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Developer's Guidelines for CESR database on Shares admitted to trading on EU Regulated Markets

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Audience

This document was written to allow developers to get the most out of CESR's database on Shares admitted to trading on EU Regulated Markets ("the database") and the Web Service developed for this database. You should have a good understanding of Web Services and XML in order to fully appreciate this guide.

Introduction

Shares admitted to trading on EU Regulated Markets database origins

The MiFID implementing Regulation (No 1287/2006, of 10 August 2006) requires the relevant competent authorities to calculate and publish a set of information regarding all shares which are admitted to trading on a regulated market. This market information, covering the shares admitted to trading on the regulated market by the end of the previous calendar year, shall be published on the first trading day of March each year. In addition, new entries will be added regularly during the year.

CESR is of the view that the setting up of a database best fulfils the needs of the market as regards accessing this information, and sets out in this document further technical details regarding this database.

Technical choices

In order to best provide for the varying range of needs of members and end users accessing the database of Shares admitted to trading on EU Regulated Markets, a standard, easy to use technology had to be deployed. CESR has chosen Web Services, an XML based machine-to-machine communication protocol, recognised as a standard, which allows for all major programming languages to access and retrieve data from its database, while maintaining speed and security.

Maximum results for each search have been limited to 2000 entries.

Exposed Features

Snapshots

This feature allows you to view the database exactly as it was at a precise moment in time. All you need to do, to use this feature, is to specify which date you would like the results to be from. See queryDate for more information on how to use this feature.

Data Sort

The system provides you with 6 sorting mechanisms to give you the ability to retrieve data, while at the same time organising it based on your needs.

See sortOrder for more information on how to use this feature.



Filters

Filters give you the flexibility to retrieve only the relevant data from the database, improving response time and network performance.

Advanced searches

By using advanced searches, you can further refine your searches and increase the complexity of the filters to provide you with the most pertinent information for your needs.

Web Service

Web Service Location

The web service is available at the following address:

http://mifiddatabase.cesr.eu/ws/MifId.asmx

The WSDL for the web service can be found at:

http://mifiddatabase.cesr.eu/ws/MifId.asmx?WSDL

The description of the query can be found at:

http://mifiddatabase.cesr.eu/ws/MifId.asmx?op=Query

Sample Web Service result

```
<?xml version="1.0" encoding="utf~8"?>
<ArrayOfShare xmlns:xsi="http://www.w3.org/2001/XMLSchema~instance"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://www.cesr.eu/">
 <Share>
  <name>Share 1</name>
  <ISIN>BE0003846632</ISIN>
  <ADT>413890000</ADT>
  <dailyTransactions>7330</dailyTransactions>
  <freeFloat>70926100000</freeFloat>
  <AVT>46465</AVT>
  <SMS>45000</SMS>
  <authorityForLiquid />
  <authority>Rahoitustarkastus</authority>
  <countryCode>FI</countryCode>
 </Share>
 <Share>
  <name>Share 2</name>
  <ISIN> BE0003846632</ISIN>
  <ADT>1750000</ADT>
  <dailyTransactions>850</dailyTransactions>
  <freeFloat>5413110000</freeFloat>
  <AVT>28300</AVT>
```



```
<SMS>25000</SMS>
  <authorityForLiquid />
  <authority>CBFA</authority>
  <countryCode>BE</countryCode>
 </Share>
 <Share>
  <name>Share 6</name>
  <ISIN> BE0003846632</ISIN>
  <ADT>1567000</ADT>
  <dailyTransactions>358</dailyTransactions>
  <freeFloat>0</freeFloat>
  <AVT>9100</AVT>
  <SMS>7500</SMS>
  <authorityForLiquid>Polish SEC</authorityForLiquid>
  <authority>Polish SEC</authority>
  <countryCode>PL</countryCode>
 </Share>
</ArrayOfShare>
```

Web Service parameters

queryDate

Used to specify the effective date of the query. The only accepted format is "yyyyMMdd HH:mm:ss". If you need the latest version of the data, leave queryDate blank.

Example:

Get data as it was on the 21st of July 2007 at 16:54:03: queryDate=20071021 16:54:03

Get the latest version of the data:

queryDate=

In order to get fast results for a specific date, please use the format "20071021 00:00:00".

sortOrder

Used to specify the order in which shares will be returned. Current valid values are:

- 1: Sort using share name alphabetically ascending (A-Z)
- 2: Sort using share name alphabetically descending (Z-A)
- 3: Sort between Liquid/not Liquid liquid first, not liquid last
- 4: Sort between Liquid/not Liquid not liquid first, liquid last
- 5: Sort by country code alphabetically ascending (A-Z)
- 6: Sort by country code alphabetically descending (Z-A)



Example:

Sort by country code descending: sortOrder=6

name

Used to search within the names of the shares. The search will find identical matches and partial matches. This search is case insensitive and accent insensitive. Keyword has to be equal to or greater than 2 characters.

Example:

Search for "sony":

name=sony

This query will return shares for both "Sony" and "SonyEricsson"

isin

Used to search within the ISIN code of the shares. The search will find identical matches and partial matches. This search is case insensitive and accent insensitive. If you are looking for a single share, this is the only recommended way of filtering down; ISIN's are unique unlike other attributes that might change over time. Keywords have to be equal to or greater than 2 characters.

Example:

Search for "FR1":

isin=FR1

This query will return shares for both "FR123456" and "FR100000"

Search for "FR123456"

isin=FR123456

This query will only return "FR123456"

countryCode

Used to search for all shares from a particular country based on its country code. The search will ONLY find identical matches. This search is case insensitive and accent insensitive. Keyword has to be equal to or greater than 2 characters.

Example:

Search for all shares from Ireland, country code "IE": countryCode=IE

competentAuthority

Used to search within the share's relevant competent authority. The search will find identical matches and partial matches. This search is case insensitive and accent insensitive. Keyword has to be equal to or greater than 2 characters.



Example:

Search for "finans":

name=finans

This query will return shares where either "Finanstilsynet" or "Finansinspektionen" are relevant competent authorities.

Advanced queries

The MiFID web service interface supports the following advanced searches.

~ multiple parameters

Example: Search for both Great Britain shares and shares with "LTD" within their name.

countryCode=GB

name=1td

multiple keywords within a parameter (values are separated using a semi-colon)
 Example: Search for shares from either Denmark or Belgium countryCode=DK;BE