# **REPORTING GUIDELINES**









These guidelines provide the Contracting Party and/or its Affiliates with more detailed information on how to fulfil their market data reporting obligations to Euronext, as described in the EMDA Reporting Policy, as per 1 January 2020. This EMDA Reporting Policy, which forms part of the Euronext Market Data Agreement (EMDA) and other documentation are available <a href="here">here</a>. For more information, please e-mail <a href="mailto:databyeuronext@euronext.com">databyeuronext@euronext.com</a>.

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# INTRODUCTION TO THE REPORTING REQUIREMENT

The EMDA Reporting Policy, which forms part of the EMDA, sets out the Contracting Party's reporting obligation for:

- its internal distribution and display use of real-time market data.
- its redistribution of market data to its subscribers that have been approved for natural user.
- its redistribution of market data as part of managed non-display use services.
- its redistribution of market data as part of an ASP Service or ESP Service to trading members.
- its redistribution of market data to non-professional subscribers.
- its redistribution of market data as part of White Label Services.
- its redistribution of market data to its subscribers and/or sub vendors.

The table below provide an overview of your reporting and declaration obligations as a Contracting Party.

MONTHLY REPO	PRTS – EMDA Reporting Policy
WHAT	<ul> <li>A monthly electronic report, indicating</li> <li>the Contracting Party and its Affiliates employees' ability to access real-time market data for display purposes; and</li> <li>its subscriber's (employees) ability to access real-time market data for display purposes (Note, excluding the Non-Display Use of Real Time Information)</li> </ul>
WHEN	Each month, within 15 days after the end of each calendar month.  Your first report should be submitted within 15 days after the calendar month in which you provide a device/user access to real-time market data.
FREQUENCY	Monthly
REPORTABLE UNIT/UNIT OF COUNT	Each <i>User per Source</i> with the ability to access real-time market data, where 'User' refers to a natural person and 'Source' refers to each separate data feed product from an Information Supplier or, in case of a direct connection, Euronext.  Each <i>Device</i> with the ability to access real-time market data where a device cannot be allocated to a natural person. (Note, simultaneous access on such Device is not permitted).  (Note, Non-Display Use is covered in the EMDA Use Policy, which forms part of the EMDA)
FEES	Monthly fees are applicable to each reportable unit with the ability to access real-time market data.  The applicable fees are outlined in the Information Product Fee Schedule available <a href="here">here</a> .
HOW	Monthly electronic reports should be submitted via Euronext's <i>MyMarketData Portal</i> or alternatively via FTP in VRXML format.
MORE INFORMATION	For more information please <u>click here</u> .



## **MONTHLY REPORTS**

This section provides more detailed information on how to fulfil your reporting obligation to Euronext as described in the EMDA Reporting Policy, which forms part of the EMDA.

#### **WEB PORTAL**

When your organization enters into the EMDA and access to real-time market data commences:

- Euronext will set-up an account for you to allow you to report electronically. Log-in details will be provided to you by e-mail.
- Euronext will set-up the appropriate market data products and corresponding product codes under that account.

You will then be able to complete and submit electronic reports under an account set-up by Euronext. Please do not forget to confirm the details entered prior to submitting a report to Euronext.

#### **DISPLAY USE OF REAL-TIME MARKET DATA**

The EMDA Reporting Policy, which forms part of the EMDA sets out your reporting obligation for real-time market data access for the purpose of displaying such market data. Note, it excludes non-display use which must be licenced via the Order Form and therefore does not need to be reported. For more information about licensing your non-display use please refer to the clauses set out in the EMDA Use Policy.

## **MARKET DATA DISPLAY USE FEES**

You will be charged for the right to display real-time market data. The fees outlined in the Information Product Fee Schedule are applicable per reportable unit (i.e. User per Source or Device, whichever is applicable) with the ability to access such <a href="Euronext Market Data Product">Euronext Market Data Product</a> (i.e. you will be charged based on your report). For the Information Product Fee Schedule please refer to our <a href="Market Data Website">Market Data Website</a>.

Monthly market data display use fees are only waived where the use of real-time market data is for the sole purpose of monitoring and maintenance of your systems and/or development, marketing, training and/or demonstration of your devices and applications (i.e. your operational use), provided that:

- This use of real-time market data is solely in support of your real-time market data redistribution and not as part of any other commercial or other business functions and/or solely in support of your trading activities on Euronext markets and not as part of any other commercial other business functions; and
- That you report such operational use of real time market data to Euronext in accordance with the EMDA Use Policy and these reporting guidelines.



## WHAT TO REPORT

You should report your own display use and/or your subscriber's display use of real-time market data by completing and submitting a monthly electronic report. For this purpose, you should count and report the number of reportable units (Users per Source and/or Devices, whichever is applicable) with the ability to access real-time Euronext Market Data Products within a calendar month, per location/subscriber.

## **UNIT OF COUNT**

For your organization's own accesses you should report the number of Users per Source with the ability to access real-time market data. 'User' refers to a natural person and 'Source' refers to each separate datafeed product from an Information Supplier. Netting between different sources is not permitted. For more information about the User per Source unit of count please <u>click here</u>. Where you cannot allocate a device or application to a natural person you should report the device or application. Note, simultaneous access on such device is not permitted. For your subscriber's accesses to Information Supplier-Controlled market data you should report each Device. For your subscriber's accesses to Recipient-Controlled market data you should report the information provided by such subscriber via a datafeed access declaration.

#### WHEN TO REPORT

You have to complete and submit a monthly electronic report. Your initial report should be submitted within 15 days after the calendar month in which your organization's access to real-time market data commences. Subsequently you should report each calendar month within 15 days after a reporting period. The table below uses the year 2020 as an example to illustrate the reporting deadlines. The same day and month will apply for the years following.

SUBMIT THE REPORT OF	BEFORE (I.E. REPORTING DEADLINE)
January 2021	16 February 2021
February 2021	16 March 2021
March 2021	16 April 2021
April 2021	16 May 2021
May 2021	16 June 2021
June 2021	16 July 2021

SUBMIT THE REPORT	BEFORE (I.E. REPORTING
OF	DEADLINE)
July 2021	16 August 2021
August 2021	16 September 2021
September 2021	16 October 2021
October 2021	16 November 2021
November 2021	16 December 2021
December 2021	16 January 2022

As a delay in your reporting can cause a disruption of Euronext's standard processes, Euronext may charge for compensation if you do not submit your report before the reporting deadline. For more information we refer to clause 3.3 of the EMDA Reporting Policy.



## **HOW TO REPORT**

You can report via Euronext's *MyMarketData Portal*. You can enter data into the *MyMarketData Portal* via the graphic user interface or via an excel file upload.

You can manually report for each Location through the *MyMarketData Portal* and/or report via an excel upload your:

- Internal distribution and use (including your operational use)
- Subscriber's access
- Sub vendor's access
- Subscriber's access that are approved to report natural user
- Provision of managed non-display services
- Provision of ASP services /ESP services to trading members
- Provision of White Label Services
- Non-professional subscribers
- Page views

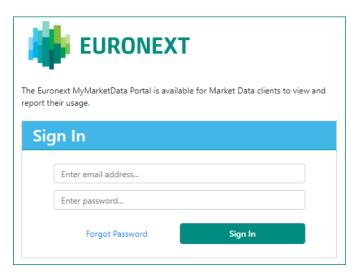
## 1. EURONEXT'S MYMARKETDATA PORTAL

This section describes how to access Euronext's MyMarketData Portal and how the home page works.

#### 1.1. ACCESSING THE PORTAL

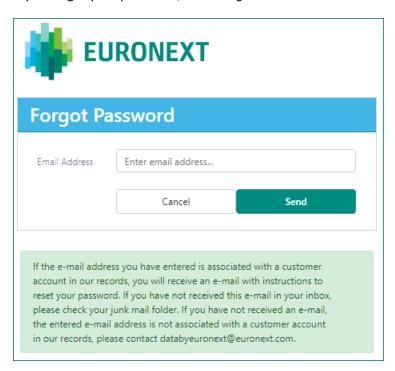
Euronext's MyMarketData Portal is available at https://mymarketdata.euronext.com.

Your email address will be the UserID and once Euronext has set you up for reporting a link to create your own password will be sent to your email address.





If you forget your password, click 'Forgot Password' to receive a new one.



If you do not yet have access to Euronext's *MyMarketData Portal*, please send an e-mail to databyeuronext@euronext.com.

## 1.2. THE HOME PAGE

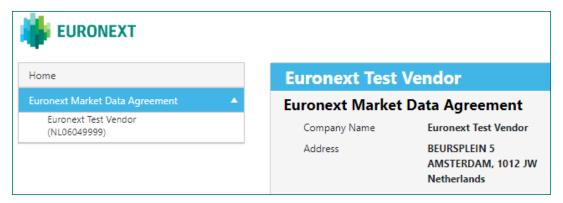
The MyMarketData Portal home page shows an overview of 'Open Tasks'. These pending reporting tasks (one for each account) will be visible. The tasks provide direct access to the Usage Reporting page of the related accounts via the 'Report usage' button.



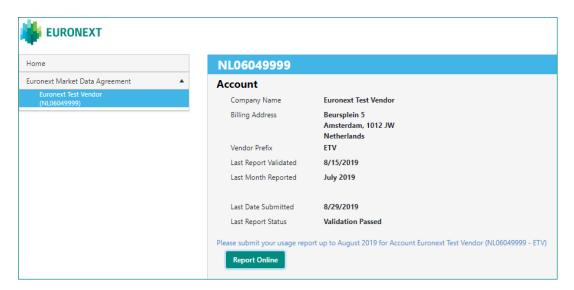
On the left side you will find a menu showing the agreement(s) and account(s) you have access to. The menu has two levels, the highest level shows the different agreements your company has with Euronext Market Data, the lower level shows the accounts for reporting and billing.

When selecting an agreement in the menu, the details of the agreement will be displayed in the main content section of the page, and this also opens the sub menu with the account(s).





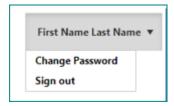
By selecting the account, the details of the account will be displayed.



Here you will also find the 'Report Online' button that gives access to the Usage Reporting page, and the dates and status the last time a report was successfully validated, the last month that has been reported, the last time a report was submitted, and the status of the last report.

Please note that your session will time out after 20 minutes of inactivity, unless you are on an *Usage Reporting* page, in which case the session time-out will be 24 hours to prevent you from losing your work.

In the right top corner you will find a dropdown menu showing your user account details, with the options to change password or sign out.

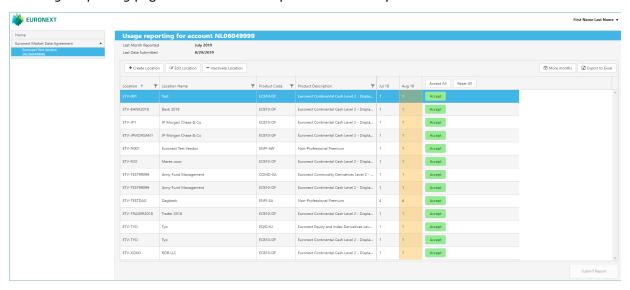




# 2. USAGE REPORTING - MANUALLY

This section describes how to create your report manually in the MyMarketData Portal.

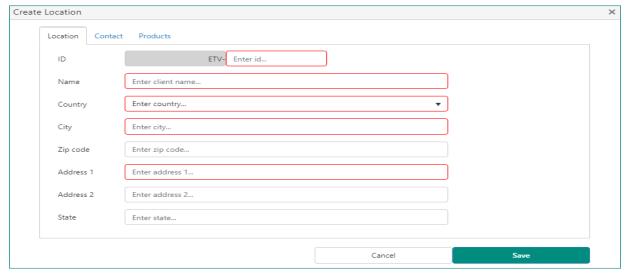
To go to the *Usage Reporting* page, click on '*Report usage*' button on the account detail page. This will open the *Usage Reporting* page with the current reportable inventory for that account.



Note, you should report the number of reportable units with the ability to access a particular Euronext Market Data Product under an unique Location Account Number in accordance with clause 4 of the EMDA Reporting Policy.

## 2.1. CREATING A LOCATION

When you create a Location for the first time you will use the 'Create Location' button.



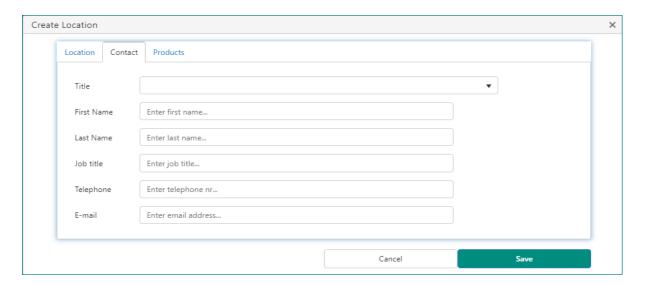


In the 'Location' tab, please fill in the fields as requested. Please note the red fields are mandatory.

- 'Location nr' field: assign a unique identifier by which you can identify the Location.
- 'Name' field: the name field should always be the statutory name of the applicable organizational entity (i.e. if the organizational entity's statutory name is 'ABCD Ltd.' Please include that in full and not just 'ABCD').

The Location details (i.e. name, address, city, etcetera) should be that of:

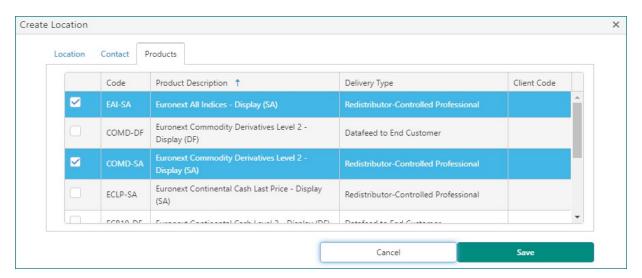
- your organization (internal distribution and use)
- your subscribers (subscriber access)
- your information suppliers or sub vendors (redistributor access)
- your members (the organizational entity of the Member's group, per country i.e. member access)



In the 'Contact' tab, please fill in the contact details of the Location.

**IMPORTANT**: even though *MyMarketData Portal* does not indicate the contact detail fields as required fields, Euronext does recommend its information suppliers, subscribers and members to provide up-to-date contact details for each Location.





In the 'Products' tab, please select at least one or more of the products that you need to report for your Location.

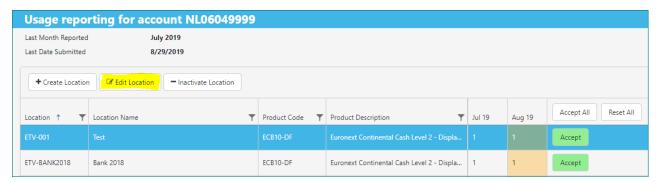
After you have filled in the fields in all the three tabs, you can click the 'Save' button.

If a product is missing in the 'Products' tab please contact databyeuronext@euronext.com. For more information about Euronext Market Data Product(s) please click here.

#### 2.2. EDITING A LOCATION

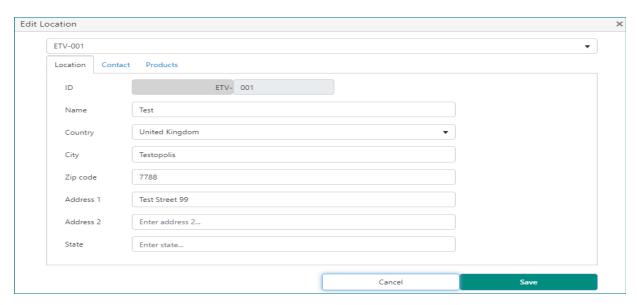
There are two ways to edit the Location details in the MyMarketData Portal.

You can edit the Location details via the 'Edit Location' button on the Usage Reporting page.

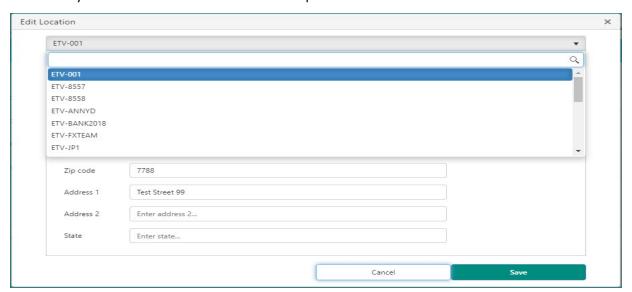


Select on the *Usage Reporting* page, the Location of which you want to edit the information and click '*Edit Location*'. In this example we use *ETV-001*.





• Or you can select the Location via the dropdown list in the 'Edit Location' window itself.



You can change the Location name and address, contact information, or select new products for the Location and click 'Save'. You cannot deselect products that are already present in the inventory and shown on the Usage Reporting page.

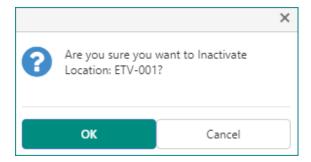
## 2.3. INACTIVING A LOCATION

You can inactivate the Location details via the 'Inactivate Location' button on the Usage Reporting page.





Select the Location that you want to inactivate and click 'Inactivate Location'. You will get the following pop up.



You can click 'OK' and the complete inventory (all products) of the Location will be set to zero in the actual month of reporting.

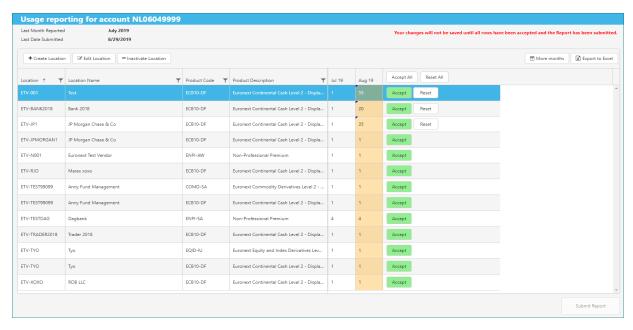
## 2.4. REPORTING THE USAGE

Once a Location has been created you can add inventory (number of reportable units) under said Location. On the *Usage Reporting* page you see the current reportable inventory of Locations for an account.

For each Location you should report the **total** number of reportable units with the ability to access Euronext Market Data per Euronext Market Data Product during a calendar month.

On the *Usage Reporting* page, you can select per line for each Location per the relevant Euronext Market Data Product(s) and enter the total number for the calendar month. The *MyMarketData Portal* will prefill the number fields according to the last received and validated report. In this example we report the number for *August 2019*.

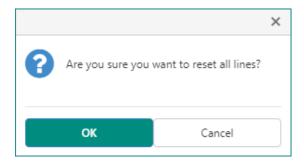




If you want to adjust the number of the Euronext Market Data Product for a Location, you can enter that straight in the number field of the calendar month itself.

The 'Reset' button will reset the number you entered to the original value as reported for the Location and Product during you last report.

If you want to undo the changes of all the numbers that you have entered, you can use the 'Reset All' button. You will get the following pop up.



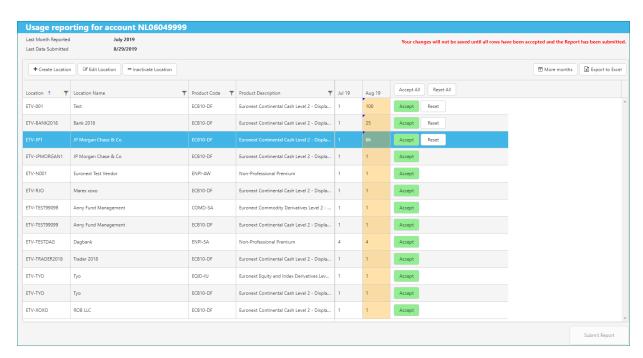
You can click 'OK', and all changes made will be undone to the number of Euronext Market Data Products of those Locations.

If you want to adjust the reported numbers of retro-active months, you can click the 'More months' button and the retro-active months will be shown on the Usage Reporting Page.

# 2.5. SUBMITTING A REPORT

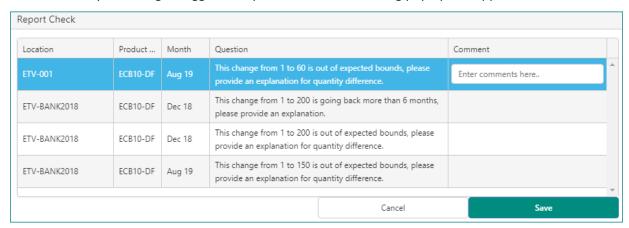
Before being able to submit a report, all lines on the *Usage Reporting* page <u>must</u> be accepted. You can accept single lines via the *'Accept'* button, or use the *'Accept All'* button to accept all lines simultaneously.





Euronext has Report Checks that will be checked, when you accept the numbers in your report.

In case one of your changes triggers a Report Check, the following pop up will appear.

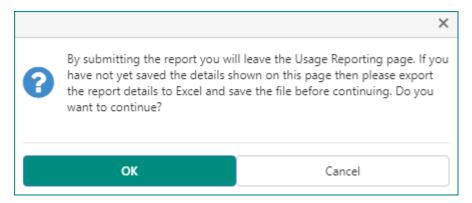


You need to fill in the 'Comment' field for each question displayed.

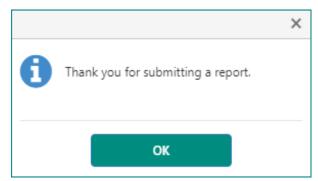
After you have filled in the comments, you can click 'Save'.

Once all lines have been accepted, you can click the 'Submit Report' button in the right bottom corner on the Usage Reporting screen. Before submitting your report, Euronext strongly advises you to export the data you want to report to excel for your own records. You will be reminded of this when you click the 'Submit Report' button with the following pop up.



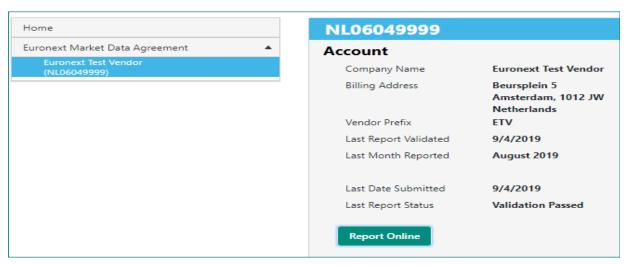


You will be advised to export the data to Excel via the 'Export to Excel' button and save it before submitting.



After submitting you are taken back to the Home Page of the MyMarketData Portal.

To check if the report has been validated successfully, go to the *Account* page and check the field *'Last Report Status'*.



## IMPORTANT:

- When you are reporting the ability to access a Euronext Market Data Product by your subscribers, make sure to report the product codes that have the suffix '-SA' and/or '-DF', whichever is applicable.
- When you are reporting a sub vendor, make sure to report the product codes that have the suffix '-SV'.



- When you are reporting the ability to access a Euronext Market Data Product for your organization or to access the Euronext Market Data Product for internal use by the member's group, make sure to report such access under the product codes that have the suffix '-IU'.
- When you (an ASP/ESP provider) are reporting access to a Euronext Market Data Product for a trading member, make sure to report such access under the product codes that start with 'TM' and have the suffix '-TM'.
- For more applicable product codes we refer to **Appendix 3.**

(Note, your use which meets all requirements for operational use, may be reported under product codes that have the suffix '-OPS')

Note, if you are unable to report the total number of reportable units during a calendar month, please contact <u>marketdataoperations team@euronext.com</u> for proper guidance on how to report.

# 3. USAGE REPORTING - EXCEL UPLOAD

This section describes how to report your Usage via an Excel spreadsheet upload in Euronext's *MyMarketData Portal*. If you want to have access to the Excel upload in the *MyMarketData Portal*, please contact *marketdataoperations team@euronext.com*.

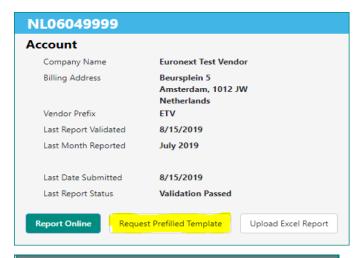
#### 3.1. CREATING A LOCATION

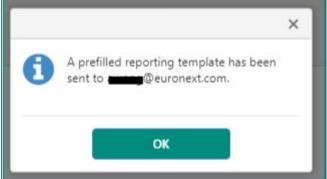
When using the upload functionality, new Locations are created by including them in your upload as a new line item.

## **3.2. REQUEST A PREFILLED TEMPLATE**

You can request *MyMarketData* to send you an email with a prefilled reporting template via the 'Request Prefilled Template' button.







The template will be prefilled with the last reported inventory and will include all months that still need to be reported since the last reported month. If the reporting obligation for the last reportable month has already been met, the template will include the last reported inventory from the last reported month.

#### 3.3. FORMAT OF THE EXCEL UPLOAD

For the required format of the excel upload please see below table. Please note:

- All columns need to be included in the upload file, with the exact Field Names
- Grey fields are mandatory to contain data
- The order of the columns is not important for the upload
- Prevent trailing spaces in any of the fields
- To unsubscribe users or entities with the ability to access the Euronext market data, the user or entity must be reported with a quantity of 0. Having reported the same user or entity with a quantity of 0 will be considered a 'delete'. The user or entity is thereafter no longer considered 'reportable', and may be removed from the report. It always remains possible to report new inventory for the same user or entity at a later date.
- Retro-active months are allowed up to 6 months by creating multiple lines for the same Location
   Number and Product Code, but if added no gaps are allowed. The report must contain all months as of



the first retro-active month present for that Location Number and Product Code up to the actual month of reporting.

Field name	Mandatory	Constraints	Comment					
Market	Yes	Only one value allowed in a single report	EN for Euronext					
Client Prefix	Yes	Only one value allowed in a single report. The combination of Client Prefix and Location Number may not exceed 30 characters.						
Location Number	Yes	the combination of Client Prefix and Location Number may not exceed 30 characters.	Enter the unique identifier (Location ID) by which you can identify the Location. Clause 4 of the EMDA reporting policy indicates the basic requirements for when the creation of a Location is necessary.					
Location Name	Yes	maximum 64 characters	Enter your organisation's statutory name if internal distribution and use. Enter your subscriber's statutory name if subscriber access. Enter your Information Supplier's of sub vendor's statutory name if redistributor access.  IMPORTANT: the name of a 'Location' should always be the statutory name of the applicable organisational entity of the Member's Group. (I.e. if the statutory name is 'ABCD Itd.', please include that in full and not just 'ABCD')					
Address1	Yes	maximum 50 characters	Enter the applicable address.					
Address2	No	maximum 50 characters						
Address3	No	maximum 50 characters						
City	Yes	maximum 50 characters	Enter the applicable city.					
State	No	maximum 32 characters						
Postal Code	No	maximum 15 characters	Enter the applicable postal code / zip code.					
Country Code	Yes	must be a ISO 3166-1 alpha-2 country code	Please enter the country code using the ISO 3166-1-alpha-2 list provided with the prefilled template.					

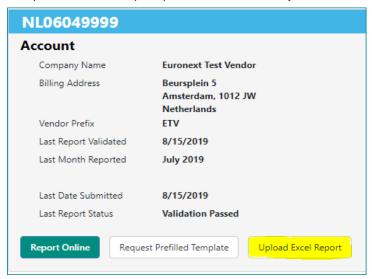


Contact Last Name	No	maximum 32 characters. If any contact information is added, this field is mandatory.	Enter the last name of the Location's contact person.  IMPORTANT: even though contact detail fields are not required fields, Euronext does recommend its Information Suppliers and subscribers to provide up-to-date contact details for each Location.
Contact First Name	No	maximum 32 characters	Enter the first name of the Location's contact person.  IMPORTANT: even though contact detail fields are not required fields, Euronext does recommend its Information Suppliers and subscribers to provide up-to-date contact details for each Location.
Contact Telephone No	No	maximum 50 characters	Enter the telephone number of the Location's contact person.
Contact Email Address	No	maximum 64 characters	Enter the e-mail of the Location's contact person.
Effective Month	Yes	Must be formatted according to ISO 8601 Standard (e.g. 2019-07-31 for July 2019)	Enter the date for which this line item's Monthly Total Quantity is for.  Must be ISO 8601 format (YYYY-MM-DD). [YYYY] indicates a four-digit year, 0000 through 9999. [MM] indicates a two-digit month of the year, 01 through 12. [DD] indicates a two-digit day of that month, 01 through 31.
Product Code	Yes		Enter the applicable product code for which you want to report the number of applicable units of count (i.e. the quantity).  IMPORTANT: When you are reporting the ability to access an Euronext Market Data Product by your subscribers, make sure to report the product codes that have the suffix '-SA' and/or '-DF', whichever is applicable. When you are reporting an Information Supplier, make sure to report the product codes that have the suffix '-SV'. When you are reporting the ability to access a Euronext Market Data Products for your organization make sure to report such access under the product codes that have the suffix '-IU'.  For more applicable product codes, please see Appendix 3.  (Note, your use which meets all requirements for Operational Use may be reported under product codes that have the suffix '-OPS'.  For more information about Euronext market data products and product codes
Monthly Total Quantity	Yes		please contact marketdataoperations team@euronext.com.  Enter the total number of reportable units of count with the ability to access to real-time market data for this Location, product and month.
Comments	No	maximum 100 characters	Please provide a short explanation in case of large variability in quantity compared to previous month or when reporting back-dated corrections.

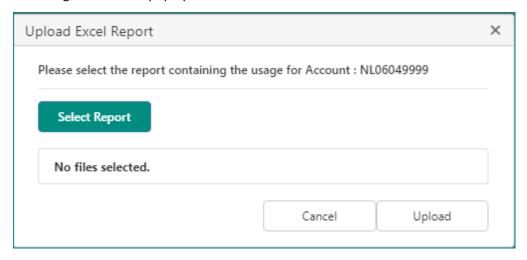


## 3.4. UPLOAD AN EXCEL REPORT

To upload an Excel report please click on the 'Upload Excel Report' button under the reporting account.

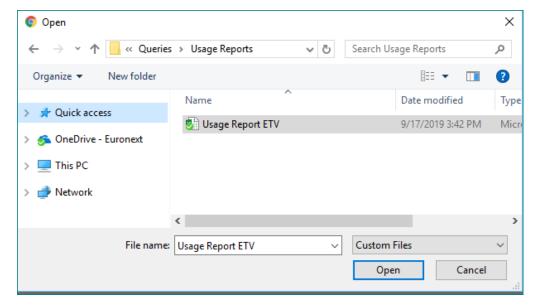


You will get the below pop up.

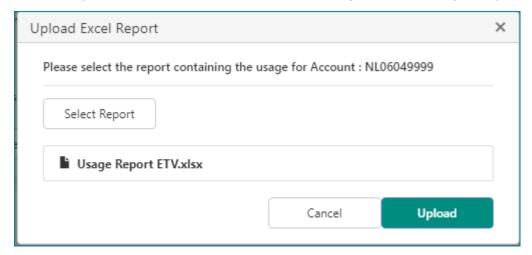


Click on 'Select Report' and your File Explorer will open where you can select the file to be uploaded.





Check that you have selected the correct file and click 'Upload' to submit your report.



After clicking 'Upload' the report will be send to Euronext to generate a vrxml file which then gets placed in a queue to entered Euronext's Reporting Validation Process.

In case of issues with your attempted upload you will be notified via email. If the Last Report Status is 'Validation Failed' please contact <u>marketdataoperations team@euronext.com</u>.

The status of the report will be updated on the *account page*. If the file was successfully processed the associated reporting task will be considered completed and removed from the *Open Task list*.



# **APPENDIX 1: OVERVIEW OF THE REPORTING CATEGORIES**

The table below provides an overview of your reporting obligation per reporting category. More detailed information is outlined in the EMDA Reporting Policy.

REPORTING CATEGORY	SUBCATEGORY (IF APPLICABLE)	LOCATION ACCOUNT NUMBERS	UNIT OF COUNT	PRODUCT CODES	
Reporting your	Internal Use (standard)	Location account number free of choice (i.e. at your	User per Source / Device (where unable to allocate to	For product codes please	
Information	Operational Use	discretion)	a single natural person)	<u>click here</u> .	
Reporting your	Subscriber Internal Use (Information Supplier- Controlled)	A separate Location Account Number for	Device	For product	
Subscriber's Use of Information	Subscriber Internal Use (Recipient- Controlled)	each Subscriber and free of choice (i.e. at your discretion)	User per Source / Device (where unable to allocate to a single natural person)	codes please click here.	
Reporting Subscribers Approved to	Information Supplier-Controlled Information	A separate Location Account Number for	Device for (Information- Supplier Controlled)	For product codes please	
report Natural User	Recipient- Controlled Information	each Subscriber (i.e. at your discretion)	Datafeed/Installation (Recipient- Controlled)	click here.	
Reporting the Provision of Managed Non- Display Services	Provision of Managed Non-Provision of Access (Non-billable)Account Nu each Subscr		Subscriber	For product codes please click here.	
Reporting the Provision of ASP Services/ESP Services to Trading Members	Provision of Access (Non-billable)	A separate Location Account Number for each Subscriber (i.e. at your discretion)	Subscriber (a Trading Member of Euronext)	For product codes please click here.	



REPORTING CATEGORY	SUBCATEGORY (IF APPLICABLE)	LOCATION ACCOUNT NUMBERS	UNIT OF COUNT	PRODUCT CODES	
	Non-Professional Subscriber	A separate Location	Device		
Reporting your	Page View Requests	specified by Euronext	Page View	For product	
Subscriber's Use of Information	White Label Services	A separate Location Account Number for each White Label Service Client and specified by Euronext	Device (professional and non-professional subscribers) or Page View	codes please click here.	
Reporting the Provision of White Label Services	White Label Services	A separate Location Account Number for each White Label Service Client and free of choice (i.e. at your discretion)	White Label Service	For product codes please click here.	
Reporting the Redistribution of	Real-Time Data Sub Vendors	A separate Location Account Number for	Cub Vandar	For product	
Information to Sub Vendors	Delayed Data Sub Vendors	each Sub Vendor and free of choice (i.e. at your discretion)	Sub Vendor	codes please click here.	



# **APPENDIX 2: UNIT OF COUNTS**

This appendix provides more detailed information about the different unit of counts.

#### **A2.1. DEVICE**

A device unit of count is applicable:

- When you (the information supplier) provide information supplier-controlled real-time market data to subscribers, either professional subscribers or non-professional subscribers, for the purpose of display. This means that the delivery mechanism does not allow the subscriber to control the type and number of users and/or devices that can access the market data and is thereby incapable of further dissemination of such data by such subscriber.
- When you (the information supplier) provide information supplier-controlled real-time market data to non-professional subscribers (i.e. private investors).
- For all your internal display use or your subscriber's display use of recipient-controlled real time market data on a device, which cannot be allocated to a single natural person.

A device means any terminal, Access ID or other method capable of accessing, receiving, processing, displaying and/or otherwise Using the Information including, but without limitation, any listening device or any other form of audio communication or similar equipment.

**IMPORTANT:** Simultaneous access on a device is not allowed. For example, in case of simultaneous access on a single device (incl. user id), each instance with access to real-time market data on that device (incl. user id) is to be counted and reported.

In accordance with the unit of count, device, you (or your subscriber, in case of recipient-controlled entitlement) should count how many devices have the ability to access market data for each separate data feed product from you (the information supplier). You should report this number to Euronext.

#### **A2.2. USER PER SOURCE**

A user per source unit of count is applicable:

- When you (the information supplier) provide recipient-controlled real-time market data to subscribers, professionals, for the purpose of display. This means that the delivery mechanism allows the subscriber to control the type and number of users and/or devices that can access the market data and is thereby capable of further dissemination of such data by such subscriber.
- In case of your internal distribution for the purpose of display use.

In accordance with the unit of count, User per Source, you (or your subscriber, in case of recipient-controlled entitlement) should count how many natural users have the ability to access market data for each separate data feed product from you (the information supplier). You should report this number to Euronext.



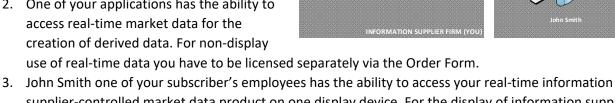
#### A2.3. EXAMPLE 'USER PER SOURCE' - WHEN YOU ARE AN INFORMATION SUPPLIER

The illustration below describes a situation in which you (the information supplier):

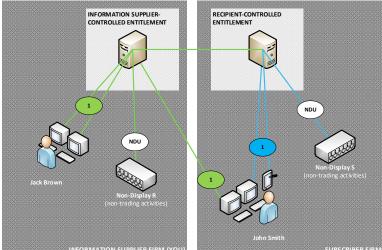
- are internally distributing and using real-time market data; and
- are redistributing real-time market data to a subscriber

In the example below you should report 1 user per source (for your internal access and use) and 1 device and 1 user per source (for your subscriber's access and use).

- 1. Jack Brown one of your employees has the ability to access your real-time market data products on two display devices. For such internal distribution and use of real-time market data the 'User per Source' unit of count applies. Therefore you should count and report to Euronext 1 user (Jack Brown). Note, even though Jack Brown has access to market data twice, he only has to be counted once, as both are fed from one source.
- 2. One of your applications has the ability to access real-time market data for the creation of derived data. For non-display



- supplier-controlled market data product on one display device. For the display of information suppliercontrolled market data the 'Device' unit of count applies. Therefore you should count and report to Euronext 1 device (that of John Smith).
- 4. John Smith also has the ability to access your real-time market data products on two display devices, but in this case through recipient-controlled entitlement. For the display of recipient-controlled market data the 'User per Source' unit of count applies. In this case, the subscriber should count and report to you 1 user (John Smith). You then shall report this user to Euronext. Note, even though John Smith has access to market data twice, it only has to be counted once, as it comes from one source (your data feed product)
- 5. Lastly, one of your subscriber's applications has the ability to access your real-time recipient-controlled market data product for non-display risk management. For non-display use the subscriber has to sign the EDSA agreement, if the subscriber is not already part of the EMDA agreement yet. It is your responsibility to ensure that all of your subscribers that are in receipt of recipient-controlled information from you have entered into an agreement with Euronext (whether they have non-display use or not).





#### A2.4. EXAMPLE 'USER PER SOURCE' - WHEN YOU ARE A TRADING MEMBER

The (simplified) illustration of market data access through market connectivity services is meant to provide more clarity on how to count and report the number of users with the ability to access Euronext market data.

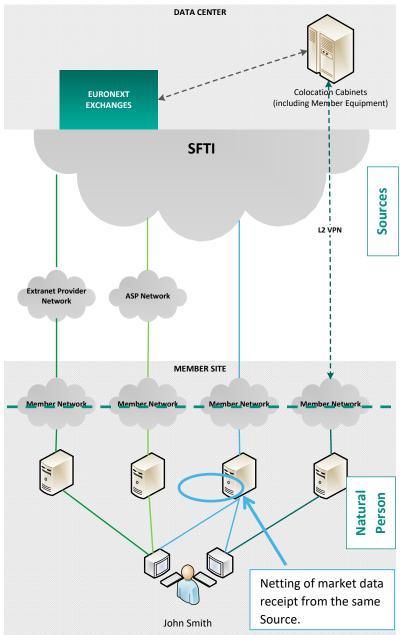
In accordance with the unit of count, **User per Source**, you should count how many natural users have the ability to access market data for each market connectivity service (provider) and report the aggregate number per country.

In the illustration John Smith is a user at a member firm and this user has two terminals:

- On one terminal John Smith has access to market data as part of three market connectivity services or 'Sources' (Extranet Service Provider service, Application Service Provider service, SFTI Direct Connection).
- On one terminal John Smith has access to market data as part of two market connectivity services or 'Sources' (SFTI Direct Connection, Colocation Cabinet).

In this case, the member firm should count and report John Smith four times (i.e. under four main locations). Once for the extranet service provider, once for application service provider, once for the SFTI Direct Connection and once for the SFTI Co-Location.

Note, even though John Smith has access to market data from the SFTI Direct Connection twice, it only has to be counted once, as it comes from one source.



For more information about how to apply the User per Source unit of count please contact <a href="mailto:databyeuronext@euronext.com">databyeuronext@euronext.com</a>.



# APPENDIX 3: EURONEXT MARKET DATA PRODUCTS & PRODUCT CODES (INFORMATION SUPPLIER)

The tables below provide more information about Euronext Market Data Products applicable under the Euronext Market Data Agreement. The product codes described are the product codes either recommended or required by Euronext.

EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION		REPORTING YOUR INTERNAL USE REPORTING YOUR SUBSCRIBER'S OF INFORMATION USE OF INFORMATION		REPORTING SUBSCRIBERS APPROVED TO REPORT NATURAL USER		
		INTERNAL USE	OPERATIONAL USE	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA
EURONEXT ALL INDICES	means Euronext Indices Information relating to all indices compiled, calculated and published by Euronext and Oslo Børs, except for the ISE Bond Index and Nordic indices. It includes index levels, open, high, low and closing level, of the indices.	EAI-IU	EAI-OPS	EAI-SA	EAI-DF	EAI-SDB	EAI-DDB
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)  This Information Product is mapped to Cash Level 2, Cash Level 1 and Cash Last Price product codes. (available in Level 2, Level 1 and Last Price)	means Euronext Continental Equities, Euronext Best of Book Quotes, Euronext Block, Euronext ETFs and Funds, Euronext Warrants and Certificates and Euronext Fixed Income Information.  Level 2:  The full depth of the order book of the applicable financial instrument(s) traded on the applicable market(s). Level 2 also includes Level 1 and Last Price: The best bid and offer per financial instrument, i.e. prices and quantities, of the applicable financial instrument(s) traded on the applicable market(s) and the number of orders at each price level. It also includes the indicative matching price and volume. The traded prices and quantities, open, high, low and closing prices of the	ECB10-IU	ECB10-OPS	ECB10-SA	ECB10-DF	ECB10-SDB	ECB10-DDB



traded on book and/or off book on the applicable market(s).  The opening and closing messages relative to the characteristics of the financial instruments for the trading session.  Level 1:  The best bid and offer per financial	ECB1-IU	ECB1-OPS	ECB1-SA	ECB1-DF	ECB1-SDB	ECB1-DDB
instrument, i.e. prices and quantities, of the applicable financial instrument(s) traded on the applicable market(s) and the number of orders at each price level. It also includes the indicative matching price and volume.  Level 1 also includes Last Price:  ■ The traded prices and quantities, open, high, low and closing prices of the applicable financial instrument(s) traded on book and/or off book on the applicable market(s).  ■ The opening and closing messages relative to the characteristics of the financial instruments for the trading session.						
Last Price:  The traded prices and quantities, open, high, low and closing prices of the applicable financial instrument(s) traded on book and/or off book on the applicable market(s).  The opening and closing messages relative to the characteristics of the financial instruments for the trading session.	ECLP-IU	ECLP-OPS	ECLP-SA	ECLP-DF	ECLP-SDB	ECLP-DDB



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING THE PROVISION OF MANAGED NON- DISPLAY SERVICES	REPORTING THE PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REPORTING THE PROVISION OF WHITE LABEL SERVICES		REPORTING THE REDISTRIBUTION OF INFORMATION TO SUB VENDORS	
		PROVISION OF MANAGED NON- DISPLAY SERVICES	PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REAL TIME WHITE LABEL	DELAYED WHITE LABEL	REAL-TIME DATA SUB VENDOR	DELAYED DATA SUB VENDOR
EURONEXT ALL INDICES	means Euronext Indices Information relating to all indices compiled, calculated and published by Euronext and Oslo Børs, except for the ISE Bond Index and Nordic indices. It includes index levels, open, high, low and closing level, of the indices.	VCEAI-MND	TMEAI-TM	EAI-WL	EAI-DWL	SVEAI-SV	SVDEAI-SV
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)  This Information Product is mapped to Cash Level 2, Cash Level 1 and Cash Last Price product codes. (available in Level 2, Level 1 and Last Price)	means Euronext Continental Equities, Euronext Best of Book Quotes, Euronext Block, Euronext ETFs and Funds, Euronext Warrants and Certificates and Euronext Fixed Income Information.  Level 2:  The full depth of the order book of the applicable financial instrument(s) traded on the applicable market(s). Level 2 also includes Level 1 and Last Price: The best bid and offer per financial instrument, i.e. prices and quantities, of the applicable financial instrument(s) traded on the applicable market(s) and the number of orders at each price level. It also includes the indicative matching price and volume. The traded prices and quantities, open, high, low and closing prices of the applicable financial instrument(s) traded on book and/or off book on the applicable market(s). The opening and closing messages relative to the characteristics of the financial instruments for the trading session.	VCECB10-MND	TMECB10-TM	ECB10-WL	ECB10-DWL	SVECB10-SV	SVDECB10-S



Level 1:  ■ The best bid and offer per financial instrument, i.e. prices and quantities, of the applicable financial instrument(s) traded on the applicable market(s) and the number of orders at each price level. It also includes the indicative matching price and volume.  Level 1 also includes Last Price:  ■ The traded prices and quantities, open, high, low and closing prices of the applicable financial instrument(s) traded on book and/or off book on the applicable market(s).  ■ The opening and closing messages relative to the characteristics of the financial instruments for the trading session.	VCECB1-MND	TMECB1-TM	ECB1-WL	ECB1-DWL	SVECB1-SV	SVDECB1-SV
Last Price: ■ The traded prices and quantities, open, high, low and closing prices of the applicable financial instrument(s) traded on book and/or off book on the applicable market(s). ■ The opening and closing messages relative to the characteristics of the financial instruments for the trading session.	VCECLP-MND	TMECLP-TM	ECLP-WL	ECLP-DWL	SVECLP-SV	SVDECLP-SV



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING YOUR INTERNAL USE OF INFORMATION		REPORTING YOUR SUBSCRIBER'S USE OF INFORMATION		REPORTING SUBSCRIBERS APPROVED TO REPORT NATURAL USER	
		INTERNAL USE	OPERATIONAL USE	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA
EURONEXT CONTINENTAL EQUITIES (available in Level 2 and Last Price)	means Information relating to Euronext's regulated equities markets in Amsterdam, Brussel, Lisbon and Paris, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of Euronext equities. It also includes the indicative matching price and volume for the equity markets. Opening and closing messages relative to the characteristics of the equities for the trading session are also included.	EQTL2-IU EQTLP-IU	EQTL2-OPS EQTLP-OPS	EQTL2-SA EQTLP-SA	EQTL2-DF EQTLP-DF	EQTL2-SDB EQTLP-SDB	EQTL2-DDB EQTLP-DDB
EURONEXT BEST OF BOOK (available in Level 2)	means Information relating to the Best of Book segment of the regulated Euronext cash markets, including up to all bids and offers per security, i.e. prices and quantities.	RMFQ-IU	RMFQ -OPS	RMFQ -SA	RMFQ -DF	RMFQ -SDB	RMFQ -DDB
EURONEXT BLOCK (available in Last Price)	means Information, relating to securities traded on the Euronext Block MTF platform, including all traded prices and quantities.	EBT-IU	EBT-OPS	EBT-SA	EBT-DF	EBT-SDB	EBT-DDB



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING THE PROVISION OF MANAGED NON- DISPLAY SERVICES	REPORTING THE PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REPORTING THE PROVISION OF WHITE LABEL SERVICES		REPORTING THE REDISTRIBUTION OF INFORMATION TO SUB VENDORS	
		PROVISION OF MANAGED NON- DISPLAY SERVICES	PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REAL TIME WHITE	DELAYED WHITE LABEL	REAL-TIME DATA SUB VENDOR	DELAYED DATA SUB VENDOR
EURONEXT CONTINENTAL EQUITIES (available in Level 2 and Last Price)	means Information relating to Euronext's regulated equities markets in Amsterdam, Brussel, Lisbon and Paris, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of Euronext equities. It also includes the indicative matching price and volume for the equity markets. Opening and closing messages relative to the characteristics of the equities for the trading session are also included.	VCEQTL2-MND VCEQTLP-MND	TMEQTL2-TM TMEQTLP-TM	EQTL2-WL EQTLP-WL	EQTL2-DWL EQTLP-DWL	SVEQTL2-SV SVEQTLP-SV	SVDEQTL2-S SVDEQTLP-S
EURONEXT BEST OF BOOK (available in Level 2)	means Information relating to the Best of Book segment of the regulated Euronext cash markets, including up to all bids and offers per security, i.e. prices and quantities.	VCRMFQ-MND	TMRMFQ-TM	RMFQ-WL	RMFQ-DWL	SVRMFQ-SV	SVDRMFQ-S
EURONEXT BLOCK (available in Last Price)	means Information, relating to securities traded on the Euronext Block MTF platform, including all traded prices and quantities.	VCEBT-MND	тмевт-тм	EBT-WL	EBT-DWL	SVEBT-SV	SVDEBT-SV



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING YOUR INTERNAL USE OF INFORMATION		REPORTING YOUR SUBSCRIBER'S USE OF INFORMATION		REPORTING SUBSCRIBERS APPROVED TO REPORT NATURAL USER	
		INTERNAL USE	OPERATIONAL USE	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA
EURONEXT ETFs AND FUNDS (available in Level 2 and Last Price)	means Information relating to all Euronext and Oslo Børs Exchange Traded Funds (ETFs) and Funds markets, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of the ETFs and Funds. Euronext ETFs and Funds markets include Euronext's regulated markets for ETFs and Funds and Euronext ETF Access. It also includes the indicative matching price and volume for the ETF and Funds markets. Opening and closing messages relative to the characteristics of the ETFs and Funds for the trading session are also included.	ETFL2-IU ETFLP-IU	ETFL2-OPS ETFLP-OPS	ETFL2-SA ETFLP-SA	ETFL2-DF	ETFL2-SDB ETFLP-SDB	ETFL2-DDB ETFLP-DDB
EURONEXT WARRANTS AND CERTIFICATES (available in Level 2 and Last Price)	means Information relating to all Euronext and Oslo Børs Warrants and Certificates markets, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of the Warrants and Certificates. It also includes the indicative matching price and volume for the Warrants and Certificates markets. Opening and closing messages relative to the characteristics of the Warrants and Certificates for the trading session are also included.	EWCL2-IU EWCLP-IU	EWCL2-OPS EWCLP-OPS	EWCL2-SA EWCLP-SA	EWCL2-DF EWCLP-DF	EWCL2-SDB EWCLP-SDB	EWCL2-DDB



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING THE PROVISION OF MANAGED NON- DISPLAY SERVICES	REPORTING THE PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	ON OF ASP  REPORTING THE PROVISION OF WHITE LABEL SERVICES  OF WHORS  REPORTING THE RE			ON OF
		PROVISION OF MANAGED NON- DISPLAY SERVICES	PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REAL TIME WHITE LABEL	DELAYED WHITE LABEL	REAL-TIME DATA SUB VENDOR	DELAYED DATA SUB VENDOR
EURONEXT ETFS AND FUNDS (available in Level 2 and Last Price)	means Information relating to all Euronext and Oslo Børs Exchange Traded Funds (ETFs) and Funds markets, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of the ETFs and Funds. Euronext ETFs and Funds markets include Euronext's regulated markets for ETFs and Funds and Euronext ETF Access.  It also includes the indicative matching price and volume for the ETF and Funds markets.  Opening and closing messages relative to the characteristics of the ETFs and Funds for the trading session are also included.	VCETFL2-MND VCETFLP-MND	TMETFL2-TM TMETFLP-TM	ETFL2-WL ETFLP-WL	ETFL2-DWL ETFLP-DWL	SVETFL2-SV SVETFLP-SV	SVDETFL2-S SVDETFLP-S
EURONEXT WARRANTS AND CERTIFICATES (available in Level 2 and Last Price)	means Information relating to all Euronext and Oslo Børs Warrants and Certificates markets, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of the Warrants and Certificates. It also includes the indicative matching price and volume for the Warrants and Certificates markets. Opening and closing messages relative to the characteristics of the Warrants and Certificates for the trading session are also included.	VCEWCL2-MND VCEWCLP-MND	TMEWCL2-TM TMEWCLP-TM	EWCL2-WL EWCLP-WL	EWCL2-DWL	SVEWCL2-SV SVEWCLP-SV	SVDEWCL2-S SVDEWCLP-S



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING YO	UR INTERNAL USE ON	REPORTING YOUR S		REPORTING SUBSCI APPROVED TO REPU USER	
		INTERNAL USE	OPERATIONAL USE	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA
EURONEXT FIXED INCOME (available in Level 2 and Last Price)	means Information relating to all regulated Euronext and Oslo Børs Fixed Income markets, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices and spread and yield of the bonds. It also includes the indicative matching price and volume for the Fixed Income markets. Opening and closing messages relative to the characteristics of the bonds for the trading session are also included.	EFIL2-IU EFILP-IU	EFIL2-OPS EFILP-OPS	EFIL2-SA EFILP-SA	EFIL2-DF EFILP-DF	EFIL2-SDB EFILP-SDB	EFIL2-DDB EFILP-DDB
EURONEXT DUBLIN EQUITIES (available in Level 2 and Last Price)	means Information relating to Euronext's regulated equities market in Dublin, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of these Euronext equities. It also includes the indicative matching price and volume for the equity market. Opening and closing messages relative to the characteristics of the equities for the trading session are also included.	DEQL2-IU DEQLP-IU	DEQL2-OPS DEQLP-OPS	DEQL2-SA DEQLP-SA	DEQL2-DF DEQLP-DF	DEQL2-SDB DEQLP-SDB	DEQL2-DDB  DEQLP-DDB
OSLO BØRS EQUITIES  (available in Level 2 and Last Price)  Effective per 1st July 2020	means Information relating to Oslo Børs' regulated equities market in Oslo, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of these Oslo Børs equities. It also includes the indicative	OEQL2-IU	OEQL2-OPS	OEQL2-SA	OEQL2-DF	OEQL2-SDB	OEQL2-DDB
	matching price and volume for the equity market. Opening and closing messages relative to the characteristics of the equities for the trading session are also included.	OEQLP-IU	OEQLP-OPS	OEQLP-SA	OEQLP-DF	ODEQLP-SDB	OEQLP-DDB



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING THE PROVISION OF MANAGED NON- DISPLAY SERVICES	REPORTING THE PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REPORTING THE		REPORTING THE REDISTRIBUTION OF INFORMATION TO SUB VENDORS	
		PROVISION OF MANAGED NON- DISPLAY SERVICES	PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REAL TIME WHITE LABEL	DELAYED WHITE LABEL	REAL-TIME DATA SUB VENDOR	DELAYED DATA SUB VENDOR
EURONEXT FIXED INCOME (available in Level 2 and Last Price)	means Information relating to all regulated Euronext and Oslo Børs Fixed Income markets, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices and spread and yield of the bonds. It also includes the indicative matching price and volume for the Fixed Income markets. Opening and closing messages relative to the characteristics of the bonds for the trading session are also included.	VCEFIL2-MND VCEFILP-MND	TMEFIL2-TM TMEFILP-TM	EFIL2-WL EFILP-WL	EFIL2-DWL EFILP-DWL	SVEFIL2-SV SVEFILP-SV	SVDEFIL2-S SVDEFILP-S
EURONEXT DUBLIN EQUITIES (available in Level 2 and Last Price)	means Information relating to Euronext's regulated equities market in Dublin, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of these Euronext equities. It also includes the indicative matching price and volume for the equity market. Opening and closing messages relative to the characteristics of the equities for the trading session are also included.	VCDEQL2-MND VCDEQLP-MND	TMDEQL2-TM TMDEQLP-TM	DEQL2-WL DEQLP-WL	DEQL2-DWL	SVDEQL2-SV SVDEQLP-SV	SVDDEQL2-SV SVDDEQLP-SV
OSLO BØRS EQUITIES (available in Level 2 and Last Price)  Effective per 1 <sup>st</sup> July 2020	means Information relating to Oslo Børs' regulated equities market in Oslo, including all bids and offers, i.e. prices and quantities, traded prices and quantities, open, high, low and closing prices of these Oslo Børs equities. It also includes the indicative matching price and volume for the equity market. Opening and closing messages relative to the characteristics of the equities for the trading session are also included.	VCOEQL2-MND VCOEQLP-MND	TMOEQL2-TM TMOEQLP-TM	OEQL2-WL OEQLP-WL	ODEQL2-DWL OEQLP-DWL	SVOEQL2-SV SVOEQLP-SV	SVDOEQL2-SV SVDOEQLP-SV

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EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION		PORTING YOUR INTERNAL USE INFORMATION USE		SUBSCRIBER'S ION	REPORTING SUBSCRIBERS APPROVED TO REPORT NATURAL USER		
		INTERNAL USE	OPERATIONAL USE	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	
NORDIC ABM  (available in Level 2)  Effective per 1 <sup>st</sup> July 2020	means Information relating to all instruments registered on Oslo Børs' Nordic ABM including trades, full depth order book and statistics.	ABM-IU	ABM-OPS	ABM-SA	ABM-DF	ABM-SDB	ABM-DDB	
EURONEXT EQUITY AND INDEX DERIVATIVES  (available in Level 2 and Last Price)	means Euronext Derivatives Information relating to Equity and Index Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's equity and index derivatives.	EQID-IU EQIDLP-IU	EQID -OPS  EQIDLP-OPS	EQID -SA EQIDLP-SA	EQID -DF EQIDLP-DF	EQID -SDB EQIDLP-SDB	EQID -DDB  EQIDLP-DDB	
EURONEXT COMMODITY DERIVATIVES (available in Level 2 and Last Price)	means Euronext Derivatives Information relating to Commodity Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's commodity derivatives.	COMD-IU COMLP-IU	COMD -OPS COMLP-OPS	COMD -SA COMLP-SA	COMD -DF COMLP-DF	COMD -SDB COMLP-SDB	COMD -DDB COMLP-DDB	
EURONEXT CURRENCY DERIVATIVES  (available in Level 2 and Last Price)  Decommissioned per 1st January 2021	means Euronext Derivatives Information relating to Currency Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's currency derivatives.	CURD-IU CURLP-IU	CURD -OPS CURLP-OPS	CURD -SA CURLP-SA	CURD -DF CURLP-DF	CURD -SDB CURLP-SDB	CURD -DDB CURLP-DDB	



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING THE PROVISION OF MANAGED NON- DISPLAY SERVICES	REPORTING THE PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REPORTING THI OF WHITE LABE		REPORTING T REDISTRIBUTI INFORMATION VENDORS	ON OF
		PROVISION OF MANAGED NON- DISPLAY SERVICES	PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REAL TIME WHITE LABEL	DELAYED WHITE LABEL	REAL-TIME DATA SUB VENDOR	DELAYED DATA SUB VENDOR
NORDIC ABM  (available in Level 2)  Effective per 1 <sup>st</sup> July 2020	means Information relating to all instruments registered on Oslo Børs' Nordic ABM including trades, full depth order book and statistics.	VCABM-MND	ТМАВМ-ТМ	ABM-WL	ABM-DWL	SVABM-SV	SVDABM-SV
EURONEXT EQUITY AND INDEX DERIVATIVES  (available in Level 2 and Last Price)	means Euronext Derivatives Information relating to Equity and Index Derivatives traded on the Euronext and Oslo Børs Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's equity and index derivatives.	VCEQID-MND VCEQIDLP-MND	TMEQID-TM TMEQIDLP-TM	EQID-WL EQIDLP-WL	EQID -DWL EQIDLP-DWL	SVEQID-SV SVEQIDLP-S	SVDEQID-SV SVDEQIDLP-S
EURONEXT COMMODITY DERIVATIVES (available in Level 2 and Last Price)	means Euronext Derivatives Information relating to Commodity Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's commodity derivatives.	VCCOMD-MND VCCOMLP-MND	TMCOMD-TM	COMD-WL	COMD-DWL	SVCOMD-SV SVCOMLP-SV	SVDCOMD-SV SVDCOMLP-S
EURONEXT CURRENCY DERIVATIVES  (available in Level 2 and Last Price)	means Euronext Derivatives Information relating to Currency Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded	VCCURD-MND	TMCURD-TM	CURD-WL	CURD -DWL	SVCURD-SV	SVDCURD-SV
Decommissioned per 1 <sup>st</sup> January 2021	prices, open interest and quantities on Euronext's currency derivatives.	VCCURLP-MND	TMCURLP-TM	CURLP-WL	CURLP-DWL	SVCURLP-SV	SVDCURLP-S



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING YO	UR INTERNAL USE ON	REPORTING YOUR S		REPORTING SUBSC APPROVED TO REP USER	
		INTERNAL USE	OPERATIONAL USE	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA	INFORMATION SUPPLIER - CONTROLLED DATA	RECIPIENT - CONTROLLED DATA
EURONEXT APA TRADES  (available in Last Price)	means Information including the trade reports submitted by investment firms and systematic internalisers to Euronext and Oslo Børs via the Euronext and Oslo Børs APA service, Trade Publication Service or other trading platforms directly.	EETR -IU	EETR -OPS	EETR -SA	EETR -DF	EETR -SDB	EETR -DDB
EURONEXT APA (SI) QUOTES (available in Level 2)	means Information including all bids and offers, i.e. prices and quantities, submitted by systematic internalisers to Euronext and Oslo Børs via the Euronext and Oslo Børs APA service.	EAPAQ-IU	EAPAQ-OPS	EAPAQ-SA	EAPAQ-DF	EAPAQ-SDB	EPAQ-DDB
VINX ALL  Effective per 1 <sup>st</sup> July 2020	means Information relating to all indices with constituents from all of the Nordic stock exchanges and produced by Oslo Børs in cooperation with Nasdaq OMX for Redistributors that include VINX Information in all Real Time subscriptions from Nasdaq OMX and Oslo Børs. It includes, but is not limited to, index values, closing level, as well as weight reports.	VINXA-IU	VINXA-OPS	VINXA-SA	VINXA-DF	VINXA-SDB	VINXA-DDB
VINX PLUS  Effective per 1 <sup>st</sup> July 2020	means Euronext Derivatives Information relating to Equity and Index Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's equity and index derivatives.	VINXP-IU	VINXP-OPS	VINXP-SA	VINXP-DF	VINXP-SDB	VINXP-DDB



EURONEXT MARKET DATA INFORMATION PRODUCT	EURONEXT MARKET DATA INFORMATION PRODUCT DESCRIPTION	REPORTING THE PROVISION OF MANAGED NON- DISPLAY SERVICES	REPORTING THE PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS		PORTING THE PROVISION WHITE LABEL SERVICES INFORMATION TO SERVICES		
		PROVISION OF MANAGED NON- DISPLAY SERVICES	PROVISION OF ASP SERVICES/ESP SERVICES TO TRADING MEMBERS	REAL TIME WHITE LABEL	DELAYED WHITE LABEL	REAL-TIME DATA SUB VENDOR	DELAYED DATA SUB VENDOR
EURONEXT APA TRADES (available in Last Price)	means Information including the trade reports submitted by investment firms and systematic internalisers to Euronext and Oslo Børs via the Euronext and Oslo Børs APA service, Trade Publication Service or other trading platforms directly.	VCEETR-MND	TMEETR-TM	EETR-WL	EETR -DWL	SVEETR-SV	SVDEETR-SV
EURONEXT APA (SI) QUOTES (available in Level 2)	means Information including all bids and offers, i.e. prices and quantities, submitted by systematic internalisers to Euronext and Oslo Børs via the Euronext and Oslo Børs APA service.	VCEAPAQ-MND	TMEAPAQ-TM	TMEAPAQ-WL	EAPAQ-DF	EAPAQ-SDB	EPAQ-DDB
VINX ALL  Effective per 1 <sup>st</sup> July 2020	means Information relating to all indices with constituents from all of the Nordic stock exchanges and produced by Oslo Børs in cooperation with Nasdaq OMX for Redistributors that include VINX Information in all Real Time subscriptions from Nasdaq OMX and Oslo Børs. It includes, but is not limited to, index values, closing level, as well as weight reports.	NA	NA	NA	NA	SVVINXA-SV	SVDVINXA-SV
VINX PLUS  Effective per 1 <sup>st</sup> July 2020	means Euronext Derivatives Information relating to Equity and Index Derivatives traded on the Euronext Derivatives markets, including all bids and offers (aggregated limits), traded prices, open interest and quantities on Euronext's equity and index derivatives.	NA	NA	NA	NA	SVVINXP-SV	SVDVINXP-SV



EURONEXT MARKET DATA PRODUCT	EURONEXT MARKET DATA PRODUCT DESCRIPTION	REPORTING YOUR NON-PROFESSIONAL SUBSCIRBER'S USE OF INFORMATION
NON-PROFESSIONAL SUBSCRIBER PREMIUM	This may include, Euronext All Indices, Euronext Continental Cash Level 1 & 2 (and Best of Book Quotes if you are authorized), Euronext Equity and Index Derivatives*, Euronext Currency Derivatives* market data.  *Where this market data is limited to the best bid and offer and trading prices only.	ENPI-SA
NON-PROFESSIONAL SUBSCRIBER BASIC	This may include, Euronext All Indices, Euronext Continental Cash Level 1 (and Best of Book Quotes if you are authorized), Euronext Dublin Equities*, Oslo Bors Equities*, Euronext Equity and Index Derivatives*, Euronext Currency Derivatives* market data.  *Where this market data is limited to the best bid and offer and trading prices only.	ENPIB-SA
NON-PROFESSIONAL SUBSCRIBER WARRANTS AND CERTIFICATES	This only include Euronext Warrants and Certificates (Level 2).	ENPIWC-SA
PAGE VIEWS	A page view may include quotes from Euronext Continental Cash market data, Euronext Best of Book Quotes, Euronext Equity and Index Derivatives, Euronext Currency Derivatives and the following indices: Euronext 100, Next 150, CAC 40, AEX, OBX, OSEBX, Bel 20, ISEQ 20 and PSI 20.	EPVR-MU



# APPENDIX 4: EURONEXT MARKET DATA PRODUCTS & PRODUCT CODES (TRADING MEMBER)

The tables below provide more information about Euronext Market Data Products applicable under the Euronext Market Data Agreement. The product codes described are the product codes either recommended or required by Euronext.

EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT ALL INDICES	EAI-IU	REFI	Compressed	Optiq - Euronext Indices - REFI (indices and referential data)	100 MB	224.0.64.250	224.0.65.250	224.0.66.250	224.0.67.250	10250, 20250
	EAI-OPS	REFI	Compressed	Optiq - Euronext iNAVs - REFI (indices and referential data)	100 MB	224.0.64.251	224.0.65.251	224.0.66.251	224.0.67.251	10251, 20251
	EAI-OPS	REFI	Compressed	Optiq - Euronext Dublin Indices - REFI (indices and referential data)	100 MB	224.0.64.252	224.0.65.252	224.0.66.252	224.0.67.252	10252, 20252
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)	ECB10-IU*	FBMU	Compressed	Optiq - Equities - Belgium - includes Public Auction Market - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.101	224.0.65.101	224.0.66.101	224.0.67.101	10101, 11101, 12101, 13101, 20101, 21101, 22101, 23101
*The Market Data Product Codes ECB10-IU, ECB10-	ECB10- OPS*	FBMU	Shaped	Optiq - Equities - Belgium - includes Public Auction Market - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.102	224.0.65.102			10102, 11102, 12102, 13102
OPS, ECB1-IU and ECB1-OPS are mapped to the same SFTI products.	ECB1-IU*	FBOU	Compressed	Optiq - Equities - Belgium - includes Public Auction Market - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.103	224.0.65.103	224.0.66.103	224.0.67.103	10103, 11103, 12103, 13103, 20103, 21103, 22103, 23103
(available in Level 2, Level 1 and Last Price)	ECB1-OPS*	FBOU	Shaped	Optiq - Equities - Belgium - includes Public Auction Market - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.104	224.0.65.104			10104, 11104, 12104, 13104



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)		FBMU	Compressed	Optiq - Equities - Portugal - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.106	224.0.65.106	224.0.66.106	224.0.67.106	10106, 11106, 12106, 13106, 20106, 21106, 22106, 23106
*The Market Data Product Codes		FBMU	Shaped	Optiq - Equities - Portugal - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.107	224.0.65.107			10107, 11107, 12107, 13107
ECB10-IU, ECB10- OPS, ECB1-IU and ECB1OPS are mapped to the same		FBOU	Compressed	Optiq - Equities - Portugal - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.108	224.0.65.108	224.0.66.108	224.0.67.108	10108, 11108, 12108, 13108, 20108, 21108, 22108, 23108
SFTI products.  (available in Level 2, Level 1 and Last Price)	ECB10-IU*	FBOU	Shaped	Optiq - Equities - Portugal - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.109	224.0.65.109			10109, 11109, 12109, 13109
	ECB10-OPS*  ECB1-IU*	FBMU	Compressed	Optiq - Equities - France - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.111	224.0.65.111	224.0.66.111	224.0.67.111	10111, 11111, 12111, 13111, 20111, 21111, 22111, 23111
	ECB1-OPS*	FBMU	Shaped	Optiq - Equities - France - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.112	224.0.65.112			10112, 11112, 12112, 13112
		FBOU	Compressed	Optiq - Equities - France - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.113	224.0.65.113	224.0.66.113	224.0.67.113	10113, 11113, 12113, 13113, 20113, 21113, 22113, 23113
		FBOU	Shaped	Optiq - Equities - France - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.114	224.0.65.114			10114, 11114, 12114, 13114
		FBOU	Unshaped	Optiq - Equities - France - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.115	224.0.65.115			10115, 11115, 12115, 13115



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)		FBMU	Compressed	Optiq - Equities - Netherlands - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.121	224.0.65.121	224.0.66.121	224.0.67.121	10121, 11121, 12121, 13121, 20121, 21121, 22121, 23121
*The Market Data Product Codes ECB10-IU, ECB10-		FBMU	Shaped	Optiq - Equities - Netherlands - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.122	224.0.65.122			10122, 11122, 12122, 13122
ECB10-IU, ECB10- OPS, ECB1-IU and ECB1OPS are mapped to the same		FBOU	Compressed	Optiq - Equities - Netherlands - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.123	224.0.65.123	224.0.66.123	224.0.67.123	10123, 11123, 12123, 13123, 20123, 21123, 22123, 23123
SFTI products.  (available in Level 2, Level 1 and Last Price)	ECB10-IU*	FBOU	Shaped	Optiq - Equities - Netherlands - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.124	224.0.65.124			10124, 11124, 12124, 13124
	ECB10-OPS*  ECB1-IU*	FBOU	Unshaped	Optiq - Equities - Netherlands - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.125	224.0.65.125			10125, 11125, 12125, 13125
	ECB1-OPS*	FBMU	Compressed	Optiq - ETF - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.131	224.0.65.131	224.0.66.131	224.0.67.131	10131, 20131
		FBMU	Shaped	Optiq - ETF - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.132	224.0.65.132			10132
		FBOU	Compressed	Optiq - ETF - All - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.133	224.0.65.133	224.0.66.133	224.0.67.133	10133, 20133
		FBOU	Shaped	Optiq - ETF - All - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.134	224.0.65.134			10134



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINTAL CASH (CONSOLIDATED PACK)		FBOU	Unshaped	Optiq - ETF - All - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.135	224.0.65.135			10135
*The Market Data Product Codes		FBMU	Compressed	Optiq - ETF Access - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.91	224.0.65.91	224.0.66.91	224.0.67.91	10091, 20091
ECB10-IU, ECB10- OPS, ECB1-IU and ECB1OPS are mapped to the same		FBMU	Shaped	Optiq - ETF Access - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.92	224.0.65.92			10092
SFTI products.  (available in Level 2, Level 1 and Last Price)	ECB10-IU*	FBOU	Compressed	Optiq - ETF Access - All - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.93	224.0.65.93	224.0.66.93	224.0.67.93	10093, 20093
,	ECB10-OPS*  ECB1-IU*	FBOU	Shaped	Optiq - ETF Access - All - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.94	224.0.65.94			10094
	ECB1-OPS*	FBOU	Unshaped	Optiq - ETF Access - All - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.95	224.0.65.95			10095
		FBMU	Compressed	Optiq - Fixed Income - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.151	224.0.65.151	224.0.66.151	224.0.67.151	10151, 20151
		FBMU	Shaped	Optiq - Fixed Income - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.152	224.0.65.152			10152
		FBOU	Compressed	Optiq - Fixed Income - All - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.153	224.0.65.153	224.0.66.153	224.0.67.153	10153, 20153

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EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)		FBOU	Shaped	Optiq - Fixed Income - All - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.154	224.0.65.154			10154
*The Market Data		ВВВО	Compressed	Optiq - Warrants & Certificates - All - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.156	224.0.65.156	224.0.66.156	224.0.67.156	10156, 20156
Product Codes ECB10-IU, ECB10- OPS, ECB1-IU and ECB1-OPS are	ECB10-IU*	ввво	Shaped	Optiq - Warrants & Certificates - All - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.157	224.0.65.157			10157
mapped to the same SFTI products.  (available in Level 2,	ECB10-OPS*	FBMU	Compressed	Optiq - Warrants & Certificates - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.158	224.0.65.158	224.0.66.158	224.0.67.158	10158, 20158
Level 1 and Last Price)	ECB1-IU*	FBMU	Shaped	Optiq - Warrants & Certificates - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.159	224.0.65.159			10159
		FBMU	Compressed	Optiq - Euronext Best of Book - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.138	224.0.65.138	224.0.66.138	224.0.67.138	10138, 11138, 12138, 13138, 20138, 21138, 22138, 23138
**The Market Data Product Codes ECLP-		FBMU	Shaped	Optiq - Euronext Best of Book - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.139	224.0.65.139			10139, 11139, 12139, 13139
IU and ECLP-OPS are mapped to the same SFTI products.	ECLP-IU**	REFT	Compressed	Optiq - Equities - Belgium - includes Public Auction Market - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.100	224.0.65.100	224.0.66.100	224.0.67.100	10100, 11100, 12100, 13100, 20100, 21100, 22100, 23100
	ECLP-OPS**	REFT	Compressed	Optiq - Equities - Portugal - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.105	224.0.65.105	224.0.66.105	224.0.67.105	10105, 11105, 12105, 13105, 20105, 21105, 22105, 23105

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EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL CASH (CONSOLIDATED PACK)		REFT	Compressed	Optiq - Equities - France - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.110	224.0.65.110	224.0.66.110	224.0.67.110	10110, 11110, 12110, 13110, 20110, 21110, 22110, 23110
**The Market Data		REFT	Compressed	Optiq - Equities - Netherlands - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.120	224.0.65.120	224.0.66.120	224.0.67.120	10120, 11120, 12120, 13120, 20120, 21120, 22120, 23120
Product Codes ECLP- IU and ECLP-OPS are mapped to the same SFTI products.	ECLP-IU**	REFT	Compressed	Optiq - ETF - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.130	224.0.65.130	224.0.66.130	224.0.67.130	10130, 20130
(available in Level 2, Level 1 and Last Price)	ECLP-OPS**	REFT	Compressed	Optiq - ETF Access - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.90	224.0.65.90	224.0.66.90	224.0.67.90	10090, 20090
		REFT	Compressed	Optiq - Fixed Income - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.150	224.0.65.150	224.0.66.150	224.0.67.150	10150, 20150
		REFT	Compressed	Optiq - Warrants & Certificates - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.155	224.0.65.155	224.0.66.155	224.0.67.155	10155, 20155
EURONEXT CONTINENTAL EQUITIES (available in Level 2	EQTL2-IU	FBMU	Compressed	Optiq - Equities - Belgium - includes Public Auction Market - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.101	224.0.65.101	224.0.66.101	224.0.67.101	10101, 11101, 12101, 13101, 20101, 21101, 22101, 23101
and Last Price)	EQTL2-OPS	FBMU	Shaped	Optiq - Equities - Belgium - includes Public Auction Market - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.102	224.0.65.102			10102, 11102, 12102, 13102



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL EQUITIES (available in Level 2		FBOU	Compressed	Optiq - Equities - Belgium - includes Public Auction Market - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.103	224.0.65.103	224.0.66.103	224.0.67.103	10103, 11103, 12103, 13103, 20103, 21103, 22103, 23103
and Last Price)		FBOU	Shaped	Optiq - Equities - Belgium - includes Public Auction Market - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.104	224.0.65.104			10104, 11104, 12104, 13104
		FBMU	Compressed	Optiq - Equities - Portugal - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.106	224.0.65.106	224.0.66.106	224.0.67.106	10106, 11106, 12106, 13106, 20106, 21106, 22106, 23106
	EQTL2-IU	FBMU	Shaped	Optiq - Equities - Portugal - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.107	224.0.65.107			10107, 11107, 12107, 13107
	EQTL2-OPS	FBOU	Compressed	Optiq - Equities - Portugal - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.108	224.0.65.108	224.0.66.108	224.0.67.108	10108, 11108, 12108, 13108, 20108, 21108, 22108, 23108
		FBOU	Shaped	Optiq - Equities -Portugal - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.109	224.0.65.109			10109, 11109, 12109, 13109
		FBMU	Compressed	Optiq - Equities - France - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.111	224.0.65.111	224.0.66.111	224.0.67.111	10111, 11111, 12111, 13111, 20111, 21111, 22111, 23111
		FBMU	Shaped	Optiq - Equities - France - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.112	224.0.65.112			10112, 11112, 12112, 13112



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL EQUITIES		FBOU	Compressed	Optiq - Equities - France - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.113	224.0.65.113	224.0.66.113	224.0.67.113	10113, 11113, 12113, 13113, 20113, 21113, 22113, 23113
(available in Level 2 and Last Price)		FBOU	Shaped	Optiq - Equities - France - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.114	224.0.65.114			10114, 11114, 12114, 13114
		FBOU	Unshaped	Optiq - Equities - France - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.115	224.0.65.115			10115, 11115, 12115, 13115
	EQTL2-IU	FBMU	Compressed	Optiq - Equities - Netherlands - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.121	224.0.65.121	224.0.66.121	224.0.67.121	10121, 11121, 12121, 13121, 20121, 21121, 22121, 23121
	EQTL2-OPS	FBMU	Shaped	Optiq - Equities - Netherlands - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.122	224.0.65.122			10122, 11122, 12122, 13122
		FBOU	Compressed	Optiq - Equities - Netherlands - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.123	224.0.65.123	224.0.66.123	224.0.67.123	10123, 11123, 12123, 13123, 20123, 21123, 22123, 23123
		FBOU	Shaped	Optiq - Equities - Netherlands - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.124	224.0.65.124			10124, 11124, 12124, 13124
		FBOU	Unshaped	Optiq - Equities - Netherlands - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.125	224.0.65.125			10125, 11125, 12125, 13125



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT CONTINENTAL EQUITIES		REFT	Compressed	Optiq - Equities - Belgium - includes Public Auction Market - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.100	224.0.65.100	224.0.66.100	224.0.67.100	10100, 11100, 12100, 13100, 20100, 21100, 22100, 23100
(available in Level 2 and Last Price)	EQTLP-IU	REFT	Compressed	Optiq - Equities - Portugal - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.105	224.0.65.105	224.0.66.105	224.0.67.105	10105, 11105, 12105, 13105, 20105, 21105, 22105, 23105
	EQTLP-OPS	REFT	Compressed	Optiq - Equities - France - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.110	224.0.65.110	224.0.66.110	224.0.67.110	10110, 11110, 12110, 13110, 20110, 21110, 22110, 23110
		REFT	Compressed	Optiq - Equities - Netherlands - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.120	224.0.65.120	224.0.66.120	224.0.67.120	10120, 11120, 12120, 13120, 20120, 21120, 22120, 23120
EURONEXT DUBLIN EQUITIES (available in Level 2		FBMU	Compressed	Optiq - Equities - Dublin - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.166	224.0.65.166	224.0.66.166	224.0.67.166	10166, 11166, 12166, 13166, 20166, 21166, 22166, 23166
and Last Price)	DEQL2-IU	FBMU	Shaped	Optiq - Equities - Dublin - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.167	224.0.65.167			10167, 11167, 12167, 13167
	DEQL2-OPS	FBOU	Compressed	Optiq - Equities - Dublin - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.168	224.0.65.168	224.0.66.168	224.0.67.168	10168, 11168, 12168, 13168, 20168, 21168, 22168, 23168
		FBOU	Shaped	Optiq - Equities - Dublin - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.169	224.0.65.169			10169, 11169, 12169, 13169
	DEQLP-IU DEQLP-OPS	REFT	Compressed	Optiq - Equities - Dublin - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.165	224.0.65.165	224.0.66.165	224.0.67.165	10165, 11165, 12165, 13165, 20165, 21165, 22165, 23165



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
OSLO BØRS EQUITIES  (available in Level 2 and Last Price)		FBMU	Compressed	Optiq - Equities - Norway - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.86	224.0.65.86	224.0.66.86	224.0.67.86	10086, 11086, 12086, 13086, 20086, 21086, 22086, 23086
Effective per 1 <sup>st</sup> July 2020	OEQL2-IU	FBMU	Shaped	Optiq - Equities - Norway - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.87	224.0.65.87			10087, 11087, 12087, 13087
	OEQL2-OPS	FBOU	Compressed	Optiq - Equities - Norway - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.88	224.0.65.88	224.0.66.88	224.0.67.88	10088, 11088, 12088, 13088, 20088, 21088, 22088, 23088
		FBOU	Shaped	Optiq - Equities - Norway - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.89	224.0.65.89			10089, 11089, 12089, 13089
	OEQLP-IU OEQLP-OPS	REFT	Compressed	Optiq - Equities - Norway - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.85	224.0.65.85	224.0.66.85	224.0.67.85	10085, 11085, 12085, 13085, 20085, 21085, 22085, 23085
EURONEXT BEST OF BOOK (available in Level 2)	RMFQ-IU	FBMU	Compressed	Optiq - Euronext Best of Book - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.138	224.0.65.138	224.0.66.138	224.0.67.138	10138, 20138, 12138, 13138, 20138, 21138, 22138, 23138
	RMFQ-OPS	FBMU	Shaped	Optiq - Euronext Best of Book - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.139	224.0.65.139			10139, 11139, 12139, 13139
EURONEXT BLOCK (available in Last Price)	EBT-IU EBT-OPS	EBLK	Compressed	Euronext Block - Compressed Channels	100 MB	224.0.64.99	224.0.65.99	224.0.66.99	224.0.67.99	10099, 20099



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT ETFs AND FUNDS (available in Level 2		FBMU	Compressed	Optiq - ETF - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.131	224.0.65.131	224.0.66.131	224.0.67.131	10131, 20131
and Last Price)		FBMU	Shaped	Optiq - ETF - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.132	224.0.65.132			10132
		FBOU	Compressed	Optiq - ETF - All - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.133	224.0.65.133	224.0.66.133	224.0.67.133	10133, 20133
		FBOU	Shaped	Optiq - ETF - All - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.134	224.0.65.134			10134
	ETFL2-IU	FBOU	Unshaped	Optiq - ETF - All - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.135	224.0.65.135			10135
	ETFL2-OPS	FBMU	Compressed	Optiq - ETF Access - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.91	224.0.65.91	224.0.66.91	224.0.67.91	10091, 20091
		FBMU	Shaped	Optiq - ETF Access - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.92	224.0.65.92			10092
		FBOU	Compressed	Optiq - ETF Access - All - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.93	224.0.65.93	224.0.66.93	224.0.67.93	10093, 20093
		FBOU	Shaped	Optiq - ETF Access - All - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.94	224.0.65.94			10094
		FBOU	Unshaped	Optiq - ETF Access - All - FBOU (Full Order Book data using Order Update messages) - Unshaped Channels	10 GB	224.0.64.95	224.0.65.95			10095



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT ETFs AND FUNDS	ETFLP-IU	REFT	Compressed	Optiq - ETF - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.130	224.0.65.130	224.0.66.130	224.0.67.130	10130, 20130
(available in Level 2 and Last Price)	ETFLP-OPS	REFT	Compressed	Optiq - ETF Access - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.90	224.0.65.90	224.0.66.90	224.0.67.90	10090, 20090
EURONEXT WARRANTS AND CERTIFICATES		ввво	Compressed	Optiq - Warrants & Certificates - All - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.156	224.0.65.156	224.0.66.156	224.0.67.156	10156, 20156
(available in Level 2 and Last Price)	EWCL2-IU	ввво	Shaped	Optiq - Warrants & Certificates - All - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.157	224.0.65.157			10157
	EWCL2-OPS	FBMU	Compressed	Optiq - Warrants & Certificates - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.158	224.0.65.158	224.0.66.158	224.0.67.158	10158, 20158
		FBMU	Shaped	Optiq - Warrants & Certificates - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.159	224.0.65.159			10159
	EWCLP-IU	REFT	Compressed	Optiq - Warrants & Certificates - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.155	224.0.65.155	224.0.66.155	224.0.67.155	10155, 20155
EURONEXT FIXED INCOME (available in Level 2		FBMU	Compressed	Optiq - Fixed Income - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.151	224.0.65.151	224.0.66.151	224.0.67.151	10151, 20151
and Last Price)	EFIL2-IU EFIL2-OPS	FBMU	Shaped	Optiq - Fixed Income - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.152	224.0.65.152			10152
		FBOU	Compressed	Optiq - Fixed Income - All - FBOU (Full Order Book data using Order Update messages) - Compressed Channels	100 MB	224.0.64.153	224.0.65.153	224.0.66.153	224.0.67.153	10153, 20153



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT FIXED INCOME  (available in Level 2 and Last Price)	EFIL2-IU EFIL2-OPS	FBOU	Shaped	Optiq - Fixed Income - All - FBOU (Full Order Book data using Order Update messages) - Shaped Channels	1 GB	224.0.64.154	224.0.65.154			10154
una Last Price)	EFILP-IU EFILP-OPS	REFT	Compressed	Optiq - Fixed Income - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.150	224.0.65.150	224.0.66.150	224.0.67.150	10150, 20150
NORDIC ABM  (available in Last  Price)  Effective per 1 <sup>st</sup> July 2020	ABM-IU ABM-OPS	REFT	Compressed	Optiq - Fixed Income Nordic ABM - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.149	224.0.65.149	224.0.66.149	224.0.67.149	10149, 20149
EURONEXT EQUITY AND INDEX		ВВВО	Compressed	Optiq - Equity Derivatives - France - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.176	224.0.65.176	224.0.66.176	224.0.67.176	10176, 11176, 12176, 20176, 21176, 22176
(available in Level 2		ВВВО	Shaped	Optiq - Equity Derivatives - France - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.177	224.0.65.177			10177, 11177, 12177
and Last Price)	EQID-IU	FBMU	Compressed	Optiq - Equity Derivatives - France - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.178	224.0.65.178	224.0.66.178	224.0.67.178	20178, 21178, 22178
	EQID-OPS	FBMU	Shaped	Optiq - Equity Derivatives - France - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.179	224.0.65.179			10179, 11179, 12179
		ВВВО	Compressed	Optiq - Equity Derivatives - Netherlands - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.181	224.0.65.181	224.0.66.181	224.0.67.181	10181, 11181, 12181, 20181, 21181, 22181
		ВВВО	Shaped	Optiq - Equity Derivatives - Netherlands - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.182	224.0.65.182			10182, 11182, 12182



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT EQUITY AND INDEX DERIVATIVES (available in Level 2		FBMU	Compressed	Optiq - Equity Derivatives - Netherlands - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.183	224.0.65.183	224.0.66.183	224.0.67.183	20183, 21183, 22183
and Last Price)		FBMU	Shaped	Optiq - Equity Derivatives - Netherlands - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.184	224.0.65.184			10184, 11184, 12184
		ввво	Compressed	Optiq - Equity Derivatives - Other (Belgium & Portugal) - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.186	224.0.65.186	224.0.66.186	224.0.67.186	10186, 11186, 12186, 20186, 21186, 22186
		ВВВО	Shaped	Optiq - Equity Derivatives - Other (Belgium & Portugal) - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.187	224.0.65.187			10187, 11187, 12187
	EQID-IU	FBMU	Compressed	Optiq - Equity Derivatives - Other (Belgium & Portugal) - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.188	224.0.65.188	224.0.66.188	224.0.67.188	20188, 21188, 22188
	EQID-OPS	FBMU	Shaped	Optiq - Equity Derivatives - Other (Belgium & Portugal) - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.189	224.0.65.189			10189, 11189, 12189
		ВВВО	Compressed	Optiq - Index Futures - France - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.191	224.0.65.191	224.0.66.191	224.0.67.191	10191, 20191
		ввво	Shaped	Optiq - Index Futures - France - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.192	224.0.65.192			10192
		FBMU	Compressed	Optiq - Index Futures - France - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.193	224.0.65.193	224.0.66.193	224.0.67.193	20193
		FBMU	Shaped	Optiq - Index Futures - France - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.194	224.0.65.194			10194



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT EQUITY AND INDEX DERIVATIVES		FBMU	Unshaped	Optiq - Index Futures - France - FBMU (Full Order Book data using Market Update messages) - Unshaped Channels	10 GB	224.0.64.195	224.0.65.195			10195
(available in Level 2 and Last Price)		ВВВО	Compressed	Optiq - Index Futures - Netherlands - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.201	224.0.65.201	224.0.66.201	224.0.67.201	10201, 20201
		ВВВО	Shaped	Optiq - Index Futures - Netherlands - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.202	224.0.65.202			10202
		FBMU	Compressed	Optiq - Index Futures - Netherlands - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.203	224.0.65.203	224.0.66.203	224.0.67.203	10203, 20203
	EQID-IU	FBMU	Shaped	Optiq - Index Futures - Netherlands - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.204	224.0.65.204			10204
	EQID-OPS	FBMU	Unshaped	Optiq - Index Futures - Netherlands - FBMU (Full Order Book data using Market Update messages) - Unshaped Channels	10 GB	224.0.64.205	224.0.65.205			10205
		ВВВО	Compressed	Optiq - Index Options - France - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.221	224.0.65.221	224.0.66.221	224.0.67.221	10221, 20221
		ВВВО	Shaped	Optiq - Index Options - France - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.222	224.0.65.222			10222
		FBMU	Compressed	Optiq - Index Options - France - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.223	224.0.65.223	224.0.66.223	224.0.67.223	20223
		FBMU	Shaped	Optiq - Index Options - France - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.224	224.0.65.224			10224
		FBMU	Unshaped	Optiq - Index Options - France - FBMU (Full Order Book data using Market Update messages) - Unshaped Channels	10 GB	224.0.64.225	224.0.65.225			10225



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT EQUITY AND INDEX DERIVATIVES		ввво	Compressed	Optiq - Index Options - Netherlands - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.231	224.0.65.231	224.0.66.231	224.0.67.231	10231, 20231
(available in Level 2 and Last Price)		ВВВО	Shaped	Optiq - Index Options - Netherlands - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.232	224.0.65.232			10232
		FBMU	Compressed	Optiq - Index Options - Netherlands - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.233	224.0.65.233	224.0.66.233	224.0.67.233	20233
		FBMU	Shaped	Optiq - Index Options - Netherlands - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.234	224.0.65.234			10234
	EQID-IU	FBMU	Unshaped	Optiq - Index Options - Netherlands - FBMU (Full Order Book data using Market Update messages) - Unshaped Channels	10 GB	224.0.64.235	224.0.65.235			10235
	EQID-OPS	ввво	Compressed	Optiq - Index Derivatives - Other (Belgium & Portugal) - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.241	224.0.65.241	224.0.66.241	224.0.67.241	10241, 20241
		ввво	Shaped	Optiq - Index Derivatives - Other (Belgium & Portugal) - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.242	224.0.65.242			10242
		FBMU	Compressed	Optiq - Index Derivatives - Other (Belgium & Portugal) - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.243	224.0.65.243	224.0.66.243	224.0.67.243	20243
		FBMU	Shaped	Optiq - Index Derivatives - Other (Belgium & Portugal) - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.244	224.0.65.244			10244

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EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT EQUITY AND INDEX DERIVATIVES		REFT	Compressed	Optiq - Equity Derivatives - France - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.175	224.0.65.175	224.0.66.175	224.0.67.175	10175, 11175, 12175, 20175, 21175, 22175
(available in Level 2 and Last Price)		REFT	Compressed	Optiq - Equity Derivatives - Netherlands - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.180	224.0.65.180	224.0.66.180	224.0.67.180	10180, 11180, 12180, 20180, 21180, 22180
		REFT	Compressed	Optiq - Equity Derivatives - Other (Belgium & Portugal) - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.185	224.0.65.185	224.0.66.185	224.0.67.185	10185, 11185, 12185, 20185, 21185, 22185
	EQIDLP-IU	REFT	Compressed	Optiq - Index Futures - France - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.190	224.0.65.190	224.0.66.190	224.0.67.190	10190, 20190
	EQIDLP-OPS	REFT	Compressed	Optiq - Index Futures - Netherlands - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.200	224.0.65.200	224.0.66.200	224.0.67.200	10200, 20200
		REFT	Compressed	Optiq - Index Options - France - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.220	224.0.65.220	224.0.66.220	224.0.67.220	10220, 20220
		REFT	Compressed	Optiq - Index Options - Netherlands - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.230	224.0.65.230	224.0.66.230	224.0.67.230	10230, 20230
		REFT	Compressed	Optiq - Index Derivatives - Other (Belgium & Portugal) - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.240	224.0.65.240	224.0.66.240	224.0.67.240	10240, 20240
EURONEXT COMMODITY DERIVATIVES	COMD-IU	ввво	Compressed	Optiq - Commodity Derivatives - All - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.246	224.0.65.246	224.0.66.246	224.0.67.246	10246, 20246
(available in Level 2 and Last Price)	COMD-OPS	ВВВО	Shaped	Optiq - Commodity Derivatives - All - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.247	224.0.65.247			10247



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT COMMODITY DERIVATIVES (available in Level 2 and Last Price)	COMD-IU	FBMU	Compressed	Optiq - Commodity Derivatives - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.248	224.0.65.248	224.0.66.248	224.0.67.248	20248
	COMD-OPS	FBMU	Shaped	Optiq - Commodity Derivatives - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.249	224.0.65.249			10249
	COMLP-IU COMLP-OPS	REFT	Compressed	Optiq - Commodity Derivatives - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.245	224.0.65.245	224.0.66.245	224.0.67.245	10245, 20245
EURONEXT CURRENCY		ввво	Compressed	Optiq - Currency Derivatives - All - BBBO (Best Bid & Offer) - Compressed Channels	100 MB	224.0.64.141	224.0.65.141	224.0.66.141	224.0.67.141	10141, 20141
DERIVATIVES  (available in Level 2 and Last Price)  Decommissioned per 1st January 2021	CURD-IU CURD-OPS	ввво	Shaped	Optiq - Currency Derivatives - All - BBBO (Best Bid & Offer) - Shaped Channels	1 GB	224.0.64.142	224.0.65.142			10142
		FBMU	Compressed	Optiq - Currency Derivatives - All - FBMU (Full Order Book data using Market Update messages) - Compressed Channels	100 MB	224.0.64.143	224.0.65.143	224.0.66.143	224.0.67.143	20143
		FBMU	Shaped	Optiq - Currency Derivatives - All - FBMU (Full Order Book data using Market Update messages) - Shaped Channels	1 GB	224.0.64.144	224.0.65.144			10144
	CURLP-IU CURLP-OPS	REFT	Compressed	Optiq - Currency Derivatives - All - REFT (Trades & Referential Data) - Compressed Channels	100 MB	224.0.64.140	224.0.65.140	224.0.66.140	224.0.67.140	10140, 20140



EURONEXT MARKET DATA INFORMATION PRODUCT	MARKET DATA PRODUCT CODE	TYPE OF DATA	DATA FORMAT	SFTI PRODUCT(S) ON ORDER FORM	CHANNEL SPEED	Multicast Group IP Feed A - Real-Time	Multicast Group IP Feed B - Real-Time	Multicast Group IP Feed A - Snapshot	Multicast Group IP Feed B - Snapshot	CHANNEL/SERVICE ID(S)
EURONEXT APA TRADES  (available in Last Price)	EETR-IU EETR-OPS	APTR	Compressed	Optiq - Euronext APA Trades Reports - Compressed Channels	100 MB	224.0.64.146	224.0.65.146	224.0.66.146	224.0.67.146	11146, 21146
EURONEXT APA (SI) QUOTES (available in Level 2)	EAPAQ-IU EAPAQ-OPS	APSI	Compressed	Optiq - Euronext APA (SI) Quotes- Compressed Channels	100 MB	224.0.64.145	224.0.65.145	224.0.66.145	224.0.67.145	11145, 21145
VINX ALL  Effective per 1 <sup>st</sup> July 2020	VINXA-IU VINXA-OPS	N/A	N/A	N/A	N/A					
VINX PLUS  Effective per 1 <sup>st</sup> July 2020	VINXP-IU VINXP-OPS	N/AI	N/A	N/A	N/A					



## APPENDIX 5: ADDITIONAL EXPLANATION REGARDING THE EMDA REPORTING POLICY

## **Reporting your Internal Use of Information**

Clause 4.2: When you are a member receiving real time data from Direct Access and/or an ASP/ESP service, you will need to report your internal use (trading activities) *directly* to Euronext via the -IU product codes. But if you are also receiving data from a redistributor (information supplier) you will need to report this usage to the redistributor (indirectly).

**Except if** you are not approved as Natural User, then you do not need to report your real time data received by your vendor service **directly** to Euronext. For further reference, the reporting is described in the Natural User Application Guidelines.

## **Reporting Subscribers Approved to report Natural User**

If the subscribers are approved to report Natural user, then you (as a redistributor) as Information Supplier of the Information, should report the provision of these subscribers via the –SDB or –DDB product codes. These – SDB and –DDB product codes are non-billable, 0 (zero) Euro, so the subscribers will not be billed twice.



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