SIOM-AM Interface
User Manual

Ref. MU_InterfazAM-EDGE.docx

Version 1.0
Date: 2021-11-17

CONTENTS

1   INTRODUCTION

This guide describes the requirements of a Market Agent's client station and the necessary steps to start using the Electricity Market's Agent Website.

Generally speaking, the Agent Website will enable sending and checking all necessary information for both the daily and intraday markets' proper operation: sending information on Energy Disaggregation in Physical Units, Disaggregation of open Term Contracting positions, and Available Energies that are going to be engaged in Bilateral Contracts; searching for information on settlements, submitting claims, etc. For this reason, good knowledge of the Agent Website is needed to be able to use it quickly and efficiently.

This guide will particularly emphasize the general aspects of navigation and information access. It will also offer a brief introduction to prior configuration and requirements for the Agent station.

The Agent Website Interface generally presents the following features:

- Presenting the most relevant information at all times, and access to the most used options through **Dashboards**

- Simple navigation based on **drop-down menus**

- **Automatic installation** processes for the components in the client's browser

- Connection security with **strong encryption** in sending or receiving information

- Features for **sending information onscreen and by file**, including digital signatures for data sent in XML format

- **Search Execution Window**, which allows paginating, ordering, and filtering the results, printing them, and exporting them to a file

- Access to the **Download Center**, which includes manual download mechanisms for batches of files, as well as an Automatic Download mechanism that allows unattended downloading of information as it becomes available

- **Editing Bids Through Excel**, which enables editing a bid through an Excel sheet.

2 REQUIREMENTS

This section offers a simplified list of steps that must be carried out prior to accessing the Agent Website without any major issues. For more exhaustive information, please see the "*Setup Guide for the OMIE Information Systems Access Point*" (www.omie.es→Publications).
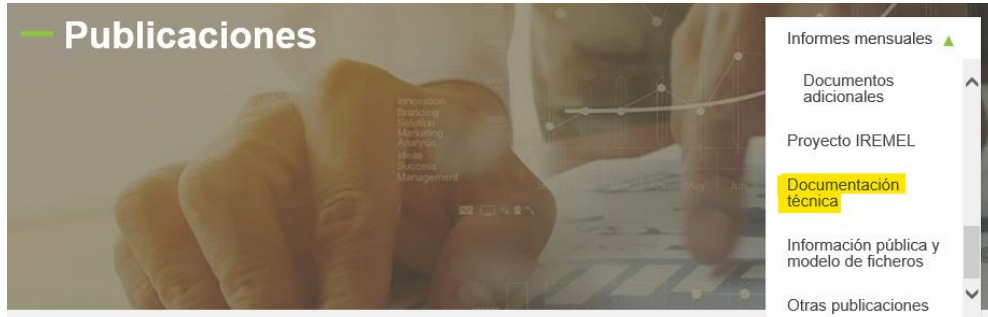

2.1 Software Components

As a prerequisite for accessing the Agent Website, the Fortify application must be installed and running. This application runs in the background. It is responsible for managing the certificates installed on the client station and using the one selected by the agent to sign digital documents securely without any private data from the certificate leaving the client's machine.

To check that Fortify is running, go to the notification area on the Windows taskbar; there, this icon should appear

You can check that it is the version authorized by REE and Omie by right-clicking to show the 'About' window; there, you should see the message highlighted in the image:
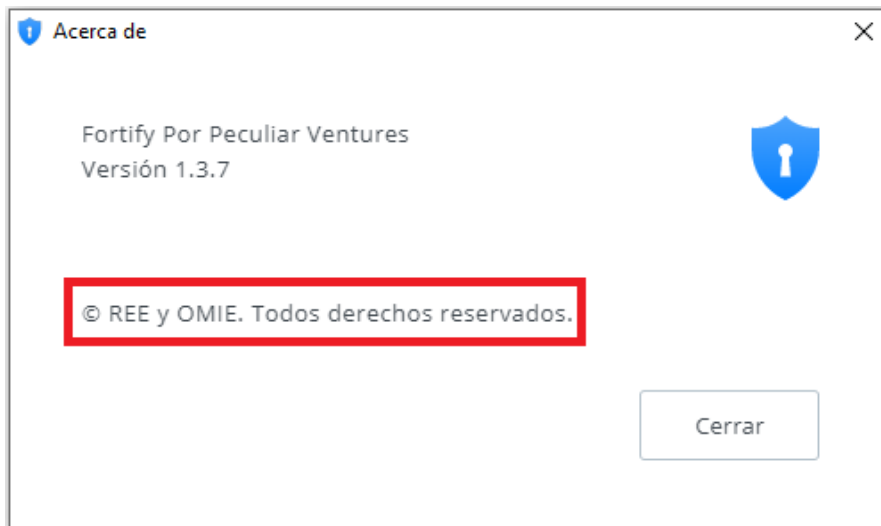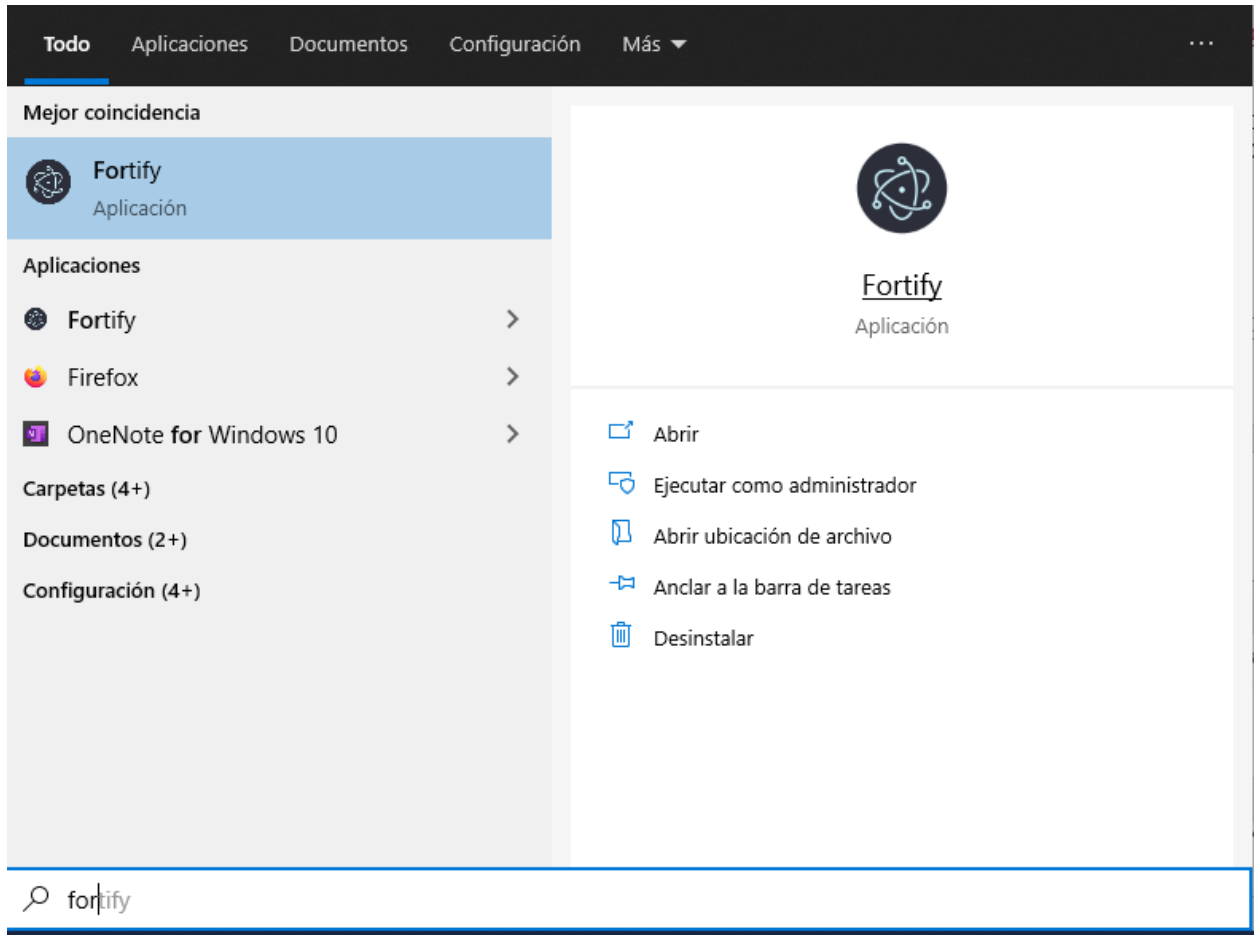

If you can't find that icon in the notification area, you can manually start the application as follows:

1. Using Windows finder, type "Fortify" into the text box.

2. If the application is installed, it will appear as available to run, like in the image shown.
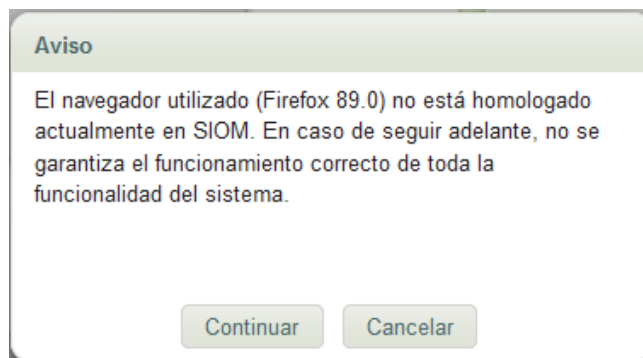

The Agent Website incorporates a mechanism for detecting the main software components installed on the user's station. If a version not supported by the website is detected, access will be prevented, displaying a warning similar to the one below:
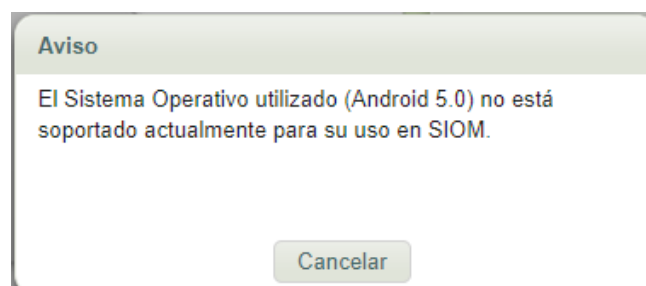
The supported versions of the different components may evolve as new versions or products appear.

In some circumstances, there will be versions that are not officially approved on the website but which may work; however, they may not work optimally or only work with limitations. In that case, the website will indicate this with a notice similar to the one below:

Aviso

El navegador utilizado (Firefox 89.0) no está homologado actualmente en SIOM. En caso de seguir adelante, no se garantiza el funcionamiento correcto de toda la funcionalidad del sistema.

Continuar   Cancelar

In this case, the user may choose to continue accessing the system or cancel it and install a supported version of the component.

2.2   Card Reader (Only for Card Certificates)

To access the OMIE Agent Website, you must have a personal X.509 security certificate, which OMIE issues on Gemplus smart cards or with a file (software certificates). When using card certificates, a smart card reader is needed.

The user can use any reader that's compatible with the PC/SC standard that has the Gemplus software installed. The 'GemSafe Installation Manual,' provided as a separate document, offers detailed information on the supported versions and the steps to follow. It is necessary to have the reader installed and to be able to use the security card with the browser to proceed with the following setup steps for the agent's station.

2.3   Display configuration

The Market's Agent Website was designed for an optimal desktop configuration of 1280x1024 pixels and 65536 colors.

3 NAVIGATION

3.1 Web connection and certificate

Every time the Agent Website (www.mercado.omie.es) is accessed after the browser is started, the certificate used is requested. You must choose the one corresponding to the card inserted in the reader or to the software certificate you want to use from the list shown.
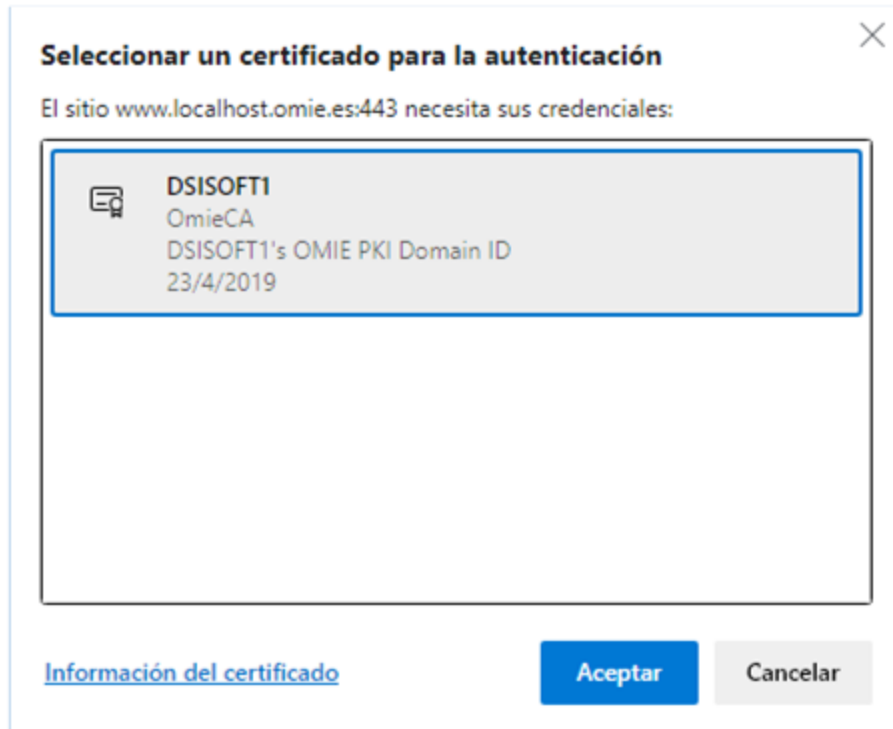
If you choose a card certificate, the PIN for the certificate provided by OMIE, or the one assigned by the user if it was subsequently changed, must be entered.
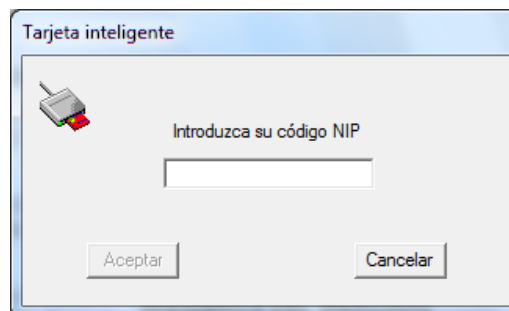
If choosing a software certificate, the browser may also ask for the PIN used when registering the certificate, display a warning to confirm the use of the private key, or use the certificate automatically without the need for confirmation. This behavior depends on how the software certificate was registered in the browser.

Important Note. When using a card for the first time at an agent station, the certificate for the card may not be listed. This requires the user to install the certificate manually so that it is included in the certificate store. See the section' **Registering User Certificates**' in the *Setup Guide for the OMIE Information Systems Access Point* to see how to perform this operation, as well as how to register software certificates.


3.2 Initial Fortify authorization

The first time the system is accessed by each browser, the Fortify application will request authorization to access the certificate store and associate the selected certificate with the Market Website URL and the browser used. To do this, the screen shown below will appear. There, you must verify that the code shown in both windows is the same, and both must be accepted.
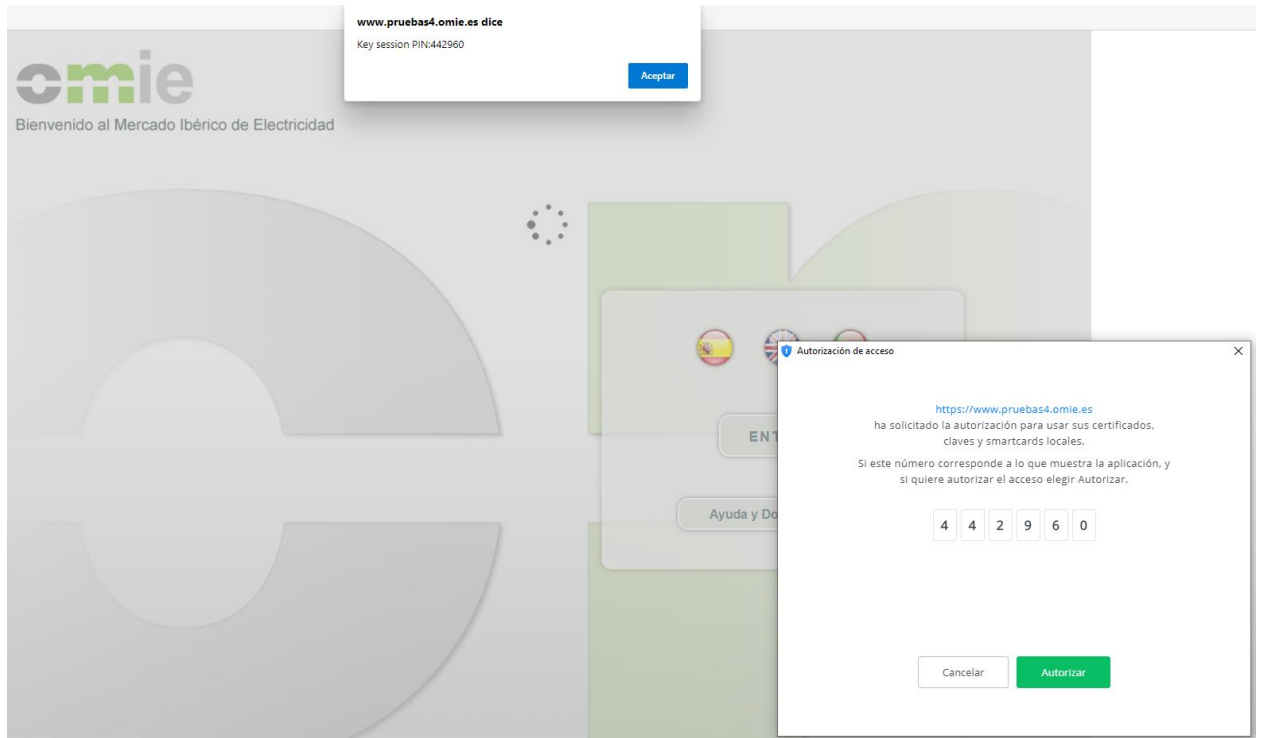
3.3 Main Menu

To access the Market Website once the initial configuration is done, after verifying that the user has the Fortify application and that it has access to a valid certificate, the main access screen will be displayed:
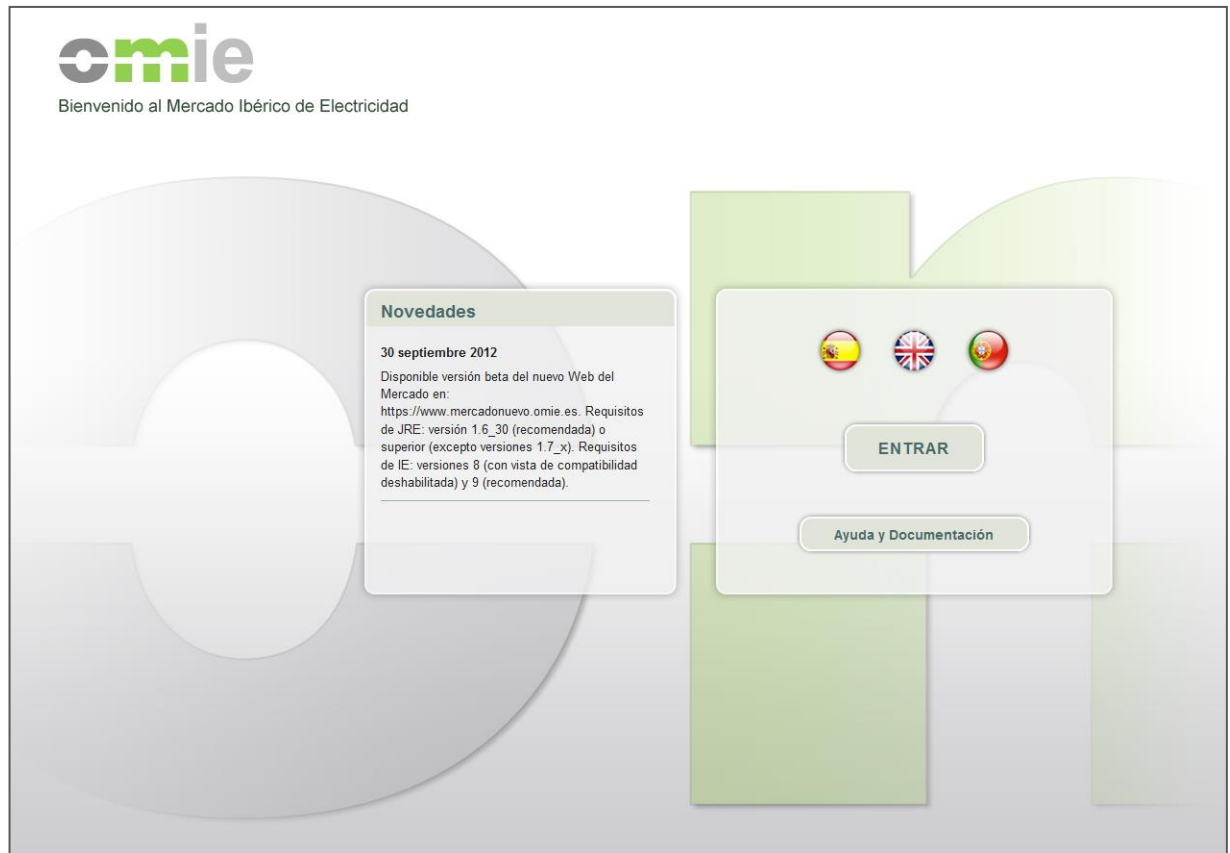
On the **Help and Documentation** page, you can access all the documentation necessary for the Agent that OMIE makes available, including documentation on market operation, data modeling, and information published, User Manuals, and other help topics for access issues.

By clicking **ENTER**, you will access the Main Menu on the Agent Website

3.4 Screen layout

The Agent Website Interface is based on 3 main areas where basic functionalities are grouped.

- The upper area displays information on the market time, message statuses and claims, data on the connected user, and links to static information (help, contact, etc.)

- The menu bar offers quick access to all the options on the website.

- The operational area is where basic information on the sessions and settlements is initially displayed (based on "Dashboards"), where information is sent to the Market Operator (Bids, Disaggregations, Claims, etc.), and where information related to the processes carried out with that information is consulted (results from the different markets, claims resolutions, etc.).

3.5 Menus and dashboards

The menu bar provides access to the different dashboards and extended menus from each section identified (Day-Ahead Market, Intraday Market, Market Settlements, etc.). Clicking the section text provides access to its dashboard; clicking on the inverted triangle next to the text shows the menu for each section, structured in two levels.
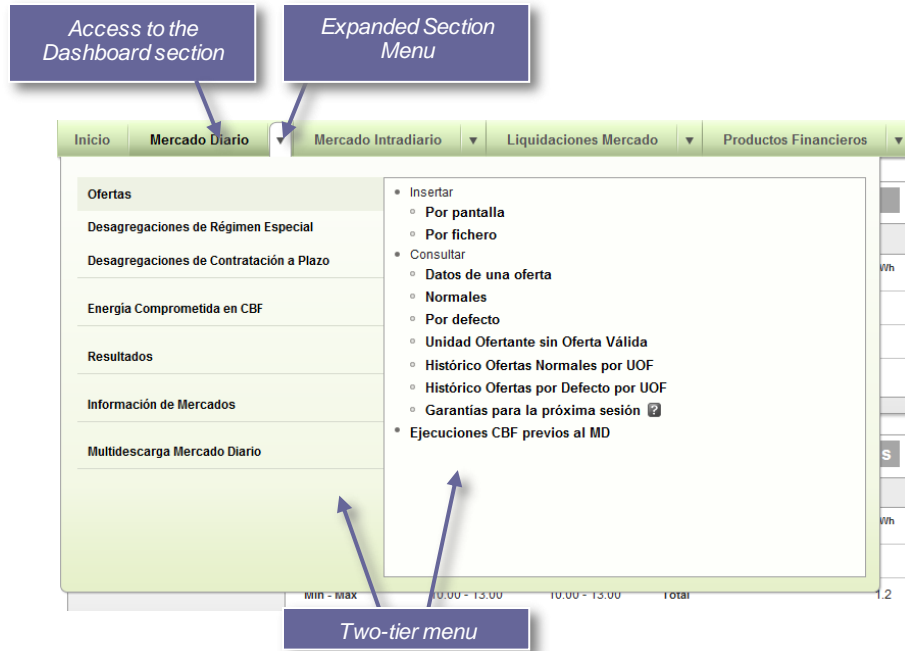
The following screenshot is an example of the Day-Ahead Market dashboard. That is where summarized information for the current session is shown, and it provides access to the most common delivery and search options, depending on the session status.

3.6 Information delivery

3.6.1 Delivery mechanisms

The Market's Website Interface enables sending operational information (bids, disaggregations, energy engaged in bilateral contracts, etc.) using two different mechanisms:

- **Onscreen** – that is, manually specifying each of the fields or informational elements in a form on a web page. In some cases, this operation may also be performed by retrieving data from a previous transaction onscreen, which may be modified onscreen and sent as a new transaction.

- **By file**, so that the user selects a previously generated file from the browser with the information data to be sent, according to the format determined by OMIE. This option enables sending multiple operations specified in the same file in a single action.

Access to delivery operations on screen and in file format is done from the menu bar, for instance, in "Day-Ahead Market / Bids / Insert / By screen" (and similarly for file deliveries and other transactions). This can also be done from the dashboards from the "Insert" drop-down menu located in the corresponding box.

3.6.2 XML and digital signature

In all cases, the delivery format for information is XML, using different predefined blueprints depending on the type of transaction. Likewise, the digital signature of the information sent is used.

The operation generally goes as follows:

- For delivery by file, once the user has selected the file to send, the system performs a series of simple checks and executes the digital signature process of the file before it is sent. To do this, the system will use the same certificate used to connect to the website (and the user must enter the card's PIN if needed). With this procedure, the user creates the digital signature on behalf of the certificate holder. The format of the signed file follows the XML-Signature standard.

- For onscreen submission, after manual editing of the form data, the system performs a series of minimum checks on the validity of the format and completeness of the information, and it automatically generates an XML file with that data, which is digitally signed just as explained for the data in file format.

- Once the information, which will always be a signed XML file, is delivered, it goes through a series of checks on the server (validity of the certificate, validity of the signature, data format, session status, specific checks on each type of operation). These may generate different response screens indicating any errors that have occurred or confirming that the operation was carried out successfully.

3.6.3   Cancellation and withdrawal operations

In all information cancellation and withdrawal operations (bids, disaggregation of term contracts, etc.), the digital signature of the cancellation or withdrawal order is also included. For this reason, once the cancellation or withdrawal order is confirmed onscreen, the system will request the certificate and signing PIN (if applicable), and it will generate a cancellation or withdrawal order in XML format.

Access to cancellation and withdrawal operations is done from the sent data search screens in one of two different ways:

- From the search windows of sent items (for example, "Bids for a Day-Ahead Market session"), by selecting a record and right-clicking to display a menu that includes the option to cancel or withdraw

- From the screen for searching for a bid or term disaggregation that's already been sent by clicking the "Cancel" button shown next to the bid's header data

3.6.4   Checking the XML format

The XML formats for sending information to SIOM are described in the documents:

- Description of the Information Exchange Mechanisms between OM and AM

- Description of the Information Exchange Formats between OM and AM (Volume I, Market Data)

- Description of the Information Exchange Formats between OM and AM (Volume II, Settlement Data)

These formats are based on the XML-Schema standard, which allows specifying the structure of elements and attributes that must be fulfilled in each type of operation, as well as the format of each field and attribute, the repetitions allowed, etc.

SIOM uses standard XML parsers that automatically check the content of the XML file sent by the user against the structure schema that the file must comply follow. This way, a large part of the format checks are performed by generic modules (that is, modules not specifically developed for the types of operation supported by SIOM but for any type of XML document and associated schema).

For this reason, when a validation error occurs that affects the schema, the system also generates a generic error message with the intent to present as much information as possible, including:

- Fragment of the XML file where the error occurred, indicating the exact line where the error is located

- Text that describes the compatibility error with the defined schema

- Location of the error within the hierarchical structure of the XML file. In cases where a hierarchy level includes repeating elements, the ordinal of the element where the error is located is given.

3.7 Search window

All searches will be obtained through a common screen format that's managed from the search window. It appears when any of the searches is pulled up, either from the top menu or from the dashboards. Each time a new search is accessed through one of these links, a new browser window will open containing the selected search. As many windows as desired can be opened at the same time. It looks like this:

A more exhaustive description of the Search Window's functionality, configuration, and use is provided in the document "General Searches. User Manual," which is accessible from the Help section on the Agent Website.

3.8   Editing Bids Through Excel

Sending bids onscreen is assisted by using the option to Edit Bids Through Excel. To pull it up, just click on the button "*Edit Excel Entry*" on the screen for sending bids onscreen (Day-Ahead and Intraday Market).
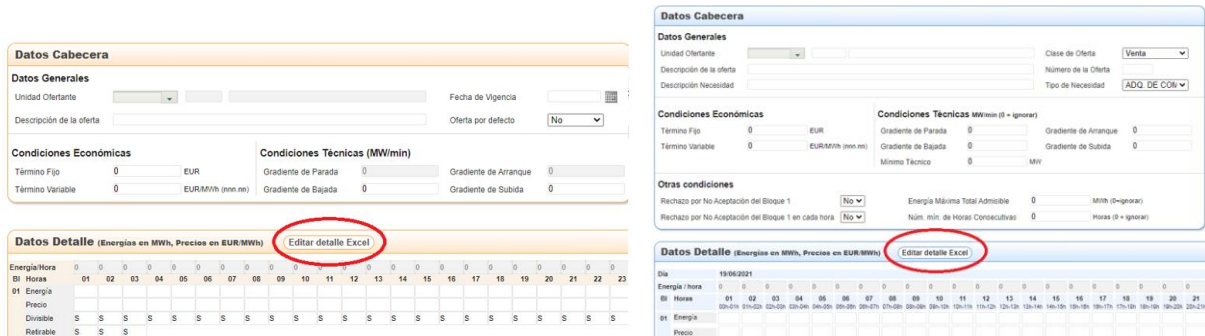
Once you click on it, a new browser tab will open with a grid similar to Excel; there, you can insert data using the functions available in the spreadsheet:
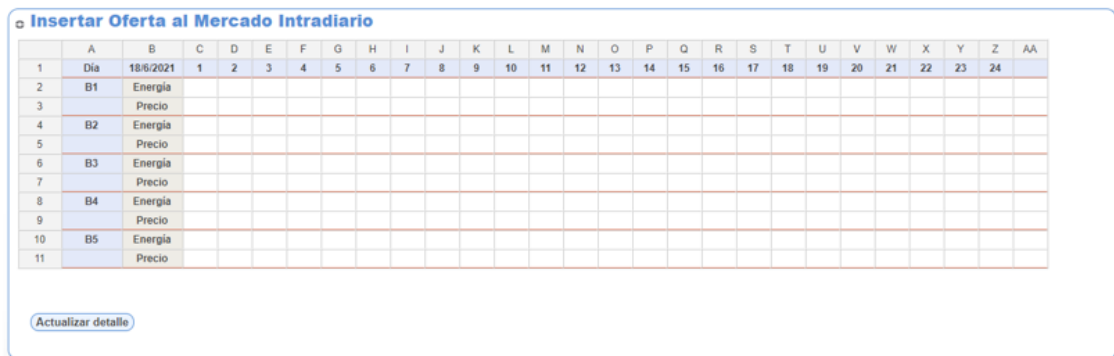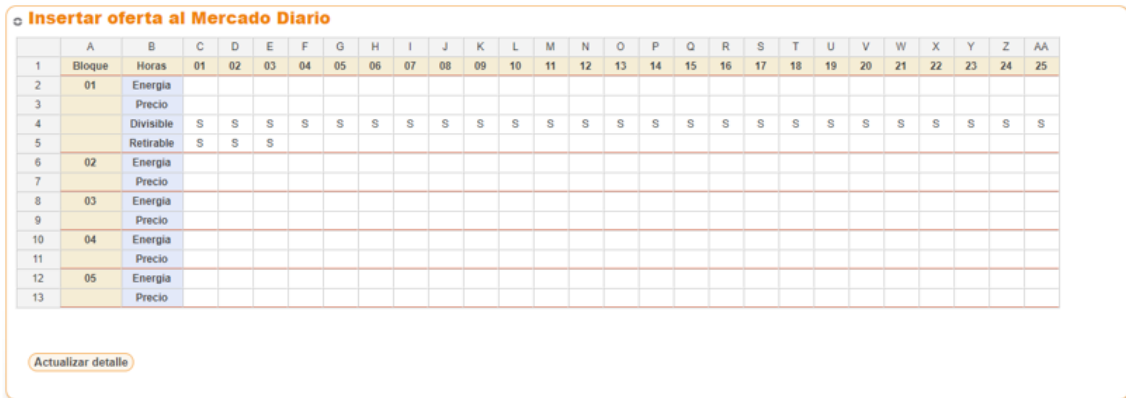
Once data insertion is completed, that information is sent to the browser page by pressing the "*Update entry*" button. At that point, the new tab is closed, and you are returned to the page with the bid, which can be sent to the Market Operator.

For more information on this feature, please refer to the document '*Editing Excel Bids. User Manual*,' which is available on the Market Website.

3.9   Download Center

The Download Center is an application designed to bring together the different mechanisms for downloading market results under the same interface, combining manual download functions with unattended mechanisms.

The Download Center is installed from the Information Download area by clicking on the "Download Center" link. The application runs independently of the browser. This way, the automatic download functions can be left running unattended while continuing to operate on the Agent Website. The application's installation and subsequent updates are done through standard mechanisms of the Open Web Start application. This application must be installed on the user station. This can be done by using the procedures described in the document, "Setup Guide for the OMIE Information Systems Access Point," which is available in the Help section of the Agent Website.

The first time the Download Center is run, it must be set up by choosing what information to download to which directories. Other configurable elements are the location of the Log file and the call to an external module.

A more exhaustive description of the functionality of the Download Center, its configuration, and its use is given in the document "Download Center. User Manual (www.omie.es→Publications).