

Document title

EURONEXT STRUCTURED PRODUCTS MASTER FILE CLIENT SPECIFICATION

Version Date

4.12 30 October 2019

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PREFACE

DOCUMENT HISTORY

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

VERSION NO.	DATE	CHANGE DESCRIPTION
1.0	Nov 2009	Initial version
2.0	Dec 2009	Changes:
		– Addition of delta files
		– File Specifications
		– Delivery methods
2.0a	01/12/2009	Formatted into new template
2.1	28/01/2010	Product package renamed to Structured Products
2.2	15/12/2011	Changes:
		– File Specifications
		– Delivery Schedule
2.3	5/12/2011	Changes:
		– Table 6 – Marketing Product Name (Limited SPEEDER Long)
	29/08/2012	Rebranded with new NYSE Technologies template
2.4	09/01/2013	Changes:
		Strike Price Interpretation Rules
		New MarketIng Product Names
		– Bonus Cappé Last Minute
		– Booster Long
		– Booster Short
		– Collateralized tracker certificate
		– Rendement Certificaat
		– Sprinter BEST Long
		– Sprinter BEST Short
		- Turbo Illimite BEST Call
		- Turbo Illimite BEST Put
3.0	25/02/2013	Effective mid-April 2013
		Release of Primary Market Service and other field enhancements
		Changes:

VERSION NO.	DATE	CHANGE DESCRIPTION
		- Introduction section
		– File Names section
		– File Structure section
		new fields addedsome existing fields modified
3.1	08/04/2013	Table 2 Structured Products File Records
		Minor field name changes:
		Subscription_PriceSubscription_Price_Date
		Minor name to field example:
		- Subscription_Price_Type
3.2	13/12/2013	Launch of Trading After Knock-Out
		- Added a new field: TAKOPeriod
3.3	03/03/2014	Updated Trading After Knock-Out production release date (Wed 21 May 2014) – Postponed until further notice
4.0	03/07/2014	Rebranded to Euronext
4.1	22/09/2014	Updated the Euronext Service Operations email address
		Updated Payment After Knock-Out (formerly Trading After Knock-Out) related changes production release date – Mon 20 October 2014
4.2	05/12/2014	Changes resulting from migration to new Euronext data delivery infrastructure – Planned for Mon 16 March 2015
		 Added section 1 – NEW DATA DELIVERY INFRASTRUCTURE Edited section 4 – FTP DIRECTORY STRUCTURE
4.3	13/03/2015	Updated Euronext Service Operations telephone number
		Updated dates in section 1.2 Transition Period
		Updated Strike Price Interpretation Rules
4.4	07/04/2015	Updated Delta File name
4.5	14/05/2015	Updated Euronext Service Operations email address
4.6	01/12/2015	Updated Strike Price Interpretation Rules:
		 Added Certificat 100% bear quanto Modified Autocall Modified Discount Certificate Modified Limited SPEEDER Long Modified Limited Speeder Short
		- Modified Turbo Call

VERSION NO.	DATE	CHANGE DESCRIPTION
		- Modified Turbo Put
4.7	15/02/2016	Updated Euronext Service Operations phone number
		Updated Strike Price Interpretation Rules:
		Added LeverageAdded Short
4.8	18/04/2016	Corrected Underlying_designation field length
4.9	20/12/2016	Updated Strike Price Interpretation Rules: - Added Bear Certificate
4.10	31/05/2017	 Updated Strike Price Interpretation Rules: Added Turbo Life Call Added Turbo Life Put
		Added Limited Turbo CallAdded Limited Turbo Put
4.11	20/12/2017	Effective 02 January 2018,
		 An auxiliary file carrying the URL of the KID documents produced by issuers under the terms of the PRIIPS regulation will be added to the Structured Products Master File product (see pages 6, 7 and 15)
4.11a		Updated Strike Price Interpretation Rules:
		Added: - Athena - SMART Turbo Long - SMART Turbo Short - Turbo Life Long - Turbo Life Short - Turbo ilimitado Call - Turbo ilimitado Put - Turbo ilimitado SL Call - Turbo ilimitedo SL Put - Turbo Illimite Smart Call - Turbo Illimite Smart Put - Unlimited Turbo Call - Unlimited Turbo Put Updated: - Discount Certificate
4.12	30/10/2019	Updated Strike Price Interpretation Rules: Added:
		- Bonus Certificaat

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1. INTRODUCTION

The Euronext Structured Products Master File currently provides comprehensive referential data information on Structured Products (warrants, certificates and structured notes) listed on Euronext markets. Further to the release of the Primary Market Service the Euronext Structured Products Master File will be enriched with data to cover the new service.

The Euronext Structured Products Master File product includes the following files:

- A daily batch that provides information on all warrants, certificates and structured notes listed on Euronext secondary markets and/or available for subscription on the Euronext Primary Market offer.
- A daily delta file that provides only information on changes to the daily batch. The changes can be additions or deletions of instruments and modification to the characteristics of instruments that are currently listed.
- A daily auxiliary file carrying the URL where clients can find the Key Information Documents (KIDs) produced by issuers for most of the instruments included in the Structured Products daily batch. This file will be available as of 02 Jan 2018.

2. FILE SPECIFICATIONS

2.1 STRUCTURED PRODUCTS FILES

2.1.1 File Availability

The Euronext Structured Products Master File is comprised of several files that are delivered to clients on trading days (according to the Euronext trading calendar) at 01:00 CET.

2.1.2 File Format

The files are provided in TXT (pipe-delimited), Microsoft Excel and XML formats.

2.1.3 File Name

- Daily batch: SP_EU_ENXT_REF_MASTER_BOD
- Daily delta: SP_EU_ENXT_REF_MASTER_BOD_delta
- Auxiliary file: SP_EU_ENXT_REF_MASTER_AUX (available in txt format only)

2.2 FILES STRUCTURE

The Daily Batch and the Daily Delta contain the following records:

n x structured products record

where n is the number of structured products listed on Euronext cash markets.

Table 1 Structured Products Files Records

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Change Type	(Daily Delta file only) Indicates the type of change made to the Daily Batch	Alphanumeric	1	new record (A) modified record (M) deleted recorded (D)
Euronext_Code	Equal to ISIN code except if instrument is multi- listed	Alphanumeric	12	DE000DR98LC0
BDM_Security_Code	This column is not currently utilized and is reserved for future use	Number	1	Not filled in since 13 December 2011
Isin_code	ISIN code	Alphanumeric	12	DE000DR98LC0
Warrant_type (1)	Indicates the type of structured product	Alphanumeric	1	Call (1) Put (2) N/A (Blank)

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Exercise_type	Indicates the type of exercise	Alphanumeric	1	European (1) American (2) Mixed type (3)
Market_type	Crosses product type and underlying type	Alphanumeric	20	Market Type Correspondence table
Underlying_Isin_code	Underlying ISIN code	Alphanumeric	12	FR0003500008
Underlying_local_code	This column is not currently utilized and is reserved for future use	Number	6	Not filled in
Underlying_MEP	Underlying trading place :	Alphanumeric	3	Underlying MEP correspondence table
First_trading_date	First trading date	Date	8	YYYYMMDD
Issue_date	Issue date	Date	8	YYYYMMDD
Underlying_type	Crosses product type and underlying type	Alphanumeric	20	Underlying type correspondence table
Strike_price (1) (2)	Exercise or strike price	Number	15(6)	Strike Price Interpretation Rules table N/A (Blank) when the instrument is not listed on the secondary market
Strike_price_currency (1)	Currency strike price	Alphanumeric	3	EUR
Expiry_Date (1)	Expiry date	Date	8	YYYYMMDD
Number_days_before_expiration	Numbers of days between expiry and delisting date	Number	7(3)	N/A (Blank) when there is no maturity date
Number_underlying_assets	Number of underlying assets	Number	7(3)	1,000
Number_structured_products	Number of structured products	Number	12(7)	10,0000000

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Beginning_exchange_date	First exercise day	Date	8	YYYYMMDD
End_exchange_date	Last exercise day	Date	8	YYYYMMDD N/A (Blank) when there is no maturity date
Usage_type	This column is not currently utilized and is reserved for future use	Alphanumeric	1	Not filled in
Cash_settlement_indicator	Settlement type	Alphanumeric	3	Cash (O) Physical delivery (N) Optional (OP)
Mnemonic	Euronext Mnemonic	Alphanumeric	5	5467D
Issuer_name	Issuer name	Alphanumeric	50	DRESDNER BANK AG
Euronext_designation	Instrument designation	Alphanumeric	18	CAC 4800 C 1206D
Underlying_designation	Underlying designation	Alphanumeric	40	CAC40
Trading_lot_size	Trading lot size	Number	15(6)	1000,000000
Issue_price	Issue price	Number	15(6)	1,250000
Issue_price_currency	Issue price currency	Alphanumeric	3	EUR
Second_strike_price (1) (2)	Second strike price	Number	15(6)	Strike Price Interpretation Rules table N/A (Blank) when the instrument is not listed on the secondary market
Second_strike_price_currency (1)	Second strike price currency	Alphanumeric	3	EUR
Marketing_product_name	Marketing product name	Alphanumeric	30	Strike Price Interpretation Rules table

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Structured_products_type	Structured products type	Alphanumeric	20	Structured products type table
Instrument_underlying_type	Type of underlying instrument	Alphanumeric	25	Instrument underlying type correspondence table
Risk_level	Risk level Segment level 1	Alphanumeric	1	Investment (I) Leveraged (L)
Strategy	Strategy type	Alphanumeric	1	Bull bear (1) Bear (2) Undetermined
Delisting_date	Delisting date	Date	8	YYYYMMDD N/A (Blank) when there is no maturity date or when the instrument is not listed on the secondary market
MEP	This column will stop being utilized and will be reserved for future use	Alphanumeric	3	To be presented empty as of 08 April 2013
Market_of_reference	Market of Reference	Alphanumeric	25	Amsterdam Brussels Lisbon Paris
First_listing_place (1st_listing_place prior to 16 March 2015)	Primary Euronext Listing Venue	Alphanumeric	25	Amsterdam Brussels Lisbon Paris
Second_listing_place (2 nd _listing_place prior to 16 March 2015)	Second Euronext Listing Venue	Alphanumeric	25	Amsterdam Brussels Lisbon Paris

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Third_listing_place (3 rd _listing_place prior to 16 March 2015)	Third Euronext Listing Venue	Alphanumeric	25	Amsterdam Brussels Lisbon Paris
Third_strike_price (1)(2)	Third strike price	Number	15(6)	Strike Price Interpretation Rules table N/A (Blank) when the instrument is not listed on the secondary market
Third_strike_price_currency (1)	Third strike price currency	Alphanumeric	3	EUR
Fourth_strike_price (1) (2)	Fourth strike price	Number	15(6)	Strike Price Interpretation Rules table N/A (Blank) when the instrument is not listed on the secondary market
Fourth_strike_price_currency (1)	Fourth strike price currency	Alphanumeric	3	EUR
Parity_1warrant_underlying (Parity_ 1warrant_underlying prior to 16 March 2015)	Number_underlyin g_assets/Number_ structured_product s	Number	7(6)	0.100000
Execution_ratio_D1 (Execution_ratio_D-1 prior to 16 March 2015)	Execution ration for the last trading day	Number	7(6)	Not filled in until further notice
Execution_ratio_20D	Execution ration for the last 20 trading days	Number	7(6)	Not filled in until further notice
Issuer_presence_D1 (Issuer_presence_D-1 prior to 16 March 2015)	Issuer presence for the last trading day	Number	7(6)	Not filled in until further notice
Issuer_presence_20D	Issuer presence for the last 20 trading days	Number	7(6)	Not filled in until further notice

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Avg_bid_offer_spread_D1 (Avg_bid-offer_spread_D-1 prior to 16 March 2015)	Average Bid-Offer spead for the last trading day	Number	7(6)	Not filled in until further notice
Avg_bid_offer_spread_20D (Avg_bid-offer_spread_20D prior to 16 March 2015)	Average Bid-Offer spread for the last 20 trading days	Number	7(6)	Not filled in until further notice
Avg_quantity_D1 (Avg_quantity_D-1 prior to 16 March 2015)	Average quantity for the last trading day	Number	7(6)	Not filled in until further notice
Avg_quantity_20D	Average quantity for the last 20 trading days	Number	7(6)	Not filled in until further notice
SP_Bloomberg_Symbol	Bloomberg terminal Ticker symbol	Alphanumeric	35	SOCGEN 0 09/17/12 000G
SP_Global_Identifier	This column is not currently utilized and is reserved for future use	Number	15	Not filled in
SP_Parseable_Description	This column will stop being utilized and will be reserved for future use	Alphanumeric	35	To be presented empty as of 08 April 2013
SP_BSID	Bloomberg Security ID Number with Source	Number	15	287783230340
FILLER1	Replaces Closing Price This column is not currently utilized and is reserved for future use	Number	15(4)	Not filled in until further notice
FILLER1_date	Replaces Trading Date This column is not currently utilized and is reserved for future use	Date	8	Not filled in until further notice

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Trading_Group	Trading group of the security	Alphanumeric	2	M5
CFI_Code	Classification of Financial Instruments code by (ISO)	Alphanumeric	6	CFI (Classification of Financial Instruments) Code
FILLER2	This column is reserved for future use	Number	0	
FILLER3	This column is reserved for future use	Number	0	
Suspension_Date	Date trading is suspended	Date	8	YYYYMMDD
Professional_Investors_Flag	Eligible for trading exclusively by Professional Investors.	Alphanumeric	1	Y or N
Primary_Market_Indicator	(Primary Market field) Indicates if the instrument class is attached to the Primary Market Segment	Alphanumeric	1	Y or N
Subscription_Price_Type	(Primary Market field) Indicates if subscription price is fixed or variable	Alphanumeric		Fixed (F) Variable (V)
Subscription_Start_Date	(Primary Market field) First day of subscription	Date	8	YYYYMMDD
Subscription_End_Date	(Primary Market field) Last day of subscription	Date	8	YYYYMMDD

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
Subscription_End_Time	(Primary Market field) Closing time of subscription on last day of subscription	Alphanumeric	4	ННММ
Auction_Date	(Primary Market field) Subscription auction date	Date	8	YYYYMMDD
Auction_Time	(Primary Market field) Time of auction on auction date	Alphanumeric	4	ННММ
Market_Place	(Primary Market field) Name associated with Market Place	Alphanumeric	25	Amsterdam Brussels Lisbon Paris
Commercialization_Country1	(Primary Market field) Country of commercialisation	Alphanumeric	2	ISO 3166 2-character country code
Commercialization_Country2	(Primary Market field) Country of commercialisation	Alphanumeric	2	ISO 3166 2-character country code
Commercialization_Country3	(Primary Market field) Country of commercialisation	Alphanumeric	2	ISO 3166 2-character country code
Order_Cancellation_Indicator	(Primary Market field) Indicates if Primary Market Broker orders can be cancelled	Alphanumeric	1	Y or N
Professional_Segment_Indicator	(Primary Market field)	Alphanumeric	1	Y or N

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
	Indicates if segment is professional or not			
Subscription_Price	(Primary Market field) Subscription Price	Number	8(1)	4050.35
Subscription_Price_Date	(Primary Market field) Date subscription price takes effect	Date	8	YYYYMMDD
TAKOPeriod	Number of days the instrument can be traded after Knock Out	Number	3	If the instrument does not have a TAKO period defined this field shows the value: "0" (zero) or will be presented blank

⁽¹⁾ These fields may be blank depending on the structured products classification system. The <u>Rules for Blank Fields</u> specifies when these fields will be blank.

Table 2 Auxiliary File Records

FIELD	DEFINITION	FORMAT	LENGTH	EXAMPLE
ISIN	ISIN code of the instrument	Alphanumeric	12	DE0005437412
Distribution_Country	The country where the instrument has been approved for distribution	Alphanumeric	2	ISO 3166-1 alpha-2 code e.g. NL
Please note that most countries only have one language, but some countries can have more than one language (e.g. Belgium, Switzerland).	The language is linked to the distribution country.	Alphanumeric	2	ISO 639-1 e.g. NL
KID_Link	The URL to access the KID for each instrument for the country and in the language mentioned in the fields	Alphanumeric	255	http://kid.bnppari bas.com/DE00054 37412-NL.pdf

⁽²⁾ See Strike Price Interpretation Rules

Distribution Count	
_	
ry and Language.	

2.2.1 Market Type & Underlying Type Correspondence

CODE	MARKET TYPE
301	Warrant on Share
302	Warrant on Index
305	Warrant on Bond
310	Warrant on Commodity
311	Warrant on Currency
312	Warrant on Basket of Shares
315	Certificate / Interest Rates
317	Warrant / Others
320	Certificate / Commodities
321	Certificate / Share
322	Certificate / Index
323	Certificate / Currency
324	Certificate / Basket of Shares
325	Certificates / Others

2.2.2 Underlying MEP Correspondence

CODE	MARKET ENTRY PLACE
AMS	Amsterdam
BRU	Brussels
LIS	Lisbon
PAR	Paris
ОТН	Other

2.2.3 Structured Products Type

FIELD	VALUE
Structured products type	Capital protection
	Spread
	Bear indexation

VALUE
Plain vanilla warrant
Pure indexation
Yield enhancement
Digital with knock out barrier
Leverage product with knock out barrier

2.2.4 Instrument Underlying Type Correspondence

CODE	INSTRUMENT UNDERLYING TYPE
1	Shares
2	Index
5	Bonds
10	Commodity
11	Currency
12	Basket of shares
17	Other

2.3 RULES FOR BLANK FIELDS

2.3.1 Warrant Type

If marketing product name is one of the following, then Warrant type is N/A (not applicable, represented by a blank field):

- 100% Bear Quanto
- 100% plus performance
- Airbag accelerator
- Airbag certificate
- Alpha Outperformance Cert
- Autocall
- Bonus
- Bonus Cappé
- Bonus Cappé Last Minute
- Bonus Certificate PRO
- Bonus Certificate Quanto
- Bonus Pro
- Bonus certificate
- Capital protected note

- Capital I
- Cash settled discount
- Certificados
- Certificat
- Certificat 100%
- Certificat 100% Bear
- Certificat 100% bear quanto
- Certificat 100% open-end
- Certificat 100% quanto
- Certificat Bonus
- Certificat Corridor
- Certificat Leverage
- Certificat Short
- Certificat Open End
- Certificat Replix
- Certificat SPRINT
- Certificat Sprint PLUS
- Certificat pyramide
- Certificate
- Certificate 100% Bear
- Certificate 100% Open end
- Certificate 100% Open-end Quanto
- Certificate 100% Quanto
- Certifié 100%
- Certifié 100% bear
- Certifié 100% quanto
- Cobatracker
- Convertibles synthétiques
- Credit linked note
- Discount certificate
- Double up certificate
- Dynamic Capital Guarantee
- Factor certificate
- Factor Long

- Factor Short
- Index Linked Certificates
- Index Linked Redemption Cert.
- Inline
- Jet
- Leverage
- Lookback Certificate
- Open end certificate
- Perf plus
- Perles plus
- Phoenix
- Physically settled discount
- Protect
- Protectis
- Quanto certificate
- Quanto open end certificate
- Recovery Bonus Cappés
- Replix
- Reverse Bonus Cappé
- Recovery Bonus Capped
- Reverse Convertible Note
- Reverse exchangeable
- Rolling Covered Call
- Securis
- Short
- Sprint
- Sprintx8
- Stability Speeder
- Stability Warrant
- Static Capital Guarantee
- Step up certificate
- Structured Note
- Super Sprinter
- Total Return Certificate

- Triple Trigger Certificate
- Twin win 21ertificate
- Yield discovery note

2.3.2 Strike Price Fields

Please refer to Strike Price Interpretation Rules.

2.4 CFI (CLASSIFICATION OF FINANCIAL INSTRUMENTS) CODE

The CFI (Classification of Financial Instruments) code is maintained by the International Organization for Standardization (ISO). The CFI code consists of six alphabetic characters and is issued by ANNA (Association of National Numbering Agencies). This section provides only a brief overview of the construction and meaning of the CFI code; for a detailed explanation please consult www.anna-web.com.

2.4.1 CFI First Character – Category Level

The first character indicates the highest level of classification and differentiates between six generic categories: Equities, Debt instruments, Entitlements (Rights), Options, Futures, and Others.

For certificates, warrants and structured notes Master File, only two categories are relevant:

- Debt instruments = D. The construction of the six-letter CFI code starts with D (D-*-*-*-*)
- Entitlements = R. The construction of the six-letter CFI code starts with R (R-*-*-*-*)

2.4.2 CFI Second Character – Group Level

The second character of the CFI code indicates specific groups within each category.

For the debt instruments category there are six groups:

B = Bonds	(D-B-*-*-*)
C = Convertible Bonds	(D-B-*-*-*)
T = Medium-term Notes	(D-T-*-*-*)
W = Bonds With Warrants Attached	(D-W-*-*-*)
Y = Money Market Instruments	(D-Y-*-*-*)
M = Miscellaneous	(D-M-*-*-*)

For the entitlements category there are five groups:

A = Allotment Rights	(R-A-*-*-*)
P = Purchase Rights	(R-P-*-*-*)
S = Subscription Rights	(R-S-*-*-*)
W = Warrants	(R-W-*-*-*)
M = Miscellaneous	(R-M -*-*-*)

2.4.3 CFI Third, Fourth, Fifth and Sixth Characters – Attributes 1,2,3,4

For debt instruments, the attributes have separate possibilities depending on the group of the debt product. For exact details please consult www.anna-web.com. Here is a summary of the four attributes for debt instruments:

- Attribute 1 = Type of interest: Fixed (D-*-F-*-*), variable (D-*-V-*-*-*), zero rate/discount (D-*-Z-*-*-*)
- Attribute 2 = Guarantee: Gov./Treasury (D-*-*-T-*-*), secured (D-*-*-S-*-*), guaranteed (D-*-*-G-*-*), unguaranteed or unsecured (D-*-*-U-*-*)
- Attribute 3 = Redemption/Reimbursement. For details please consult <u>www.anna-web.com</u>.
- Attribute 4 = Form: Bearer (D-*-*-*-B), registered (D-*-*-*-R), bearer/registered (D-*-*-*-N), bearer depository receipt (D-*-*-*-Z), registered depository receipt (D-*-*-*-A)

For entitlement instruments only warrants are relevant (R-W-*-*-*):

- Attribute 1= Underlying assets: basket (R-W-B-*-*-), equity (R-W-S-*-*-), debt (R-W-D-*-*-*), commodities (R-W-T-*-*-), currencies (R-W-C-*-*-*), indices (R-W-I-*-*-*), other or undefined (R-W-M-*-*-*)
- Attribute 2 = Type: Covered warrant (R-W-*-C-*-*), naked warrant (R-W-*-N-*-*), traditional warrant (R-W-*-T-*-*)
- Attribute 3 = Call/Put: Call (R-W-*-*-C-*), put (R-W-*-*-P-*), call and put (R-W-*-*-B-*)
- Attribute 4 = Form: Bearer (R-W-*-*-*-B), registered (R-W-*-*-*-R), bearer/registered (R-W-*-*-*-N), bearer depository receipt (R-W-*-*-*-Z), registered depository receipt (R-W-*-*-*-A)

2.5 STRIKE PRICE INTERPRETATION RULES

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
100% Bear Quanto	Bear indexation	Upper_Threshold	Reference_Level	empty	empty
100% Plus Performance	Capital protection	empty	empty	empty	empty
AAB Turbo Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
AAB Turbo Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Airbag Accelerator	Yield enhancement	Airbag	Capped_Value	Level_1	Performance_1
Airbag Certificate	Yield enhancement	Airbag	Capped_Value	Level_1	Performance_1
Alpha Outperformance Cert	Yield enhancement	Strike_Price	Participation	empty	empty
Athena	Yield enhancement	Coupon	Barrier_Capital	empty	empty
Autocall	Yield enhancement	Lower_Level	Upper_Altering_Barrier	Strike_price	Coupon
Bear Certificate	Pure indexation	empty	empty	empty	empty
Best Speeder Long	Leverage product with knock out barrier	Lower_Threshold	empty	empty	empty
Best Speeder Short	Leverage product with knock out barrier	Upper_Threshold	empty	empty	empty
BEST Turbo Long	Leverage product with knock out barrier	Lower_Threshold	empty	empty	empty
BEST Turbo Short	Leverage product with knock out barrier	Upper_Threshold	empty	empty	empty
Bonus	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Bonus Capped Certificate	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Capped_Value	empty
Bonus Cappé	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Capped_Value	empty
Bonus Cappé Last Minute	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Capped_Value	empty
Bonus Certificate	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Lower_Altering_Barrier	empty
Bonus Certificaat	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Lower_Altering_Barrier	empty
Bonus Certificate Pro	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Lower_Altering_Barrier	Empty
Bonus Certificate Quanto	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Lower_Altering_Barrier	Empty
Bonus Pro	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Lower_Altering_Barrier	empty
Booster Long	Yield enhancement	Lower_Threshold	empty	empty	empty
Booster Short	Yield enhancement	Upper_Threshold	empty	empty	empty
Call Warrant	Plain vanilla warrants	Strike_Price	empty	empty	empty
Capital Protected Note	Capital protection	Protection_Level	Coupon_Amount	empty	empty
Capital protege	Capital protection	Protection_Level	Participation	empty	empty
Cappé	Spread	Lower_Level	Upper_Level	empty	empty
Cappé +	Spread	Lower_Altering_Barrier	Upper_Level	empty	empty
Cash Settled Discount	Yield enhancement	Capped_Value	empty	empty	empty
Certificados	Pure indexation	empty	empty	empty	empty
Certificat	Pure indexation	empty	empty	empty	empty
Certificat 100%	Pure indexation	empty	empty	empty	empty
Certificat 100% Bear	Bear indexation	Upper_Threshold	Reference_Level	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Certificat 100% bear quanto	Bear indexation	Upper_Threshold	Reference_Level	empty	empty
Certificat 100% Open-End	Pure indexation	empty	empty	empty	Empty
Certificat 100% Quanto	Pure indexation	empty	empty	empty	empty
Certificat Bonus	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	empty	empty
Certificat Corridor	Yield enhancement	Lower_Level	Upper_Level	empty	empty
Certificat Leverage	Pure indexation	empty	empty	empty	empty
Certificat Short	Pure indexation	empty	empty	empty	empty
Certificat Open End	Pure indexation	empty	empty	empty	empty
Certificat Pyramide	Spread	Lower_Level	Upper_Level	empty	empty
Certificat Replix	Pure indexation	empty	empty	empty	empty
Certificat SPRINT	Yield enhancement	Capped_Value	Lower_Level	empty	empty
Certificat Sprint Plus	Yield enhancement	Capped_Value	Lower-Altering_Barrier	empty	empty
Certificate	Pure indexation	empty	empty	empty	Empty
Certificate 100% Bear	Bear indexation	Upper_Threshold	Reference_Level	empty	empty
Certificate 100% Open End	Pure indexation	empty	empty	empty	empty
Certificate 100% Open-end Quanto	Pure indexation	empty	empty	empty	empty
Certificate 100% Quanto	Pure indexation	empty	empty	empty	Empty
Certifié 100%	Pure indexation	empty	empty	empty	Empty
Certifié 100% Bear	Bear indexation	Upper_Threshold	Reference_Level	empty	empty
Certifié 100% Quanto	Pure indexation	empty	empty	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Certifié Cap	Spread	Lower_Level	Upper_Level	empty	empty
Certifié Cap+	Spread	Lower_Altering_Barrier	Upper_Level	empty	empty
Certifié Floor	Spread	Upper_Level	Lower_Level	empty	empty
Certifié Floor+	Spread	Upper_Altering_Level	Lower_Level	empty	Empty
Cobatracker	Pure indexation	empty	empty	empty	empty
Collateralized tracker certificate	Pure indexation	empty	empty	empty	empty
Convertibles Synthétiques	Capital protection	Protection_Level	Participation	empty	empty
Credit Linked Note	Yield enhancement	empty	empty	empty	empty
Discount Certificate	Yield enhancement	Capped_Value	empty	empty	empty
Double Up Certificate	Yield enhancement	Capped_Value	Lower_Level	empty	empty
Dynamic Capital Guarantee	Capital protection	Protection_Level	Participation	empty	empty
Factor certificate	Yield enhancement	empty	empty	empty	empty
Factor Long	Pure indexation	empty	empty	empty	empty
Factor Short	Pure indexation	empty	empty	empty	empty
Flooré	Spread	Upper_Level	Lower_Level	empty	empty
Flooré +	Spread	Upper_Altering_Level	Lower_Level	empty	empty
Index Linked Certificates	Pure indexation	empty	empty	empty	empty
Index Linked Redemption Cert.	Pure indexation	empty	empty	empty	empty
ING Sprinter Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	Empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
ING Sprinter Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Inline	Digital with barrier	Lower_Threshold	Upper_Threshold	empty	empty
Jet	Yield enhancement	Capped_Value	Lower_Level	empty	empty
Leverage	Pure indexation	empty	empty	empty	empty
Limited Speeder Bear	Leverage product with knock out barrier	Upper_Threshold	empty	empty	empty
Limited Speeder Bull	Leverage product with knock out barrier	Lower_Threshold	empty	empty	empty
Limited SPEEDER Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Limited Speeder Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Limited Sprinter Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Limited Sprinter Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Limited Turbo Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Limited Turbo Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Limited Turbo Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Limited Turbo Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Lookback Certificate	Yield enhancement	Coupon_Percentage	empty	empty	empty
MiniFuture Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
MiniFuture Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Open End Certificate	Pure indexation	empty	empty	empty	empty
Perf Plus	Yield enhancement	Reference_Level	Capped_Value	Participation	empty
Perles Plus	Yield enhancement	Capped_Value	Lower_Level	empty	empty
Phoenix	Yield enhancement	Barrier_Capital	Barrier_Coupon	Barrier_Recall	Coupon
Physically Settled Discount	Yield enhancement	Capped_Value	empty	empty	empty
Power Down	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Power Up	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Protect	Capital protection	Protection_Level	Participation	empty	empty
Protectis	Capital protection	Protection_Level	Nominal_Value	empty	empty
Put Warrant	Plain vanilla warrants	Strike_Price	empty	empty	empty
Quanto Certificate	Pure indexation	empty	empty	empty	empty
Quanto Open End Certificate	Pure indexation	empty	empty	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Quanto Speeder Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Quanto Speeder Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Recovery Bonus Cappés	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Capped_Value	empty
Recovery Bonus Capped	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Capped_Value	empty
Rendement Certificaat	Yield enhancement	Bonus_Level	Lower_Altering_Barrier	Capped_Value	empty
Replix	Pure indexation	empty	empty	empty	empty
Reverse Bonus Cappé	Yield enhancement	Bonus_Level	Upper_Altering_Barrier	Capped_Value	empty
Reverse Convertible Note	Capital protection	Coupon	Lower_Altering_Barrier	Initial_Level	empty
Reverse Exchangeable	Yield enhancement	Initial_Level	Coupon	Initial_Principal_Amount	empty
Rolling Covered Call	Yield enhancement	Coupon_Amount	empty	empty	empty
Securis	Capital protection	Protection_Level	Nominal_Value	Performance_Cap	Underlying_Performance
Short	Pure indexation	empty	empty	empty	empty
SMART Turbo Long	Leverage product with KO Barrier	Lower Thresold	Strike Price	empty	empty
SMART Turbo Short	Leverage product with KO Barrier	Upper Thresold	Strike Price	empty	empty
Speeder Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Speeder Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Sprint	Yield enhancement	Capped_Value	Lower_Level	empty	empty
Sprinter BEST Long	Yield enhancement	Lower_Threshold	empty	empty	empty
Sprinter BEST Short	Yield enhancement	Upper_Threshold	empty	empty	empty
Sprinter Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Sprinter Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Sprintx8	Yield enhancement	Capped_Value	Lower_Level	empty	empty
Stability Speeder	Digital with barrier	Lower_Threshold	Upper_Threshold	empty	empty
Stability Warrant	Digital with barrier	Lower_Threshold	Upper_Threshold	empty	empty
Static Capital Guarantee	Capital protection	Protection_Level	Participation	empty	empty
Super Sprinter	Yield enhancement	Bonus_Level	Lower_Knockin_Level	empty	empty
Step Up Certificate	Capital protection	empty	Coupon_Type	Coupon_Amount	empty
Structured Note	Yield enhancement	Coupon_Percentage	empty	empty	empty
Total Return Certificate	Pure indexation	empty	empty	empty	empty
Tracking Certificates	Pure indexation	empty	empty	empty	empty
Trader Long	Leverage product with knock out barrier	Lower_Threshold	empty	empty	empty
Trader Short	Leverage product with knock out barrier	Upper_Threshold	empty	empty	empty
Triple Trigger Certificate	Pure indexation	empty	empty	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Turbo Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Call Illimité	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Call Infini	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Call Infini Best	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo ilimitado Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo ilimitado Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo ilimitado SL Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo ilimitado SL Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Illimite BEST Call	Leverage product with knock out barrier	Lower_Threshold	empty	empty	empty
Turbo Illimite BEST Put	Leverage product with knock out barrier	Upper_Threshold	empty	empty	empty
Turbo Illimite Smart Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Illimite Smart Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Turbo Jour Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Jour Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Life Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Life Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Life Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Life Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Turbo Pro Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	Lower_Knockin_Level	Upper_Knockin_Level
Turbo Pro Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	Upper_Knockin_Level	Lower_Knockin_Level
Turbo Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Put Illimité	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Put Infini	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty

MARKETING PRODUCT NAME	STRUCTURED PRODUCTS TYPE	STRIKE 1	STRIKE 2	STRIKE 3	STRIKE 4
Turbo Put Infini Best	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Turbo Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Twin Win Certificat	Yield enhancement	Initial_Level	Lower_Altering_Barrier	empty	empty
Unlimited Speeder Bear	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Unlimited Speeder Bull	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Unlimited Speeder Long	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Unlimited Speeder Short	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Unlimited Turbo Call	Leverage product with knock out barrier	Lower_Threshold	Strike_Price	empty	empty
Unlimited Turbo Put	Leverage product with knock out barrier	Upper_Threshold	Strike_Price	empty	empty
Yield Discovery Note	Yield enhancement	Empty	empty	empty	empty

3. FTP DIRECTORY STRUCTURE

3.1 GENERAL INFORMATION

The Euronext Master Files are offered via FTP pull over the Internet.

3.2 FTP PULL

The customer can download the files over FTP from the following FTP server:

- Production: <u>ftp.data.euronext.com</u>
- EUA: <u>ftp.eua-data.euronext.com</u>

Euronext will provide a User ID and a password to the customer that will remain valid until the customer decides to cancel the subscription.

3.3 DIRECTORY STRUCTURE FTP SERVER

Most Recent Files

```
/SP_EU_ENXT_REF_MASTER_BOD/
/CURRENT/
```

Historical Files

```
/SP_EU_ENXT_REF_MASTER_BOD/

/SP_EU_ENXT_REF_MASTER_BOD_YYYY/

/SP_EU_ENXT_REF_MASTER_BOD_YYYYMM/
```