Document title

EURONEXT CASH MARKETS WEB SERVICE API - CLIENT SPECIFICATION

Version	Date
1.2	27 January 2020

PREFACE

DOCUMENT HISTORY

The following table provides a description of all changes to this document.

VERSION NO.	DATE	CHANGE DESCRIPTION
1.0	02 Sep 2016	Initial distribution
1.1	09 June 2017	Introduction of “Last Price” and “Level 1” packages Removal of several fields
1.1	27 January 2020	Updated “Introduction” section

CONTACT INFORMATION

For additional information about the Euronext Web Services APIs or any questions about this specification, please contact **Euronext London** at webservices@euronext.com.

CONTENTS

1. INTRODUCTION

The Euronext Web Service API and data are now available to clients for the application development and consumption through the internet. This document intends to give detail technical inputs for the use of our APIs.

The API framework explained in this document is open from the Euronext production environment for third party application development. The user token for authentication purpose will be given to the client on a later stage when they start the integration development.

The APIs are available to clients as web services on widely used JSON protocol.

1.1 EURONEXT WEB SERVICES API AVAILABLE

Euronext provides the following data sets through its Cash Markets Web Service API.

Real Time/Delayed Data

DATA SETS AVAILABLE	ALL CASH MARKET INSTRUMENT TYPES		
	LAST PRICE	LEVEL 1	LEVEL 2
Instrument Characteristics	●	●	●
Current Trading Session	●	●	●
Previous Trading Session	●	●	●
Best Bid/Ask Orders	-	●	●
Order Book by Price Limit (10 Best Limits)	-	-	●
Instrument Performance	●	●	●

Real Time/Delayed – Intraday Tick Data & Interval Bar Data

DATA SETS AVAILABLE	ALL CASH MARKET INSTRUMENT TYPES
	LAST PRICE / LEVEL 1 / LEVEL 2
Intraday Tick Data	●
Interval Bar Data	●

Technical details on accessing these data sets from Euronext are provided in the following sections.

2. EURONEXT CASH MARKETS WEB SERVICES API IN DETAIL

2.1 REAL TIME/DELAYED DATA

The service returns data based on the parameters provided in the request. The URL and Key provided by Euronext should be used to request the data from the API.

PARAMETERS	ALL CASH MARKET INSTRUMENT TYPES
	LAST PRICE / LEVEL 1 / LEVEL 2
ISIN - MIC Code	●

2.1.1 API URL

http://gateway.euronext.com/api/instrumentDetail?code=**<ISIN>**&exchCode=**<MIC>**&view=FULL&sessionQuality=**<SessionQuality>**&authKey=**<Key>**

where

<ISIN> refers to the ISIN code of the instrument

<MIC> refers to the MIC code of the Euronext market where the instrument is listed/traded

<SessionQuality> (optional parameter for clients that have a real time market data license) allows the client to access Real Time (RT) or Delayed Data (DT) via the API. The default value is RT.

<Key> refers to the authentication key provided by Euronext to enable the client to access the Euronext Web Services API.

2.1.2 INSTRUMENT CHARACTERISTICS

Refers to the characteristics of the requested instrument. The fields description is provided in Annex A.

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
status ***(please ignore this field)***	●	●	●	●	●
~~entityID~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
view ***(please ignore this field)***	●	●	●	●	●
sessionQuality	●	●	●	●	●
instr.iid	●	●	●	●	●
instr.exchCode	●	●	●	●	●
instr.cdStand	●	●	●	●	●
instr.codifStand	●	●	●	●	●
~~instr.tradGrpID~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.longNm	●	●	●	●	●
~~instr.providerNm~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
instr.type	●	●	●	●	●
~~instr.subType~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
~~instr.accInt~~	~~-~~	~~●~~	~~-~~	~~-~~	~~-~~
~~instr.accIntDt~~	~~-~~	~~●~~	~~-~~	~~-~~	~~-~~
instr.cashSetlmt	-	-	●	-	-
instr.cfiCode	●	●	●	●	●
~~instr.cfiCodeDecompOrder~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
~~instr.coupCur~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.coupDetachDt~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.coupPayDt~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.coupTypeFreq~~	~~-~~	~~●~~	~~-~~	~~-~~	~~-~~
instr.currency	●	●	●	●	●
instr.exchBegDt	-	-	●	-	-
instr.exercType	-	-	●	-	-
instr.exposure	-	-	-	●	-
instr.faceVal	●	●	●	●	●
instr.faceValCur	-	●	-	-	-
~~instr.grossCoup~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
~~instr.idxFamily~~	~~-~~	~~-~~	~~-~~	~~●~~	~~-~~
instr.introDt	-	-	●	-	-
instr.issueDt	-	-	●	●	-
instr.issuePx	-	●	●	-	-
instr.issuePxCur	-	●	●	-	-
instr.issuer	●	●	●	●	●
instr.issuerCtry	●	●	●	●	●
instr.countryGroup	●	●	●	●	●
instr.issuerType	●	●	●	●	●
instr.isSRDTradable	●	●	●	●	●
instr.isISAEligibility	●	●	●	●	●
instr.marketOfReference	●	●	●	●	●
~~instr.netCoup~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
~~instr.nominalRate~~	~~-~~	~~•~~	~~-~~	~~-~~	~~-~~
instr.parityWarUnder	-	-	•	-	-
instr.parityUnderWar	-	-	•	-	-
instr.priceUnitType	•	•	•	•	•
instr.qtyNotat	•	•	•	•	•
instr.repayDt	-	•	-	-	-
instr.repayFirstDt	-	•	-	-	-
instr.repayType	-	•	-	-	-
instr.riskLevel	-	-	•	-	-
instr.strategy	-	-	•	-	-
instr.strikePx	•	•	•	•	•
instr.strikePxCur	-	-	•	-	-
instr.secondStrikePx	-	-	•	-	-
instr.secondStrikePxCur	-	-	•	-	-
instr.structuredProductsType	-	-	•	-	-
instr.tradLot	•	•	•	•	•
instr.tradMode	•	•	•	•	•
instr.underType	-	-	•	•	-
instr.warType	-	-	•	-	-
~~instr.listed~~	~~•~~	~~•~~	~~•~~	~~•~~	~~•~~
instr.listBeginDt	•	•	•	•	•
instr.nbShare	•	•	•	•	•
instr.accuracy	•	•	•	•	•
instr.tickSize	•	•	•	•	•
~~instr.tickSizeRule~~	~~-~~	~~•~~	~~•~~	~~-~~	~~•~~
~~instr.segmentationLevel1~~	~~-~~	~~-~~	~~-~~	~~•~~	~~-~~
~~instr.segmentationLevel2~~	~~-~~	~~-~~	~~-~~	~~•~~	~~-~~
~~instr.segmentationLevel3~~	~~-~~	~~-~~	~~-~~	~~•~~	~~-~~
instr.quality	•	•	•	•	•
instr.transco[…].code	•	•	•	•	•
instr.transco[…].codification	•	•	•	•	•
instr.transco[…].exchCode	•	•	•	•	•

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.specFeat[...].field	●	●	●	●	●
instr.specFeat[...].fieldType	●	●	●	●	●
instr.specFeat[...].value	●	●	●	●	●
instr.stateHisto[...].stateDt	●	●	●	●	●
instr.stateHisto[...].stateId	●	●	●	●	●
instr.exchange[...].exchID	●	●	●	●	●
instr.exchange[...].exchCd	●	●	●	●	●
instr.exchange[...].exchlbl	●	●	●	●	●
~~instr.exchange[...].exchlvl~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
~~instr.exchange[...].refIdx~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
~~instr.exchange[...].ownExchId~~	~~●~~	~~●~~	~~●~~	~~●~~	~~●~~
instr.instrRel[...].instrLst.lstType	●	-	-	●	-
instr.instrRel[...].instrLst.lstCd	●	-	-	●	-
instr.instrRel[...].instrLst.lstOwner	●	-	-	●	-
instr.instrRel[...].instrLst.lstLbl	●	-	-	●	-
instr.instrRel[...].instrLst.lstLvl	●	-	-	●	-
instr.instrRel[...].instrLst.listIndex.code	●	-	-	●	-
instr.instrRel[...].instrLst.listIndex.codification	●	-	-	●	-
instr.instrRel[...].instrLst.listIndex.exchCode	●	-	-	●	-
~~instr.prevDayRefCapi~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.stockWeight~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.lstType~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.lstCd~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.lstOwner~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.lstLbl~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.rfrshFreq~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.lastUpdate~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.transco[...].code~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.transco[...].codification~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
~~instr.instrLst.transco[...].exchCode~~	~~●~~	~~-~~	~~-~~	~~-~~	~~-~~
instr.tradingGroupSession.marketState	●	●	●	●	●
instr.tradingGroupSession.providerMarketState	●	●	●	●	●

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.tradingGroupSession.lastUpdate	●	●	●	●	●
instr.tradingGroup.tradingGroupCode	●	●	●	●	●
instr.tradingGroup.tradingMode	●	●	-	●	●
instr.tradingGroup.instrumentType	●	●	●	●	●
instr.tradingGroup.timePreOpening1	●	●	●	●	●
instr.tradingGroup.timeOpening1	●	●	●	●	●
instr.tradingGroup.timeClosing1	●	●	●	●	●
instr.tradingGroup.timePreOpening2	●	●	-	●	-
instr.tradingGroup.timeOpening2	●	●	-	●	-
instr.tradingGroup.eodTime	●	●	●	●	●
instr.listingPlaces	●	-	-	-	-
instr.listingPlacesMEP	●	-	-	-	-
instr.underlying[…].code	-	-	●	●	-
instr.underlying[…].codification	-	-	●	●	-
instr.underlying[…].exchCode	-	-	●	●	-
instr.inavId[...].code	-	-	-	●	-
instr.inavId[...].codification	-	-	-	●	-
instr.inavId[...].exchCode	-	-	-	●	-

2.1.3 CURRENT TRADING SESSION

Refers to a trading statistics overview for the current trading session of the requested instrument. The fields description is provided in Annex A.

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.currInstrSess.sessionType	●	●	●	●	●
instr.currInstrSess.dateTime	●	●	●	●	●
instr.currInstrSess.quotationState	●	●	●	●	●
instr.currInstrSess.quality	●	●	●	●	●
instr.currInstrSess.lastPx	●	●	●	●	●
instr.currInstrSess.lastQty	●	●	●	●	●
instr.currInstrSess.openPx	●	●	●	●	●
instr.currInstrSess.openQty	●	●	●	●	●

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.currInstrSess.openDtTm	●	●	●	●	●
instr.currInstrSess.indiOpenPx	●	-	-	-	-
instr.currInstrSess.indiOpenPxDtTm	●	-	-	-	-
instr.currInstrSess.setlmtPx ***(please ignore this field)***	●	-	-	-	-
instr.currInstrSess.setlmtPxDtTm ***(please ignore this field)***	●	-	-	-	-
instr.currInstrSess.risVarLim	●	●	-	●	●
instr.currInstrSess.falVarLim	●	●	-	●	●
instr.currInstrSess.tradedQty	●	●	●	●	●
instr.currInstrSess.nbTrades	●	●	●	●	●
instr.currInstrSess.lastUpdate	●	●	●	●	●
instr.currInstrSess.valorization	●	●	●	●	●
instr.currInstrSess.valorizationDateTime	●	●	●	●	●
instr.currInstrSess.marketCapitalisation	●	●	●	●	●
instr.currInstrSess.prevAdjClosingPrice	●	●	●	●	●
instr.currInstrSess.prevAdjClosingDateTime	●	●	●	●	●
instr.currInstrSess.lastPriceAdj	-	-	●	-	-
instr.currInstrSess.lastPriceAdjDateTime	-	-	●	-	-
instr.currInstrSess.lastTradeType	-	-	●	-	-
instr.currInstrSess.haltReason	●	●	●	●	●
instr.currInstrSess.actionAffectingState	●	●	●	●	●
instr.currInstrSess.orderEntryRejection	●	●	●	●	●

2.1.4 PREVIOUS TRADING SESSION

Refers to a trading statistics overview for the previous trading session where the requested instrument traded. The field description is provided in Annex A.

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.prevInstrSess.sessionType	●	●	●	●	●
instr.prevInstrSess.dateTime	●	●	●	●	●
instr.prevInstrSess.quotationState	●	●	●	●	●
instr.prevInstrSess.quality	●	●	●	●	●
instr.prevInstrSess.lastPx	●	●	●	●	●

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.prevInstrSess.lastQty	●	●	●	●	●
instr.prevInstrSess.openPx	●	●	●	●	●
instr.prevInstrSess.openQty	●	●	●	●	●
instr.prevInstrSess.openDtTm	●	●	●	●	●
instr.prevInstrSess.indiOpenPx	●	-	-	-	●
instr.prevInstrSess.indiOpenPxDtTm	●	-	-	-	●
instr.prevInstrSess.closPx	●	●	●	●	●
instr.prevInstrSess.setlmtPx ***(please ignore this field)***	●	-	-	-	-
instr.prevInstrSess.setlmtPxDtTm ***(please ignore this field)***	●	-	-	-	-
instr.prevInstrSess.risVarLim	●	●	-	●	●
instr.prevInstrSess.falVarLim	●	●	-	●	●
instr.prevInstrSess.nbTrades	●	●	●	●	●
instr.prevInstrSess.lastUpdate	●	●	●	●	●
instr.prevInstrSess.tickSize	-	●	●	●	●
instr.prevInstrSess.tickSizeRule ***(please ignore this field)***	●	●	●	-	●
instr.marketCapitalisation	-	-	●	●	●
instr.prevInstrSess.prevAdjClosingPrice	●	●	●	●	●
instr.prevInstrSess.prevAdjClosingDateTime	●	●	●	●	●
instr.prevInstrSess.lastTradeType	-	-	●	-	-
instr.prevInstrSess.haltReason	●	●	●	●	●
instr.prevInstrSess.actionAffectingState	●	●	●	●	●
instr.prevInstrSess.orderEntryRejection	●	●	●	●	●

2.1.5 BEST BID/ASK ORDERS

Refers to the best bid and ask for the instrument requested. The field description is provided in Annex A.

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.ordBook.bsBidPx	●	●	●	●	●
instr.ordBook.bsBidQty	●	●	●	●	●
instr.ordBook.bsBidDtTm	●	●	●	●	●
instr.ordBook.bsAskPx	●	●	●	●	●
instr.ordBook.bsAskQty	●	●	●	●	●

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.ordBook.bsAskDtTm	●	●	●	●	●
instr.ordBook.sessionType	●	●	●	●	●

2.1.6 ORDER BOOK BY PRICE LIMIT (10 BEST LIMITS)

Refers to the ten best bid and ask limits for the requested instrument, except for warrants and certificates. In which case, only the best bid and ask limit is available. The field description is provided in Annex A.

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.ordBook.ordBkLnAsk[0…9].qty	●	●	●	●	●
instr.ordBook.ordBkLnAsk[0…9].nbOrd	●	●	●	●	●
instr.ordBook.ordBkLnAsk[0…9].px	●	●	●	●	●
instr.ordBook.ordBkLnAsk[0…9].type	●	●	●	●	●
instr.ordBook.ordBkLnAsk[0…9].dateTime	●	●	●	●	●
instr.ordBook.ordBkLnBid[0…9].qty	●	●	●	●	●
instr.ordBook.ordBkLnBid[0…9].nbOrd	●	●	●	●	●
instr.ordBook.ordBkLnBid[0…9].px	●	●	●	●	●
instr.ordBook.ordBkLnBid[0…9].type	●	●	●	●	●
instr.ordBook.ordBkLnBid[0…9].dateTime	●	●	●	●	●

2.1.7 INSTRUMENT PERFORMANCE

Refers to the performance over a period of time of the requested instrument. The field description is provided in Annex A.

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.perf[…].perType	●	●	●	●	●
instr.perf[…].perStartDtTm	●	●	●	●	●
instr.perf[…].perStartPx	●	●	●	●	●
instr.perf[…].var	●	●	●	●	●
instr.perf[…].pxVar	●	●	●	●	●
instr.perf[…].highPx	●	●	●	●	●
instr.perf[…].highPxQty	●	●	●	●	●
instr.perf[…].highPxDtTm	●	●	●	●	●
instr.perf[…].lowPx	●	●	●	●	●
instr.perf[…].lowPxQty	●	●	●	●	●

FIELD NAME	EQUITIES	BONDS	WARRANTS	ETFS	FUNDS
instr.perf[…].lowPxDtTm	●	●	●	●	●
instr.perf[…].tradedQty	●	●	●	●	●
instr.perf[…].tradedAmt	●	●	●	●	●
instr.perf[…].nbOpenDays	●	●	●	●	●
instr.perf[…].updateMd	●	●	●	●	●
instr.perf[…].lastQuotDtTm	●	●	●	●	●
instr.perf[…].sessionType	●	●	●	●	●

2.2 INTRADAY TICK DATA & INTERVAL BAR DATA

The service returns data based on the parameters provided in the request. The URL and Key provided by Euronext should be used to request the data from the API.

PARAMETERS	ALL CASH MARKET INSTRUMENT TYPES
	LAST PRICE / LEVEL 1 / LEVEL 2
ISIN - MIC Code	●

2.2.1 URL

http://gateway.euronext.com/api/intraday?code=**<ISIN>**&codification=ISIN&exchCode=**<MIC>**&view=FULL&depth=<Depth>&type=**<Type>**&resolution=**<Resolution>**&sessionQuality=**<SessionQuality>**&authKey=**<Key>**

where

<ISIN> refers to the ISIN code of the instrument

<MIC> refers to the MIC code of the Euronext market where the instrument is listed/traded

<Depth> (optional parameter) allows the client to select data for the one (=1) of two (=2) trading sessions. If the client selects two the API will return data for the current trading session and for the last trading session when the instrument traded. The default value is 1.

<Type> (optional parameter) allows the client to access data for all transactions (=TRA) or interval bar data (=MIN). The default value is MIN

<Resolution> (optional parameter when using Type = MIN) allows the client to set the length of the interval bars in milliseconds. The default value is 60000 (i.e. 60 seconds)

<SessionQuality> (optional parameter for clients that have a real time market data license) allows the client to access Real Time (RT) or Delayed Data (DT) via the API. The default value is RT.

<Key> refers to the authentication key provided by Euronext to enable the client to access the Euronext Web Services API.

2.2.2 INTRADAY TICK DATA & INTERVAL BAR DATA

Refers to the characteristics of the requested instrument. The fields description is provided in Annex A.

FIELD NAME	ALL CASH MARKET INSTRUMENT TYPES
status	●
entityID	●
view	●
sessionQuality	●
type	●
currency	●
accuracy	●
tickSize	●
tickSizeRule	●
intradayPoint[…].time	●
intradayPoint[…].nbTrade	●
intradayPoint[…].beginPx	●
intradayPoint[…].beginTime	●
intradayPoint[…].endPX	●
intradayPoint[…].endTime	●
intradayPoint[…].highPx	●
intradayPoint[…].lowPx	●
intradayPoint[…].beginAskTime ***(please ignore this field)***	●
intradayPoint[…].endAskTime ***(please ignore this field)***	●
intradayPoint[…].beginBidTime ***(please ignore this field)***	●
intradayPoint[…].endBidTime ***(please ignore this field)***	●
intradayPoint[…].vol	●
intradayPoint[…].amt	●
intradayPoint[…].tradeStatus	●
intradayPoint[…].tradeType	●

FIELD NAME	ALL CASH MARKET INSTRUMENT TYPES
intradayPoint[…].provTrdID	•

3. APPENDIX A: FIELDS

3.1 INSTRUMENT CHARACTERISTICS

FIELD	FIELD DESCRIPTION	SAMPLE
status	***Please ignore this field***	
entityID	Data Provider	"euronext"
view	***Please ignore this field***	
sessionQuality	Timeliness of the Data	"RT" – Real Time Data "DT" – Delayed Data
instr.iid	Instrument Internal ID	"1240952"
instr.exchCode	Instrument Location Code	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris
instr.cdStand	Instrument Identifier	"NL0006294274"
instr.codifStand	Instrument Identifier Type	"ISIN"
~~instr.tradGrpID~~		
instr.longNm	Instrument Long Name	"EURONEXT"
~~instr.providerNm~~	~~Data Source~~	~~"EURONEXT"~~
instr.type	Instrument Type	"BOND" – Bonds/Convertible Bonds "STOCK" – Shares, Rights and Funds "TRACK" - ETFs "WARRT" – Warrants/Certificates
~~instr.subType~~		
~~instr.accInt~~	~~Accrued Interest~~ ~~(Bonds only)~~	~~"1.076"~~
~~instr.accIntDt~~	~~Accrued Interest Date~~ ~~(Bonds only)~~	~~"20160602"~~
instr.cashSetlmt	Settlement Type (Warrants only)	"O" - Cash "N" - Physical delivery "OP" - Optional
instr.cfiCode	CFI Code	"ESVUFR"
~~instr.cfiCodeDecompOrder~~	~~CFI Code Structure~~	~~"CFIVotingRight,CFIOwnership,CFIPaymentStatus,CFIForm"~~
~~instr.coupCur~~	~~Coupon Currency~~	~~"EUR"~~
~~instr.coupDetachDt~~	~~Coupon Detachment Date~~	~~"20150511"~~
~~instr.coupPayDt~~	~~Coupon Payment Date~~	~~"20150513"~~

FIELD	FIELD DESCRIPTION	SAMPLE
~~instr.coupTypeFreq~~	~~Coupon Frequency~~ ~~(Bonds only)~~	~~"0" - Not indicated~~ ~~"1" - Annual~~ ~~"2" - Half yearly~~ ~~"3" - Three times / year~~ ~~"4" - Quarterly~~ ~~"5" - Zero coupon~~ ~~"6" - Every 2 months~~ ~~"7" - No meaning~~ ~~"8" - Monthly~~ ~~"9" - > 1 year~~
instr.currency	Issue Currency	"EUR"
instr.exchBegDt	First exercise day (Warrants only)	"20151215"
instr.exercType	Exercise Type (Warrants only)	"1" - European "2" - American "3" - Mixed type
instr.exposure	Underlying Replication Type (ETFs only)	"Synthetic" "Physical"
instr.faceVal	Nominal Value	"1.6"
instr.faceValCur	Nominal Value Currency	"EUR"
~~instr.grossCoup~~	~~Gross Coupon Amount~~	~~"0.0"~~
~~instr.idxFamily~~		
instr.introDt	Listing Date (Warrants only)	"20151211"
instr.issueDt	Issue Date (Warrants and ETFs only)	"20151211"
instr.issuePx	Issue Price (Bonds and Warrants)	"99.138"
instr.issuePxCur	Issue Price Currency (Bonds and Warrants)	"EUR"
instr.issuer	Issuer Code	"092802"
instr.issuerCtry	Issuer’s Country	"NLD"
instr.countryGroup	Issuer’s Region	"Europe"
instr.issuerType	Issuer Type	"OTH"
instr.isSRDTradable	Deferred Settlement Indicator	"true" "false"

FIELD	FIELD DESCRIPTION	SAMPLE
instr.isISAEligibility	French Investment Saving Plan	"true" "false"
instr.marketOfReference	Instrument Market of Reference	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris
~~instr.netCoup~~	~~Instrument Net Coupon Amount~~	~~"0.0"~~
~~instr.nominalRate~~	~~Interest Rate (in %)~~ ~~(Bonds only)~~	~~"2.875"~~
instr.parityWarUnder	Ratio Warrant / Underlying (numerator)	"1.0"
instr.parityUnderWar	Ratio Warrant / Underlying (denominator)	"1.0"
instr.priceUnitType	Instrument Price Unit Type	"CUR" – In Currency
instr.qtyNotat	Instrument Quantity Notation	"UNT" – In Units
instr.repayDt	Final Reimbursement Date (Bonds only)	"20260721"
instr.repayFirstDt	First Reimbursement Date (Bonds only)	"20160121"
instr.repayType	Reimbursement Type (Bonds only)	"0" - In fine "1" -At intervals "2" - Perpetual bond "5" - Before due date "8" – Not defined "9" - Not indicated
instr.riskLevel	Risk Level (Warrants only)	"I" - Investment "L" – Leveraged
instr.strategy	Strategy (Warrants only)	"1" - Bull "2" - Bear "3" – Not Applicable
instr.strikePx	Strike Price (Warrants only)	"26.3" Please refer to Strike Price interpretation rules
instr.strikePxCur	Strike Price Currency (Warrants only)	"EUR"
instr.secondStrikePx	Second Strike Price (Warrants only)	"28.4306" Please refer to Strike Price interpretation rules

FIELD	FIELD DESCRIPTION	SAMPLE
instr.secondStrikePxCur	Second Strike Price Currency (Warrants only)	"EUR"
instr.structuredProductsType	Structured Products Type (Warrants only)	"1" - Pure indexation "2" - Capital protection "3" - Yield enhancement "4" - Bear indexation "5" - Spread "6" - Digital with barrier "7" - Leverage product with knock out barrier "8" - Plain vanilla warrants
instr.tradLot	Instrument Trading Lot Size	"1.0"
instr.tradMode	Instrument Trading Mode	"0" - Continous "1" - Fixing "2" - Double call auction "3" - Weekly call auction
instr.underType	Underlying Type (Warrants and ETFs only)	"Others" "Basket of shares" "Indices" "Stocks" "Currency" "Commodities" "Bonds"
instr.warType	Warrants Types (Warrants only)	"1" - Call "2" - Put
~~instr.listed~~	~~Instrument Listed Flag~~	~~"true"~~ ~~"false"~~
instr.listBeginDt	Instrument Listing Date	"20150904"
instr.nbShare	Instrument Number of Listed Share	"70000000"
instr.accuracy	Number of Decimals in the Price	"2"
instr.tickSize	Tick Size	"0.01"
~~instr.tickSizeRule~~		
~~instr.segmentationLevel1~~		
~~instr.segmentationLevel2~~		
~~instr.segmentationLevel3~~		
instr.quality	Timeliness of the Data	"RT" – Real Time data "DT" – Delayed Data

FIELD	FIELD DESCRIPTION	SAMPLE
instr.transco[…].code	Instrument Identifier	BDM Code = "576684" ISIN Code = "NL0006294274" Trading Symbol = "ENX" Euronext Code = "NL0006294274" Internal ID Code = "1240952"
instr.transco[…].codification	Instrument Identifier Type	"BDM" – BDM Code "ISIN" – ISIN Code "MNE" – Trading Symbol "NXT"– Euronext Code "IID" – Internal ID Code
instr.transco[…].exchCode	Instrument Location Code	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris
instr.specFeat[…].field	Field Name	"inavName" iNAV name (ETFs only)
		"currencyCoef" Change ratio coefficient of currency applied to instrument. Used in conjunction with one of the change rate indicators in order to apply this coefficient to a currency among two available currencies defined for the instrument: • Trading currency • Currency code of strike price for derivative Instrument The currency to which this coefficient will be applied depends on just one of the two values set to the related indicators (defined below in the integrity constraints). This coefficient is used when the currency is not compliant with the ISO 4217 (3A) standard as pence (GBP) or cent (USD) expression of an official currency. In this case the formula to apply in order to retrieve the price expressed in an official currency is: Real price in Trading currency = Traded price (i.e. 1565 pence) x Change ratio coefficient value (0.01).
		"eventDate"

FIELD	FIELD DESCRIPTION	SAMPLE
		Date of the last modification of the characteristics of the instrument except the following ones (which are modified every day): • Previous day's adjusted closing price (LastAdjPrice) • Previous day capital traded (PrevDayCapitalTraded) • Number of shares for this security traded on previous day (PrevVolumeTraded) • Date security last traded (DateOfLastTrade)
		"underlyingIndexBloombergTicker" ETF's Underlying Bloomberg Ticker (ETFs only)
		"firstPossibleSettlementDate" First Possible Settlement Date (Bonds only)
		"MIC" Identifies the market to which an instrument y belongs by its MIC (Market Identification Code), according to ISO 10383.
		"officialQuotationListSection" ***Please ignore this field***
		"marketFeedCode" The "Market data flow" to which the instrument belongs See Market Feed Code
		"CFIForm" = Instrument CFI Form (ISO 10962)
		"instrumentCategory" Indicates to which category, the security belongs. Valid values are: • "A" – Stock • "O" – Bond • "W" – Warrant and certificate • "T" – Tracker • "D" – Miscellaneous
		"isaEligibility" ***Please ignore this field***
		"inavBloombergTicker" iNAV's Bloomberg Ticker

FIELD	FIELD DESCRIPTION	SAMPLE
		(ETFs only)
		"tradedNotListed" Indicates if the instrument is traded by not listed
		"timeLagEuronextUTC" Effective difference time between CET (Euronext time) and UTC. To be interpreted in conjunction with the time difference between MiFID regulators and UTC.
		"CFIOwnership" (ISO 10962)
		"nextprime" ***Please ignore this field***
		"tradingCurrencyIndicator" Change rate indicator for currency of Instrument Traded Price. Indicates if the change rate will be applied to the currency defined for traded prices of the instrument. • "0" – Change rate not applied to the traded price • "– 1" – Change rate applied to the traded price
		"priceMultiplier" Number of units of the financial instrument that are contained in a trading lot.
		"CFIVotingRight" (ISO 10962)
		"sourceName" ***Please ignore this field***
		"name" Instrument's Designation (ETFs only)
		"marketTypeWithoutTranslation" ***Please ignore this field***
		"srd" Eligibility to Deferred Settlement Service. Currently applicable in France only. (ETFs only)
		"dividendFrequency" Dividend Frequency

FIELD	FIELD DESCRIPTION	SAMPLE
		Valid values are: • "Capitalization" • "Monthly" • "Annually" • "Semi-Annually" • "Quarterly" (ETFs only)
		"CFIAssets" (ISO 10962) (ETFs and Funds only)
		"bdmSource" ***Please ignore this field***
		"fundManager" Fund Manager's Designation (ETFs only)
		"listed" Indicated is the instrument is listed on Euronext markets
		"typeOfCorporateEvent" Indicates the last type of corporate event that has occurred on an instrument, such as detachment of rights, or of coupons. The data item is automatically calculated by the adjustment application but in case of problem or error, the data item value could be modified manually, particularly for purging the order book in case of absence of corporate event. This data has to be treated in consideration of the date of the event included into the header of the message. Valid values are: • "00" – No specific event • "01" – Dividend payment in cash or in stocks • "02" – Interest payment (bonds for which the price is not expressed in % of the nominal, only) • "04" – Split • "05" – Bonus (i.e. attribution) • "06" – Subscription • "07" – Share allocation • "08" – Share swap • "09" – Reverse split • "10" – Merger • "11" – Final bond redemption • "12" – Capital amortization • "13" – Draw announcement

FIELD	FIELD DESCRIPTION	SAMPLE
		(Belgian bonds only) • "14" – Block trade of controlling interest • "15" – Optional corporate events(dividend option) • "16" – Complex corporate event • "17" – Purge of the order book (purge is initiated manually in the absence of a corporate event, for example, following the modification of the variable tick of the listed security) • "22" - Bourse de Luxembourg corporate event
		"lendingMarketUnderlyingSecurityIndicator" Indicates whether the security listed underlies any loan contracts, meaning it has been admitted to the Deferred Settlement system and/or to the lending market. Valid values are: • "0" – Instrument neither eligible for the SRD, nor eligible for the Loan and Lending Market • "1" – Instrument eligible for the SRD and for the Loan and Lending Market • "2" – Instrument eligible for the SRD long only • "3" – Instrument eligible for the Loan and Lending Market and for the SRD long only • "4" – Easy-to-borrow Instrument eligible for the SRD and the for Loan and Lending Market • "5" – Instrument eligible for the Loan and Lending Market • "8" – Non significant
		"pea" Eligibility to Personal Savings Plan. Currently applicable in France only. (ETFs only)
		"marketIndicator" ***Please ignore this field***
		"nbDaysBeforeExpiration" (Warrants only)
		"underlyingIndex" Underlying index (ETFs only)

FIELD	FIELD DESCRIPTION	SAMPLE
		"CFIDistributionPolicy" (ISO 10962) (ETFs & Funds only)
		"mainDepositary" Identifies the default (or main) depository organization of the instrument (between the possible 5 depositaries registered) used by priority for the settlement (for example: multi-listed instruments which have several depositories). Possible values: • "00001" – Euroclear France • "00002" – CIK (Belgium) • "00003" – NECIGEF (the Netherlands) • "00004" – X/N (BoB's system) • "00005" – VIF (non-fungible Belgian instruments) • "00006" – Euroclear Bank • "00007"- NIEC • "00008" – Physical • "00009" – Euronext Paris non Euroclear France • "00010" – Interbolsa • "00000" – No depository organization • Nulls – Not significant
		"CFICallPut" (ISO 10962) (Warrants only)
		"CFIPaymentStatus" (ISO 10962)
		"notRegulatedMarket" Indicates if the instrument is listed/traded on a non-regulated market.
		"financialMarketCode" Financial Market Code. Valid values are: • "000" - None applicable • "025" - Paris • "277" - Centralized lending market • "278" - Brussels • "279" - Amsterdam • "290" - Lisbon • "292" - London • "295" - Luxembourg • "299" - Europe • "300" - Commercial paper
		"timeLagMiFIDRegUTC"

FIELD	FIELD DESCRIPTION	SAMPLE
		Effective time difference between MiFID regulators and UTC. To be interpreted in conjunction with the time difference between CET (Euronext time) and UTC.
		"marketingProductName" Marketing Product Name. This field is required to apply the Strike Price interpretation rules (Warrants only)
		"euronextDesignation" Euronext Designation of the instrument (Warrants only)
		"bloombergTicker" Bloomberg Ticker of the instrument (ETFs only)
		"issuer" Issuer Name (ETFs only)
		"isAccruedInterest" ***Please ignore this field***
		"typeOfInstrumentWithoutTranslation" Type of instrument. For a description of what instrument each of the possible codes mean, see Stock Type
		"CFIFurtherGrouping"
		"periodIndicator" ***Please ignore this field***
		"nexteco" = "nexteco" ***Please ignore this field***
		"CFIClosedOpen" (ISO 10962) (ETFs & Funds only)
		"typeOfDerivatives" Type of derivative instrument associated to the security. Valid values are: • "1" – INAV (Indicative Net Asset Value for ETF-Exchange Traded Funds) • "4" – Supports short terms options • "6" – Supports long term options • "9" – No

FIELD	FIELD DESCRIPTION	SAMPLE
		"strikeCurrencyIndicator" Change rate indicator for currency of the strike price. Indicates if the change rate will be applied to the currency defined for strike prices of the instrument. Valid values are: • "– 0" – Change rate not applied to the strike price • "– 1" – Change rate applied to the strike price (Warrants only)
		"underlyingDesignation" Underlying situation (Warrants only)
		"officialQuotationListHeading" ***Please ignore this field***
		"ter" Total Expense Ratio (ETFs only)
		"officialList" ***Please ignore this field***
instr.specFeat[…].fieldType	Field Type	"inavName" "fieldType": "String"
		"currencyCoef" fieldType = "Integer"
		"MIC", fieldType = "String"
		"eventDate" fieldType = "Date"
		"underlyingIndexBloombergTicker" "fieldType": "String"
		"firstPossibleSettlementDate" "fieldType": "Date"
		"officialQuotationListSection", ***Please ignore this field***
		"marketFeedCode" fieldType = "String"
		"CFIForm" fieldType = "Character"

FIELD	FIELD DESCRIPTION	SAMPLE
		"instrumentCategory" ***Please ignore this field***
		"isaEligibility" fieldType = "Integer"
		"inavBloombergTicker", "fieldType": "String"
		"tradedNotListed" fieldType = "Boolean"
		"timeLagEuronextUTC" fieldType = "String"
		"field": "CFIOwnership" fieldType = "Character"
		"nextprime" ***Please ignore this field***
		"tradingCurrencyIndicator" fieldType = "Integer"
		"priceMultiplier" fieldType = "Double"
		"CFIVotingRight" fieldType = "Character"
		"sourceName" ***Please ignore this field***
		"name" "fieldType": "String"
		"marketTypeWithoutTranslation" ***Please ignore this field***
		"srd" "fieldType": "Character"
		"dividendFrequency" "fieldType": "String"
		"CFIAssets" "fieldType": "Character"
		"bdmSource" ***Please ignore this field***
		"fundManager" "fieldType": "String"

FIELD	FIELD DESCRIPTION	SAMPLE
		"listed" fieldType = "Integer"
		"typeOfCorporateEvent" fieldType = "String"
		"lendingMarketUnderlyingSecurityIndicator" fieldType = "Character"
		"pea" "fieldType": "Integer"
		"marketIndicator" ***Please ignore this field***
		"nbDaysBeforeExpiration" "fieldType": "Double"
		"underlyingIndex" "fieldType": "String"
		"CFIDistributionPolicy" "fieldType": "Character"
		"mainDepositary" fieldType = "String"
		"CFICallPut" "fieldType": "Character"
		"CFIPaymentStatus" fieldType = "Character"
		"notRegulatedMarket" fieldType = "Boolean"
		"financialMarketCode" fieldType = "String"
		"timeLagMiFIDRegUTC" fieldType = "String"
		"marketingProductName" "fieldType": "String"
		"field": "euronextDesignation" "fieldType": "String"
		"field": "bloombergTicker" "fieldType": "String"
		"field": "issuer" "fieldType": "String"

FIELD	FIELD DESCRIPTION	SAMPLE
		"isAccruedInterest" ***Please ignore this field***
		"typeOfInstrumentWithoutTranslation" fieldType = "Integer"
		"CFIFurtherGrouping" fieldType = "Character"
		"periodIndicator" ***Please ignore this field***
		"nexteco", ***Please ignore this field***
		"CFIClosedOpen" "fieldType": "Character"
		"typeOfDerivatives", fieldType = "Character"
		"strikeCurrencyIndicator" fieldType = "Integer"
		"underlyingDesignation" "fieldType": "String"
		"officialQuotationListHeading" ***Please ignore this field***
		"ter" "fieldType": "Double"
		"officialList" ***Please ignore this field***
instr.specFeat[…].value	Field Value	"inavName" "value": "COMSTAGE PPP INAV"
		"currencyCoef" value = "0.0"
		"MIC" value = "XPAR"
		"eventDate" value = "2015-11-05"
		"underlyingIndexBloombergTicker" "value": "PSI20"
		"firstPossibleSettlementDate" "value": "2016-01-21"

FIELD	FIELD DESCRIPTION	SAMPLE
		"officialQuotationListSection" ***Please ignore this field***
		"marketFeedCode" value = "04"
		"CFIForm" value = "R"
		"instrumentCategory" value = "A"
		"isaEligibility" ***Please ignore this field***
		"inavBloombergTicker" "value": "INPPP"
		"tradedNotListed" value = "0"
		"timeLagEuronextUTC" value = "+0200"
		"CFIOwnership" value = "U"
		"nextprime" ***Please ignore this field***
		"tradingCurrencyIndicator" value = "0"
		"priceMultiplier" value = "1.0"
		"CFIVotingRight" value = "V"
		"sourceName" ***Please ignore this field***
		"name" "ComStage PSI 20 UCITS ETF"
		"marketTypeWithoutTranslation" ***Please ignore this field***
		"srd" "value": "No"
		"dividendFrequency" "value": "Capitalization"

FIELD	FIELD DESCRIPTION	SAMPLE
		"CFIAssets" "value": "S"
		"bdmSource" ***Please ignore this field***
		"fundManager" "value": "Commerz Derivatives Funds Solutions S.A."
		"listed" value = "1"
		"typeOfCorporateEvent" value = "00"
		"lendingMarketUnderlyingSecurityIndicator" value = "1"
		"pea" "value": "No"
		"marketIndicator" ***Please ignore this field***
		"nbDaysBeforeExpiration" "value": "0.0"
		"underlyingIndex" "value": "PSI 20"
		"CFIDistributionPolicy" "value": "G"
		"mainDepositary" value = "00001"
		"CFICallPut" "value": "B"
		"CFIPaymentStatus" value = "F"
		"notRegulatedMarket" value = "0"
		"financialMarketCode" value = "025"
		"timeLagMiFIDRegUTC" value = "+0200"
		"marketingProductName"

FIELD	FIELD DESCRIPTION	SAMPLE
		"value": "Turbo short"
		"euronextDesignation" "value": "ABN 26.3TS OPENH"
		"bloombergTicker" "value": "PPP PL"
		"issuer" "value": "ComStage ETF"
		"isAccruedInterest" ***Please ignore this field***
		"typeOfInstrumentWithoutTranslation" value = "41"
		"CFIFurtherGrouping" Value = "I"
		"periodIndicator" ***Please ignore this field***
		"nexteco", ***Please ignore this field***
		"CFIClosedOpen" "value": "O"
		"typeOfDerivatives", value = "9"
		"strikeCurrencyIndicator" value = "0"
		"underlyingDesignation", "value": "ABN AMRO Bank"
		"officialQuotationListHeading" ***Please ignore this field***
		"ter" "value": "0.35"
		"officialList" ***Please ignore this field***
instr.stateHisto[...].stateDt	Instrument Trading State Timestamp Please note that this field refers to historic trading states of the instrument rather than to the current trading state	"20160217-10:14:52"
instr.stateHisto[...].stateId	Instrument Trading State Please note that this field refers to	"HAL" - Halted

FIELD	FIELD DESCRIPTION	SAMPLE
	historic trading state of the instrument rather than to the current state	"INE" – Inherited "AUT" – Auction
instr.exchange[…].exchID	Exchange Classification ID	"1025" "1020" "1"
instr.exchange[…].exchCd	Exchange Classification Code	"CPTA1" "ERXLC" "XPAR"
instr.exchange[…].exchlbl	Exchange Classification Description	"Compartiment A - Local Securities" "Euronext - Local Securities" "Euronext - Euronext Paris"
~~instr.exchange[…].exchlvl~~		
~~instr.exchange[…].refIdx~~		
~~instr.exchange[…].ownExchId~~		
instr.instrRel[…].instrLst.lstType	Sectorial Classification of the Instrument	"SEC"
instr.instrRel[…].instrLst.lstCd	ICB Code	ICB Industy Code="8000" ICB Supersector Code="8700" ICB Sector Code="8770" ICB Subsector Code="8777"
instr.instrRel[…].instrLst.lstOwner	Sectorial Classification Provider	"ICB"
instr.instrRel[…].instrLst.lstLbl	ICB Code Designation	"SOCIETES FINANCIERES" "Services financiers" "Finances - General" "Services d'investissement"
instr.instrRel[…].instrLst.lstLvl	ICB Code Level	"1" – Industry "2" – Supersector "3" – Sector "4" – Subsector
instr.instrRel[…].instrLst.listIndex.code	Euronext Index ISIN Code This field identifies a Euronext Index representative of the ICB Code Level of the instrument.	"QS0011017801" - "QS0011018114" -
instr.instrRel[…].instrLst.listIndex.codification	Euronext Index Identifier Type	"ISIN" - "ISIN" -

FIELD	FIELD DESCRIPTION	SAMPLE
instr.instrRel[…].instrLst.listIndex.exchCode	Euronext Index Market	"XPAR" - "XPAR" -
~~instr.prevDayRefCapi~~		
~~instr.stockWeight~~		
~~instr.instrLst.lstType~~		
~~instr.instrLst.lstCd~~		
~~instr.instrLst.lstOwner~~		
~~instr.instrLst.lstLbl~~		
~~instr.instrLst.rfrshFreq~~		
~~instr.instrLst.lastUpdate~~		
~~instr.instrLst.transco[…].code~~		
~~instr.instrLst.transco[…].codification~~		
~~instr.instrLst.transco[…].exchCode~~		
instr.tradingGroupSession.marketState	Instrument Market State	"B" - Post-session "C" - Beginning of day consultation "CLAU" - Closing Auction "CLCA" - Closing Call "CLSD" - Closed "COAU" - Core Auction "COCA" - Core Call "COCO" - Core Continuous "COMO" - Core Monitoring "E" - Intervention before opening "EAMO" - Early Monitoring "F" - End of day inquiry "HALT"- Halted "I" - Forbidden "LAMO"- Late Monitoring "N" - Surveillance Intervention "O" - Opening "P" - Pre-opening "R" - Trading at last "S" - Market Session "TAL" - Trading at last "Z" - Interrupted

FIELD	FIELD DESCRIPTION	SAMPLE
instr.tradingGroupSession.providerMarketState	Instrument Trading Mode (as presented in the Euronext XDP feed)	"CLAU" – Closing Auction "CLCA" – Closing Call "CLSD" – Closed "COAU" – Core Auction "COCA" – Core Call "COCO" – Core Continuous "COMO" – Core Monitoring "EAMO" – Early Monitoring "HALT" – Halted "LAMO" – Late Monitoring "TAL" – Trading At Last
instr.tradingGroupSession.lastUpdate	Last Update Time to Market State	"20160419-09:00:21"
instr.tradingGroup.tradingGroupCode	Instrument Trading Group	"80"
instr.tradingGroup.tradingMode	Instrument Trading Mode	"CON" – Continuous "AUC" - Auction
instr.tradingGroup.instrumentType	Instrument Type	"BOND" – Bonds/Convertible Bonds "STOCK" – Shares, Rights and Funds "TRACK" - ETFs "WARRT" – Warrants/Certificates
instr.tradingGroup.timePreOpening1	Instrument Trading Group Pre-Opening Time	"20160419-07:15:00"
instr.tradingGroup.timeOpening1	Instrument Trading Group Opening Time	"20160419-09:00:00"
instr.tradingGroup.timeClosing1	Instrument Trading Group Closing Time	"20160419-17:40:00"
instr.tradingGroup.timePreOpening2	Instrument Trading at Last Pre-Opening Time	"20160419-17:30:00"
instr.tradingGroup.timeOpening2	Instrument Trading at Last Opening Time	"20160419-17:35:00"
instr.tradingGroup.eodTime	Instrument Trading at Last Closing Time	"20160419-18:00:00"
instr.listingPlaces	Instrument Listing Places	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris
instr.listingPlacesMEP	Instrument Euronext Market Entry Points	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris

FIELD	FIELD DESCRIPTION	SAMPLE
instr.underlying[…].code	(Warrants and ETFs only)	BDM Code = "576684" ISIN Code = "NL0006294274" Trading Symbol = "ENX" Euronext Code = "NL0006294274" Internal ID Code = "1240952"
instr.underlying[…].codification	(Warrants and ETFs only)	"BDM" – BDM Code "ISIN" – ISIN Code "MNE" – Trading Symbol "NXT"– Euronext Code "IID" – Internal ID Code
instr.underlying[…].exchCode	(Warrants and ETFs only)	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris
instr.inavId[...].code	(ETFs only)	BDM Code = "576684" ISIN Code = "NL0006294274" Trading Symbol = "ENX" Euronext Code = "NL0006294274" Internal ID Code = "1240952"
instr.inavId[...].codification	(ETFs only)	"BDM" – BDM Code "ISIN" – ISIN Code "MNE" – Trading Symbol "NXT"– Euronext Code "IID" – Internal ID Code
instr.inavId[...].exchCode	(ETFs only)	"XAMS" – Euronext Amsterdam "XBRU" – Euronext Brussels "XLIS" – Euronext Lisbon "XPAR" – Euronext Paris

3.2 CURRENT TRADING SESSION

FIELD	FIELD DESCRIPTION	SAMPLE
instr.currInstrSess.sessionType	Trading Session	"CUR" - Current
instr.currInstrSess.dateTime	Timestamp	"20160316-16:58:09"
instr.currInstrSess.quotationState	Instrument Trading State	"HAL" - Halted "INE" - Inherited "AUT" – Auction

FIELD	FIELD DESCRIPTION	SAMPLE
instr.currInstrSess.quality	Data Timeliness Type	"RT" – Real Time Data "DT" – Delayed Data
instr.currInstrSess.lastPx	Last Price	"38.545"
instr.currInstrSess.lastQty	Last Price Quantity	"65.0"
instr.currInstrSess.openPx	Open Price	"37.505"
instr.currInstrSess.openQty	Open Price Quantity	"7.0"
instr.currInstrSess.openDtTm	Open Price Timestamp	"20160316-09:00:28"
instr.currInstrSess.indiOpenPx	Theoretical Open Price	"37.505"
instr.currInstrSess.indiOpenPxDtTm	Theoretical Open Price Timestamp	"20160316-09:00:28"
instr.currInstrSess.setlmtPx	***Please ignore this field***	
instr.currInstrSess.setlmtPxDtTm	***Please ignore this field***	
instr.currInstrSess.risVarLim	Authorised Price Interval - Upper Limit	"40.47"
instr.currInstrSess.falVarLim	Authorised Price Interval - Lower Limit	"36.62"
instr.currInstrSess.tradedQty	Traded Quantity	"181160.0"
instr.currInstrSess.nbTrades	Number of Trades	"1540"
instr.currInstrSess.lastUpdate	Last Update Timestamp	"20160316-16:58:10"
instr.currInstrSess.valorization	Instrument Price (usually same as Last Price)	"38.545"
instr.currInstrSess.valorizationDateTime	Instrument Price Timestamp	"20160316-16:58:09"
instr.currInstrSess.marketCapitalisation	Market Capitalization	"2.69815E9"
instr.currInstrSess.prevAdjClosingPrice	Adjusted Previous Closing Price	"37.465"
instr.currInstrSess.prevAdjClosingDateTime	Adjusted Previous Closing Price Timestamp	"20160316-04:06:18"
instr.currInstrSess.lastPriceAdj	Adjusted Last Price (Warrants only)	"37.465"
instr.currInstrSess.lastPriceAdjDateTime	Adjusted Last Price Timestamp (Warrants only)	"20160316-04:06:18"
instr.currInstrSess.lastTradeType	Last Price Type (Warrants only)	"VT" - Valuation Trade
instr.currInstrSess.haltReason	Trading Halt Reason	"C" - Opening price outside collars "M" - Manuel halting by Market Operations "R" - Halted. No liquidity provider "UNA" - Instrument not halted or information not available
instr.currInstrSess.actionAffectingState	Event Affecting Market State	"B" - Universal Trading Platform

FIELD	FIELD DESCRIPTION	SAMPLE
		initialization, for instruments which are in TAKO phase "E" - Knock out by market operations "I" - knock out by issuer "O" - LP Present in TAKO phase "T" - Beginning of a TAKO (trading after knock out) phase "C" - Trading on the instrument at the opening (sent before O) "D" - Cancelled programmed opening "M" - Instrument manually halted by Market Operations "N" - Instrument is being initialized (beginning of the trading day) "O" - Instrument opened "P - Deferred programmed opening "R"- Automatic halting at the class auction "Y" - Beginning of a one side only period "Z" - End of a one side only period
instr.currInstrSess.orderEntryRejection	Order Entry Rejection Indicator	"N" - Order entry allowed "Y" - Order entry forbidden

3.3 PREVIOUS TRADING SESSION

FIELD	FIELD DESCRIPTION	SAMPLE
instr.prevInstrSess.sessionType	Trading Session	"DCC" – Previous session where the instrument traded
instr.prevInstrSess.dateTime	Timestamp	"20160315-17:35:14"
instr.prevInstrSess.quotationState	Instrument Trading State	"HAL" – Halted "INE" - Inherited "AUT" – Auction
instr.prevInstrSess.quality	Data Timeliness Type	"RT" – Real Time Data "DT" – Delayed Data
instr.prevInstrSess.lastPx	Last Price	"37.465"
instr.prevInstrSess.lastQty	Last Price Quantity	"152.0"
instr.prevInstrSess.openPx	Open Price	"37.105"

FIELD	FIELD DESCRIPTION	SAMPLE
instr.prevInstrSess.openQty	Open Price Quantity	"10.0"
instr.prevInstrSess.openDtTm	Open Price Timestamp	"20160315-09:00:01"
instr.prevInstrSess.indiOpenPx	Theoretical Open Price (refers to the following session)	"37.465"
instr.prevInstrSess.indiOpenPxDtTm	Theoretical Open Price Timestamp	"20160315-17:35:14"
instr.prevInstrSess.closPx	Closing Price	"37.465"
instr.prevInstrSess.setlmtPx	***Please ignore this field***	
instr.prevInstrSess.setlmtPxDtTm	***Please ignore this field***	
instr.prevInstrSess.risVarLim	Authorised Price Interval - Upper limit	"41.21"
instr.prevInstrSess.falVarLim	Authorised Price Interval - Lower Limit	"33.72"
instr.prevInstrSess.nbTrades	Number of Trades	"1402"
instr.prevInstrSess.lastUpdate	Last Update Time	"20160315-17:40:01"
instr.prevInstrSess.tickSize	Tick Size	"0.01"
instr.prevInstrSess.tickSizeRule	***Please ignore this field***	
instr.marketCapitalisation	Instrument Market Capitalization	"5.21E7"
instr.prevInstrSess.prevAdjClosingPrice	Adjusted Previous Closing Price	"37.57"
instr.prevInstrSess.prevAdjClosingDateTime	Adjusted Previous Closing Price Timestamp	"20160315-04:06:15"
instr.prevInstrSess.lastTradeType	Last Price Type (Warrants only)	"VT" - Valuation Trade
instr.prevInstrSess.haltReason	Trading Halt Reason	"C" - Opening price outside collars "M" - Manuel halting by Market Operations "R" - Halted. No liquidity provider "UNA" - Instrument not halted or information not available
instr.prevInstrSess.actionAffectingState	Event Affecting Market State	"B" - Universal Trading Platform initialization, for instruments which are in TAKO phase "E" - Knock out by market operations "I" - knock out by issuer "O" - LP Present in TAKO phase "T" - Beginning of a TAKO (trading after knock out) phase "C" - Trading on the instrument at the opening (sent before O) "D" - Cancelled programmed opening "M" - Instrument manually halted by

FIELD	FIELD DESCRIPTION	SAMPLE
		Market Operations "N" - Instrument is being initialized (beginning of the trading day) "O" - Instrument opened "P - Deferred programmed opening "R"- Automatic halting at the class auction "Y" - Beginning of a one side only period "Z" - End of a one side only period
instr.prevInstrSess.orderEntryRejection	Order Entry Rejection Indicator	"N" - Order entry allowed "Y" - Order entry forbidden

3.4 BEST BID/ASK ORDERS

FIELD	FIELD DESCRIPTION	SAMPLE
instr.ordBook.bsBidPx	Best Bid Price	"38.51"
instr.ordBook.bsBidQty	Best Bid Quantity	"281.0"
instr.ordBook.bsBidDtTm	Best Bid Timestamp	"20160316-17:23:34"
instr.ordBook.bsAskPx	Best Ask Price	"38.59"
instr.ordBook.bsAskQty	Best Ask Quantity	"150.0"
instr.ordBook.bsAskDtTm	Best Ask Timestamp	"20160316-17:23:34"
instr.ordBook.lastUpdate	Last Update Timestamp	"20160419-14:33:13"
instr.ordBook.sessionType	Trading Session	"CUR" - Current

3.5 ORDER BOOK BY PRICE LIMIT (10 BEST LIMITS)

FIELD	FIELD DESCRIPTION	SAMPLE
instr.ordBook.ordBkLnAsk[0...9].qty	Aggregated Ask Price Limit – Line [0...9] Quantity	"822.0"
instr.ordBook.ordBkLnAsk[0...9].nbOrd	Aggregated Ask Price Limit – Line [0...9] Number of Orders	"3"
instr.ordBook.ordBkLnAsk[0...9].px	Aggregated Ask Price Limit – Line [0...9] Price	"38.58"
instr.ordBook.ordBkLnAsk[0...9].type	Type of Ask Price	“N” = Normal “M” = Market order
instr.ordBook.ordBkLnAsk[0...9].dateTime	Aggregated Ask Price Limit – Line [] Timestamp	"20160316-17:29:45"

FIELD	FIELD DESCRIPTION	SAMPLE
instr.ordBook.ordBkLnBid[0...9].qty	Aggregated Bid Price Limit – Line [0...9] Quantity	"13828.0"
instr.ordBook.ordBkLnBid[0...9].nbOrd	Aggregated Bid Price Limit – Line [0...9] Number of Orders	"19"
instr.ordBook.ordBkLnBid [0...9].px	Aggregated Bid Price Limit – Line [0...9] Price	"38.58"
instr.ordBook.ordBkLnBid[0...9].type	Type of Bid Price	"N" = Normal "M" = Market order
instr.ordBook.ordBkLnBid[0...9].dateTime	Aggregated Bid Price Limit – Line [0...9] Timestamp	"20160316-17:32:38"

3.6 INSTRUMENT PERFORMANCE

FIELD	FIELD DESCRIPTION	SAMPLE
instr.perf[...].perType	Performance over a period of time	"D" – Current Session
		"P" – Previous session where the instrument traded
		"1W" – Last week
		"1M" - Last month
		"3M" – Last three months
		"52W" – Last 52 weeks
		"6M" – Last six months
		"Y" – Year-to-date
instr.perf[...].perStartDtTm	Period Start Date	"20160316-00:00:00"
instr.perf[...].perStartPx	Start Date Price	"38.48"
instr.perf[...].var	Variation in Percentage	"-0.01962"
instr.perf[...].pxVar	Variation in Currency	"-0.755"
instr.perf[...].highPx	Highest Price	"39.19"
instr.perf[...].highPxQty	Highest Price Quantity	"11.0"
instr.perf[...].highPxDtTm	Highest Price Timestamp	"20160317-09:01:53"
instr.perf[...].lowPx	Lowest Price	"37.45"
instr.perf[...].lowPxQty	Lowest Price Quantity	"1.0"
instr.perf[...].lowPxDtTm	Lowest Price Timestamp	"20160317-15:01:14"
instr.perf[...].tradedQty	Traded Quantity	"184406.0"
instr.perf[...].tradedAmt	Traded Amount	"7047660.53"
instr.perf[...].nbOpenDays	Number of Trading Sessions	"1"
instr.perf[...].updateMd	Update Method	"I" - Intraday

FIELD	FIELD DESCRIPTION	SAMPLE
instr.perf[…].lastQuotDtTm	Period End Date/Time	"20160317-15:53:31"
instr.perf[…].sessionType	Trading Session	"CUR" - Current "DCC" – Previous session where the instrument traded. Applies only when instr.perf[…].perType = "P".

3.6.1 INTRADAY TICK DATA & INTERVAL BAR DATA

FIELD	FIELD DESCRIPTION	SAMPLE
status	***Please ignore this field***	
entityID	Data Provider	"euronext"
View	***Please ignore this field***	
sessionQuality	Timeliness of the Data	"RT" – Real Time data "DT" – Delayed Data
Type	***Please ignore this field***	
Currency	Currency	"EUR"
Accuracy	Number of Decimals in the Price	"2"
TickSize	Tick Size	"0.01"
tickSizeRule	Tick Size Rule	"ERX_07" Please refer to tick size table
intradayPoint[…].time	Trade Timestamp (for Intraday Tick Data) Start Timestamp (for Interval Bar Data)	"20160617-09:03:00"
intradayPoint[…].nbTrade	Number of Trades in Interval Bar	"4"
intradayPoint[…].beginPx	Trade Price (for Intraday Tick Data) Open Price (for Interval Bar Data)	"34.345"
intradayPoint[…].beginTime	Open Price Timestamp (for Interval Bar Data)	"09:03:10"
intradayPoint[…].endPX	Last Price (for Interval Bar Data)	34.36"
intradayPoint[…].endTime	Last Price Timestamp (for Interval Bar Data)	"09:03:36"
intradayPoint[…].highPx	High Price (for Interval Bar Data)	"34.36"
intradayPoint[…].lowPx	Low Price (for Interval Bar Data)	"34.345"
intradayPoint[…].beginAskTime	***Please ignore this field***	
intradayPoint[…].endAskTime	***Please ignore this field***	
intradayPoint[…].beginBidTime	***Please ignore this field***	

FIELD	FIELD DESCRIPTION	SAMPLE
intradayPoint[…].endBidTime	***Please ignore this field***	
intradayPoint[…].vol	Trade Quantity (for Intraday Tick Data) Total Traded Quantity (for Interval Bar Data)	"193.0"
intradayPoint[].amt	Trade Value (in Currency) (for Intraday Tick Data) Total Traded Value (in Currency) (for Interval Bar Data)	"6629.335"
intradayPoint[…].tradeStatus	Trade Status (for Intraday Tick Data)	"VAL" – Valid "DEL" – Deleted
intradayPoint[…].tradeType	Trade Type (for Intraday Tick Data)	"00" - Exchange Continuous "01" - Exchange Cross "VT" - Valuation Trade "0R" - Retail Matching Facility "2D" - OffBook Delta Neutral "2E" - OffBook Market Vwap "2H" - OffBook Out of market "2I" - OffBook Investment funds "2R" - OffBook Secondary Listing Place "2Y" - OffBook Exchange for Physical "0OP" - Opening "3P" - OTC "00K" - Trading after knock Out "01K" - Trading after knock Out "00H" - Auction "01H" - Auction Cross "00L" - Trading at last "01L" - Trading at last "00C" - Auction "01C" - Auction cross "00A" - Auction "01A" - Auction cross "OXA" - Opening "AT" - Automatic trade "QC" - Auction Closing "QO" - Auction Opening "QA" - Auction "QB" - Auction

FIELD	FIELD DESCRIPTION	SAMPLE
		"QE" - Auction "QF" - Auction "LC" - Cancellation of on-Exchange trade after date of publication "PC" - Previous Day Contra "O" - Ordinary trade "IF" - Inter Fund Transfer "NK" - Negotiated trade DLY pub "NT" - Negotiated trade "OC" - Cancellation of OTC trade "OK" - Ordinary trade DLY pub "OT"- OTC Trade "SC" - Cancellation of SI trade after date of publication "SI" - SI Trade "SK" - SI Trade DLY pub "TK" - OTC trade - DLY pub "EA" - ExchangeAuction "EC" - ExchangeContinuous "XOT" - OTC "EM" - ExchangeMatched "ED" - ExchangeDark
intradayPoint[…].provTrdID	Trade ID (for Intraday Tick Data)	"203"

4. APPENDIX B: STOCK TYPE

CODE	CONTENT
008	Participating bond-Cum-warrant
009	Participating bond-Ex-warrant
010	Participating share
011	Subordinated bond
013	Interest strip
014	Principal strip
015	Perpetual
017	Bunny bond
018	ORT (France)
019	OAT Fungible government bond
021	Convertible bond
022	Exchangeable bond
023	Participating bond
024	Indexed bond
025	Ordinary bond or note
026	Lottery bond
027	Savings bond
028	Indemnity bond
030	Bond warrant
032	Bond Cum-warrant
033	Bond Ex-warrant
035	Right to indemnity security
038	Bond option
039	Emprunt notionnel (France)
040	Founder's share
041	Ordinary share
042	Bonus share
043	Preferred share
044	Saving share
045	Certificate
046	AFV share (Belgium)
047	Accumulating right
048	Allotment right

CODE	CONTENT
049	Subscription right
050	Preferred stock
051	VVPR share (Belgium)
052	Bons de caisse
053	Cash note
054	Allocation right
055	Option right
056	Share-Cum warrant
057	Share-Ex warrant
058	Preference share
059	Preference
060	Gold
061	Unit of international investment trust
062	Unit of unit trust
063	Mortgage warrant
064	Bank note
065	Devise commerciale (France)
066	Devise titre (France)
067	Commodities
068	Index
069	Unit
070	Investment fund share
071	Miscellaneous products-Warrant
072	Share warrant
075	Miscellaneous
076	Listed call option
077	Listed put option
078	Call money, average BD rate
080	Founder's stock
081	Partnership interest
082	Part de réserve (Belgium)
084	Deferred share
085	Regional development company share
086	Venture capital company
087	Real estate company share

CODE	CONTENT
090	Mortgage bond
100	Participation certificate
105	Index warrant
106	Currency warrant
108	Warrant of a warrant
110	Participating share-Warrant
111	Subordinated convertible bond
121	Convertible bond-Cum warrant
123	Convertible participating bond
139	Matif 90 days treasury bond
140	Part de réserve AFV (Belgium)
141	Convertible ordinary share
142	Dividend right certificate
200	Participative certificate-Warrant
221	Convertible bond-Ex warrant
240	AFV company's share (Belgium)
241	VVPR's company's share (Belgium)
242	Accumulation fund share
243	Distribution fund share
244	Unit-Futures and Options market investment fund
245	Accumulation fund share
246	Distribution fund share
247	Certificate of guaranteed value
248	Share warrant 249 BTAN (France)
250	OAT (France)-Interest certificate
251	OAT (France)-Principal certificate
252	Indexed OAT (France)
253	Indexed OAT (France)-Principal certificate
254	Indexed OAT (France)-Interest certificate
255	Euro medium term note-EMTN 256 BTF (France)
257	Indexed certificate
258	BMTN (France)
259	Real estate bond
260	Convertible EMTN
261	Indexed EMTN

CODE	CONTENT
262	Indexed certificate-EMTN
263	Exchange Traded fund-ETF
264	Venture Cap. mutual fund share
265	Mutual fund for innovation share
266	Medium Term Note
267	Medium Term Note-Floating rate
268	Accumulating share
269	Distribution share
270	Ordinary bond-Interest certificate
271	Ordinary bond-Principal certificate
272	'Beneficial interest' share
273	Redeemable cumulative preferred share
274	Convertible redeemable cumulative preferred share
275	Convertible cumulative preferred share
276	Cumulative preferred share
277	Redeemable preferred share
278	Foreign treasury note
279	Subordinated Euro medium term note
280	Strip VVPR
281	Mortgage Bonds
303	Exotic warrant
304	Certificate of deposit
305	Commercial paper
306	ETF – Closed ended Fund
307	ETF – Open ended Fund
308	SICAV Action
309	Preferred securities

5. APPENDIX C: FINANCIAL MARKET CODE

CODE	CONTENT
000	None applicable
025	Paris
277	Centralized lending market
278	Brussels
279	Amsterdam
290	Lisbon
292	London
295	Luxembourg
299	Europe
300	Commercial paper

6. APPENDIX D: STOCK EXCHANGE CODE

CODE	CONTENT
000	Not Applicable
006	Bruxelles
025	Paris
027	Lyon
028	Marseille
029	Nancy
030	Bordeaux
031	Nantes
032	Lille
038	Amsterdam
047	Luxembourg
051	Lisbon
726	London
991	European Stock

7. APPENDIX E: MARKET FEED CODE

MARKET	CODE	CONTENT
	00	None Applicable
	CC	Technical message
	61	Volatility Indices
	62	Strategic indices
	63	Net Return Indices
	64	Gross Return Indices
	66	Commodities Indices
	01	Equity Indices
Euronext Paris	02	CAC40 stocks that do not support traded options.
	03	Non-CAC40 stocks that support traded options.
	04	Non-CAC40 stocks that do not support traded options.
	05	Non-CAC40 stocks that support traded options (same as 03)
	06	Non-CAC40 stocks that do not support traded options.
	07	Bonds.
	10	Free market (“Marché libre”)
	11	Securities in process of being introduced (SHIVA).
	12	Gold.
	13	Foreign exchange.
	15	Centralized lending market
	16	Commercial paper
	60	iNAV (Indicative Net Asset Value of ETFs)
	20	Stock listed in Brussels
Euronext Brussels	21	Bonds listed in Brussels
	22	Brussels Index constituents
	23	Warrants listed in Brussels
	30	Stocks listed in Amsterdam
Euronext Amsterdam	31	Bonds listed in Amsterdam
	32	Amsterdam Index constituents
	33	Warrants listed in Amsterdam

MARKET	CODE	CONTENT
	40	Equities, Rights and Investment Funds listed in Lisbon
Euronext Lisbon	41	Bonds and Certificates listed in Lisbon
	42	PSI-20 equities listed in Lisbon
	43	Warrants listed in Lisbon
	18	Equities and GDR
Euronext London	19	Bonds and Bonds convertible / exchangeable
	14	Warrants
	50	Stocks listed in BDL Luxembourg
	51	Bonds listed in BDL
	52	Corporate Bonds listed in BDL
	53	Warrants listed in BDL (bilateral clearing / settlement)
	54	Indices listed in BDL
	55	OPCs listed in BDL (bilateral clearing / settlement)
	56	Bonds listed in BDL (bilateral clearing / settlement)
	57	Stocks listed in BDL (European regulated market)
European Instruments	65	European stocks (Trade publication purpose)

8. APPENDIX F: STRIKE PRICE INTERPRETATION RULES

MARKETING PRODUCT NAME	STRIKE 1	STRIKE 2
100% Bear Quanto	Upper_Threshold	Reference_Level
100% Plus Performance	n/a	n/a
AAB Turbo Long	Lower_Threshold	Strike_Price
AAB Turbo Short	Upper_Threshold	Strike_Price
Airbag Accelerator	Airbag	Capped_Value
Airbag Certificate	Airbag	Capped_Value
Alpha Outperformance Cert	Strike_Price	Participation
Autocall	Lower_Level	Upper_Altering_Barrier
Best Speeder Long	Lower_Threshold	n/a
Best Speeder Short	Upper_Threshold	n/a
BEST Turbo Long	Lower_Threshold	n/a
BEST Turbo Short	Upper_Threshold	n/a
Bonus	Bonus_Level	Lower_Altering_Barrier
Bonus Capped Certificate	Bonus_Level	Lower_Altering_Barrier
Bonus Cappé	Bonus_Level	Lower_Altering_Barrier
Bonus Cappé Last Minute	Bonus_Level	Lower_Altering_Barrier
Bonus Certificate	Bonus_Level	Lower_Altering_Barrier
Bonus Certificate Pro	Bonus_Level	Lower_Altering_Barrier
Bonus Certificate Quanto	Bonus_Level	Lower_Altering_Barrier
Bonus Pro	Bonus_Level	Lower_Altering_Barrier
Booster Long	Lower_Threshold	n/a
Booster Short	Upper_Threshold	n/a
Call Warrant	Strike_Price	n/a
Capital Protected Note	Protection_Level	Coupon_Amount
Capital protege	Protection_Level	Participation
Cappé	Lower_Level	Upper_Level
Cappé +	Lower_Altering_Barrier	Upper_Level
Cash Settled Discount	Capped_Value	n/a
Certificados	n/a	n/a
Certificat	n/a	n/a
Certificat 100%	n/a	n/a
Certificat 100% Bear	Upper_Threshold	Reference_Level
Certificat 100% bear quanto	Upper_Threshold	Reference_Level

MARKETING PRODUCT NAME	STRIKE 1	STRIKE 2
Certificat 100% Open-End	n/a	n/a
Certificat 100% Quanto	n/a	n/a
Certificat Bonus	Bonus_Level	Lower_Altering_Barrier
Certificat Corridor	Lower_Level	Upper_Level
Certificat Leverage	n/a	n/a
Certificat Short	n/a	n/a
Certificat Open End	n/a	n/a
Certificat Pyramide	Lower_Level	Upper_Level
Certificat Replix	n/a	n/a
Certificat SPRINT	Capped_Value	Lower_Level
Certificat Sprint Plus	Capped_Value	Lower-Altering_Barrier
Certificate	n/a	n/a
Certificate 100% Bear	Upper_Threshold	Reference_Level
Certificate 100% Open End	n/a	n/a
Certificate 100% Open-end Quanto	n/a	n/a
Certificate 100% Quanto	n/a	n/a
Certifié 100%	n/a	n/a
Certifié 100% Bear	Upper_Threshold	Reference_Level
Certifié 100% Quanto	n/a	n/a
Certifié Cap	Lower_Level	Upper_Level
Certifié Cap+	Lower_Altering_Barrier	Upper_Level
Certifié Floor	Upper_Level	Lower_Level
Certifié Floor+	Upper_Altering_Level	Lower_Level
Cobatracker	n/a	n/a
Collateralized tracker certificate	n/a	n/a
Convertibles Synthétiques	Protection_Level	Participation
Credit Linked Note	n/a	n/a
Discount Certificate	n/a	n/a
Double Up Certificate	Capped_Value	Lower_Level
Dynamic Capital Guarantee	Protection_Level	Participation
Factor certificate	n/a	n/a
Factor Long	n/a	n/a
Factor Short	n/a	n/a
Flooré	Upper_Level	Lower_Level
Flooré +	Upper_Altering_Level	Lower_Level

MARKETING PRODUCT NAME	STRIKE 1	STRIKE 2
Index Linked Certificates	n/a	n/a
Index Linked Redemption Cert.	n/a	n/a
ING Sprinter Long	Lower_Threshold	Strike_Price
ING Sprinter Short	Upper_Threshold	Strike_Price
Inline	Lower_Threshold	Upper_Threshold
Jet	Capped_Value	Lower_Level
Leverage	n/a	n/a
Limited Speeder Bear	Upper_Threshold	n/a
Limited Speeder Bull	Lower_Threshold	n/a
Limited SPEEDER Long	Lower_Threshold	Strike_Price
Limited Speeder Short	Upper_Threshold	Strike_Price
Limited Sprinter Long	Lower_Threshold	Strike_Price
Limited Sprinter Short	Upper_Threshold	Strike_Price
Limited Turbo Long	Lower_Threshold	Strike_Price
Limited Turbo Short	Upper_Threshold	Strike_Price
Lookback Certificate	Coupon_Percentage	n/a
MiniFuture Long	Lower_Threshold	Strike_Price
MiniFuture Short	Upper_Threshold	Strike_Price
Open End Certificate	n/a	n/a
Perf Plus	Reference_Level	Capped_Value
Perles Plus	Capped_Value	Lower_Level
Phoenix	Barrier_Capital	Barrier_Coupon
Physically Settled Discount	Capped_Value	n/a
Power Down	Upper_Threshold	Strike_Price
Power Up	Lower_Threshold	Strike_Price
Protect	Protection_Level	Participation
Protectis	Protection_Level	Nominal_Value
Put Warrant	Strike_Price	n/a
Quanto Certificate	n/a	n/a
Quanto Open End Certificate	n/a	n/a
Quanto Speeder Long	Lower_Threshold	Strike_Price
Quanto Speeder Short	Upper_Threshold	Strike_Price
Recovery Bonus Cappés	Bonus_Level	Lower_Altering_Barrier
Recovery Bonus Capped	Bonus_Level	Lower_Altering_Barrier
Rendement Certificaat	Bonus_Level	Lower_Altering_Barrier

MARKETING PRODUCT NAME	STRIKE 1	STRIKE 2
Replix	n/a	n/a
Reverse Bonus Cappé	Bonus_Level	Upper_Altering_Barrier
Reverse Convertible Note	Coupon	Lower_Altering_Barrier
Reverse Exchangeable	Initial_Level	Coupon
Rolling Covered Call	Coupon_Amount	n/a
Securis	Protection_Level	Nominal_Value
Short	n/a	n/a
Speeder Long	Lower_Threshold	Strike_Price
Speeder Short	Upper_Threshold	Strike_Price
Sprint	Capped_Value	Lower_Level
Sprinter BEST Long	Lower_Threshold	n/a
Sprinter BEST Short	Upper_Threshold	n/a
Sprinter Long	Lower_Threshold	Strike_Price
Sprinter Short	Upper_Threshold	Strike_Price
Sprintx8	Capped_Value	Lower_Level
Stability Speeder	Lower_Threshold	Upper_Threshold
Stability Warrant	Lower_Threshold	Upper_Threshold
Static Capital Guarantee	Protection_Level	Participation
Super Sprinter	Bonus_Level	Lower_Knockin_Level
Step Up Certificate	n/a	Coupon_Type
Structured Note	Coupon_Percentage	n/a
Total Return Certificate	n/a	n/a
Tracking Certificates	n/a	n/a
Trader Long	Lower_Threshold	n/a
Trader Short	Upper_Threshold	n/a
Triple Trigger Certificate	n/a	n/a
Turbo Call	Lower_Threshold	Strike_Price
Turbo Call Illimité	Lower_Threshold	Strike_Price
Turbo Call Infini	Lower_Threshold	Strike_Price
Turbo Call Infini Best	Lower_Threshold	Strike_Price
Turbo Illimite BEST Call	Lower_Threshold	n/a
Turbo Illimite BEST Put	Upper_Threshold	n/a
Turbo Jour Call	Lower_Threshold	Strike_Price
Turbo Jour Put	Upper_Threshold	Strike_Price
Turbo Life Call	Lower_Threshold	Strike_Price

MARKETING PRODUCT NAME	STRIKE 1	STRIKE 2
Turbo Life Put	Upper_Threshold	Strike_Price
Turbo Long	Lower_Threshold	Strike_Price
Turbo Pro Call	Lower_Threshold	Strike_Price
Turbo Pro Put	Upper_Threshold	Strike_Price
Turbo Put	Upper_Threshold	Strike_Price
Turbo Put Illimité	Upper_Threshold	Strike_Price
Turbo Put Infini	Upper_Threshold	Strike_Price
Turbo Put Infini Best	Upper_Threshold	Strike_Price
Turbo Short	Upper_Threshold	Strike_Price
Twin Win Certificat	Initial_Level	Lower_Altering_Barrier
Unlimited Speeder Bear	Upper_Threshold	Strike_Price
Unlimited Speeder Bull	Lower_Threshold	Strike_Price
Unlimited Speeder Long	Lower_Threshold	Strike_Price
Unlimited Speeder Short	Upper_Threshold	Strike_Price
Yield Discovery Note	n/a	n/a