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SATURN SHORT LONG CODE MANAGEMENT

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PREFACE

PURPOSE

The purpose of this document is to introduce the Short Long Code (SLC) Manager GUI and API as well as data requirements for the submission of a mapping between short codes and long codes for Euronext Cash and Derivative Markets and Bourse de Luxembourg.

RTS 24 of MiFID II requires Trading Venues to be able to supply regulators with a wide range of order-related data. To gather this information, whilst avoiding sensitive information circulating on the non-encrypted order entry interface, the following 'short codes' have been deployed in order entry messages:

- **ClientIdentificationShortCode** - Short code corresponding to LEI, National ID, 'AGGR' (aggregated orders) or 'PNAL' (pending allocations);
- **ExecutionWithinFirmShortCode** - Short code corresponding to National ID, Algorithm ID, NORE (client execution decision maker);
- **InvestmentDecisionWFFirmShortCode** - Short code corresponding to National ID or Algorithm ID
- **NonExecutingBrokerShortCode** - Short code corresponding to LEI.









To ensure that the Trading Venues can fulfil the requirements for Order Record Keeping under RTS 24, Members are requested to submit a mapping between short codes and corresponding long codes via the dedicated application '**SLC Manager**'.

TARGET AUDIENCE

This document should be read by **all** Euronext Trading Members across all Euronext markets including Bourse de Luxembourg.

SCOPE

The scope of this document is listed below:

Optiq Segment	Segment Value	In/Out of Scope	SBE Version
EURONEXT CASH MARKET			
Equities 	1	✓	
Funds 	2	✓	
Fixed Income 	3	✓	
Warrants & Certificates 	4	✓	
Block 	14	✓	
Irish Bonds and Funds 	16	✓	
Forex 	15	✓	
OTHER MARKETS			
Luxembourg Stock Exchange 	5	✓	

Optiq Segment	Segment Value	In/Out of Scope	SBE Version
EURONEXT DERIVATIVES MARKET			
Commodity Derivatives CMO	8	✓	
Index Derivatives IDD	11	✓	
Equity Derivatives EQD	12	✓	
EURONEXT INDICES			
Indices Indices	9	✗	
EURONEXT APPROVED PUBLICATION ARRANGEMENT (APA) FACILITY			
Trade Reporting and Publication TRP	10	✗	

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- Portugal +351 2 1060 8585
- UK +44 20 7660 8585

WHAT'S NEW?

The following lists only the most recent modification made to this revision/version. For the Document History table, please go to page 68.

Version Number	Date	Change Description
3.0.2	30 Jul 2025	<ul style="list-style-type: none"> ■ Updated Section Frequency and Timing. SLC reports must be uploaded on the same day that the code is used for the first time at the latest.
3.0.1	30 Apr 2024	<ul style="list-style-type: none"> ■ Updated Section Examples: Amend Example amended with the correct Action Type value.

ASSOCIATED DOCUMENTS

The following lists the associated documents, which either should be read in conjunction with this document or which provide other relevant information for the user, please visit <http://www.euronext.com/en/it-documentation/>.

Clients are additionally advised to also refer to the Euronext Rules and Regulations documents for more details.

For the latest version of documentation please visit the [IT Documentation page](#).

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1. TERMS AND ACRONYMS

- **SLC Manager** – Short and Long Code Manager
- **GUI** – Graphical User Interface
- **API REST** – Application Programming Interface REST compliant

2. TECHNOLOGY

2.1 SLC MANAGER

The SLC Manager is a Euronext web-based tool for submitting and managing data related to Order Record Keeping requirements for Trading Venues under RTS 24, providing:

- **A secure solution with certificate-based authentication:**
 - SecureID® card for GUI access;
 - Login/Password attribution and 2FA (two-factor authentication) for API access.
- **Confidentiality management through resilient access controls:**
 - Independent administrator user profile to manage access rights to add, view, modify, delete and export files per user.
- **High ease of connectivity with upload and data management possibilities via GUI and API REST:**
 - Supported file upload formats GUI: .CSV & .dat (**soon to be depreciated**);
 - Supported file upload formats API: JSON, XML, .dat (**soon to be depreciated**)
 - Delta file management via Form Submission into GUI.
- **Centralised administration for all Euronext markets and Euronext hosted solutions;**
- **Fast feedback of file quality with error detection.**

2.2 SATURN WEB SERVICES

The **SLC Manager** is offered as a functionality within **Saturn Web Services**. Saturn Web Services is the technical solution that has been deployed by Euronext in the context of MiFID II to securely host Euronext. [Trade Publication \(APA\)](#) and [Transaction Reporting \(ARM\)](#) services¹, [Commodities Position Limits Reporting](#), and the short and long code management tool [SLC Manager](#).

The services in the Saturn API are exposed as Web Services:

- *Message format:* REST;
- *Transport mechanism:* HTTPS.

The Saturn REST API allows multiple formats: JSON, XML, .dat (**soon to be depreciated**) and csv files.

2.1 RECOMMENDED BROWSER CONFIGURATION

To fully benefit from this Web application, Euronext recommends using Internet Explorer 11.0 or higher, Chrome or Firefox version 51.0.

¹ Both APA & ARM services will be terminated by end 2023.

3. ACCESS AND USER MANAGEMENT

3.1 MEMBER ACCESS

The SLC Manager is offered as a functionality within the Euronext Regulatory Reporting Solution, hosted on Saturn. To obtain access to the functionality, Member Connectivity Administrators (MCAs) are required to submit a service access request using the Saturn Access web form(s) available on [Euronext Connect](#). Members will be provided with SecurID® Card for GUI access by Euronext [Customer Access Service \(CAS\)](#). To obtain a Certificate for API access, Members are invited to submit a request directly via the Saturn interface using the Digicert link. Euronext will validate the request and the Member will receive the Certificate by email. The Member or appointed service provider shall install the Certificate and use it to access Saturn via API.

Access will initially only be granted for the EUA environment. To obtain access to the Production environment, Euronext requires all Members to:

1. become familiar with the Terms and Conditions governing access to and use of the Euronext Regulatory Reporting Solution;
2. return to [Euronext Membership](#) the Registration Form duly completed with information relevant to the use of the Euronext Regulatory Reporting Solution.

Relevant documentation

[Euronext Reporting Solution - Registration Form](#)

[Euronext Reporting Solution - Terms and Conditions](#)

3.2 ACCESS FEES

3.2.1 Access to the Web-GUI

Access to the web-GUI is based on a personal RSA SecurID® card. The access is free up to two (2) User-IDs per Member using the Service(s). User profiles may be split across the EUA and Production environments as deemed appropriate. A charge will be applied for Members with three (3) or more User-IDs.

Number of User-IDs	Fee for 3 years use (€)
1 ≤ 2 (standard)	N/A
Each additional user	200

3.2.2 Access to the Web-API

WEB-API access will be defined by an Investment Firm through the GUI. The access is free for up to six (6) API Logins per Member using the Service(s). For an Investment Firm requesting more than six (6) API logins per Member using the Service(s), an additional annual fee is applied.

Number of API Logins	Annual Fee (€)
1 ≤ 6 (standard)	N/A
Package for 9	150
Each additional 3 logins thereafter	100

Firms signing up to more than one service on the platform may receive more complimentary accesses.

3.1 USER ADMINISTRATION MANAGEMENT

Administrators are assigned by Euronext Membership during the SLC Manager onboarding process. The SLC Manager enables the Administrator to set rights per *User* via the SLC Admin tool:

ADD NEW PROFILE

SLC Manager profile	VIEW	CREATION	UPDATE	DELETE
Users Management	<input type="checkbox"/>		<input type="checkbox"/>	
Business Unit Management	<input type="checkbox"/>			
User Reset Password	<input type="checkbox"/>		<input type="checkbox"/>	
User Unlock			<input type="checkbox"/>	
Profile Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
User Activity	<input type="checkbox"/>			
Dashboard ARM	<input type="checkbox"/>			
Dashboard ARM Trades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Upload ARM Trades	<input type="checkbox"/>		<input type="checkbox"/>	
Dashboard Commodities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Upload Commodities	<input type="checkbox"/>		<input type="checkbox"/>	
SLC manager	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Upload SLC	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

CANCEL
CREATE

User profiles can be set up with the following rights:

Functionality	description	Rights
SLC manager	This function allows the user to manage short and long codes SLC (create a new SLC, amend or cancel an existing SLC)	View, Create, Update
Upload SLC	This function allows the user to upload a list of short and long codes via a .dat or .csv file and view the list of uploaded files	View, Update

Please note: For Members who already have access to other services within Saturn Web Services, the User access configuration will stay the same but can be amended per Saturn functionality.

4. SESSION HANDLING

The Euronext SLC Manager allows for high ease of connectivity through both GUI and API REST. The following section explains how to start the SLC Manager in order to communicate with the application. More precisely, it explains how to:

- Log-in;
- Log-out.

No previous installation is necessary.

4.1 LOGGING IN

The following table provides the links to connect to the Saturn Web/API application in the EUA and Productions environments.

Environment	URL Saturn GUI	URL Saturn Web Services
PEUA	https://saturn-eua.euronext.com	https://saturnapi-eua.euronext.com
PRODUCTION	https://saturn-prod.euronext.com	https://saturnapi-prod.euronext.com

4.1.1 Web-GUI

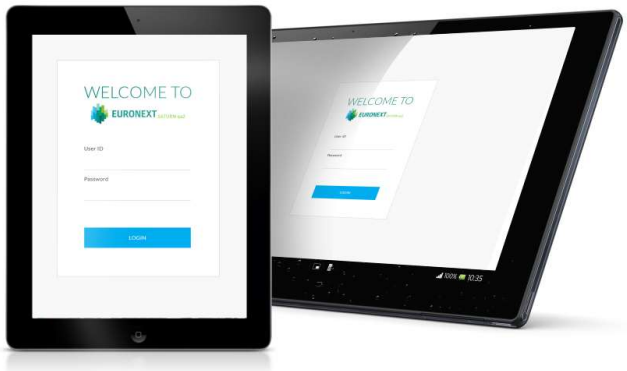
During the month of December 2020, a new version of Saturn which aims to strengthen the security of the login procedure was released. A two-factor authentication was introduced, to supplement a user-controlled password with a one-time password (OTP). Saturn GUI users are able to choose their own two-factor authentication (2FA) mode between **RSA SecurID®** and the new **Time-based One-time Password (TOTP)**².

² Please note that this will be a temporary solution until the RSA token expires. Eventually, all users will have to use the TOTP solution.

4.1.1.1 If the RSA mode is chosen for authentication

To logon to the Euronext Saturn User Interface, please follow the steps below:

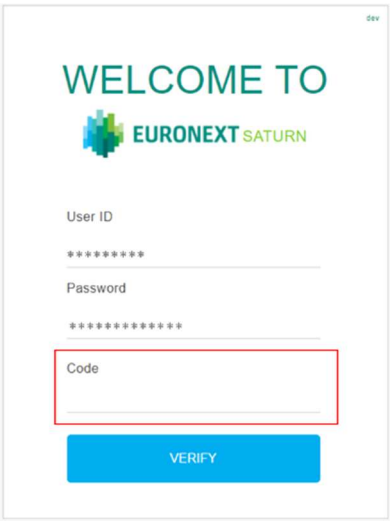
- 1. Start a Web browser;
- 2. Enter the appropriate [secure domain address](#);
- 3. The Euronext Saturn login form is displayed:



- 4. When the Saturn login page appears, the User must logon with valid connection parameters:

	For the first connection to Saturn	For all other usual connections
User ID	User's Login provided in the authentication email sent by Euronext CAS (Customer Access Services) team to the User right after the subscription (if for some reason the client is not able to use this authentication parameter, please contact the Euronext CAS team for further notice).	User's Login.
Password	One-Time Password provided in the authentication email sent by Euronext CAS team to the User right after the subscription to Saturn service(s).	Password defined by the user.

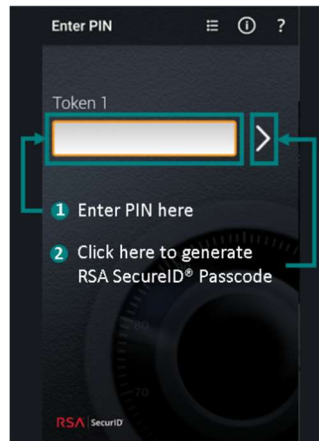
5. Press the “LOGIN” button. If the credentials are valid, the second factor authentication appears.



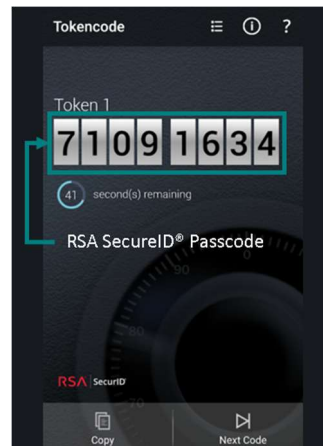
6. The User should then, populate the “Code” field described below:

Code	<p>The Code (on 8 digits) corresponds to a RSA SecurID® passcode derived from the use of a PIN³ code in an RSA SecurID® software.</p> <p>Both PIN and RSA SecurID® soft token are provided by the Euronext CAS team.</p> <ul style="list-style-type: none">■ PIN: a 6 digits code intended to be used in the RSA SecurID® soft token in order to generate a RSA SecurID® passcode.■ The RSA SecurID® soft token<ul style="list-style-type: none">- The soft token is sent via email and it should be installed on a device (phone, computer, etc.)- Enter the PIN code on the RSA SecurID® soft token
------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

³ Please contact the Euronext CAS team to get the PIN code and the RSA SecurID® soft token.



- Once the PIN code is entered, an RSA SecurID® passcode will be generated. This passcode is renewed each 60 seconds.



The generated RSA SecurID® passcode should then be used to populate the "Code" field.

Example:

If the PIN code = 123456 and the generated RSA SecurID® passcode = 71091634, the "Code" field should be populated with 71091634.

Note:

For clients using [RSA SecurID® Cards or Token](#), the code corresponds to the old password (when the 2FA was not implemented).

■ The RSA SecurID® card

- Wait until there are 6 grads bars on the left of the RSA SecurID® card screen
- Enter the [PIN code](#) on the [RSA SecurID® card](#) by using the number keys in white

and finish by pressing the  symbol.

This will return the code (N digits number).

**■ The RSA SecurID® token**

- Wait until there are 6 grads bars on the left of the [RSA SecurID® Token](#) screen.
- The Code will be [PIN code](#) followed by the 6 digits Password.



For example: If the [PIN code](#) = [123456](#), the code to use will be: [123456032848](#).

7. The last step is to click on the "VERIFY" button of the Saturn connection window. If the User is authorized to access the Saturn GUI and all the authentication parameters are valid, access is granted to the platform.

4.1.1.2 If the Time-based One-Time Password (TOTP) mode is chosen for authentication

APPENDIX A: HOW TO SET UP THE TOTP SOLUTION ON A DEVICE


Before using the TOTP as authentication mode, clients are advised to install the TOTP application(s) **on their mobile phones**⁴.

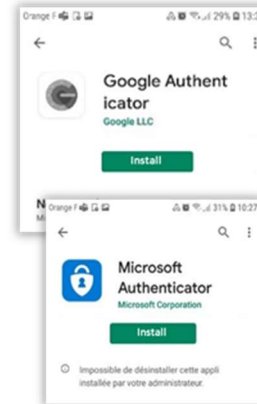
A) User Guide Google Authenticator App

The User will need to install the Barcode Scanner application (if not installed, Authenticator will ask to install one).

- Download and install the [Google Authenticator](#) app for [iOS](#) or [Android](#);
- On your mobile device, open the Google Authenticator app;
- Tap on **BEGIN SETUP**;
- Tap **Scan a Barcode** ;

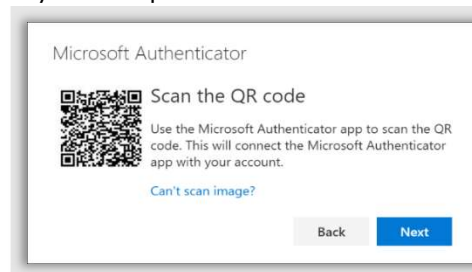
B) User Guide Microsoft Authenticator App

- Download and install the [Microsoft Authenticator](#) app for [iOS](#) or [Android](#);
- On your mobile device, open the Microsoft Authenticator app;
- Tap the Add icon  or **Add an Account** option;
- Select your desired account type. If prompted, select **Scan QR code**.



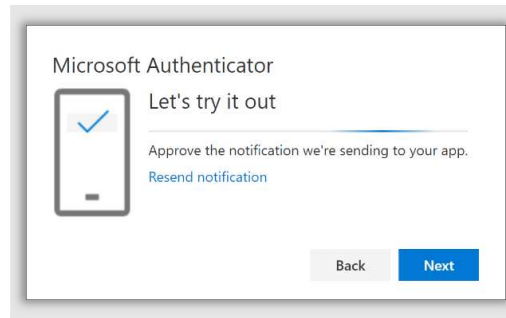
[Android](#);

- Select **Next** on the **Scan the QR code** page on your computer

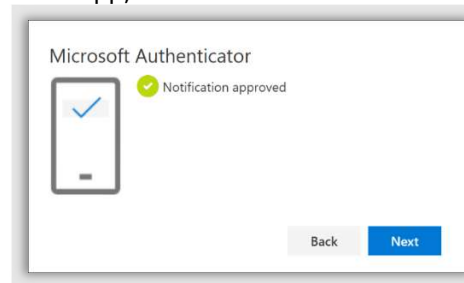


- A notification is sent to the Microsoft Authenticator app on your mobile device, to test your account.

• ⁴ If for some reason the Users are not able to use their mobile phones for the TOTP solution, it is possible to install the TOTP application on a computer. In this case please contact the Euronext Customer Access Services team (CAS) for further guidance on cas@euronext.com.



- Approve the notification in the Microsoft Authenticator app, and then select **Next**.

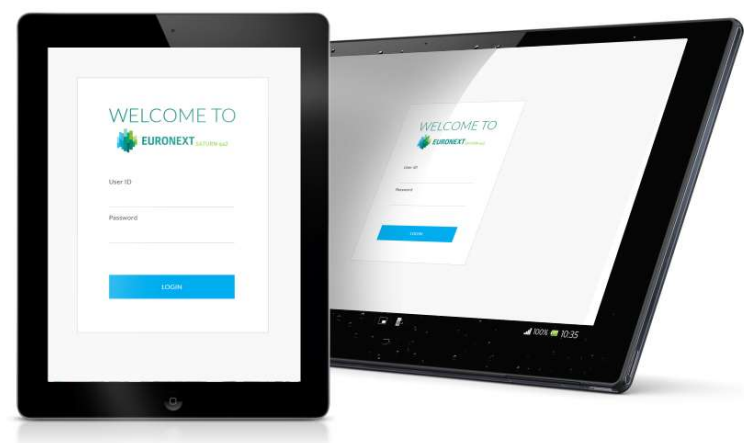


Your security info is updated to use the Microsoft Authenticator app by default to verify your identity when using two-step authentication or password reset.

APPENDIX B: LOGON TO SATURN GUI

To logon to the Euronext Saturn User Interface, please follow the steps below:

- 1. Start a Web browser;
- 2. Enter the appropriate [secure domain address](#);
- 3. The Euronext Saturn login window is displayed:

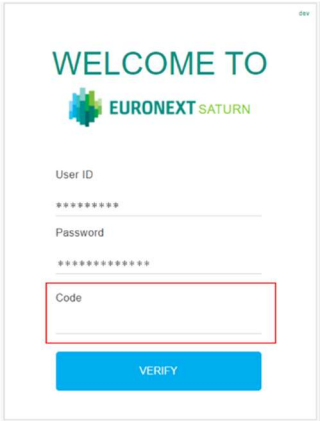


- 4. When the Saturn login page appears, User must login with his valid connection parameters:

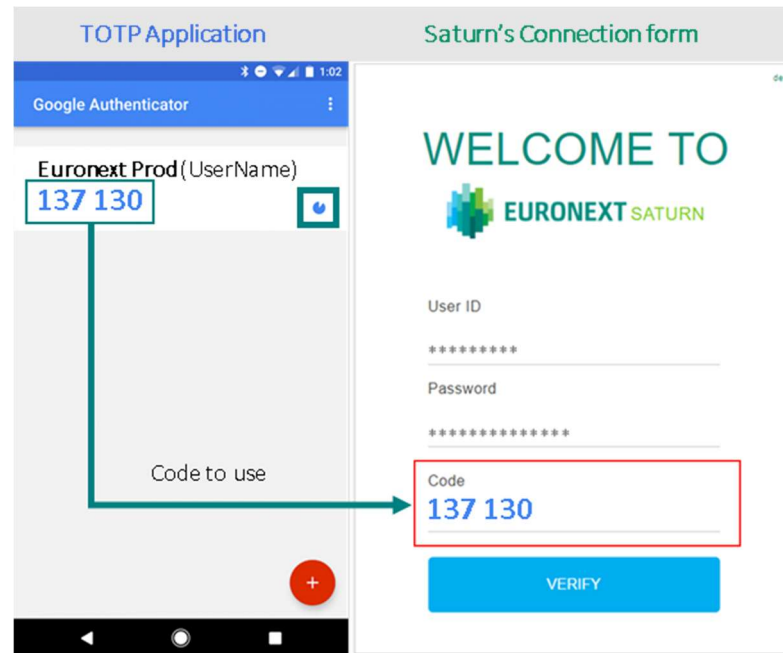
	For the first connection to Saturn	For all other connections
User ID	User's Login provided in the authentication email sent by Euronext CAS (Customer Access Services) team to the User right after the subscription (if for some reason the client is not able to use this authentication parameter, please contact the Euronext CAS team for further assistance).	User's Login.

	For the first connection to Saturn	For all other connections
Password	One-Time Password provided in the authentication email sent by Euronext CAS team to the User right after the subscription to Saturn’s service(s).	Password defined by the user.

5. Press the “LOGIN” button. If the credentials are valid, the second factor authentication appears.



6. The User should then, populate the “Code” field with the 6 digits code from the chosen TOTP application (Google or Microsoft Authenticator).



7. The last step is to click on the "VERIFY" button.. If the User is authorized to access the Saturn GUI and all the authentication parameters are valid, access is granted to the platform.

If your SecureID Card is blocked, please click [here](#) or contact Euronext Membership Customer Connectivity (tel +33 185 148 589).

Please note: Unblocking your SecureID Card® by telephone requires your personal 12 digit identification code.

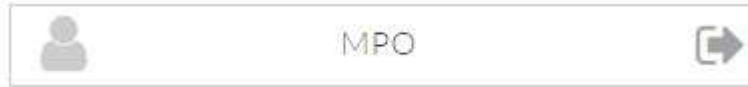
4.1.2 Web-API

Please refer to [section 6](#) and [section 7](#) of this document.

4.2 LOGGING OUT

4.2.1 Web-GUI

To logout, click on the “LOGOUT” icon in the Admin block of the application screen.



Users will automatically be logged out of the system after 10 minutes of inactivity.

4.2.2 Web-API

Function:

Function name: Logout

Request EndPoint: /SaturnWebServices/rest/Authentication/Logout

Method: POST

5. SHORT AND LONG CODE MAPPING SUBMISSION

The following chapter outlines the terms of reference for the submission of a mapping between short codes and long codes.

5.1 DATA STRUCTURE REQUIREMENTS

All data submitted must adhere to the file format, naming convention, data structure requirements and validation rules outlined in the following section.

5.1.1 File formats and naming convention

The current file formats accepted are:

- **DAT** (extension **.dat**),
- **CSV** (extension **.csv**).



Note

Please note that **.dat** file will be depreciated and replaced by **.csv** file. Please refer to [this](#) section for **CSV file specifications**.

The filename is composed as follows:

ShortLongCodes_[date]_[member_code]_[market_type]_[sequence].[file_extension]

Where:

Field name	Format	Description	Values	Mandatory	Rejection cases
ShortLongCode	Alphanumerical	Prefix of the file.	ShortLongCodes	Yes	Not equal to: 'ShortLongCodes'
date	Date	Date of the file.	Format: YYYYMMDD	Yes	Not a valid date.


Field name	Format	Description	Values	Mandatory	Rejection cases
member_code	Alphanumeric ID	Unique participant ID of a member of 8 characters. Assigned by Euronext to hosted solutions or Members.	Letters, numbers, Fixed- length -8 char. Left padded with '0' where Member code is less than 8 characters.	Yes	Not on 8 characters.
market_type	Integer	Identifier of the market for which the short code is declared. In case of presence on both markets, Member must send two reports, one for each market.	1 – Euronext Cash or Derivatives Markets 2 – Bourse de Luxembourg	Yes	Value not in (1,2)
sequence	Integer	Sequence number, to be incremented in case of multiple subsequent uploads for a given day.	Between 01 and 99 digit.	Yes	Validation rules: Must be defined between 01 and 99 digit. if more than 99 files need to be submitted for the same Market during the same day, sequence can restart from 01. Rejection cases: 1) Contains less than 2 characters. 2) Contains special characters, accentuated characters, punctuation marks. 3) Contains letters.
file_extension	Alphanumeric	File extension	.dat or .csv	Yes	Not equal to “.dat” or “.csv”

Example: ShortLongCodes_20170601_00014956_
_01.dat, ShortLongCodes_20170601_00014956_1_01.csv.

5.1.1 Data structure and validation rules

5.1.1.1 DAT file (TO BE DEPRECIATED)

The following data structure is required for the purposes of short code and long code mapping in **.dat** files. The first line must contain the label of the fields in any order.

**Note**

Please note that **.dat** file will be depreciated and replaced by **.csv** file. Please refer to [this](#) section for **CSV file specifications**.

The labels of the fields are listed below in the first column of the table, please note that the labels are case sensitive:

sShortCode|sLongCode|cCodeType|dEffectiveDate|dEndDate|FirstName|Surname|DateOfBirth|LongCode2|FirstName2|Surname2|DateOfBirth2

Where:

Field name	Format	Description	Values	Mandatory	Rejections cases
sShortCode	Integer	Short code that is used by the Participant in order entry.	Integer within the range of numerical values, as detailed in the respective external client specifications ¹	Yes	1- Not an Integer, or a value not within the range of numerical values $[-2^{31}(-2,147,483,648); 2^{31}-1(2,147,483,647)]$, as identified in the respective external client specifications for the various short code fields. 2- Value already used with another Long Code. 3- Short Code reserved values: '1' = long code 'AGGR' (aggregated orders) '2' = long code 'PNAL' (pending allocations) '3' = long code 'NORE' (where execution decision was made by a client)

¹ Members are required are required to generate their own short codes. In case of an ISV Algo, the member may rely on the ISV to generate a short code, provided that negative short code ranges are applied.

Field name	Format	Description	Values	Mandatory	Rejections cases
sLongCode	Alphanumerical	Long code that will be populated for the purposes of MiFID Order Record Keeping (RTS 24).	Alphanumerical values with maximum length of: - 35 when cCodeType = 2, 3, 5 - 50 when cCodeType = 4, 6 - 20 when cCodeType = 1, 7	Yes	1- Empty 2- Max length exceeds 35 when cCodeType = 2, 3 & 5 3- Max length exceeds 50 when cCodeType = 4 & 6 4- Max length exceeds 20 when cCodeType = 1, 7 5- Contains invalid characters other than # and Capital letters. Cf Section for Long Code Error Management .
cCodeType	Integer	Identifies how to interpret the long code.	1- Client Identification as a LEI 2- Client Identification as a National ID 3- Investment Decision Within Firm as a National ID 4- Investment Decision Within Firm as an Algo 5- Execution Within Firm as a National ID 6- Execution Within Firm as a Algo 7- Non Executing Broker Code as a LEI	Yes	1- Empty 2- Values not in (1,2,3,4,5,6,7)
dEffectiveDate	Date	Date as of which the short and long code mapping is effective.	Format: YYYY-MM-DD	Yes	1- Empty 2- Effective date < Current date - 1
dEndDate	Date	When populated, indicates when the registration for the short and long code mapping is no longer effective. End date must be greater than the effective date.	Format: YYYY-MM-DD	No	1- EndDate < EffectiveDate
FirstName	Alphanumerical	Full first name of the natural person.	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumerical characters: comma ",",	Conditional	Cf Section for Natural Persons Fields Error Management .

Field name	Format	Description	Values	Mandatory	Rejections cases
			space " ", apostrophe "'", minus "-", dash "-".		
Surname	Alphanumeric	Full Surname of the natural person.	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumeric characters: comma ",", space " ", apostrophe "'", minus "-", dash "-".	Conditional	Cf Section for Natural Persons Fields Error Management .
DateOfBirth	Date	Birth Date of the client natural person.	Format: YYYY-MM-DD	Conditional	Cf Section for Natural Persons Fields Error Management .
LongCode2	Alphanumeric	Long code that will be populated for the purposes of MiFID Order Record Keeping (RTS 24).	Alphanumeric values with maximum length of: - 35 when cCodeType = 2, 3, 5 - 50 when cCodeType = 4, 6 - 20 when cCodeType = 1, 7	Conditional	Cf Section for Natural Persons Fields Error Management .
FirstName2	Alphanumeric	Full first name of the natural person. (for joint account)	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumeric characters: comma ",", space " ", apostrophe "'", minus "-", dash "-".	Conditional	Cf Section for Natural Persons Fields Error Management .
Surname2	Alphanumeric	Full Surname of the natural person. (for joint account)	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumeric characters: comma ",", space " ", apostrophe "'", minus "-", dash "-".	Conditional	Cf Section for Natural Persons Fields Error Management .
DateOfBirth2	Date	Birth Date of the client natural person. (for joint account)	Format: YYYY-MM-DD	Conditional	Cf Section for Natural Persons Fields Error Management .

Examples:

- 4670|LONGCODE67|3|2023-07-18|2026-07-18|
- 18691|LONGCODE7492|4|2023-08-13|2025-08-13|
- -22280|LONGCODE5097|4|2023-04-19|2025-04-19|
- -14390|FR19800101PIERRDUPON|6|2013-04-15|2024-04-15|PIERRE|DUPOND|1980-01-01
- 14390|FR19800101PIERRDUPON|6|2013-04-15|2024-04-15|PIERRE|DUPOND|1980-01-01|FR19850101MARIEDUPON|MARIE|DUPOND|1985-01-01

5.1.1.2 CSV file

The following data structure is required for the purposes of short code and long code mapping in **.csv** files, with following requirements:

File extension: **.csv**

File linefeed: **LF** (Linux linefeed)

File separator: **;** (semi-colon)

File encoding: **UTF-8**

The first line must contain the label of the fields in any order.

The labels of the fields are listed below in the first column of the table, please note that the labels are case sensitive:

ActionType;ShortCode;LongCode;CodeType;EffectiveDate;FirstName;Surname;DateOfBirth;LongCode2;FirstName2;Surname2;DateOfBirth2

Where:

Field name	Format	Description	Values	Mandatory	Rejections cases
ActionType	Integer	Indication as to whether the mapping report is new, an amendment or a cancellation.	1 – New 2 – Amend 3 – Cancel	YES	Cf Section for Action Type Management .

Field name	Format	Description	Values	Mandatory	Rejections cases
ShortCode	Integer	Short code that is used by the Participant in order entry.	Integer within the range of numerical values, as detailed in the respective external client specifications ¹	Yes	1- Not an Integer, or a value not within the range of numerical values $[-2^{31}(-2,147,483,648); 2^{31}-1(2,147,483,647)]$, as identified in the respective external client specifications for the various short code fields. 2- Value already used with another Long Code. 3- Short Code reserved values: '1' = long code 'AGGR' (aggregated orders) '2' = long code 'PNAL' (pending allocations) '3' = long code 'NORE' (where execution decision was made by a client)
LongCode	Alphanumeric	Long code that will be populated for the purposes of MiFID Order Record Keeping (RTS 24).	Alphanumeric values with maximum length of: - 35 when cCodeType = 2, 3, 5 - 50 when cCodeType = 4, 6 - 20 when cCodeType = 1, 7	Yes	1- Empty 2- Max length exceeds 35 when cCodeType = 2, 3 & 5 3- Max length exceeds 50 when cCodeType = 4 & 6 4- Max length exceeds 20 when cCodeType = 1, 7 5- Contains invalid characters other than # and Capital letters. Cf Section for Long Code Error Management .
CodeType	Integer	Identifies how to interpret the long code.	1- Client Identification as a LEI 2- Client Identification as a National ID 3- Investment Decision Within Firm as a National ID 4- Investment Decision Within Firm as an Algo 5- Execution Within Firm as a National ID 6- Execution Within Firm as a Algo 7- Non Executing Broker Code as a LEI	Yes	1- Empty 2- Values not in (1,2,3,4,5,6,7)

¹ Members are required are required to generate their own short codes. In case of an ISV Algo, the member may rely on the ISV to generate a short code, provided that negative short code ranges are applied.

Field name	Format	Description	Values	Mandatory	Rejections cases
EffectiveDate	Date	Date as of which the short and long code mapping is effective.	Format: YYYY-MM-DD	Yes	1- Empty 2- Effective date < Current date - 1
FirstName	Alphanumerical	Full first name of the natural person.	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumerical characters: comma ",", space " ", apostrophe "'", minus "-", dash "-".	Conditional	Cf Section for Natural Persons Fields Error Management .
Surname	Alphanumerical	Full Surname of the natural person.	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumerical characters: comma ",", space " ", apostrophe "'", minus "-", dash "-".	Conditional	Cf Section for Natural Persons Fields Error Management .
DateOfBirth	Date	Birth Date of the client natural person.	Format: YYYY-MM-DD	Conditional	Cf Section for Natural Persons Fields Error Management .
LongCode2	Alphanumerical	Long code that will be populated for the purposes of MiFID Order Record Keeping (RTS 24).	Alphanumerical values with maximum length of: - 35 when cCodeType = 2, 3, 5 - 50 when cCodeType = 4, 6 - 20 when cCodeType = 1, 7	Conditional	Cf Section for Natural Persons Fields Error Management .
FirstName2	Alphanumerical	Full first name of the natural person. (for joint account)	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumerical characters: comma ",", space " ", apostrophe "'", minus "-", dash "-".	Conditional	Cf Section for Natural Persons Fields Error Management .
Surname2	Alphanumerical	Full Surname of the natural person. (for joint account)	Latin alphabet (A-Z), Cyrillic alphabet (А-Я), Greek alphabet (Α-Ω), diacritical characters and the following non-alphanumerical characters: comma ",",	Conditional	Cf Section for Natural Persons Fields Error Management .

Field name	Format	Description	Values	Mandatory	Rejections cases
			space " ", apostrophe "'", minus "-", dash "-".		
DateOfBirth2	Date	Birth Date of the client natural person. (for joint account)	Format: YYYY-MM-DD	Conditional	Cf Section for Natural Persons Fields Error Management .

Examples:**ActionType;ShortCode;LongCode;CodeType;EffectiveDate****1;-12977;LONGCODE6919;7;2023-05-10****ActionType;ShortCode;LongCode;CodeType;EffectiveDate;FirstName;Surname;DateOfBirth****1;-12977;LONGCODE6919;2;2023-05-10;JEAN;DUPOND;1980-05-05****ActionType;ShortCode;LongCode;CodeType;EffectiveDate;FirstName;Surname;DateOfBirth;LongCode2;FirstName2;Surname2;DateOfBirth2****1;-12977;FR19800505JEAN#DUPON;2;2023-05-10;JEAN;DUPOND;1980-05-05;FR19850505JEANNNDUPON;JEANNE;DUPOND;1985-05-05**

5.1.2 Upload & API Fields Name

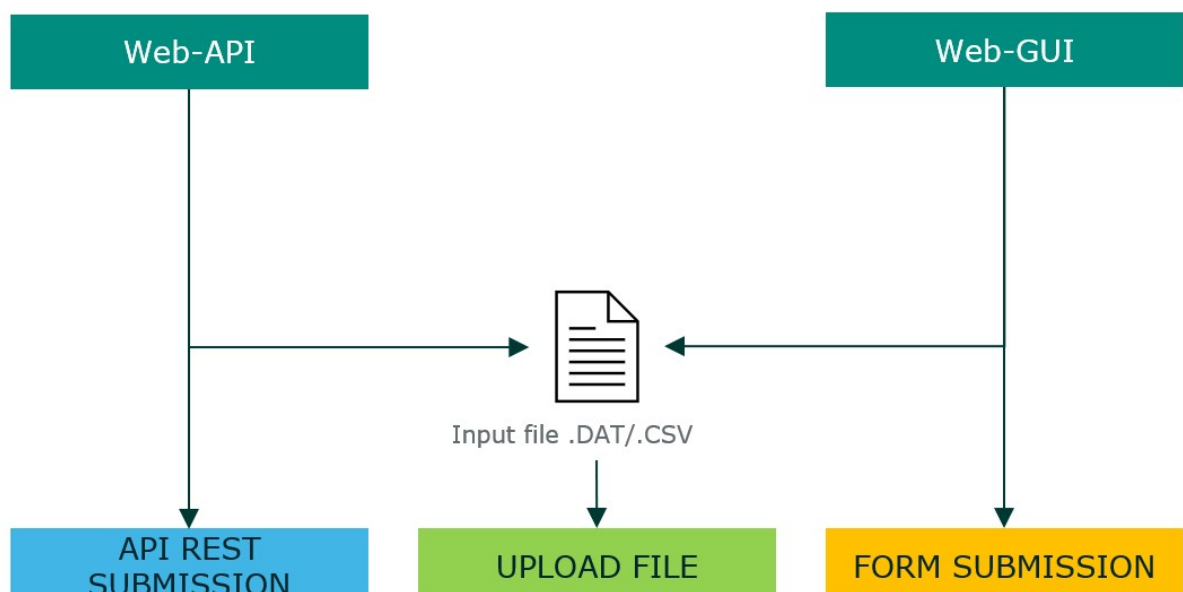
Short Long Code Mappings, submitted either via Upload File or Web-API, must be named as per below:

Field Name	Upload File Name - DAT	Upload File Name - CSV	API Field Name
Short Code	sShortCode	ShortCode	shortcode
Long Code	sLongCode	LongCode	longcode
Code Type	cCodeType	CodeType	codetype
Market Type	N/A	N/A	markettype
Effective Date	dEffectiveDate	EffectiveDate	effectivedate
End Date	dEndDate	N/A	enddate
Action Type	N/A	ActionType	N/A
First Name	FirstName		firstname
Surname	Surname		surname
Date of Birth	DateOfBirth		dateofbirth
Long Code 2	LongCode2		longcode2
First Name 2	FirstName2		firstname2
Surname 2	Surname2		surname2
Date of Birth 2	DateOfBirth2		dateofbirth2

5.2 DATA SUBMISSION

For purposes of mapping short codes and long codes, the SLC Manager allows for three data submission functionalities:

- **Web-GUI**
 - File upload via SLC Manager GUI (.dat or .csv);
 - Form Submission via SLC Manager GUI;
- **Web-API**
 - File upload via API REST (.dat or .csv);
 - SLC Mapping Submission, Amendment or Cancellation via API REST.



The following section describes the procedures for each of the data submission functionalities.

The Section [Examples](#) allows Members to understand how to report SLC Mapping into the SLC Manager.




5.2.1 File Upload via Web-GUI


The following section introduces the file upload possibilities via the SLC Manager GUI.

To upload a new mapping file via the SLC Manager GUI, Members are required to:


- 1) Complete the mapping file according to the data structure and validation rules outlined in this [section](#) of the document;
- 2) Save the mapping file according to the file format and naming convention outlined in this [section](#) of the document;
- 3) Connect to SLC Manager (see the [section](#) "Logging- in") and go to the "Upload file" screen;
- 4) Browse to the local .dat file and select it via "Choose" button;
- 5) Click the "Upload" button to send the mapping file to the Euronext server or "Cancel" to exit.

After uploading the mapping file, the SLC Manager offers a range of data management functions:

Icon	Action	Result
	View status	Display the upload status by clicking on the "Status" icon. In case of an unsuccessful upload all errors are displayed. In case of success- the message "Succeed to insert, X of lines"
	View List of files uploaded to SLC Manager	Display the list of short and long code mappings uploaded in the SLC Manager tab.
	Refresh	Update the display of the uploaded files

Uploaded data is checked against the data structure and validation rules set out in this [section](#) of the document instantly. Successfully uploaded files are displayed in the upload file screen with the "success" icon .

In case of unsuccessful upload, the SLC Manager will display the uploaded file with the "error" icon .

In case of a successful upload with errors in the content of the file, the SLC Manager will display the uploaded file with the "icon  " and the error list under the concerned file name.

+

CHOOSE

📁

UPLOAD

✕

CANCEL







STATUS	NAME	SIZE	UPLOADED DATE	
✔	ShortLongCodes_20170814_12345678_1_01.dat	154 B	2017-09-12 09:43:47	<div> <div>i</div> <div>↺</div> </div>
✔	ShortLongCodes_20170814_12345678_1_01.dat	154 B	2017-08-31 14:47:47	
✔	ShortLongCodes_20170814_12345678_1_01.dat	154 B	2017-08-30 16:43:48	
✔	ShortLongCodes_20170814_12345678_1_01.dat	154 B	2017-08-29 18:04:09	
⬆	ShortLongCodes_20170728_12345678_1_01.dat	535 B	2017-08-28 16:11:47	
Unknown fields: AAsShortCodeAA,BGsLongCodeDF,DRcCodeTypeML,PLoEffectiveDateOKLA,QKMdEndDateMKOO,				
✕	ShortLongCodes_20170728_12345678_1_01.dat	535 B	2017-08-28 16:08:48	
✕	ShortLongCodes_20170728_12345678_1_01.dat	535 B	2017-08-28 16:08:47	
⬆	ShortLongCodes_20170803_12345678_2_05.dat	249 B	2017-08-28 15:43:08	
Line [2] field sShortCode is required				

To correct an unsuccessful upload, correct the error displayed in the error table. When corrected, upload the file with an amended sequence number via the same upload procedure.

5.2.2 Form submission via Web-GUI

In addition to a file upload, the SLC Manager GUI allows the user to enter or update the short and long code mapping via Web Form. The following section introduces how to enter and manage data directly into the SLC Manager GUI.

To enter short and long code mapping directly into the SLC Manager GUI, access the SLC Dashboard and click the icon for “Mapping file details”, which displays all submitted mapping files. The mapping file details allow for the following available actions:

Icon	Action	Outcome
	Refresh	Update the display, transmit all recent data uploads.
	Create by copy the line	Copy the selected line. This function is useful to create a new line based on the information existing in a previous inserted line.
	Export data	Export selected lines in .dat format. Following columns are included in the download file: Record date, short code, long code, code type, market identifier, effective date, end date
	Cancel the line	Cancel the selected lines
	Edit	Open the overlay with all fields in mode edition of selected line. If more than one line is selected, an error message is displayed.
	Add new line	Open the overlay with a new line form.

To enter a new short and long code mapping directly into the SLC Manager, click “Add new line” and submit the relevant data adhering to the data structure and validation rules outlined in this [section](#) of this document.

5.2.1 File Upload via Web-API

The following section describes the fundamentals of the SLC Manager API, the REST compliant interface to publish (POST), amend (PUT), obtain (GET) or delete (POST) the short and long code mapping by upload file (.dat or .csv).

All files submitted through the API must adhere to the data structure requirements outlined in this [section](#) of this document.

Please refer to [section 6](#) and [section 7](#) of this document.

The Upload function must be used by client to upload a file in .dat or .csv formats.



Note

Please note that **.dat** file will be depreciated and replaced by **.csv** file. Please refer to [this](#) section for **CSV file specifications**.

5.2.1.1 Function

Function name: upload
Request EndPoint: /SaturnWebServices/rest/files/upload
Method: POST

5.2.1.2 Request Body

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Header: Content-Type	The Content-Type indicates to which format the filter is set: Content-Type: multipart/form-data	Yes
Header: Accept	The Accept indicates which format the result will be returned: application/json or Accept: application/xml. If the Accept is not set up, the result is returned in json format	No
Parameter	Uses @QueryParam defined as: offset= a &limit= b which a, b are the values - offset is the position of the result query (page number) - limit is the number of the recorded max per page	No
Body: File information	File to be uploaded and file type. File type must be part of below list: application/csv application/x-csv text/csv text/comma-separated-values text/x-comma-separated-values text/tab-separated-values text/plain application/vnd.ms-excel text/x-csv application/octet-stream application/dat	Yes

5.2.1.3 Expected file contents

File: .dat or .csv

5.2.1.1 Response

The response is a structured object containing the total number of available items and the list itself.

The response 200 indicates a successful upload. The response 600 indicates an unsuccessful upload. Other responses, such as 4xx and 5xx, indicate that the item was not updated in the registry.

Code	Status Code OK, KO
Data	Contains the result of the service.
Msg	Success or fail.

RecordCount	The max record available in the data base.
--------------------	--------------------------------------------

5.2.1.2 Examples

a) curl Request – CSV file

```
curl -X POST -H "Content-Type: multipart/form-data" -H "Authorization: Bearer [token]" -F
"data=@./ShortLongCodes_20170601_00014956_1_01.csv;type=application/csv" https://saturnapi-
prod.euronext.com/SaturnWebServices/rest/files/upload
```

b) Response – CSV file

```
{
  "code":200,
  "data":[
    {
      "type":"uploadedFileStatus",
      "fileName":" ShortLongCodes_20170601_00014956_1_01.csv",
      "size":6144,
      "status":"W",
      "tid":1022,
      "uploadedDate":"2023-06-07T12:54:25"
    }
  ],
  "msg":"OK",
  "recordCount":1
}
```

c) curl Request – DAT file

```
curl -X POST -H "Content-Type: multipart/form-data" -H "Authorization: Bearer [token]" -F
"data=@./ShortLongCodes_20170601_00014956_1_01.dat;type=application/dat" https://saturnapi-
prod.euronext.com/SaturnWebServices/rest/files/upload
```

d) Response – DAT file

```
{
  "code":200,
  "data":[
    {
      "type":"uploadedFileStatus",
      "fileName":" ShortLongCodes_20170601_00014956_1_01.dat",
      "size":6144,
      "status":"W",
      "tid":1022,
      "uploadedDate":"2023-06-07T12:54:25"
    }
  ],
  "msg":"OK. DAT file will soon be depreciated and replaced by CSV file",
  "recordCount":1
}
```

An informative message when uploading DAT files will be returned to clients in order to invite them to migrate to CSV file format.

5.2.2 Get Uploaded Files via Web-API

This function returns the list of error messages at a SLC Mapping level after following the upload of a dat/csv file. It also gives the possibility to filter results.

5.2.2.1 Function

Function name: GetUploadFiles
Request EndPoint: /SaturnWebServices/rest/files/getuploadedfiles
Method: POST

5.2.2.2 Request Body

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Header: Content-Type	The Content-Type indicates to which format the filter is set: Content-Type: application/json or Content-Type: application/xml	Yes
Header: Accept	The Accept indicates which format the result will be returned: application/json or Accept: application/xml. If the Accept is not set up, the result is returned in json format	No
Parameter	Uses @QueryParam defined as: offset= a &limit= b which a, b are the values - offset is the position of the result query (page number) - limit is the number of the recorded max per page	No
Body : FilterList	Sequence of FilterList. Detail of request.	Yes

Sequence of FilterList

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Name	Type of request: tid (treatment ID), status,...	Yes
Value	status of file.	Yes
Operator	EQ, NEQ, GT, GE, LT, LE	Yes
Type	Type of request	No
Sort	DESC or ASC (descending or ascending)	No

5.2.2.3 Response

The response is a structured object containing the total number of available items and the list itself.

The response 200 indicates a successful response. The response 600 indicates an unsuccessful response. Other responses, such as 4xx and 5xx, indicate that the item was not updated in the registry.

Code	Status Code OK, KO
Data	Contains the result of the service.
Msg	Success or fail.
RecordCount	The max record available in the data base.

5.2.2.4 Examples

a) curl Request

```
curl -i -X POST -H "Authorization: Bearer [TOKEN]" -H "Content-Type: application/json" -d
'{"filterList": [{"name": "fileName", "value": "ShortLongCodes_20170601_00014956_1_01.csv",
"operator": "EQ"}]}' https://saturnapi-
prod.euronext.com/SaturnWebServices/rest/files/getuploadedfiles
```

b) Response

```
{
  "code":200,
  "data":[
    {
      "type":"uploadedFileStatus",
      "fileName":" ShortLongCodes_20170601_00014956_1_01.csv",
      "size":6144,
      "status":"O",
      "tid":1022,
      "uploadedDate":"2023-06-07T12:54:25"
    }
  ],
  "msg":"OK",
  "recordCount":1
}
```

5.2.3 Create SLC Mapping via Web-API

This function should be used by the member to create one SLC Mapping into Saturn. The **Create** function is designed for Web-API.

5.2.3.1 Function

Function name: create
Request EndPoint: SaturnWebServices/rest/v2/shortcodeLongcodeResource/create
Method: POST

5.2.3.2 Request Body

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Header: Content-Type	The Content-Type indicates to which format the filter is set: Content-Type: application/json or Content-Type: application/xml	Yes
Header: Accept	The Accept indicates which format the result will be returned: application/json or Accept: application/xml. If the Accept is not set up, the result is returned in json format	No
Body : SubmissionForm	Detail of submission request, with the needed fields.	Yes

5.2.3.3 Response

The response is a structured object containing the submission result.

The response 200 indicates a successful response. The response 600 indicates an unsuccessful response. Other responses, such as 4xx and 5xx, indicate that the item was not updated in the registry.

Code	Status Code OK, KO
Data	Contains the result of the service.
Msg	Success or fail.
RecordCount	The max record available in the data base.

5.2.3.4 Examples

a) curl Request

```
curl -i -X POST -H "Authorization: Bearer [TOKEN]" -H "Content-Type: application/json" -d
'{"shortcode": 130042418, "longcode": "D94OGNU6R", "codetype": 4, "marketttype": 1,
"effectivedate": "2023-06-01"}' https://saturnapi-
prod.euronext.com/SaturnWebServices/rest/v2/shortcodeLongcodeResource/create
```

b) Response

```
{
  "code": 200,
  "msg": "success",
  "recordCount": 0,
  "data": [
    "ShortcodeLongcode added {130042418} "
  ]
}
```

5.2.4 Amend SLC Mapping via Web-API

This function should be used by the member to amend one SLC Mapping into Saturn. The **Amend** function is designed for Web-API.

5.2.4.1 Function

Function name: amend
Request EndPoint: SaturnWebServices/rest/v2/shortcodeLongcodeResource/amend
Method: PUT

5.2.4.2 Request Body

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Header: Content-Type	The Content-Type indicates to which format the filter is set: Content-Type: application/json or Content-Type: application/xml	Yes
Header: Accept	The Accept indicates which format the result will be returned: application/json or Accept: application/xml. If the Accept is not set up, the result is returned in json format	No
Body : SubmissionForm	Detail of submission request, with the needed fields.	Yes

5.2.4.3 Response

The response is a structured object containing the submission result.

The response 200 indicates a successful response. The response 600 indicates an unsuccessful response. Other responses, such as 4xx and 5xx, indicate that the item was not updated in the registry.

Code	Status Code OK, KO
Data	Contains the result of the service.
Msg	Success or fail.
RecordCount	The max record available in the data base.

5.2.4.4 Examples

a) curl Request

```
curl -i -X PUT -H "Authorization: Bearer [TOKEN]" -H "Content-Type: application/json" -d
'{"shortcode": 130042418, "longcode": "D940GNU6R", "codetype": 4, "marketype": 1,
"effectivedate": "2025-06-01"}' https://saturnapi-
prod.euronext.com/SaturnWebServices/rest/v2/shortcodeLongcodeResource/amend
```

b) Response

```
{
  "code": 200,
  "msg": "success",
  "recordCount": 0,
  "data": [
    "ShortcodeLongcode updated {130042418} "
  ]
}
```

5.2.5 Cancel SLC Mapping via Web-API

This function should be used by the member to cancel one SLC Mapping into Saturn. The **Cancel** function is designed for Web-API.

5.2.5.1 Function

Function name: cancel
Request EndPoint: SaturnWebServices/rest/v2/shortcodeLongcodeResource/cancel
Method: POST

5.2.5.2 Request Body

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Header: Content-Type	The Content-Type indicates to which format the filter is set: Content-Type: application/json or Content-Type: application/xml	Yes
Header: Accept	The Accept indicates which format the result will be returned: application/json or Accept: application/xml. If the Accept is not set up, the result is returned in json format	No
Body : SubmissionForm	Detail of submission request, with the needed fields.	Yes

5.2.5.3 Response

The response is a structured object containing the submission result.

The response 200 indicates a successful response. The response 600 indicates an unsuccessful response. Other responses, such as 4xx and 5xx, indicate that the item was not updated in the registry.

Code	Status Code OK, KO
Data	Contains the result of the service.
Msg	Success or fail.
RecordCount	The max record available in the data base.

5.2.5.4 Examples

a) curl Request

```
curl -i -X POST -H "Authorization: Bearer [TOKEN]" -H "Content-Type: application/json" -d  
'{"shortcode": 130042418, "longcode": "D94OGNU6R", "codetype": 4, "marketttype": 1}'  
https://saturnapi-prod.euronext.com/SaturnWebServices/rest/v2/shortcodeLongcodeResource/cancel
```

b) Response

```
{
  "code": 200,
  "msg": "success",
  "recordCount": 0,
  "data": [
    "ShortcodeLongcode canceled {130042418} "
  ]
}
```

5.2.6 Get SLC Mapping via Web-API

This function returns the list of SLC Mapping submitted into the application. It also gives the possibility to filter results.

5.2.6.1 Function

Function name: get
Request EndPoint: /SaturnWebServices/rest/v2/shortcodeLongcodeResource/get
Method: POST

5.2.6.2 Request Body

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
Header: Content-Type	The Content-Type indicates to which format the filter is set: Content-Type: application/json or Content-Type: application/xml	Yes
Header: Accept	The Accept indicates which format the result will be returned: application/json or Accept: application/xml. If the Accept is not set up, the result is returned in json format	No
Parameter	Uses @QueryParam defined as: offset= a &limit= b which a, b are the values - offset is the position of the result query (page number) - limit is the number of the recorded max per page	No
Body : FilterList	Sequence of FilterList. Detail of request.	Yes

Sequence of FilterList

This endpoint accepts a request with below parameters:

Name	Description	Mandatory
------	-------------	-----------

Name	Type of request: tid (treatment ID), status,...	Yes
Value	status of file.	Yes
Operator	EQ, NEQ, GT, GE, LT, LE	Yes
Type	Type of request	No
Sort	DESC or ASC (descending or ascending)	No

5.2.6.3 Response

The response is a structured object containing the total number of available items and the list itself.

The response 200 indicates a successful response. The response 600 indicates an unsuccessful response. Other responses, such as 4xx and 5xx, indicate that the item was not updated in the registry.

Code	Status Code OK, KO
Data	Contains the result of the service.
Msg	Success or fail.
RecordCount	The max record available in the data base.

5.2.6.4 Examples

a) curl Request

```
curl -i -X POST -H "Authorization: Bearer [TOKEN]" -H "Content-Type: application/json" -d
'{"filterList": [{"name": "shortcode", "value": 1132117, "operator": "EQ"}]}' https://saturnapi-prod.euronext.com/SaturnWebServices/rest/v2/shortcodeLongcodeResource/get
```

b) Response

```
{
  "code": 200,
  "msg": "success",
  "recordCount": 1,
  "data": [
    {
      "tid": 9552121492773,
      "participantid": 385,
      "shortcode": 1132117,
      "longcode": "K5FZPH7MM",
      "codetype": 6,
      "markettype": 2,
      "effectivedate": 1758542400000,
      "enddate": null,
      "status": 3,
      "errors": null,
      "saturnuser": "apiUser1",
      "userfileid": null,
      "tsreceive": 1686240777000,
      "firstname": null,
      "surname": null,
      "dateofbirth": null,
    }
  ]
}
```

```
        "longcode2": null,  
        "firstname2": null,  
        "surname2": null,  
        "dateofbirth2": null,  
    }  
]  
}
```

5.3 DATA MANAGEMENT RULES

5.3.1 SLC Mapping for Natural Persons – Non-MiFID Members only

When submitting Short Long Code mapping for a “natural person” (a physical person), below fields are required for **non-MiFID Members**:

- | | |
|-----------------|---------------------------------------|
| - ShortCode | - Long Code 2 (joint account) |
| - LongCode | - First name 2 (for joint account) |
| - First name | - Surname 2 (for joint account) |
| - Surname | - Date of birth 2 (for joint account) |
| - Date of birth | |

It will allow a correct reconciliation between transactions done on Euronext markets and the SLC Mapping provided by **non-MiFID Members**. Above natural person information will be captured automatically and added at the transaction level (Buyer and Seller information).

Note that it will also be possible to declare 2 natural persons for the same transaction, **in case of joint account**.

5.3.2 SLC Mapping new features

To facilitate SLC Mapping management, additional features were added:

- File format for SLC Mapping submission will move from **.dat** to **.csv**. To do so, **Euronext strongly advises to move forward on .csv** file integration as specified in [above](#) section.
- **A new field will be added to identify the action performed by the client.** (New, Amend or Cancel) This will allow an easier management of SLC Mapping on both Members & Saturn side.
- The field **“EndDate” will be removed from the Upload files and User Interface. Saturn will compute it automatically based on client’s inputs.** This will allow for an easier management of SLC Mapping on both Members & Saturn side.

5.3.3 Long Code Error Management & Regular Expressions

When entering a Short Long Code mapping within SATURN (either via File Upload-GUI, Form-GUI or API), some errors will be raised if the Long Code does not meet the format requirements defined [above](#). The table below lists the error messages in case of rejection:

Identification Code	Code Types to check	Rejection cases	Error Code	Error Message to send/display
LEI	1, 7	Missing Value	1001	[slongcode][1001] Missing
		Wrong Length	1020	[slongcode][1020] Wrong length for LEI (must be exactly equal to 20 characters)
		Invalid Format	1023	[slongcode][1023] Invalid characters (the LEI must only contain numeric and/or capitalized alphabetic characters)
National ID (NIDN)	2, 3, 5	Missing Value	1001	[slongcode][1001] Missing
		Wrong Length	1021	[slongcode][1021] Wrong length for National ID (NIDN/CCPT: 3 to 35 characters CONCAT: exactly 20 characters)
Passport Number (CCPT)		Invalid Format	1024	[slongcode][1024] Invalid characters (NIDN/CCPT: Capitalized Alphanumeric characters, + and – allowed for Finland, only – allowed for Latvia CONCAT: please refer to the ESMA specification for more details)
CONCAT				
Algorithm	4, 6	Missing Value	1001	[slongcode][1001] Missing
		Wrong Length	1022	[slongcode][1022] Wrong Length for Algorithm Identification Code (must be less than or equal to 50)
		Invalid Format	1025	[slongcode][1025] Invalid characters (the Algorithm Identification Code must only contain numeric and/or capitalized alphabetic characters)

Please find below regular expression for each Long Code type:

Types	Regular expression
LEI	[A-Z0-9]{18,18}[0-9]{2,2}
National ID	(([A-Z]{2,2}[A-Z0-9]{1,33}) ([A-Z]{2,2}[0-9]{8}[A-Z]{1}[AZ#]{4}[A-Z]{1}[A-Z#]{4}))
MIC	[A-Z0-9]{4,4}

5.3.4 Action Type Field Error Management

When entering a Short Long Code mapping within SATURN (either via File Upload-GUI, Form-GUI or API), some errors will be raised if the Action Type field is not present or is different from the authorized values. The table below lists the error messages in case of rejection:

Field Name	Presence	Format	Possible Values	Validation Rules
Action Type	Mandatory for all new SLC mapping reporting.	Integer	1 – New 2 – Amend 3 – Cancel	If Action Type is NULL Then, Raise Error : [ActionType][1001] Missing If Action Type ≠ (1, 2 ,3) Then, Raise Error : [ActionType][1005] Invalid format

5.3.5 Natural Persons fields Definition & Error Management

When entering a Short Long Code mapping within SATURN (either via File Upload-GUI, Form-GUI or API), some errors will be raised if Natural Persons fields does not meet the format requirements defined [above](#). The table below lists the error messages in case of rejection:

Field Name	Presence	Format	Possible Values	Validation Rules
Long Code 2	Optional only if Participant is Non-MiFID AND CodeType = 2 (Client identification as a National ID)	Alphanumeric (50 characters)	NATIONAL_ID	If CodeType ≠ 2 (Client identification as a National ID) AND Long Code 2 is NOT NULL Then, Raise Error : [LongCode2][1002] Please do not fill, unexpected value If CodeType = 2 (Client identification as a National ID) AND Long Code 2 is NULL AND (First Name 2 ≠ NULL OR Surname 2 ≠ NULL OR Date of Birth 2 ≠ NULL) Then, Raise Error : [LongCode2][1001] Missing If Long Code 2 ≠ ((FI[A-Z0-9\-\+\]{1,33}) (LV[A-Z0-9\-\]{1,33}) ([A-Z]{2}((18 19 20)(0[1-9] 1[012]) (0[1-9] 12)[0-9] 3[01]))[A-Z][A-Z#]{4}[A-Z][A-Z#]{4}) ([A-Z]{2}[A-Z0-9]{1,33})) Then, Raise Error : [LongCode2][1024] Invalid characters (NIDN/CCPT: Capitalized Alphanumeric characters, + and – allowed for Finland, only – allowed for Latvia CONCAT: please refer to the ESMA specification for more details)

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Field Name	Presence	Format	Possible Values	Validation Rules
			comma ",", space " ", apostrophe "'", minus "-", dash "-".	ŸŸŽŽŽŽ] ' - -){1,140} Then, Raise Error : [FirstName2][1005] Invalid format

5.3.6 Maximum file size

The maximum size of a single mapping file is 10 MB. Mapping files larger than 10 MB have to be split to reduce file size and have to be uploaded separately, with an independent sequence number. It is possible to upload up to 5 (five) files simultaneously.

5.3.1 Frequency and timing

The submission of a short and long code mapping is only required if there are changes to existing mapping data or if short codes have been used in order entry that have not previously been declared.

SLC Manager is available Monday - Friday between 06:30 am and 10:30 pm CET/CEST. Members are required to upload the file via the SLC manager via GUI or API REST before 10:30 pm CET/CEST on the same day of trading that the code is used for the first time, at the latest. (T)

5.3.1 Updating an existing short code

Users of SLC Manager can manage existing short codes by either uploading a new .dat/.csv file (via GUI or API REST) or amending the information directly into the SLC Manager GUI. To update an existing short code, **users may submit the existing short code with:**

- Action Type field set to **2- Amend** or use the “**Amend**” service (via Web-API)
- **Updated information, using an EffectiveDate greater or equal than short code’s current EffectiveDate.**

Examples are available in the section [Amend SLC Mapping](#).



Note

Please note that, in case of an error in the SLC Mapping update, a cancellation must be done. More information are available [here](#).

5.3.1 Cancelling an existing short code

To cancel a Short Long Code mapping, users have to resend the same ShortCode/CodeType/MarketType with Action Type field set to **3- Cancel** or use the “**Cancel**” service (via Web-API)

This will result in **EndDate being setup to the Current Date, or to a Short Long Code mapping deletion if the mapping is set in the future.**

Examples are available in the section [Cancel SLC Mapping](#).

6. PRE REQUISTIE BEFORE USING API

6.1 ENGLISH SCREENSHOTS

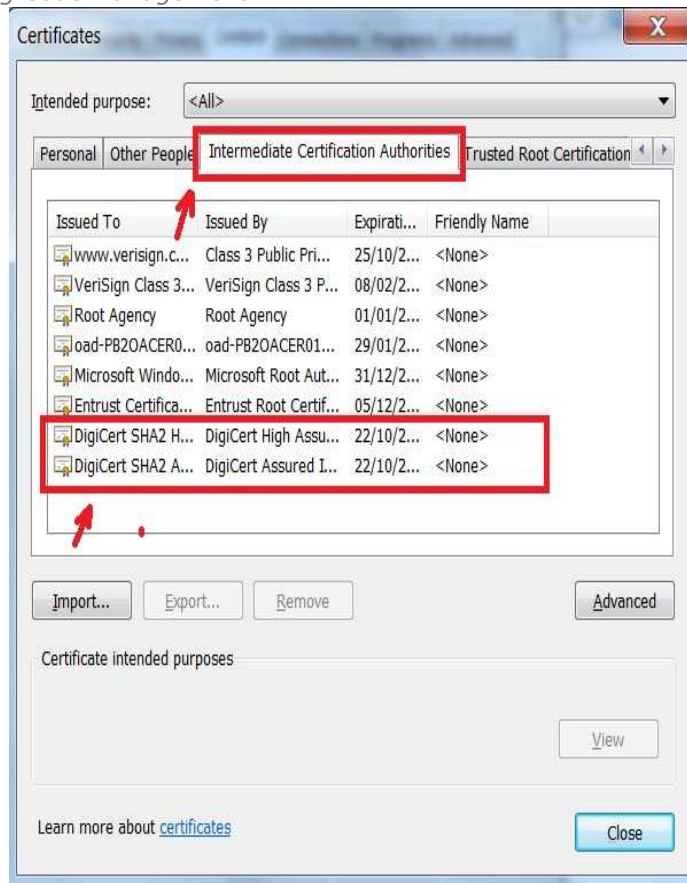
Before using SATURN API REST you have to check that your connection is made with a valid intermediate certificate.

Please follow the different steps below so that The connection is fully established.

- Open your Internet Explorer navigator
- Go to Internet Options
- Click on 'Content' Tab
- Click on 'Certificates' button



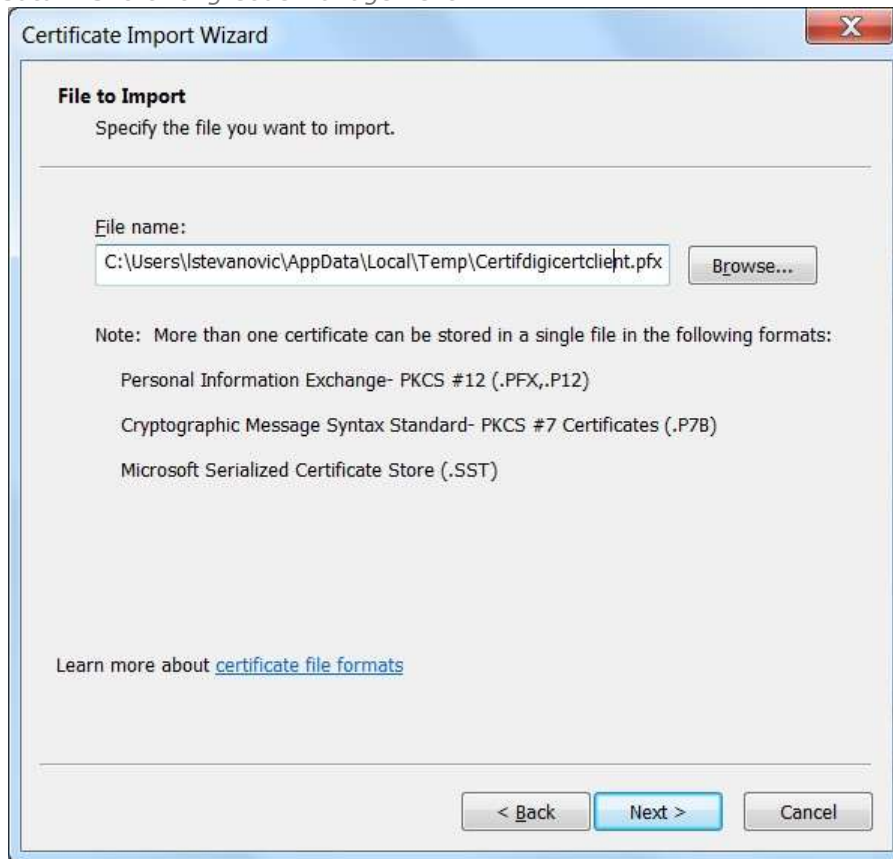
In the pop-in 'certificate' go to 'Intermediate Certification Authorities' and please check that you have the intermediate certificates Digicert:



If any it is necessary to install them with executing the file attached "Certifdigerclient.pfx" in this document, first click on 'Next':



Browse the file on your desktop and click on 'Next':



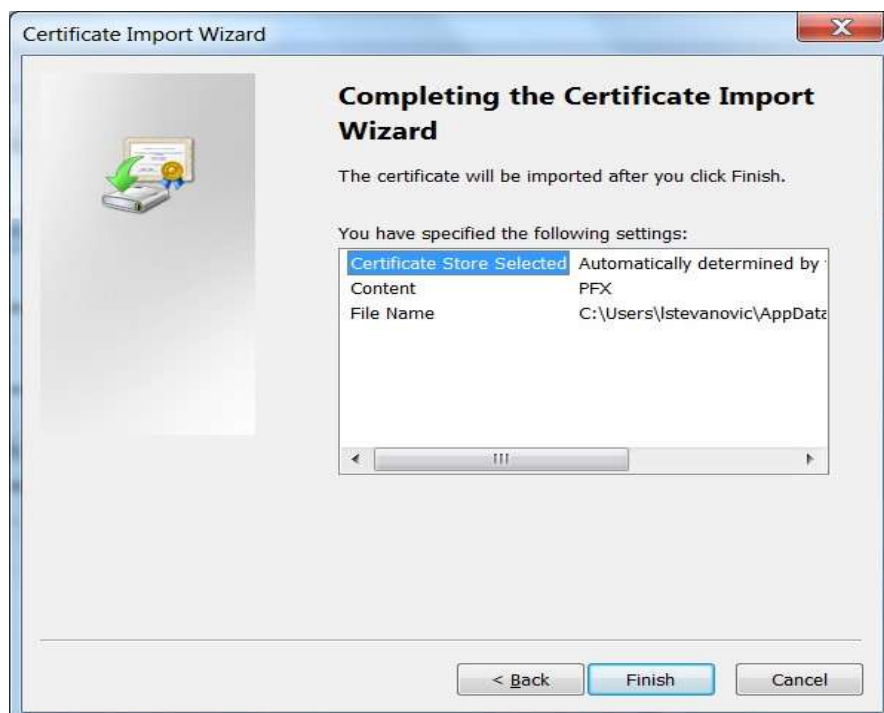
The password is Cer\$!IF123 click on 'Next':



Tick on 'Automatically select the certificate store based on the types of certificate' and click on 'Next':



When the installation is finished you get the window below, click on 'Finish':



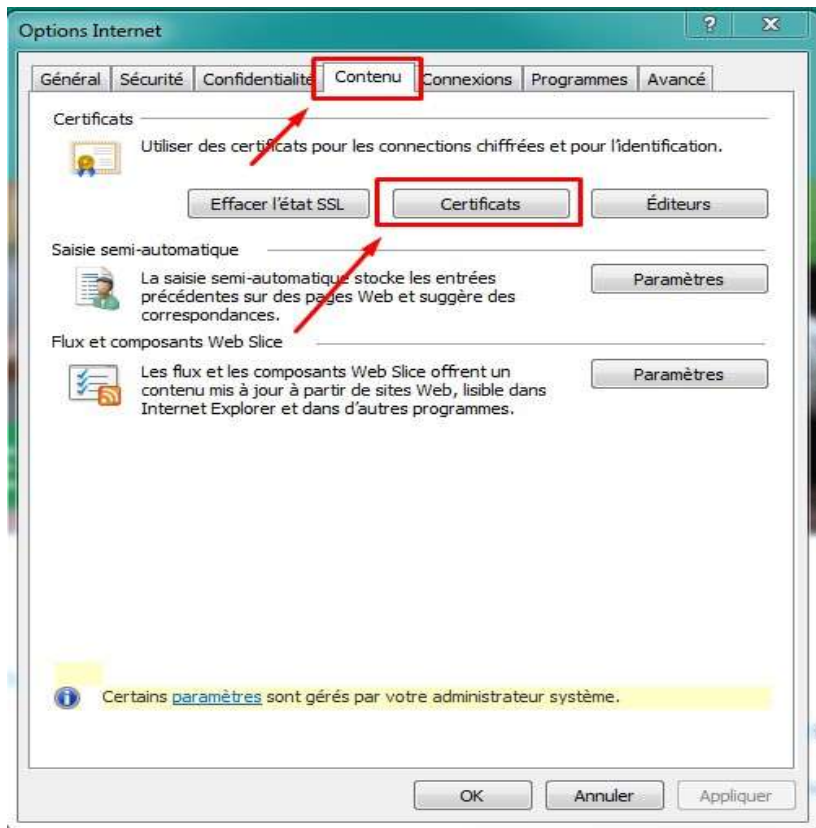
6.1 FRENCH SCREENSHOTS

Before using SATURN API REST you have to check that your connection is made with a valid intermediate certificate.

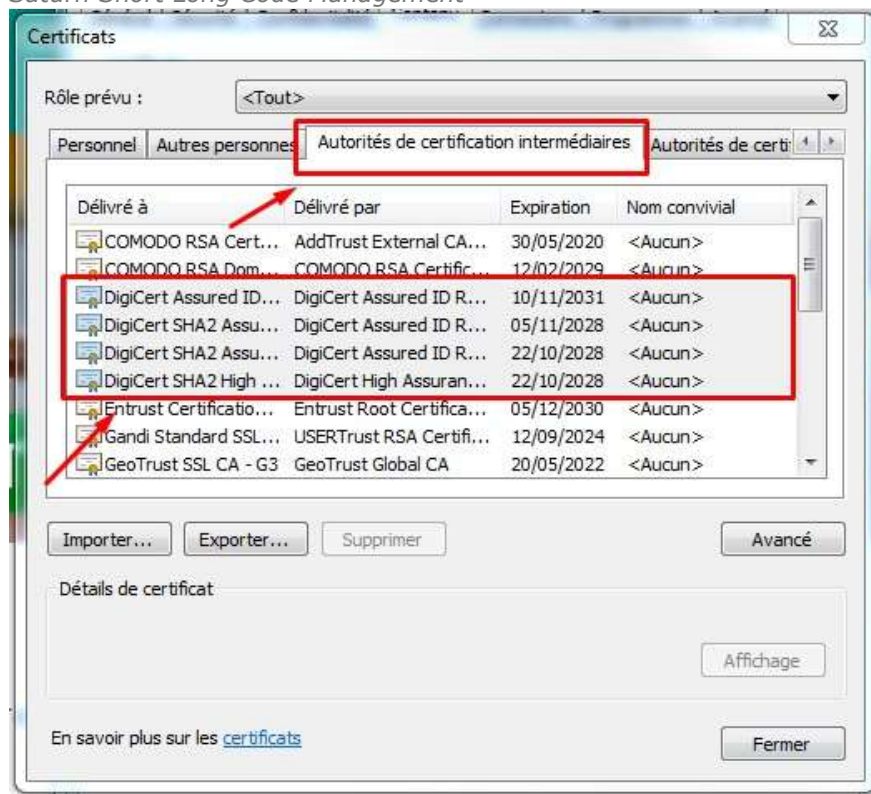
Please follow the different steps below so that The connection is fully established.

- Open your Internet Explorer navigator

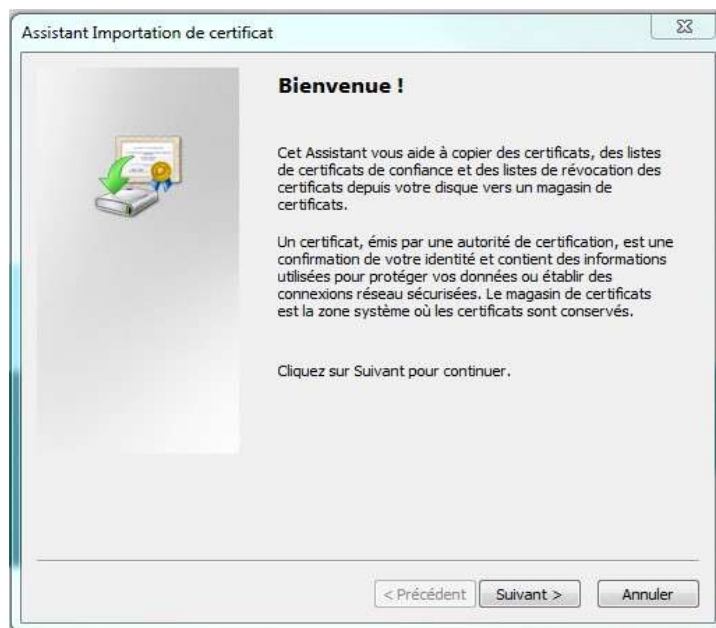
- Go to Internet Options
- Click on 'Contenu' Tab
- Click on 'Certificats' button



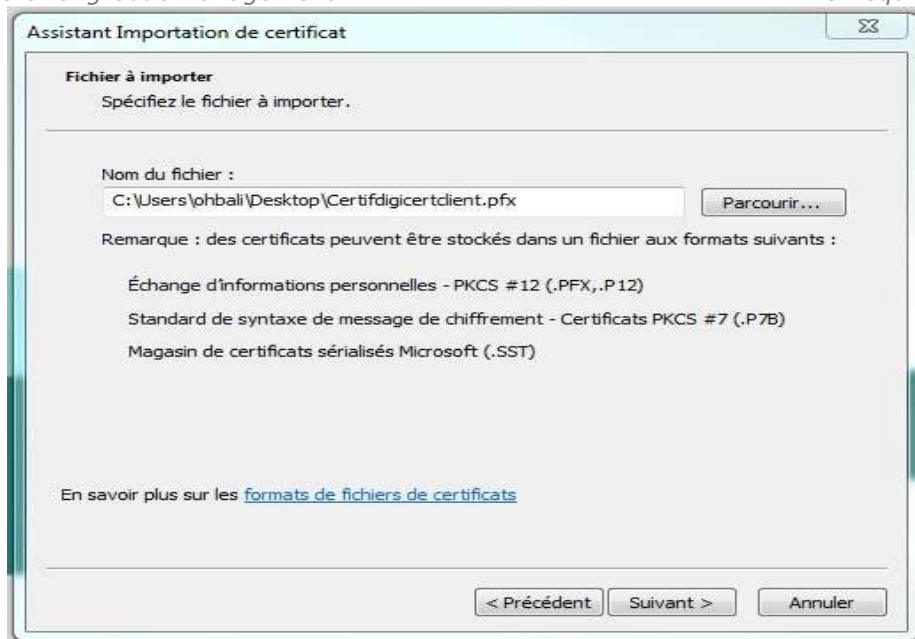
In the pop-in 'Certificats' go to 'Autorités de certification intermédiaires' and please check that you have the intermediate certificates Digicert.



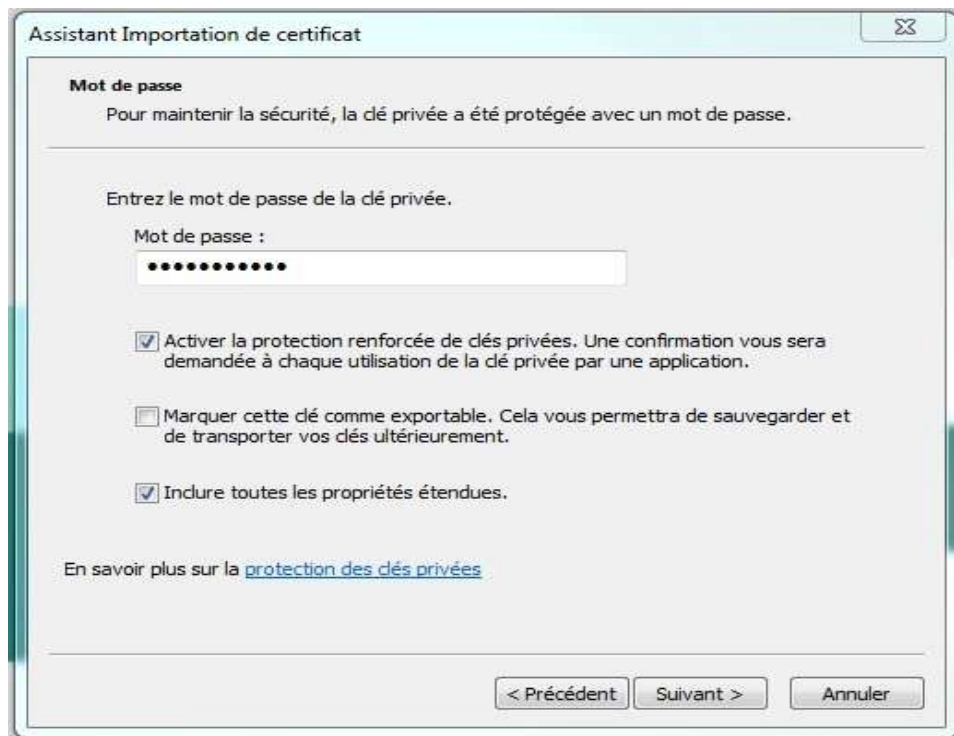
If any it is necessary to install them with executing the file attached "Certifdigicertclient", first click on 'suivant':



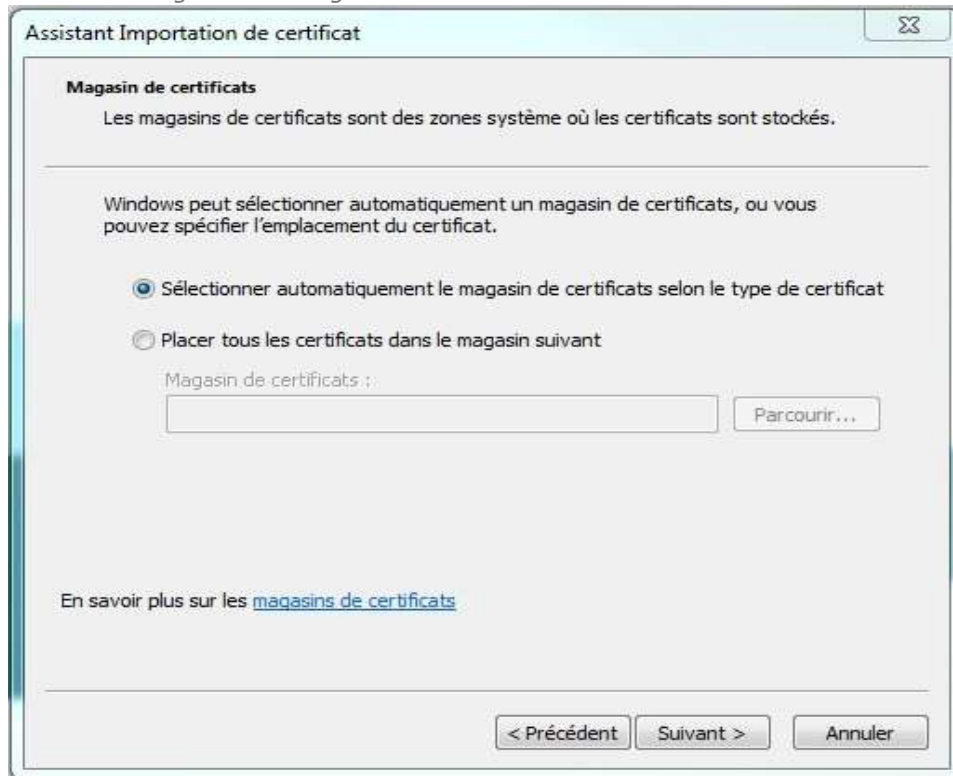
Browse the file on your desktop and click on 'Suivant':



The password is Cer\$!IF123 click on 'Suivant':



Tick 'Sélectionner automatiquement le magasin de certificats selon le type de certificat' and click on 'suivant':



When the installation is finished you get the window below, click on 'Terminer':



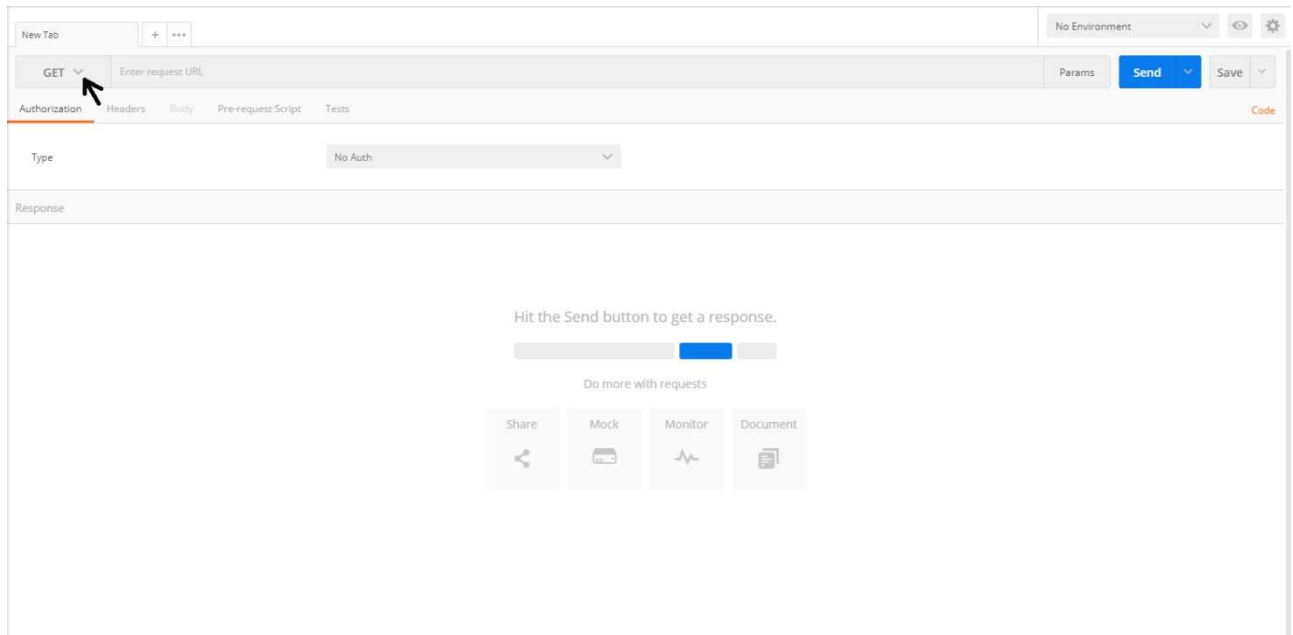
7. HOW TO SET UP A TEST

This section describes step by step how to test a function in Web service.

7.1 ACCESS TO API VIA POSTMAN

The function taken in the example hereafter is AuthenticateUser. It allows a user to connect to the API. The screenshots are Software Postman examples:

Select in the combo box below the function POST (showed by the arrow in the following screenshot):



7.2 REQUEST ENDPOINT AND FUNCTION PARAMETER

All functions in this document have to be built as detailed below:

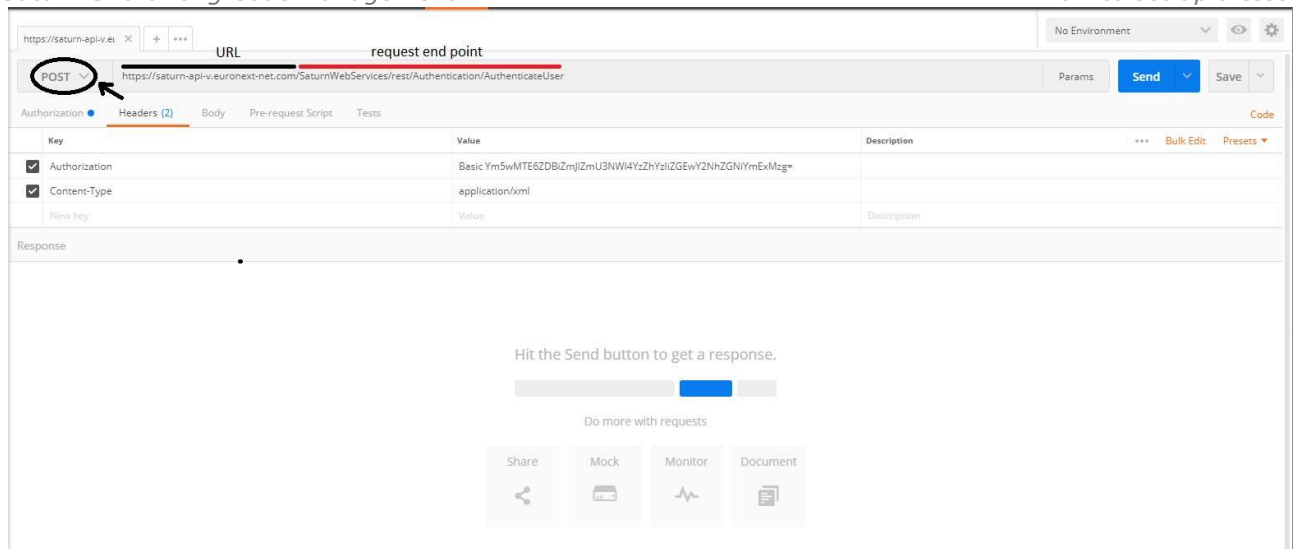
Function:

Function name: AuthenticateUser

Request EndPoint: /SaturnWebServices/rest/Authentication/AuthenticateUser

Method: POST

In Postman, select the method (POST) set up the URL followed by request end point:

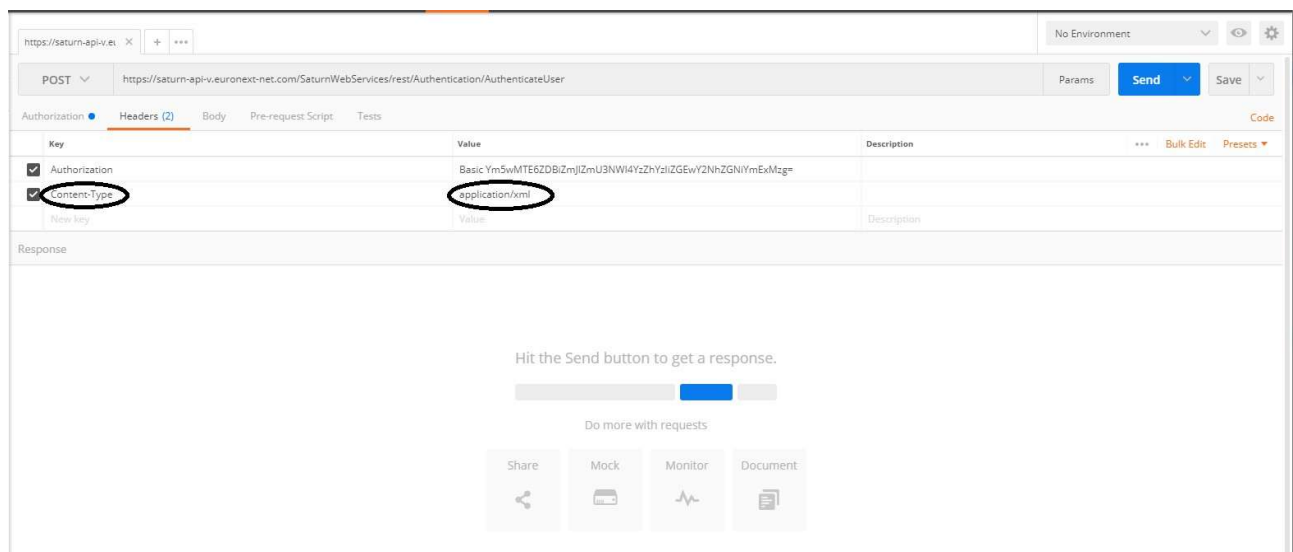


Request Body:

This endpoint accepts a request body in one of the following formats:

1. application/json;
2. application/xml.

In the screenshot below, xml is chosen as content type:



7.3 USERNAME AND PASSWORD ENCRYPTION

The last step is username and password encryption.

8. EXAMPLES

8.1 NEW SLC MAPPING

Pre requisite: SLC Mapping on Euronext Market.

Business Date	SLC Mapping to insert					SLC Mapping already present					Result
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	N/A					SLC Mapping successfully inserted.
	1	1234	LGCODE1	5	2023-02-22						
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	N/A					SLC Mapping rejected because EffectiveDate < BusinessDate -1.
	1	1234	LGCODE1	5	2023-02-18						
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ShortCode	LongCode	CodeType	EffectiveDate	SLC Mapping rejected because EffectiveDate mapping already exists.	
	1	1234	LGCODE1	5	2023-02-22	1234	LGCODE1	5	2023-02-17		
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ShortCode	LongCode	CodeType	EffectiveDate	EndDate	SLC Mapping successfully inserted.
	1	1234	LGCODE1	5	2023-02-22	1234	LGCODE1	5	2023-01-17	2023-02-20	

8.2 AMEND SLC MAPPING

Pre requisite: SLC Mapping on Euronext Market.

Business Date	SLC Mapping to amend					SLC Mapping already present					Result
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	N/A					SLC Mapping not amended as it does not exist.
	2	1234	LGCODE2	5	2023-02-22						

Business Date	SLC Mapping to amend					SLC Mapping already present						Result
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	SLC Mapping not amended because new EffectiveDate < BusinessDate -1.	
	2	1234	LGCODE2	5	2023-02-17	2	1234	LGCODE1	5	2023-01-05		
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ShortCode	LongCode	CodeType	EffectiveDate	SLC Mapping successfully updated.*		
	2	1234	LGCODE2	5	2023-02-22	1234	LGCODE1	5	2023-02-17			
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ShortCode	LongCode	CodeType	EffectiveDate	SLC Mapping successfully updated, with a new EffectiveDate as it's greater than BusinessDate.		
	2	1234	LGCODE2	5	2023-02-25	1234	LGCODE1	5	2023-06-16			
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ShortCode	LongCode	CodeType	EffectiveDate	EndDate	SLC Mapping not updated as it's already closed. Please use New instead of Amend	
	2	1234	LGCODE2	5	2023-02-25	1234	LGCODE1	5	2023-01-17	2023-02-15		

*: The update **closes** the SLC Mapping already present and **create** a new one, as per below:

ShortCode	LongCode	CodeType	EffectiveDate	EndDate
1234	LGCODE1	5	2023-01-17	2023-02-21
1234	LGCODE2	5	2023-01-22	N/A

8.3 CANCEL SLC MAPPING

Pre requisite: SLC Mapping on **Euronext Market**.

Business Date	SLC Mapping to cancel				SLC Mapping already present					Result
2023-02-21	ActionType	ShortCode	CodeType		ShortCode	LongCode	CodeType	EffectiveDate		SLC Mapping successfully canceled, with EndDate = BusinessDate.
	3	1234	5		1234	LGCODE1	5	2023-02-17		
2023-02-21	ActionType	ShortCode	CodeType		ShortCode	LongCode	CodeType	EffectiveDate		SLC Mapping successfully deleted, as EffectiveDate > BusinessDate.
	3	1234	5		1234	LGCODE1	5	2023-05-28		
2023-02-21	ActionType	ShortCode	CodeType		ShortCode	LongCode	CodeType	EffectiveDate	EndDate	SLC Mapping already closed.
	3	1234	5		1234	LGCODE1	5	2023-01-17	2023-02-15	
2023-02-21	ActionType	ShortCode	CodeType		ShortCode	LongCode	CodeType	EffectiveDate		SLC Mapping not canceled because it does not exist.
	3	1234	5		12345	LGCODE1	5	2023-01-17		

8.4 CORRECT A WRONG AMEND SLC MAPPING

Pre requisite: SLC Mapping on **Euronext Market**.

1- Client decides to update the existing SLC Mapping, with an **Effective Date = 2023-02-25**.

Business Date	SLC Mapping to amend					SLC Mapping already present					Result
2023-02-21	ActionType	ShortCode	LongCode	CodeType	EffectiveDate	ShortCode	LongCode	CodeType	EffectiveDate		SLC Mapping successfully updated.*
	2	1234	LGCODE2	5	2023-02-25	1234	LGCODE1	5	2023-02-17		

*: The update **closes** the SLC Mapping already present and **create** a new one, as per below:

ShortCode	LongCode	CodeType	EffectiveDate	EndDate
1234	LGCODE1	5	2023-01-17	2023-02-24
1234	LGCODE2	5	2023-01-25	N/A

2- Client made a wrong update, and wanted **the new Long Code to be effective on the 2023-03-01** instead !

Therefore, the client need to perform:

- A Cancellation of the newly created SLC Mapping, **that will be deleted from the System**.

ShortCode	LongCode	CodeType	EffectiveDate	EndDate
1234	LGCODE2	5	2023-01-25	N/A

- Another Cancellation of the current SLC Mapping, **that will automatically amend the EndDate**.

ShortCode	LongCode	CodeType	EffectiveDate	EndDate
1234	LGCODE1	5	2023-01-17	2023-02-21

Client will then be able to add the **SLC Mapping with the right Effective Date as a New** !

DOCUMENT HISTORY

Version Number	Date	Author	Change Description
3.0.2	30 Jul 2025	JFD	<ul style="list-style-type: none"> Updated Section Frequency and Timing. SLC reports must be uploaded on the same day that the code is used for the first time at the latest.
3.0.1	29 Apr 2024	MME	<ul style="list-style-type: none"> Updated Section Examples: Amend Example amended with the correct Action Type value.
3.0.0	12 Jun 2023	MME	<ul style="list-style-type: none"> Specification update using new template. Removed Order ID section as it was deprecated. Updated Section Data Structure And Validation Rules: New fields required for Short Long Code mapping declaration for non-MIFID members. A new file format is introduced. Also added modification on Short Long Code mapping feature with Action Type field introduction. Added Section Upload & API Fields Name: Fields naming convention whether used in Upload Files or via Web-API. Added Web-API Sections in Data Submission section: API REST that can be used by clients are specified, with examples. Added Sections SLC Mapping for Natural Persons – Non-MiFID Members only, SLC Mapping new features: Explanation on the Natural Persons fields introduction, as well as on the new feature. Added Sections Action Type Field Error Management, Natural Persons fields Definition & Error Management: Explanation on controls done in the Short Long Code mapping declaration. Added Section Examples: Examples are available for Members in order to correctly report SLC Mapping.
2.4.0	06 Jan 2021	Euronext	<p>The following section has been updated:</p> <ul style="list-style-type: none"> Section Data Structure Requirements – update of possible Market Code values for SIGMA X EU and Morgan Stanley
2.3.0	26 Sep 2020	Euronext	<ul style="list-style-type: none"> Updating section Logging In (Web GUI).
2.2.0	13 Nov 2017	Euronext	<ul style="list-style-type: none"> Adding new markets Clarifications regarding timing of SLC Manager availability and delivery times Authorize T+1 for short code and DEA submission per OrderID
2.1.0	28 Sep 2017	Euronext	<ul style="list-style-type: none"> Add English screenshots for pre requisite API
2.0.0	27 Sep 2017	Euronext	<ul style="list-style-type: none"> Updated user access policies, updated specifications for long and short code mapping, new specifications for short code and DEA submission per OrderID
0.1.0	30 Jun 2017	Euronext	<ul style="list-style-type: none"> First draft.