

SEMOpX DataNews – 27 May 2019

ETS API 3.3.1 New features and impacts

Important information – Action required

- ETS 3.3.1 version to **go live on 19 June 2019** subject to successful testing
- Simulation 1 & 2 environment available as of 27th May 2019
- **Non Market Participants can now retrieve market results via the ETS API**
- **Market results status** in 3.3.1 API schema, to simplify your API app
- **Terms Of Reference new version**, updated with Login policy and Market Results retrieval policy communicated in March 2019
- **Resulting Mandatory Conformance tests** on 7 and 12 June 2019
- **Old API schemas 2.10 and 3.0 will be decommissioned** in Q4 2019

Dear API Members,

We are pleased to inform you that SEMOpX will be deploying in production an updated ETS version 3.3.1 starting on 19 June 2019 (first trading day), subject to successful testing, with the API enhancements listed below.

1. Non Market Participants can now retrieve Market Results via the ETS API

ETS API 3.3.1 enables non Market Participants to connect to the API and retrieve Market Results to use them internally or externally.

Non Market Participants can access the following methods:

Purpose	Method	Description
Login	EstablishConnection	Once a day, please see the Login/Logout policy in Terms of Reference.
Logout	Logout	Optional, for GUIs or if your company security policy requires it.
Change your API user password	SetNewPassword	You have 7 days to change the initial password provided by Market ops. Changing a password automatically extends its validity to 90 days. Though market ops can reset or extend a password this option should be kept only for emergencies: regular changes should be handled by the API application itself.
Know Auctions	RetrieveAuctionInformation	Retrieve the Auction theoretical

characteristics		publication time, to know when to start retrieving market results.
Retrieve market results	RetrieveMarketResultsFor	For one or several areas. See related policy in Terms of Reference and below.
Be aware of auction specific events	<ul style="list-style-type: none"> RetrieveMessagesUnreadOnly SetMessagesAsRead 	In case of delays, decoupling events, second auction, etc.
Know your areas assignments	RetrieveViewableAreas	If you want to collect dynamically the list of areas your API user is assigned to.
To ensure the API server can be reached	Keep Alive	For testing purposes only. Does not require to be logged in.

As you can see in the sample request/response for the *RetrieveMarketResultsFor* method, the .csv part embedded in the XML response for Non Market Participant is a subset of the Market Participants one, that is:

- It contains the upper index part
- But does not contain the bottom portfolio allocation part.

Area set	SEM-DA		
Auction name	PWR-MRC-D+1		
Auction date time	2019-03-30T11:00:00Z		
FX rates			
EUR	GBP	1	
Period duration	60		
Market area	NI-DA		
	Price Index (EUR/MWh)	Price Index (GBP/MWh)	Volume Index (MW)
2019-03-30T23:00:00Z	770,4	770,4	128,2
2019-03-31T00:00:00Z	770,4	770,4	206,4
2019-03-31T01:00:00Z	770,4	770,4	222,5
2019-03-31T02:00:00Z	322,1	322,1	228,8
2019-03-31T03:00:00Z	984,4	984,4	183,9
2019-03-31T04:00:00Z	528,3	528,3	200,1
2019-03-31T05:00:00Z	1276,7	1276,7	100
2019-03-31T06:00:00Z	770,4	770,4	211,8
2019-03-31T07:00:00Z	770,4	770,4	271,4
2019-03-31T08:00:00Z	414,7	414,7	208,6
2019-03-31T09:00:00Z	770,4	770,4	149,6
2019-03-31T10:00:00Z	984,4	984,4	100
2019-03-31T11:00:00Z	322,1	322,1	208
2019-03-31T12:00:00Z	972,9	972,9	212,3
2019-03-31T13:00:00Z	984,4	984,4	223,3
2019-03-31T14:00:00Z	528,3	528,3	174,9
2019-03-31T15:00:00Z	412,2	412,2	147,9
2019-03-31T16:00:00Z	528,3	528,3	213,1
2019-03-31T17:00:00Z	984,4	984,4	199,1
2019-03-31T18:00:00Z	1485	1485	171,1
2019-03-31T19:00:00Z	1058,8	1058,8	171,3
2019-03-31T20:00:00Z	322,1	322,1	195,9
2019-03-31T21:00:00Z	830,8	830,8	174,4
Sum/Avg	763,578	763,578	4302,6

2. Market Results status in 3.3.1 to simplify your app

Until ETS API 3.2 it was possible to retrieve Market results but the response did not include the results status displayed in the ETS client.

As a result it was not possible to know:

- If results were published or not (before publication the API responds with 0 values)
- once published whether they were *Preliminary* or *Final*

With ETS API 3.3.1 a new tag `<ResultsStatus>` is added to the `RetrieveMarketResultsFor` method Response, with the following possible values:

- *Unavailable* (Not yet published)
- *Preliminary*
- *Final*
- *Cancelled*

```
<ns:RetrieveMarketResultsForResponse>
  <RetrieveMarketResultAcknowledgement>
    <ns:state>ACK</ns:state>
    <ns:marketResults>
      <ns:area>NI-SONI-DA</ns:area>
      <ns:ResultsStatus>Final</ns:ResultsStatus>
      <ns:marketResultExport>Area set;SEM-DA
```

Auction name;PWR-MRC-D+1

Auction date time;2019-03-28T11:00:00Z

You can access **sample 3.3.1 Market Results** request and response files [here](#).

The sequence of market results statuses depends on the nature of the auction:

- **Day-ahead Local auctions and intraday auctions:**
 - *Unavailable* (Not yet published) -> *Final*.
 - There is no cancellation possibility.
 - **Day-ahead coupled auctions:**
 - *Unavailable* -> *Preliminary* -> *Final*
 - Although this has not happened yet in production, it is process wise possible that preliminary market results get cancelled:
 - *Unavailable -> Preliminary -> Cancelled -> Unavailable (*) -> Preliminary -> Final*
- (*) when reopening the order book

We remind you that Market results must be retrieved only when relevant:

- Starting at the theoretical auction publication time
- Stopping once the auction results are Final (and thus cannot be cancelled anymore)

The shortest time interval between 2 *RetrieveMarketResultsFor* requests for the same area should be 30 seconds.

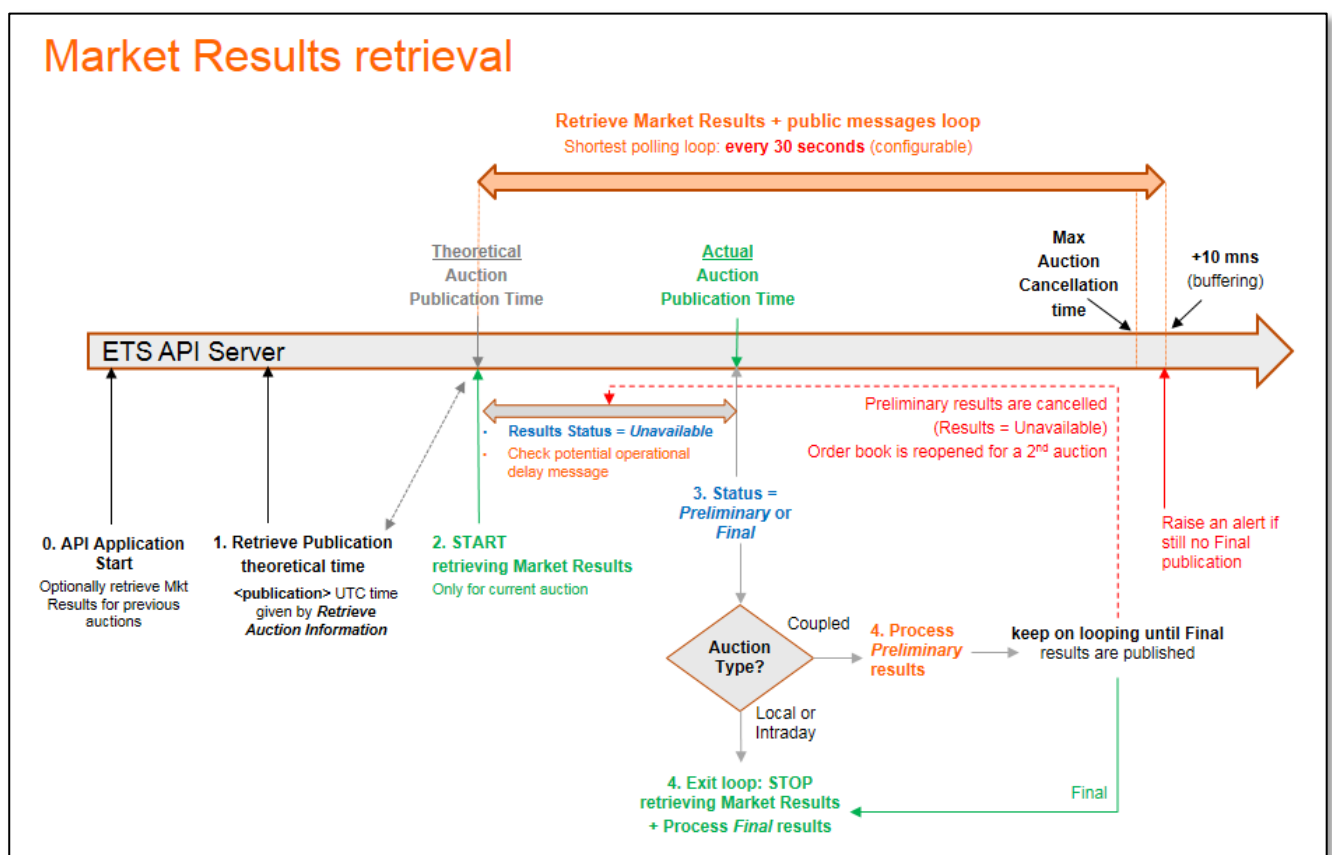
Please make this interval **configurable** in your system.

More details are provided in the attached new version of the **Terms of Reference** document (same policy as described in the March Data News).

This market results enables you to enhance two steps in your ETS API applications:

- **Stop having to rely on a convention to determine whether or not results are published** (March 2019 Data News: “*as long as all Market Clearing Prices equal 0 in the *RetrieveMarketResultsFor*, please consider that results have not yet been published.*”):
 - with version 3.3.1 the status transition indicates when results are published:
 - *Unavailable -> Preliminary or Final*
- **as soon as your application detects the switch to *Final*, it must stop retrieving market results** (results cannot be cancelled anymore).

The diagram below summarizes the logic to be implemented whether you use:



The *Max Auction Cancellation Time* will be available via the API in ETS API v3.4 version.

Note: In general **we recommend to have in parallel to the API application an operational staff** that will check their mailbox until the cancellation deadline, in order to monitor and be prepared for all situations (including a system down situation where the API would not enable to retrieve any information).

3. WSDL: all messages use unique namespaces

Until ETS API 3.2: C# developers were facing a difficulty because 2 messages shared the same "name":

```
<wsdl:message name="OpenAccess_3.2_CancelComplexOrder">
<wsdl:part name="OrderIdentifier" type="OA:ComplexOrderIdentification"/>
</wsdl:message>
```

AND

```
<wsdl:message name="OpenAccess_3.2_CancelOrder">
<wsdl:part name="OrderIdentifier" type="OA:OrderIdentifier"/>
</wsdl:message>
```

Without any modification an error would be raised during runtime (not while generating classes via the class generation tool).

With ETS API 3.3.1: the CancelComplexOrder name has been modified:

```
<wsdl:message name="OpenAccess_3.2_CancelComplexOrder">
<wsdl:part name="ComplexOrderIdentifier" type="OA:ComplexOrderIdentification"/>
</wsdl:message>
```

AND

```
<wsdl:message name="OpenAccess_3.2_CancelOrder">
<wsdl:part name="OrderIdentifier" type="OA:OrderIdentifier"/>
</wsdl:message>
```

For application programmed on other languages: please check the impact of the difference name space.

4. Terms Of Reference Document updates

The published new version of the document integrates policies published in the March 2019 Data News:

- **Login/logout policy**
- and **Market Results Retrieval policy** (the latest being adapted to the new status field available in 3.3.1).

The document contains as well updates regarding the use of:

- **Information requests** (e.g. RetrieveTradableAreas)
- **Order management requests, including error management:** what to do when the server is “busy” (OA 012 error): it is the customer responsibility to check whether the request was processed or not, and to send it again if required.

5. ETS API Conformance tests for 3.3.1

As explained in the March 2019 Data News, **a conformance test is mandatory for all applications, whatever API version is implemented**, to ensure that they all properly implement the Login/logout policy and Market Results Retrieval policy described in the published *Terms Of Reference* document.

The conformance test is mandatory whether you keep on using one of the previous API schemas (2.10, 3.0 or 3.2) or migrate to the new 3.3.1 one.

Conformance tests will take place on **Friday 7 and Wednesday 12 June 2019**.

A further communication will be sent to describe the conformance test procedure.

Old API schemas v2.10 and v3.0 decommissioned in Q4 2019

The old API schemas 2.10 and 3.0 will be decommissioned with ETS API 3.4 in Q4 2019. Should you still use one of these schemas please start preparing the upgrade of your API application to a supported WSDL version, ideally 3.3 to benefit from the new Market Results Status.

API Schema	ETS API 3.3.1	ETS API 3.3.2	ETS API 3.4
API 2.10	Supported	Supported	Decommissioned
API 3.0	Supported	Supported	Decommissioned
API 3.2	Supported	Supported	Supported
API 3.3.1	Supported	Supported	Supported
API 3.3.2	N/A	Supported	Supported
API 3.4	N/A	N/A	Supported

ETS API Simulation environments

For testing purposes EPEX SPOT offers 2 environments. **Please note that simulation 2 environments will be used for ETS 3.3 member tests:**

The ETS Simulation 2 environment is already available with version 3.2 and will be available with ETS 3.3 as of 27 May.

Environment	Simulation 1	Simulation 2
ETS version	3.2.1	3.3.1
Server address	ets-simu1.svpx.epexspot.com port 4443	ets-simu2.svpx.epexspot.com port 4443
API server address	NA	ets-simu2.svpx.api.epexspot.com port 4444
WSDL version	NA	3.3.1 (includes schemas 2.10, 3.0, 3.2, 3.3.1)

Do not hesitate to contact us with any queries on this communication.

Best regards,

SEMOpX