Information Systems Guide

OMIP

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Version Index

Date	Version	Description of change
2010	1.0	Initial version
2018	2.0	New document version

Contents

1   Introduction

This document is a reference guide for users of OMIP services supporting platforms. The document aims to clarify how technological access to the OMIP Trading system and other ancillary systems is accomplished, as well as their main features. Along the document the following points are highlighted:

1. Specification of access options to OMIP Trading Platform (Trayport), OMIP Auctions Platform (OMIPlus), OMIP Reporting Platform (ORP), OMIP Website and OMIP FTP;
2. Comparison of the different options for access solution in each case;
3. Procedures for access requests and user support;
4. Specification of technical requirements for all of OMIP systems;
5. Description of possible connectivity types to OMIP.

Targeting to clarify points above, the document is structured in 3 sections:
- Systems introduction and their interfaces description (chapter 2);
- Systems access requirements (chapter 3);
- Available connectivity options (chapter 4).

This document and the public ones referenced in it are available on OMIP's website, at the following address: https://www.omip.pt/en/downloads

2   Information systems introduction and their interfaces

OMIP supports its operation on various IT solutions that can be seen as being part of one from two distinct groups:

a.   Main operational platforms; or

b.   Ancillary platforms.

For a general overview on OMIP information systems have a look on diagram 1 below. At his point this diagram gives an overall understanding on how OMIP systems fit together and their available interfaces 1.
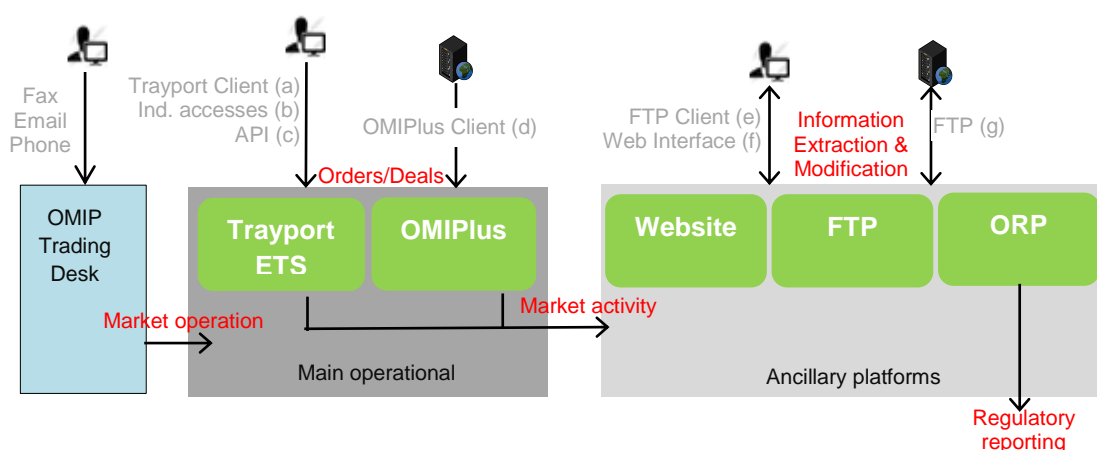

Diagram 1 - OMIP systems and interface architecture.

The five green boxes on the diagram stand for the platforms that support OMIP services and the arrows for the main information flowing between them and between their users.

The main operational platforms group consist in those which directly support OMIP derivatives market. Within are included the Trayport ETS platform as well as the OMIPlus Auctions platform.

The Trayport ETS software is a well-known (widely used) solution in the European energy derivatives markets and OMIP licenses it use for the running of the daily continuous derivatives market. The other platform, OMIPlus Auctions, is a software solution developed by OMIP to run periodic multi and single round auctions for energy related products/needs which are not supported by Trayport ETS.

The second group – ancillary platforms – are other software solutions that support OMIP core business. These are platforms e.g. for the disclosure of market data, the provision of market

information and also for regulatory reporting purposes. Three main solutions may be included in this group: OMIP Reporting Platform (ORP), OMIP website and OMIP FTP service. The OMIP Website and OMIP FTP together support the disclosure and provision of information. The ORP and the same FTP are used to support OMIP and clients on regulatory obligations under REMIT[1] and MIFID 2 / MIFIR[2].

Still referring to Diagram 1 it is possible to understand the normal information flowing process by following the red text labels. Market orders and deals reach OMIP main operational platforms under the supervision of OMIP's Trading Desk (market operation). These orders and deals flow to the ancillary platforms where they, as well as other information related, are made available for consultation and extraction. Using the ORP and the FTP platforms, some market activity information can be complemented to grant their correct and full report, according to the strict regulation in place.

Next subchapters approach on each of OMIP information systems, making a short description of the interfaces marked as (a), (b), (c), (d), (e), (f) and (g) on Diagram 1. Reference to this interfaces letters are made across the document. The questions answered are "when each interface applies as a solution" and "what the procedures are to require access to them".

2.1 Trayport ETS

Trayport Exchange Trading System (shortly ETS) is a powerful, real-time matching engine and frontend trading system designed specifically to enable commodity exchanges to host an electronic marketplace. The extensive flexibility of the system provides exchanges with a single solution for price dissemination, order and deal management and matching of any product in any market. ETS provides a reliable solution for trading, implementing the OMIP derivatives market model and achieving the ultimate goal of greater liquidity.

Access to the OMIP ETS platform can be as of a viewer only type or as of an active market participant type. For the viewers only type, the process of giving access is quicker since there is no need to become a Market Participant. The process is as simple as of signing an

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[1] REMIT – European Regulation nº1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency.
[2] MIFID 2 / MIFIR - Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU and European Regulation Nº 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012.

agreement with OMIP and then choosing the appropriate Trayport interface depending on the access goals.

To access the Trayport ETS as a Market Participant it is necessary to become an OMIP Market Participant and this requires an acceptance process. More information can be found on the on the OMIP Website - https://www.omip.pt/en/content/members-guide – and further documentation referenced there.

Referring to Diagram 1, interfaces (a), (b) and (c) represent all possibilities to connect this platform. Options (a) and (c) are direct connections to the platform and option (b) represent other indirect accesses. Option (a) is the most simple and direct access while Option (c) is an API with viewer only rights. Option (b) stand for different alternatives, Diagram 2, represent full ETS connectivity architecture giving an overview on all solutions.
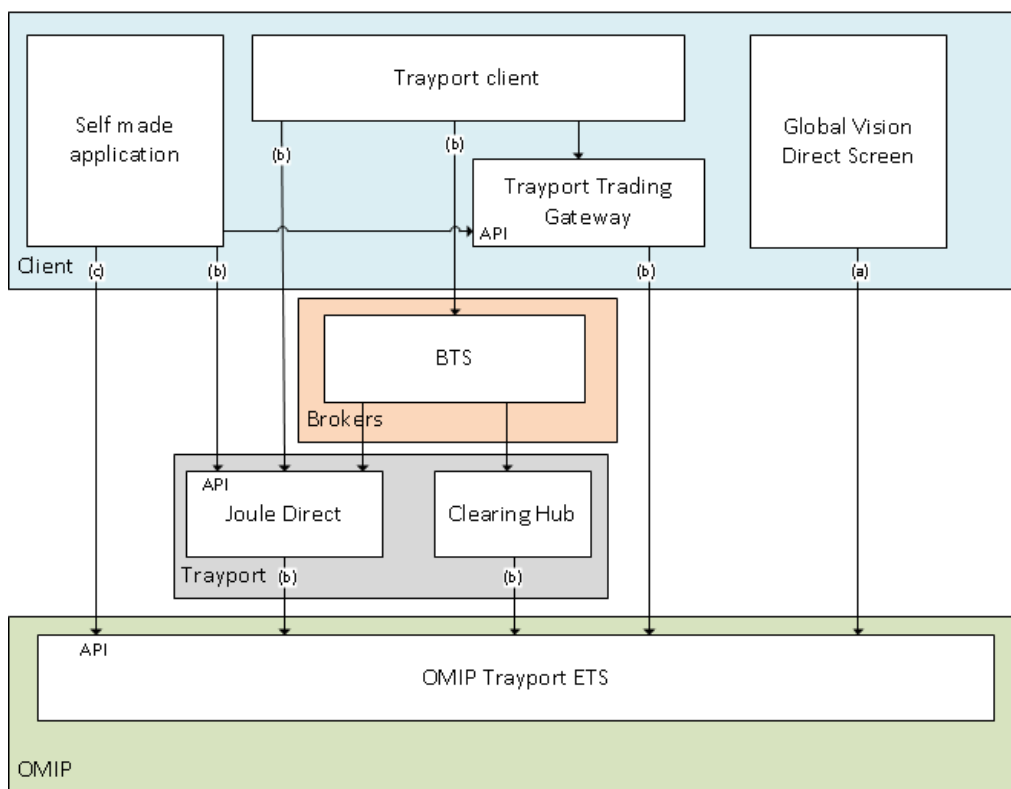

Diagram 2 - Access interfaces to Trayport ETS.

Letters (a), (b) and (c) on Diagram 2 have a direct relation to the same letters on Diagram 1. So the (b)'s on diagram 2 correspond to indirect accesses to the platform, the (a) is the direct screen option and the (c) stands for the viewer API. Next points add detail regarding each of these interfaces.

- (a) Trayport GlobalVision Direct Screen – GlobalVision is a standalone software client that can be installed in Windows computers and enables full functionality according to the member profile on the market. The client application consists of a user friendly interface and connects directly to OMIP ETS frontend.

- (b) Indirect Accesses – This interfaces are the ones which require, at least one, other middle point software before connecting to OMIP. These are solutions offered by Brokers and/or Trayport itself and therefore require an additional agreement with them. Currently Trayport provides Trading Gateway, Joule Direct and Broker Trading Gateway (BTS). All of these solutions also give access to the OMIP Market.

  - o Joule Direct fits in as a SAAS (Software as a Service), meaning that the software is installed on Trayport infrastructure and this software connects to the OMIP Market. Accesses using Joule Direct can make use of a standalone software client or by making use of an API. This is a solution for those who want to write their own application to be active (write permissions) on the market;

  - o The Trading Gateway is a similar solution as the Joule Direct but having the gateway installed on the client infrastructure. This is also a solution for those who want to write their own application to be active (write permissions) on the market. The Trading Gateway provides an API that accepts market actions which will then be set to the OMIP ETS (your program > Trading Gateway > OMIP ETS);

  - o The Broker Trading Gateway is the Trayport solution for brokers which then connect to the OMIP ETS frontend.

- (c) Trayport GlobalVision API – The API interface, provides a programmatic interface for automatic market activity receiving or retrieval and allowing integration of data from it on other applications / systems. The GlobalVision API provides users with a means of writing their own software that works with data from GlobalVision. The API provided directly by OMIP is viewer only meaning it is not possible to participate on the market using this type of connection. The API documentation guide is provided to interested users upon request to the Information Systems department from OMIP.

To request a viewer access to the OMIP Market the Marketing department should be contacted and, as previously referred, an agreement signed. For an Market Participant to request for a new access or access change to the Trayport system the Trading department of OMIP must be contacted and a form fulfilled.

2.2 OMIPlus-A

The OMIPlus-A platform was developed by OMIP to run multi and single round auctions for energy related products. The platform is designed to adapt to different auction models and business rules.

Users can access to auctions by using a standalone client, which can be installed in any Windows computer. On diagram 1 this interface stands for the one marked with letter (d).

Auctions managed by OMIP usually are only open for Market Participants. For these, requests for new accesses and changes are done contacting to the Trading department.

2.3 FTP

The OMIP FTP platform is prepared for accesses with two purposes:

1. To give access to general market information. This type of access is interesting for those who want to retrieve general information regarding market activity and contracts specifications. The data provided to each user of this service is exactly the same. The following reports can be extracted:
     o Futures Market Data;
     o Spot Prices;
     o OMIPDaily;
     o Instrument Contract List.

   These reports are updated on a daily basis. For more information on FTP reports content please see the "OMIP FTP Access Guide".

   Subscription to FTP requires the fulfilment of a subscription form. To request for an FTP access the Marketing department from OMIP should be contacted. They will inform about the formal procedure to be followed and the conditions and terms must be accepted before the access is given. The process can also be started on OMIP's website: https://www.omip.pt/en/content/omip-ftp-service.

2. To support reporting obligations, only intended for Market Participants or ORP users. Each user has its own download/upload area which makes available information that was/is going to be reported by OMIP to a third party.
   Accesses to this area of the FTP must be requested to the Marketing department.

Independently of the purpose of the access, connection to OMIP FTP Platform can be made through any usual FTP platform. It can be reached by a common FTP client (diagram 1, letter (e)) or by the OMIP provided web interface (letter (f)) or yet by a self-created software for automation and own platform integration (letter (g)). Programmatic access can be developed in any language that supports FTP connections like all usual FTP clients. Data is downloaded in CSV format (comma separated values) and can then be transposed into any desired structure.

2.4 ORP – OMIP Reporting Platform

The OMIP Reporting Platform was designed and devolved by OMIP to give a user friendly interface to comply with MIFID2 / MIFIR reporting obligations as well as REMIT (phase 2). Despite both are UE regulations the target costumers of each are distinct.

1. MIFID 2 / MIFIR – OMIP and OMIP Market Participants fall under this regulation and ORP provides functionality for Market Members to provide information that must be sent to national and/or UE regulators.

   Market Members can request access and additional users fulfilling a subscription form and sending it to the Marketing or Trading department of OMIP.

2. REMIT (phase 2) – By REMIT (phase 2) we mean all reporting obligations not included in the standard contracts concept, namely non-standard electricity and gas contracts as well as fundamental data that have to be reported to ACER – the UE Agency for the Cooperation of Energy Regulators. OMIP, as an approved RRM for REMIT reporting has developed a service to help entities which need to comply with phase 2 of the REMIT regulation. ORP provides a web based interface where users can fill fields with correspondent data which is reported to ACER.

   Clients who are interested in this service should contact OMIP Marketing department and fulfil the ORPSetup form and sign a agreement.

The platform has a user friendly web based interface and can be accessed using a common browser. Automation of access can be achieved using the OMIP FTP platform, described above in section 2.3.

2.5 Website

Current version of OMIP Website was released on early 2018 and provides public information regarding OMIP SGMR and how it is placed in the OMI Group. The website also includes an

area with general information regarding Members and Members Committees, OMIP Products and Services provided by the company.

Furthermore, the website makes available information regarding the energy market, namely:

3. Tables and graphic charts with spot prices and volumes traded (on OMIE).
4. Tables and graphic charts with information regarding OMIP market activity.
5. Other information regarding market activity which must be published under the MIFID II regulations
6. Market Window – a view over OMIP Market in, close to, real time.

There is also a download section where content can be downloaded to files in different formats: csv, xls and pdf, some of them inside an archive (zip). The type of information available for download is:

- Market Data: information regarding market activity as Market Bulletins and the OMIP Daily (Iberian, Non Iberian, Gas).
- Trading Info: information regarding the trading market like calendars, trading times, instrument lists and the price list.
- Products: products technical specifications and contractual clauses.
- OMIP Rules: Market rules as rulebook, instructions, notices and code of conduct.
- Mibel Regulation: Information regarding MIBEL Agreement.
- Registration Forms: OMIP Member registration forms.

Most of the information available on OMIP website is free to view but some of them require a login which any user is free to do by himself using a valid email address. Some specific contents, as the Market Window and access to the FTP Service require a subscription.

OMIP website was developed to be accessible using most common browsers and is also prepared for mobile accesses. To access OMIP webpage this link should be used:

https://www.omip.pt.

3   Systems Access Requirements

Each platform has its own access requirements. Some of the requirements were already referred on the previous section but in the following topics they are listed together and further detailed for each of OMIP platforms.

3.1   Trayport ETS access requirements

According to the analysis previously made to Diagram 2, Trayport has three distinct access methods: Direct Screen, Indirect Accesses and API. To all of them the following access requirements apply:

- **Access requirements (viewer only):**

  o   Sign an agreement with OMIP;
    OMIP Marketing department will send you the proposed agreement clauses under request. They can also clarify regarding prices but it is also directly on the OMIP Price list (see website download section).

  o   Have a valid username and password;
    The request for users is made by fulfilling the G02 form and sending it to the Trading department.

- **Access requirements (participant):**

  o   Be a market member of OMIP;
    More on how to become an OMIP member can be found on OMIP Website or by request with OMIP Marketing department. For viewer only features a simple agreement is enough.

  o   Have a valid username and password;
    The request for new users is made by fulfilling the G02 form and sending it to the Trading department.

The following technological requirements apply for Direct Screen and API accesses. For Indirect Accesses they only apply when using Trayport Trading Gateway. The technological requirements for other types of Indirect Accesses depend on the Trayport or Broker service and must be outlined directly with the service provider.

- **Technological requirements:**

    o A connection to OMIP systems (see chapter 4 for details on this).

    o Available access to destination: trading.omip.pt;

    o Available access to Ports: 11997, 12997, 12995, 80, 443 and 13997;
    Special care that no firewall, anti-virus or any other packet sniffer blocks accesses to the given destination and Ports.

    o For direct screen access: this type of access can be completed using any computer with Windows Operating System where the client (GlobalVision is installed). The Trading department of OMIP can provide the automatic installer upon request by any market participant. To install the ETS Client you need, at least:
        ▪ Computer with Windows Vista Business or Windows 7 Operating System and Microsoft Internet Explorer version 6 or higher;
        ▪ Administrator rights on the computer;
        ▪ Accept the installation License Agreement;
        ▪ 2GB RAM;
        ▪ 2GHz CPU Pentium class;
        ▪ 20MB free disk space.

    o For API access: in order to use the API, the following software must be installed on the machine running the API:
        ▪ Microsoft Windows 2003, Microsoft Windows NT, Microsoft Windows 2000, or Microsoft Windows XP;
        ▪ Microsoft XML Parser version 6.0.

The API is implemented as a COM (Component Object Model) component. It therefore supports any development languages that support COM. The API has been tested with success in the following languages: ASP, C++, JavaScript, .Net, VBScript, Visual Basic and Visual Basic for Applications.

o For indirect accesses: the technological requirements will vary on the type of connection and the agreement made with the third party (Trayport or Broker).

3.2 OMIPlus access requirements

The requirements for accessing to OMIPlus Auction platform are the following:

- **Access requirements:**

  o It depends on the type of auction that is being held, but usually auctions are open only for OMIP Market Members;

  o Have a valid username and password;
  The request for new users is made directly by email to the Trading Department of OMIP. This can also different on some specific Auctions;

- **Technologic requirements:**

  o A connection to OMIP systems (chapter 4 for details on this);

  o Available access to destination: auction.omip.pt;

  o Available access to Port: 443 (https) and 80 (http);

  o To install the OMIPlus Client you need, at least:
    - A Windows Operating System computer with .Net Framework installed;
    - Administrator rights on the computer;
    - 20MB free disk space;

- 2GB RAM;
- 1x2GHz CPU.

3.3 FTP access requirements

The requirements for accessing OMIP FTP are described next. Technically the requirements are equal as for most default FTP platforms.

- **Access requirements:**

  - For market data extraction: signing the FTP Server subscription model (Model G05);

  - For reporting: be a reporting service client.

    For REMIT Phase 1 information access Model 1 contract and a REMIT Reporting Registration form must be fulfilled and signed.
    For REMIT Phase 2 access a REMIT Phase 2 contract and ORPSetupForm must be fulfilled and signed.
    For MIFID 2 accesses the OMIP MiFIDII/MIFIR Static Data and Subscription Form must be fulfilled and signed.

  - Have a valid username and password;
  FTP passwords are automatically generated under security rules.

- **Technologic requirements:**

  - A connection to OMIP systems (chapter 4 for details on this);

  - Available access to destination: ftp.omip.pt;

  - Available access to Port: 443 (https), 8021 (ftps) or 8022 (sftp);

  - A functioning FTP Client, Web Browser or software which enables connection to a FTP platform;

3.4 ORP access requirements

ORP Platform is accessed by web and does not have any special requirement so the technical ones listed below are the ones applied on most Internet websites.

- **Access requirements:**

  - The access depends on the reporting service subscribed.
    For REMIT Phase 2 access a REMIT Phase 2 contract and ORPSetupForm must be fulfilled and signed.
    For MIFID 2 accesses the OMIP MiFIDII/MIFIR Static Data and Subscription Form must be fulfilled and signed.

  - Have a valid username and password;
    The password is self-defined on the first access by a unique, one time link provided by email address. The email address is also used as username.

- **Technologic requirements:**

  - A connection to OMIP systems (chapter 4 for details on this);

  - Internet Web Browser;

  - Available access to regular https port: 443 (https);

3.5 OMIP Website access requirements

OMIP Website does not have any special requirement so the ones listed below are the ones applied on most internet websites.

- **Access requirements:**

  - For access to general information there are no access requirements since that information can be accessed with or without user login to the Website;

- o Some content as OMIP Daily's and Instrument Contract Lists require a login account which can be made autonomously by any user.

- o There are some contents which require an active subscription to a product on the Website. Subscriptions can be triggered autonomously by any user following instruction on the website.

- **Technologic requirements:**
    - o A connection to OMIP systems (chapter 4 for details on this);
    - o Internet Web Browser;
    - o Available access to regular https port: 443 (https);

4 Connectivity to OMIP

Connectivity to OMIP systems can be achieved by 2 distinct ways: an internet connection or a leased line. Both give access to all OMIP systems so the choice between best option is not system dependent. The first one is definitely simpler to obtain but the leased line guarantees connection availability independent from public networks.

The following table resumes differences between the connection options:

Connection	Leased Line	Internet
Trayport	**Yes**	**Yes**
OMIPlus-A	**Yes**	**Yes**
FTP	**Yes**	**Yes**
ORP	**Yes**	**Yes**
Website	**Yes**	**Yes**
Implementation time	**Usually over 1 month**	**Not required**
Access type	**Dedicated**	**Shared (public)**
Cost	**Setup and Annual fee***	**Free of charge**

* Please refer to OMIP Price List

The differences between internet connection and a leased line consist in the implementation time, access type and costs. Further description on each solution, requirements and advantages/disadvantages for both are analysed next.

4.1 Internet connection

Clients that intend to connect to OMIP Systems by an Internet Connection, should have a link to an Internet Service Provider (ISP) with an appropriate bandwidth for the intended use. Suggested minimum bandwidth is at least 2 Mbps.

OMIP systems are connected to the Internet with a dedicated bandwidth and in peak situations a higher value of bandwidth is available for the connection. Anyway with an Internet connection access to the systems is shared with other users and that is a disadvantage for this type solution.

Since nowadays all companies have already an Internet connection this usually does not require any implementation time. Be aware that sometimes a special port has to be opened to allow connectivity to a specific system.

4.2 Leased line

Connection to OMIP by leased lines grant a dedicated bandwidth with a constant value.

Leased line has an initial setup and an annual fee. The requirements to establish the line are:

1) First the model **G01 - Trading / Clearing Systems Access Technology** must be fulfilled and delivered to OMIP Marketing department;

2) Every member is free to have his preferred line supplier;

3) Be aware of the following technical requirements for the delivered line:
   o UTP cable
   o Address range: 2 IPs
   o Capacity to NAT to OMIP compatible network (not always necessary)
   o The line end has to be delivered to OMIP's datacentre address (to be provided during the setup process)
   o On a disaster situation, OMIP will recover to a disaster recovery datacenter. If wanted, another line can be delivered there (address to be provided on request):

Please notice that it is important to communicate the technical requirements on time to the line supplier.

4) The interconnection network type between dedicated line supplier and OMIP systems must be communicated;

5   Contacts

Any problem or support needed for meeting the logistic requirements can be forwarded to OMIP Trading or Marketing departments who will be happy to help in these questions.

- Marketing direct phone number: +351 21000 6017;
- **Marketing** email address: marketing [at] omip.pt;
- Direct Trading desk recorded **phone** number: +351 21000 6010/11
- Trading desk **email** address: trading [at] omip.pt

Questions related with handling and operating the Trayport or OMIPlus-A platform should be made to Trading department and similar problems with the website, ORP and FTP platforms should be made to the Marketing contacts.

Any problem or support needed for meeting the technologic requirements can be forwarded to Information Systems department who will be happy to help in these questions:

- Direct **Information Systems** email address: IS [at] omip.pt

Questions related with leased line issues should be made to the Information system email.