of an instrument
Format	String
Length	12
Possible values	Alphanumerical
Used in	Trade Record

#### **INSTRMKTPLACE**

Field name	InstrMktPlace ALL
Description	ID of the market place where instrument price is established.
Format	Int
Length	3
Possible values	Numerical

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Field name	InstrMktPlace ALL
Used in	Trade Record

#### INSTRMNEMOCODE

Field name	InstrMnemoCode ALL
Description	Mnemonic code of a cash instrument. Only applicable if the instrument is a cash instrument.
Format	String
Length	5
Possible values	Alphanumerical
Used in	Trade Record

#### ITRANYAPL

Field name	ITranYApI <del>SP.</del>
Description	Trade type indicator. Indicates the type of trade (normal, cross, valuation, internalized).
Format	Char
Length	1
Possible values	'0'       Normal trade         '1'       Cross trade         '5'       Internalized trade         '6'       Internalized cross trade         '7'       RMF trade         '8'       Internalized RMF trade
Used in	Trade Record

# L

# LASTPX

Field name	LastPx ALL
Description	Price of last fill.
Format	Int (Decimal locator + Amount)
Length	19
Possible values	Price (1+18)
Used in	Trade Record

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# **LASTSHARES**

Field name	LastShares ALL
Description	Quantity of last fill. Quantity of shares bought/sold on the last fill.
Format	Int
Length	12
Possible values	Quantity
Used in	Trade Record

# Μ

# ΜΙ

Field name	MIC ALL
Description	Market identification code. Future use ► Identifier for a market place as defined by the ISO 10383 standard. Set to 'SI' for an SI trade.
Format	String
Length	4
Possible values	ISO 10383 standard or 'SI'
Used in	Trade Record

# Ν

# NSEQOM10

Field na	ame	NSeqOm10 ALL
Descrip	tion	Order ID. Number assigned by the trading engine when an order is entered in the system. Unique per instrument and day.
For	mat	Int
Ler	ngth	10
Possible va	lues	Numerical
Use	d in	Trade Record

# 0

# ONBEHALFOFCOMPID8

Field name	OnBehalfOfCompID8 ALL
Description	ID of the order's issuing firm. Identifier of the firm to which the order belongs (may differ from the <u>OnBehalfOfLocationID</u> that identifies a firm's front-end server and from <u>SenderCompID</u> that identifies the gateway).
Format	String
Length	8
Possible values	Firm ID
Used in	Trade Record

# ORDERENTRYDATE

Field name	OrderEntryDate ALL
Description	Date of order entry. Date the new order entered the trading engine.
Format	String
Length	8
Possible values	YYYYMMDD
Used in	Trade Record

# R

# RULE80A

Field name	Rule80A ALL
Description	Order origin. Indicates the account type for which the order is entered. For example, an order can be entered for a Client account, a House account or a Liquidity Provider.
Format	Char
Length	1
Possible values	'1'       Client         '2'       House         '3'       RLO         '4'       RO         '6'       Liquidity Provider         '7'       Related Party         '8'       Structured Product Market Maker
Used in	Trade Record

# S

### SIDE

Field name	Side ALL
Description	Order side.
Format	Char
Length	1
Possible values	'1' (or 'A' in the trade file)     Buy       '2' (or 'V' in the trade file)     Sell
Used in	Trade Record

# SIDETAKER

Field name	SideTaker ALL
Description	Taker order side. Indicates the side of the order in case the trade implies a taker order.
Format	Char
Length	1
Possible values	'A' Buy 'V' Sell
Used in	Trade Record

# SYMBOL

Field name	Symbol ALL
Description	Instrument ID. Identifier of the instrument involved in the order.
Format	String
Length	12
Possible values	ISIN or ISIN-like
Used in	Trade Record

# SYMBOLINDEX

Field name	SymbolIndex ALL
Description	Exchange identification code of the instrument. This identifier is unique per triplet: MIC, ISIN and currency. The correspondence of the Symbol Index and with the instrument characteristics is provided in the standing data messages and associated files
Format	Int
Length	10
Possible values	From 1 to 4280099999

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Field name	Symbolindex ALL
Used in	Trade Record

# Т

# TRADEDATE

Field name	TradeDate ALL
Description	Date of the trade
Format	String
Length	8
Possible values	YYYYMMDD
Used in	Trade Record

# TRADEDATETIME

Field name	TradeDateTime ALL
Description	Date and time of the trade
Format	String
Length	14
Possible values	YYYYMMDDHHMMSS
Used in	Trade Record

# TRADEREFID

Field name	TradeRefID ALL
Description	Trade reference ID.
Format	Int
Length	10
Possible values	Numerical
Used in	Trade Record

### TRADERID

Field name	TraderID ALL
Description	Trader ID.
Format	String
Length	8

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Field name	TraderID ALL
Possible values	Alphanumerical
Used in	Trade Record

# TRADETIMESECONDSGRANULARITY

Field name	TradeTimeSecondsGranularity ALL
Description	Indicates the number of microseconds in the time at which the trade is generated (ssssss). This field works as a combination with field "TradeDateTime". In order to get the complete Trade Date Timestamp in micro second, fields "TradeDateTime" + "TradeTimeMicroSeconds" must be combined, with the following format as result : YYYYMMDDHHMMSSsssss
Format	Int
Length	6
Possible values	From 0 to 999999
Used in	Trade Record

# τντις

Field name	TVTIC ALL
Description	Trading Venue Transaction Identification Code.         Trading Venue Transaction Identification Code (TVTIC) is a field aimed at identifying an individual transaction.         It is generated by trading venues and disseminated to both the buying and the selling parties, in accordance with Article 12 of the Commission Delegated Regulation (EU) 2017/580 Regulatory Technical Standards (RTS).         Trading Venue Transaction Identification Code.         TVTIC is the concatenation of:         -       TradeRefID which is the Trade reference ID         -       Symbol which is the instrument ID (ISIN or ISIN-like)
Format	String
Length	22
Possible values	Alphanumerical (without zero padding) Ex : 1FR000000012 1125FR000000013
Used in	Trade Record

# W

#### WAIVERINDICATOR

Field name	WaiverIndicator RM (TCS)
Description	Indication as to whether the transaction was executed under a pre-trade waiver in accordance with Articles 4 and 9 of Regulation (EU) 600/2014. Used for TCS trades only.

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#### Trade File Field Descriptions

Field name	WaiverIndicator RM (TCS)
Format	Char
Length	4
Possible values	<ul> <li>(blank) As the field is optional</li> <li>'NLIQ' Negotiated transactions in liquid financial instruments</li> <li>'OILQ' Negotiated transactions in illiquid financial instruments</li> <li>'PRIC' Negotiated transactions subject to conditions other than the current market price of that equity financial instrument</li> </ul>
Conditions	<ul> <li>NLIQ - Applies for Equities &amp; ETFs that are flagged by ESMA as being a liquid financial instrument, this waiver is set on Off-Market On-Exchange trades that are (1) not VWAP transactions and (2) not identified as Large in Scale limit</li> <li>OLLQ - Applies for Equities &amp; ETFs that are flagged by ESMA as being an illiquid financial instrument, this waiver is set on Off-Market On-Exchange trades that are (1) not VWAP transactions and (2) not identified as Large in Scale limit</li> <li>OLLQ - Applies for Equities &amp; ETFs that are flagged by ESMA as being an illiquid financial instrument, this waiver is set on Off-Market On-Exchange trades that are (1) not VWAP transactions and (2) not identified as Large in Scale limit</li> <li>PRIC - Applies for:         <ul> <li>Any operations done on the Euronext Fund services (Paris and Amsterdam), covering the Fund orders either in Quantity or in Cash</li> <li>VWAP transaction for Equities</li> <li>"Cash Legs" of Delta-neutral trades reported on an Equity and/or ETF underlying</li> <li>(blank) - Applies when none of the above rules are met, including any transactions that are not identified as</li> </ul> </li> </ul>
	Large in Scale limit
Used in	Trade Record

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# 8. WARRANTS & CERTIFICATES LCH FILES FIELD DESCRIPTIONS

# В

# BIC OF THE COUNTERPART MEMBER SETTLEMENT AGENT

Field name	BIC of the Counterpart Member Settlement Agent ALL
Description	Participant BIC code of settlement agent owning the security account of the Counterpart Member.
Format	Char
Length	11
Possible values	Alphanumerical
Used in	Uncleared Netting File

# BUY/SELL INDICATOR

Field name	Buy/Sell Indicator ALL
Description	Uncleared Trade Buy/Sell indicator. Indicates the side of the trade.
Format	String
Length	1
Possible values	Alphanumerical
Used in	Uncleared Trade File

# С

# CASH AMOUNT

Field name	Cash Amount ALL
Description	Cash amount of the Net Trade balance
Format	Char
Length	18
Possible values	Alphanumerical
Used in	Uncleared Netting File

### COUNTERPART MEMBER SECURITY ACCOUNT AT SETTLEMENT AGENT

Field name	Counterpart Member Security Account at Settlement Agent ALL
Description	Participant security account of the Counterparty Member.
Format	Char
Length	35

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Field name	Counterpart Member Security Account at Settlement Agent ALL
Possible values	Alphanumerical
Used in	Uncleared Netting File

# Ε

### EXTERNAL TRADE REFERENCE

	Field name	External Trade Reference ALL
	Description	Uncleared Trade External reference
	Format	Char
	Length	15
P	ossible values	Alphanumerical
	Used in	Uncleared Trade File

# I

# INTENDED SETTLEMENT DATE

Field name	Intended Settlement Date ALL
Description	ISD of Uncleared Trade
Format	Int
Length	8
Possible values	YYYYMMDD
Used in	Uncleared Trade File Uncleared Netting File

### ISIN

Field name	ISIN ALL
Description	ISIN of the instrument
Format	Char
Length	12
Possible values	Alphanumerical
Used in	Uncleared Trade File Uncleared Netting File

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Euronext Cash Markets – Optiq <sup>®</sup> End Of Day Interface Specifications Files Field Descriptions

Warrants & Certificates LCH

# LCH SA INSTRUCTION'S REFERENCE

Field name	LCH SA Instruction's Reference ALL
Description	Outbound (SI) external reference
Format	Char
Length	16
Possible values	Alphanumerical
Used in	Uncleared Netting File

# Μ

L

#### MEMBER

Field name	Member ALL
Description	Member external Code reference
Format	Char
Length	10
Possible values	Alphanumerical
Used in	Uncleared Netting File

#### MEMBER CODE

Field name	Member Code ALL
Description	Uncleared Trade Member external code
Format	Char
Length	10
Possible values	Alphanumerical
Used in	Uncleared Trade File

# MEMBER COUNTERPART

Field name	Member Counterpart ALL
Description	Member Counterparty external Code reference
Format	Char

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Field name	Member Counterpart ALL
Length	10
Possible values	Alphanumerical
Used in	Uncleared Trade File Uncleared Netting File

#### MEMBER COUNTERPART ORIGIN

Field name	Member Counterpart Origin ALL
Description	Uncleared Trade Member Counterpart Origin Code
Format	String
Length	1
Possible values	'M': House 'T'': Market Maker 'C': Client
Used in	Uncleared Trade File

# MEMBER ORIGIN

Field name	Member Origin ALL
Description	Uncleared Trade Member Origin Code
Format	String
Length	1
Possible values	'M': House 'T": Market Maker 'C': Client
Used in	Uncleared Trade File

#### MEMBER SECURITY ACCOUNT AT SETTLEMENT AGENT

Field name	Member Security Account at Settlement Agent ALL
Description	Participant security account of the Member.
Format	Char
Length	35
Possible values	Alphanumerical
Used in	Uncleared Netting File

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#### MEMBER SETTLEMENT AGENT BIC CODE

Field name	Member Settlement Agent BIC Code ALL
Description	Participant BIC code of settlement agent owning the security account of the Member.
Format	Char
Length	11
Possible values	Alphanumerical
Used in	Uncleared Netting File

#### MEMBER TRADE FREE TEXT

Field name	Member Trade Free Text ALL
Description	Uncleared Trade Free text
Format	Char
Length	18
Possible values	Alphanumerical
Used in	Uncleared Trade File

### MEMBER TRADE ORDER NUMBER

Field name	Member Trade Order Number ALL
Description	Uncleared Trade order number
Format	Char
Length	16
Possible values	Alphanumerical
Used in	Uncleared Trade File

# Ρ

# PAYMENT CURRENCY

Field name	Payment Currenct ALL
Description	Payment currency of Net Trade balance (the Outbound – SI)
Format	Char
Length	3
Possible values	ISO 4217 standard
Used in	Uncleared Netting File

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Euronext Cash Markets – Optiq <sup>®</sup> End Of Day Interface Specifications Files Field Descriptions

Warrants & Certificates LCH

# Q

# QUANTITY

Field name	Quantity ALL
Description	quantity of the Net SI balance
Format	Int
Length	18
Possible values	Alphanumerical
Used in	Uncleared Netting File

# QUANTITY UNIT

Field name	Quantity Unit ALL
Description	Quantity unit code of the Net Trade balance. (UNT)
Format	Char
Length	3
Possible values	Alphanumerical
Used in	Uncleared Netting File

# R

# RECORD TYPE

Field name	Record Type ALL
Description	Defines the type of record in a file
Format	Char
Length	5
Possible values	"00275" – New Uncleared Trade "00280" – New Uncleared Net SI related to daily Netting "00281" – New Uncleared Net SI related to Regularizations
Used in	Uncleared Trade File Uncleared Netting File

# RELATED LCH SA INSTRUCTION'S REFERENCE

Fiel	d name	Related LCH SA Instructions Reference ALL
Des	cription	Outbound (SI) Reference
	Format	Char

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Field name	Related LCH SA Instructions Reference ALL
Length	16
Possible values	Alphanumerical
Used in	Uncleared Trade File Uncleared Netting File

# S

# SETTLEMENT INSTRUCTION TYPE

Field name	Settlement Instruction Type ALL
Description	Settlement Instruction Type
Format	Char
Length	3
Possible values	<ul> <li>'RFP' - Receive Free of Payment</li> <li>'DFP' - Delivery Free of Payment</li> <li>'RVP' - Receive versus Payment</li> <li>'DVP' - Delivery versus Payment</li> <li>'RWP' - Receive with Payment</li> <li>'DWP' - Delivery with Payment</li> <li>'CPO' - Cash payment Only</li> <li>'CRO '- Cash receive Only'</li> <li>'NIL' - Null Netting</li> </ul>
Used in	Uncleared Netting File

# Т

#### TRADE AMOUNT

Field name	Trade Amount ALL
Description	Uncleared Trade Amount
Format	Int
Length	18
Possible values	Alphanumerical
Used in	Uncleared Trade File

# TRADE CURRENCY

Field name	Trade Currency ALL
Description	Uncleared Trade currency
Format	Char

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Euronext Cash Markets – Optiq <sup>®</sup> End Of Day Interface Specifications Files Field Descriptions

Warrants & Certificates LCH

Field name	Trade Currency ALL	
Length		
Possible values	Alphanumerical	
Used in	Uncleared Trade File	

### TRADE DATE

Field name	rade date ALL		
Description	ade Date of Uncleared Trade		
Format	Int		
Length	8		
Possible values	YYYYMMDD		
Used in	Uncleared Trade File Uncleared Netting File		

# TRADE PRICE

Field name	ade Price ALL	
Description	leared Trade price	
Format		
Length	9	
Possible values	Alphanumerical	
Used in	Uncleared Trade File	

# TRADE QUANTITY

Field name	rade Quantity ALL	
Description	uantity of the Uncleared Trade	
Format		
Length	18	
Possible values	Alphanumerical	
Used in	Uncleared Trade File	

#### TRADING CODE

	Field name	Trade Code ALL	
	Description	Trading code of the Instrument	
Format Char			

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Field name	Trade Code ALL	
Length	2	
Possible values	Alphanumerical	
Used in	Used in Uncleared Trade File	

# U

#### **UNCLEARED TRADE TIMESTAMP CREATION**

Field name	Uncleared Trade Timestamp Creation ALL		
Description	ncleared Trade Timestamp creation		
Format	nt		
Length	16		
Possible values	YYYYMMDDHHMMSS		
Used in	Uncleared Trade File		

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Euronext Cash Markets – Optiq <sup>®</sup> End Of Day Interface Specifications Warran Files Field Descriptions

# APPENDIX A: REVIEW LOG, DOCUMENT HISTORY, SIGN-OFF

# **REVIEW LOG**

DOCUMENT NAME	Euronext Cash Markets – Optiq ® End Of Day Interface Specifications	
REVISION VERSION	1.4.0	

# DOCUMENT HISTORY

VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
<u>1.4.0</u>	<u>24 Dec 2021</u>	<u>IT Market Services –</u> <u>WMA</u>	In Day Order Files:         - Added fields LonaClientID and STP ID         In Field Description:         - Added field Long Client ID         - Added field STP ID
1.3.10	26 July 2021	FLO, BA Team, Euronext IT	<ul> <li>Updated "2.1 Introduction": contact change for issues related to EUA and Production environment.</li> <li>Updated section "2.2.1 Step 1: Authentication": change in parameters web site address.</li> <li>Updated sections "2.2.2 Step 2: File Download" and "2.2.3 Complete Script" modification of table with correspondence of file names, parameters for the script to download them, and the file descriptions.</li> <li>Updated sections "5.2.1 Uncleared trade File Name", "5.3.1 Uncleared Netting File Name" and "5.4.1 Uncleared Outbound File Name" clarification on the name of the file with prefix "LCH_".</li> <li>Clarification on OrderID field description</li> <li>Clarification on section "4.3 Trade Record" addition of a note regarding NseqOm10 field (which can be deduced from OrderID)</li> <li>remove remark regarding Optiq Step 2 on "4.3 Trade Record"</li> </ul>
1.3.9	25 September 2020	FLO, BA Team, Euronext IT	<ul> <li>Field 'TVTIC' : modification of the format (previous format on 22 characters back)</li> <li>Adding Field 'CounterpartFirmID' in Day Trade file (FTRRM)</li> </ul>
1.3.8	10 August 2020	FLO, BA Team, Euronext IT	<ul> <li>Update Client Contact Information</li> <li>Trade Record File : update in the definition of TVTIC and correction of the length of the TVTIC field to 52 char.</li> <li>Total length of Trade Record file is 231.</li> <li>Rename segment name "Structured Products" into "Warrants and Certificates"</li> </ul>
1.3.7	19 June 2020	NTDP, TCH, Euronext IT, LCH	<ul> <li>Correction of Warrant &amp; Certificates references to Warrants &amp; Certificates</li> <li>Section 7. <u>Trade File Field Descriptions</u> – CCPID Possible Values meaning Correction</li> </ul>
1.3.6	19 May 2020	NTDP, TCH, Euronext IT, LCH	<ul> <li>Addition of section 5. Warrants &amp; Certificates LCH Files</li> <li>Removal of section 3.4 Order Record in "Legacy' UTP format</li> <li>Update of section 2.2.2. Step 2: File Download to include LCH files and keep only FORDCXML, FORCWXML and FTRRM</li> </ul>

VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
			<ul> <li>Addition of section 8. Warrants &amp; Certificates LCH Files Field Descriptions</li> </ul>
1.3.5	27 June 2019	TCH, BA team, Euronext IT	- Trade Record File: Field "TVTIC" added at the end of the record
			- Updated file scope, fields and data for migration to the Optiq of the Cash markets     - Trade Record File / Field "Trade Type Indicator" : Removing value '4'
			Valuation trade. - Trade Record File / Field "Rule80A" renamed to "AccountType" + Adding value '8' Structured Product Market Maker
			- Order record names modified to fit with Optiq order entry
1.3.4	31 January 2018	JSI & FCO, FBO, BA team, Euronext IT	<ul> <li>Removed fields from Order record that are no longer in use: AmsAndNonWarrProduct, COBSIIndicator, ClOrdIDMod, Currency, ExpireTimeFlag, Filler, IOmApl, IcebergOrder, MIC, MarketPlace, MarketSegment, NSeqOmMod, PegDifference, STPIndicator, Spread, Yield</li> </ul>
			- Updated sections "2.2.2 Step 2: File Download" and "2.2.3 Complete Script": Added table with correspondence of file names, parameters for the script to download them, and the file descriptions; Added parameters for download of new XML Order files; Removed Audit files from the scope of the script / EOD application
			- Removed BondMatch and SmartPool specific values and descriptions from fields ExecInst and OrderPriorityTime
			- Separated field description section into two, for Order and Trade files
			<ul> <li>New sections added: "Fields Formats" added for Day Order Files; "Order record in Optiq XML format"; "Format Differences Between Order File And Trade File Fields"; "Order record in 'Legacy' UTP format"</li> </ul>
1.3.3	10 November 2017	TCH, BA team, Euronext IT	Updated sections "2.2.2 Step 2: File Download" and "2.2.3 Complete Script"; in the Authentication step updated to replace –data, withdata- urlencode
1.3.2	22 September 2017	FCO, BA team, Euronext IT	Added clarification of values for the field Waiver Indicator
		500.04	- Addition in the <u>Trade record</u> of fields : <u>Symbolindex</u> , <u>EMM</u> , <u>WaiverIndicator</u> , <u>TradeTimeSecondsGranularity</u>
1.3.1	21 July 2017	FCO, BA team, Euronext IT	- Removal of references and data associated to SmartPool and BondMatch
			- Trade Record File / Field "Rule80A" : Removing value 'S' SI
			- Addition of section : how to retrieve EOD files by script
1.3.0	22 Feb. 2017	TCH, BA team, Euronext IT	<ul> <li>Addition in the <u>Trade record</u> of the field <u>CCPID</u> containing the ID of the clearing organization handling the trade.</li> </ul>
1.2.1	05 Sep. 2016	TCH, BA team, Euronext IT	- Clarification of price format: decimal locator + amount
			- Versioning updated.
1.2.0	28 Jul. 2016	BSA, BA team, Euronext IT	<ul> <li><u>Order Record</u>: New scope of fields added. AmsAndNonWarrProduct;</li> <li>IcebergOrder; DarkIndicator; DefTradReq; MinQtyType; UndisclosedPrice;</li> <li>UndisclosedExecInst; DisplayedOrderInteraction; DarkWaiver;</li> <li>DisplayQtyRdm; SweepOrder</li> <li>Definition updated for ExecInst</li> </ul>
1.16	21 Sep. 2015	GGI, BA team, Euronext IT	<ul> <li>MarketPlace changed to FinancialMarketCode in both files</li> <li>Possible values for "Side" and "SideTaker" fields have changed in the trade file</li> <li>Corrections made on the STPIndicator field ("Used in")</li> </ul>
			- Changes made to the ExecInst, TechnicalOrderType and ExpireTimeFlag fields.

		1	
VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
			- Addition of the COBSIIndicator, LeavfesQty and DisplayedQty fields in the order file.
1.15	17 Jul. 2015	VPO, BA team, Euronext IT	Addition of CTSG contacts and the link to the IT documentation.
1.14	08 Jul. 2015	VPO, BA team, Euronext IT	Rebranded version.
1.13	01 Apr. 2014	PCH, BA team, Euronext IT	<ul> <li>Added new field description for <u>STPIndicator</u>.</li> <li>Added <u>STPIndicator</u> field in the <u>Order Record</u> (replaced filler 483).</li> <li>Added new possible (P) value for <u>OrdStatus</u> and its presence only in unbooked files.</li> </ul>
1.12	14 March 2013	EDO, BA team, Euronext IT	PM Included order and trade characteristics of the Primary Market segment.
1.11	5 Mar. 2013	TCH, BA team, Euronext IT	Authorization of disclosed quantity for Limit orders on the BondMatch Market Segment. <u>MaxFloor</u> field is authorized for Euronext BondMatch in <u>Order Record</u> .
1.10	16 Jan. 2013	FBO, BA team, Euronext IT	Fix: removed value 'G' (G order) from <u>Rule80A</u> . Fix: added 'PM' in <u>MarketSegment</u> . Fix: added 'SI' as possible <u>MIC</u> value.
1.9	6 Dec. 2012	FBO, BA team, Euronext IT	Cosmetic: new document template.
1.8	28 Nov. 2012	FBO, BA team, Euronext IT	<b>RM</b> Extended IOmApl and Rule80A fields' possible values with Retail Matching Facility values.
1.7	23 Jan. 2012	FBO, BA team, Euronext IT	Added possible value 'S' (SI Order) in <u>Rule80A</u> field in both <u>order</u> and <u>trade</u> files. <u>Trade Record</u> : specified that <u>MIC</u> is set to <u>SI</u> for an SI trade. Removed unused fields DiscretionInst, DiscretionOffset and Routing. Cosmetic changes (new document template).
1.6	2 May 2011	FBO, BA team, Euronext IT	Added possible value G (MP Order) in <u>Rule80A</u> field in both <u>order</u> and <u>trade</u> files. <u>Order record</u> : Removed deprecated values <b>m</b> and <b>o</b> from <u>ExecInst</u> field; <u>MIC</u> and <u>Currency</u> fields defined for future use.
1.5	29 Nov. 2010	FBO, BA team, Euronext IT	Added support of Euronext BondMatch® Bond MTF: impacts on both order and trade files.
1.4	29 Jul. 2010	FBO, BA team, Euronext IT	Fixed offset shifting (–10) in <u>Body Record of Order File</u> (starting from DiscretionInst). Fixed length (53 instead of 52) of last filler in <u>Body Record of Trade File</u> . Cosmetic changes.
1.3	29 Jun. 2010	TCH, BA team, Euronext IT	Updated version after Euronext review.
1.2	20 May 2010	TCH, BA team, Euronext IT	Hypertext link corrections.
1.1	19 May 2010	TCH, BA team, Euronext IT	Removed the Instruments Referential file description as it is not produced by the EOD application. Changed value range of the Order Side in the <u>Trade Record</u> from (1, 2) to (A, V) Changed the address in the disclaimer.

VERSION NO.	DATE	AUTHOR	CHANGE DESCRIPTION
1.0a	19 Feb. 2010	FBO, BA team, Euronext IT	Fix: value range of fields <u>NSeqOm</u> , <u>NSeqOm10</u> , <u>NSeqOmMod</u> , and <u>NSeqOmMod10</u> .
1.0	11 Feb. 2010	FBO, BA team, Euronext IT	Rollbacked <u>Rule80A</u> 's enrichment.

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