

User documentation



Mobile IMP Sandbox

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List of Abbreviations

Abbreviation	Meaning
CS OTE	Central system OTE
OTE	Company OTE, a.s.
PC	Personal Computer

1.1 Creating mobile access request

- To create Mobile Access request the access to portal CS OTE (<https://portal.sand.ote-cr.cz/otemarket/>) with valid certificate is required. This is either by the user requesting access or by the **RMP master data administrator**. In addition, on-line access for mobile devices is essential (Wi-Fi, GPRS, ...).
- The basic method is **Direct activation** - 1.1.1 with immediate access from the mobile application. This method is applicable to an already existing user with a valid certificate who will establish access for himself.
- Installing the application on a your mobile device:

a) Applications for Android:

- launch the application **Google Play** on a mobile device



- search OTE IMP Sandbox or use QR code:
- download the application to your mobile device and install it



b) Applications pro iOS:

- launch the application **App Store** on a mobile device.



- search OTE IMP Sandbox or use QR code:
- download the application to your mobile device and install it



Direct activation is possible for persons registered in the CS OTE portal. Roles with the roles listed below:

Roles related to the application IM Power application		
Passive access	- Access to OTE IM Power via mobile application (Přístup k VDT elektro prostřednictvím mobilní aplikace)	(automatically when entering IMP)
	- Access to the IM Power trading screen (Přístup k obchodovací obrazovce VDT)	(automatically when entering IMP)
	- Access to OTE IM Power via mobile application (Přístup k VDT elektro prostřednictvím mobilní aplikace)	(automatically when entering IMP)
Active access	- Access to the IM Power trading screen (Přístup k obchodovací obrazovce VDT)	(automatically when entering IMP)
	- Submitting offers on IM Power via mobile application (Vkládání nabídek na VDT elektro prostřednictvím mobilní aplikace)	(role must be added by Administrator)
	- Access to reports (Přístup na reporty)	(automatically when entering IMP)
Přístup na reporty - Access to OTE reports (Přístup na reporty OTE)		(automatically when entering IMP)

Note: Administrators see roles in people that they can assign / remove only.

- Another option is **Activation by the administrator** - 1.1.2 (person with *RMP Administrator* role). It is also applicable to users who do not have a valid certificate in CS OTE provided that the activating administrator has a valid certificate registered in CS OTE.
- Using IM Power application is not possible without transferring the certificate from CS OTE (description of certificate transfer is stated in chapter [Transfer of Signing Certificate to the mobile device](#). If the certificate is used on a Token or other hardware repositories, the certificate cannot be exported and the private version (*.p12) of the certificate must be used for export ([1.2.1](#)).

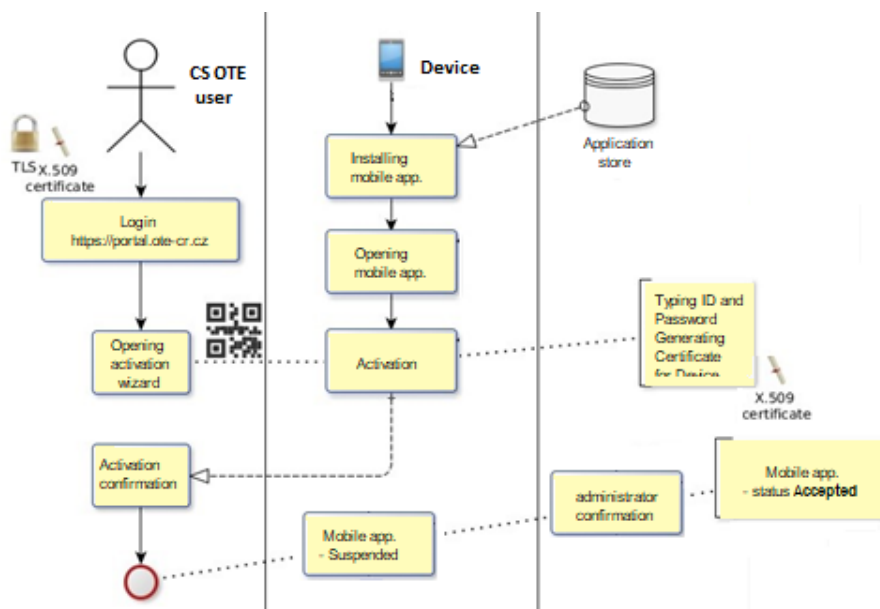


Fig. 1 – Mobile access request creation scheme

1.1.1 Direct activation with access to CS OTE portal

- To create a mobile access by direct activation process, you must first log in to the CS OTE web portal (<https://portal.sand.ote-cr.cz/otemarket/>).
- Menu **Registration** choose **Mobile access – Device management**.

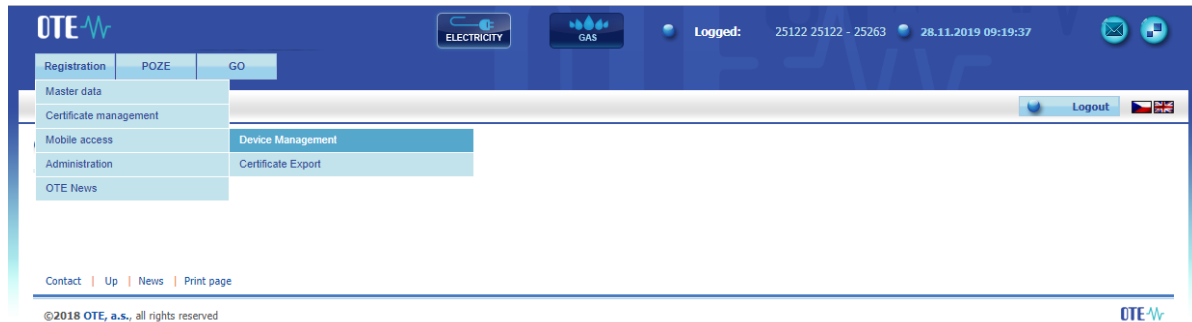


Fig. 2 – Direct activation – Web portal CS OTE – Device management

- Now press the button **New Activation**. You will see Device Detail (Fig. 3), where your user account will be listed in the Person ID. If you have the *RMP Data Manager* role, you can click on the Person ID and select another person from your company under which an editable email will be listed.
- To start activating your mobile device, click the **Activation Wizard** (Fig. 3).

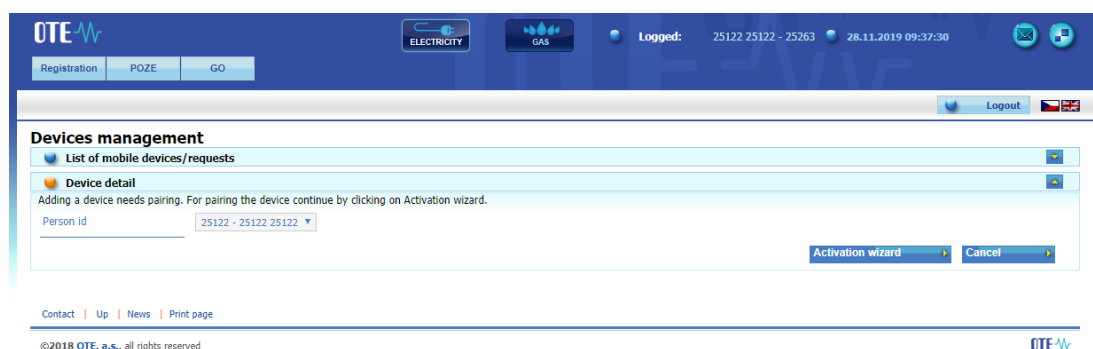


Fig. 3 – Direct activation – Web portal CS OTE – Activation wizard

- After pressing the **Activation Wizard** button a page with generated QR code will be displayed for activating Mobile device:

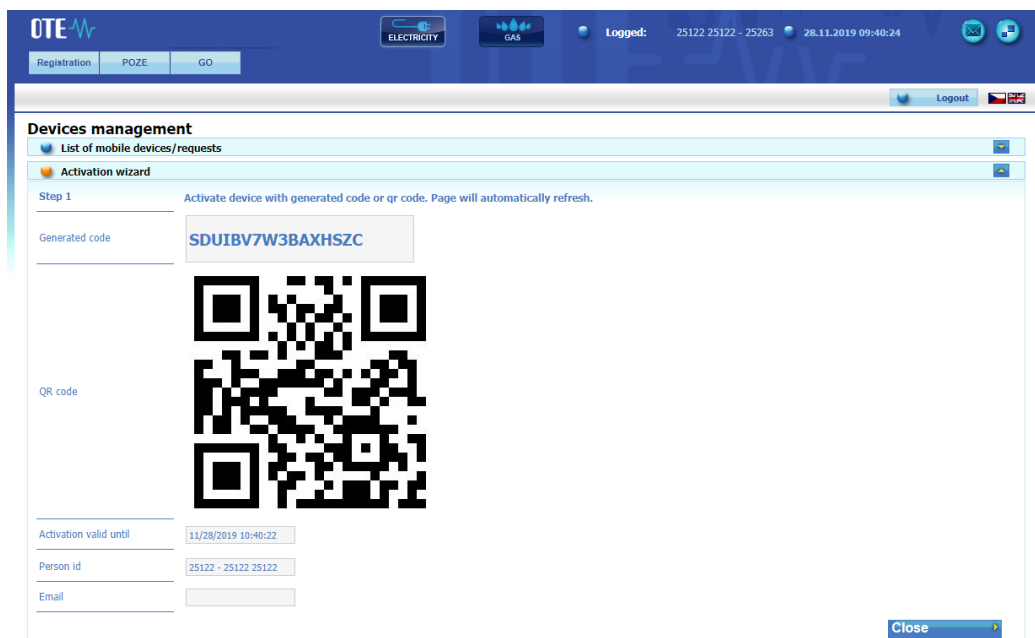


Fig. 4 – Direct activation – Web portal CS OTE

- Now you need to transfer your activation QR code to your mobile device until certain time, which is listed in the field **Activation valid until** (Fig. 4).

Mobile device - Mobile Application OTE IM Power

- Launch OTE IM Power application on your mobile device.
- If you start a newly installed application, you are asked to agree to the License Terms (Fig. 5). The Licence is necessary to confirm otherwise access the application is not be allowed:

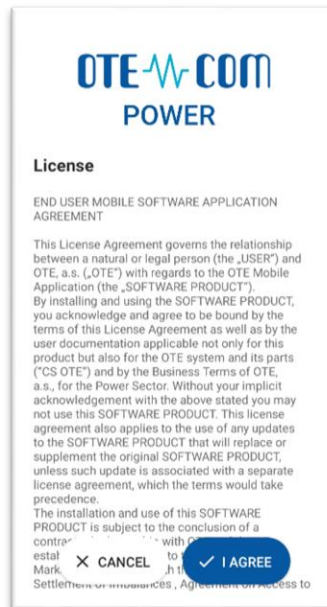


Fig. 5 – Acceptance of license terms

- The User profiles screen is then displayed (Fig. 6 –), where we click **New Profile**.

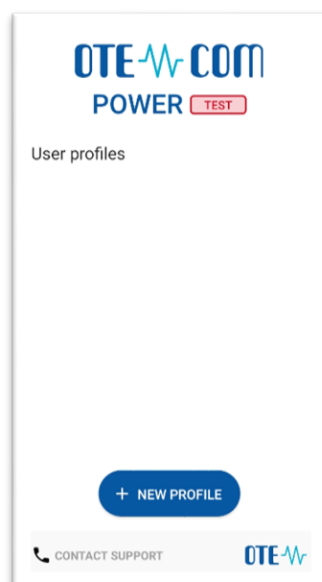


Fig. 6 – Direct activation – Mobile app – Login screen

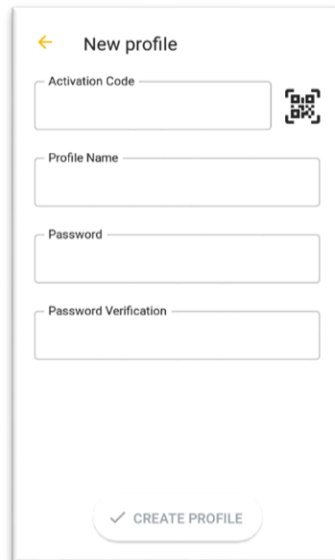


Fig. 7 – Direct activation – Mobile app – Account information

- Enter the generated QR code in the **Activation code** field.

This code can be detected by the camera or entered manually:


- Press . Your mobile device's camera will start (Fig. 8). Point the camera at the QR code screen. The mobile device records the code, which is usually reflected in the device's vibration.




Fig. 8 – Direct activation – Mobile app – Activation code

- A second option is to type the **Activation Code** itself (located on CS OTE web portal) to the field **Activation code**.

Device activation

Activate device with generated activation code or qr code.

Activation code: EV5VDCP4GOVA7PB2



<
New profile

Activation Code
EV5VDCP4GOVA7PB2

Profile Name

Password

Password Verification

✓ CREATE PROFILE

Fig. 9 – Administrator Activation – New profile – Typing QR code

- Enter a name for the new profile in the **Profile Name** field.
- Create a **Password** that contains at least 4 characters and repeat it in the **Password field again**. The password you enter is used to secure your profile and certificate against unauthorized use.
- Clicking **Create profile** (Fig. 7) you create new, not yet approved profile in the IM Power app. (Fig. 10 –).

Profile Activation

Profile name
exam

Registration status
INACTIVE

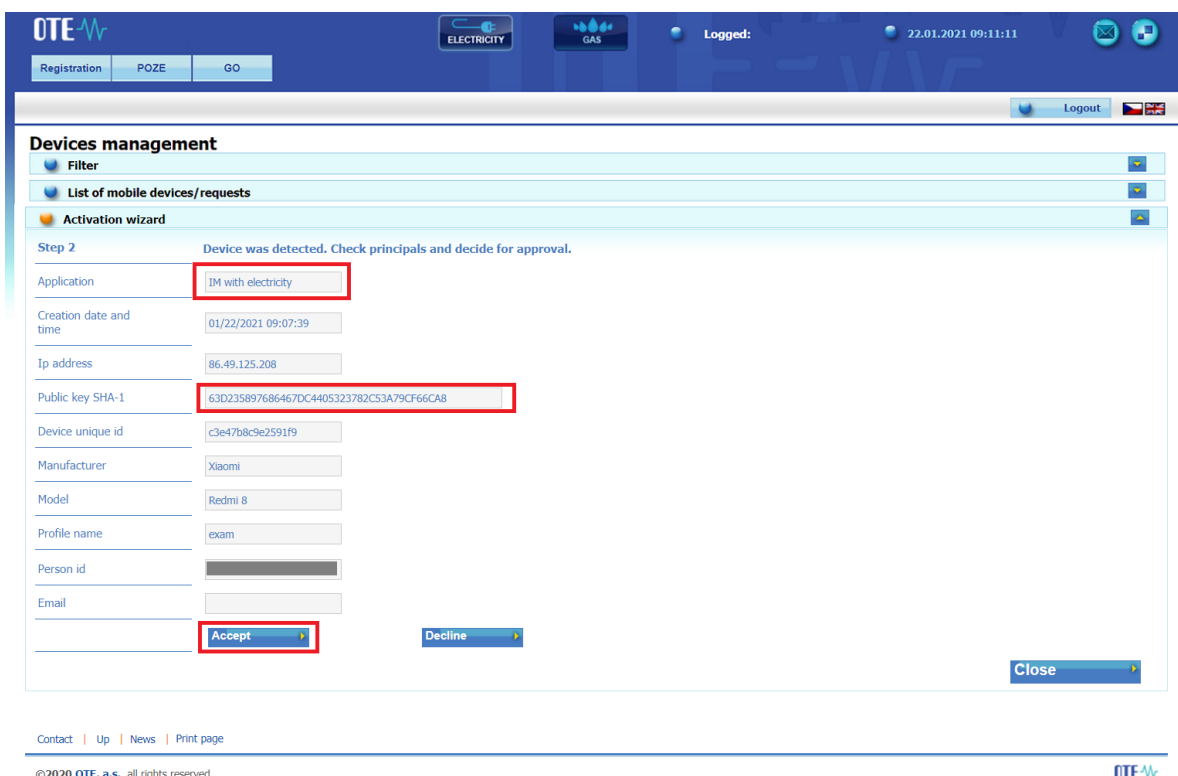
Info
Profile is not active, finish registration at CS OTE web portal

Hash
63d235897686467dc4405323782c53a79cf66ca8

X CLOSE

Fig. 10 – Direct activation – Mobile app – Created Profile

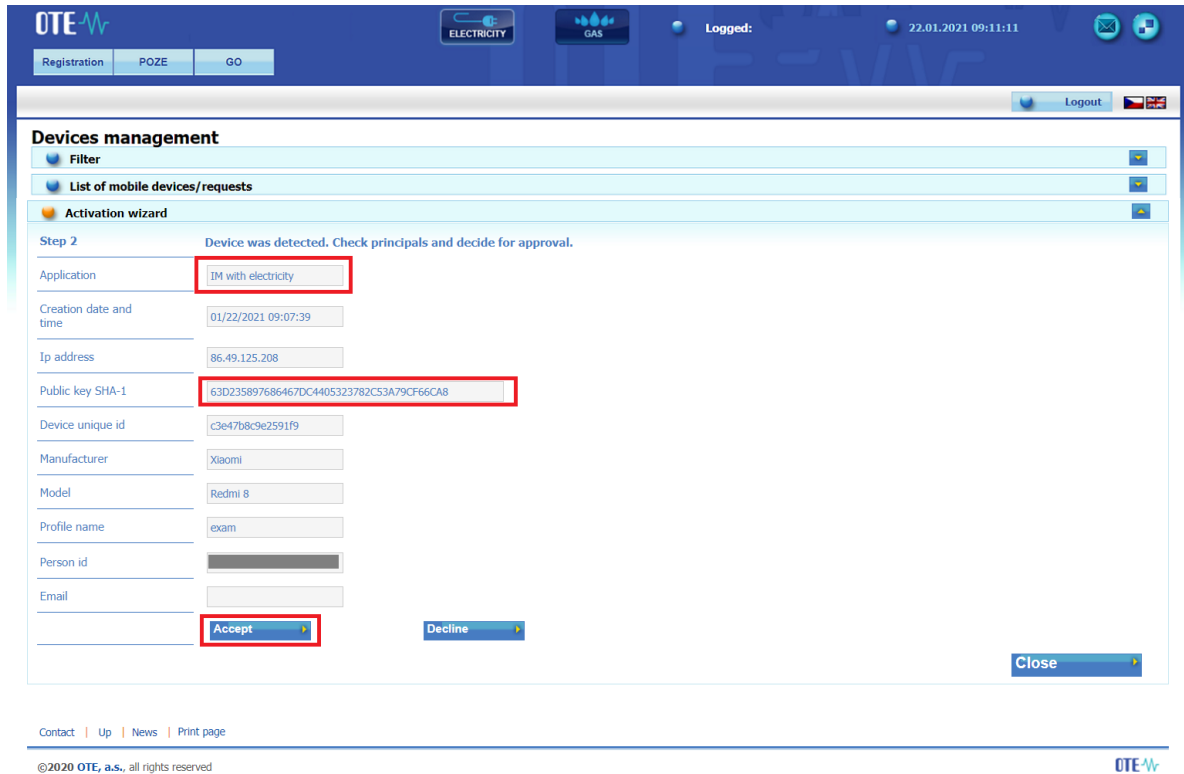
- After you **create a new profile** on a mobile device, the Activation Wizard page on the web portal automatically goes to a point that requires **accepting** or **rejecting** the link for that mobile Device to this account on CS OTE.
- The item **Application** on the screen of CS OTE could be type of **IM with electricity**, **IM with Gas** or **Renewable resources** depending on the type of mobile application used to create the profile.



The screenshot shows the 'Devices management' section of the OTE web portal. Under the 'Activation wizard' tab, 'Step 2' is active, indicating a device was detected. The 'Application' field is set to 'IM with electricity'. Other details include a creation date of 01/22/2021 09:07:39, IP address 86.49.125.208, and a public key SHA-1. Device information shows it's a Xiaomi Redmi 8 with profile name 'exam'. At the bottom, there are 'Accept' and 'Decline' buttons, with 'Accept' being the primary action.

Fig. 11 – Direct activation – Web portal

- It is recommended to check if that the red-framed codes in (Fig. 10) and (



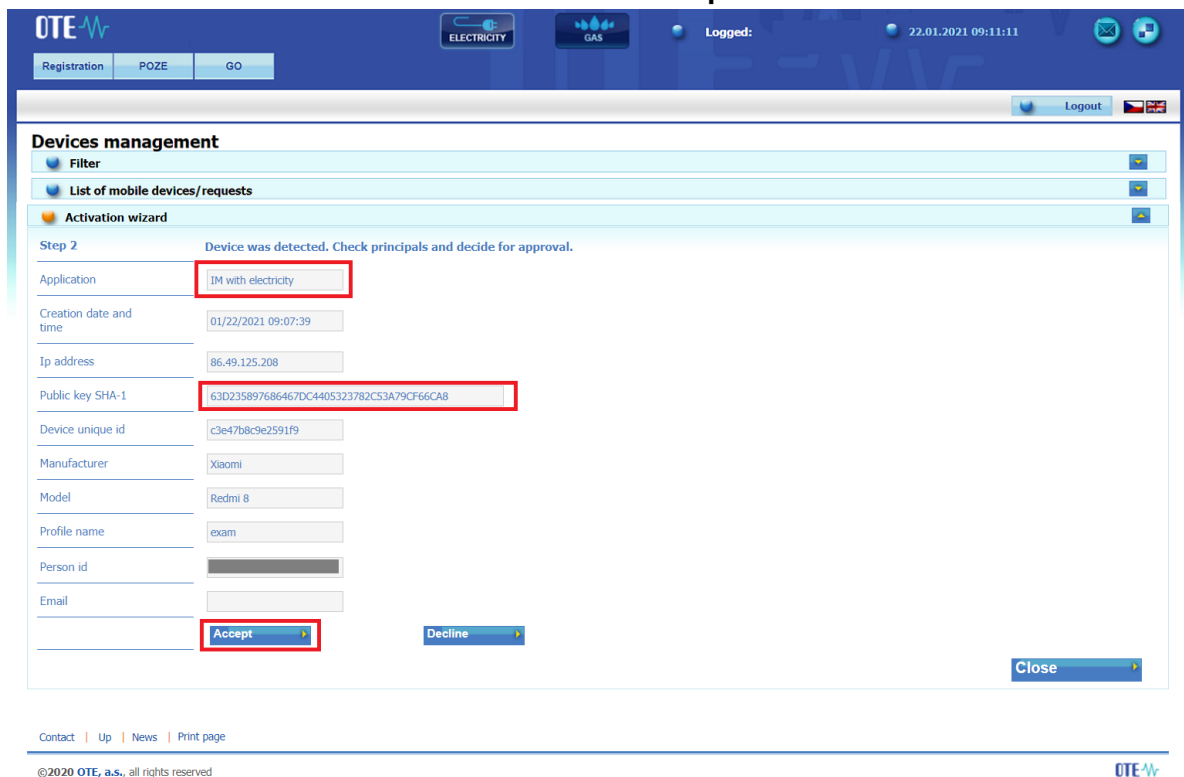
The screenshot shows the 'Devices management' section of the OTE web portal. Under the 'Activation wizard' tab, 'Step 2' is active, displaying the message 'Device was detected. Check principals and decide for approval.' The form contains the following fields:

- Application: IM with electricity (highlighted with a red box)
- Creation date and time: 01/22/2021 09:07:39
- Ip address: 86.49.125.208
- Public key SHA-1: 63D235897686467DC4405323782C53A79CF66CA8 (highlighted with a red box)
- Device unique id: c3e47b8c9e2591f9
- Manufacturer: Xiaomi
- Model: Redmi 8
- Profile name: exam
- Person id: [redacted]
- Email: [redacted]

At the bottom of the form, there are two buttons: 'Accept' (highlighted with a red box) and 'Decline'. A 'Close' button is located at the bottom right of the wizard.

- Fig. 11) are the same on the mobile device and in the CS OTE web portal.

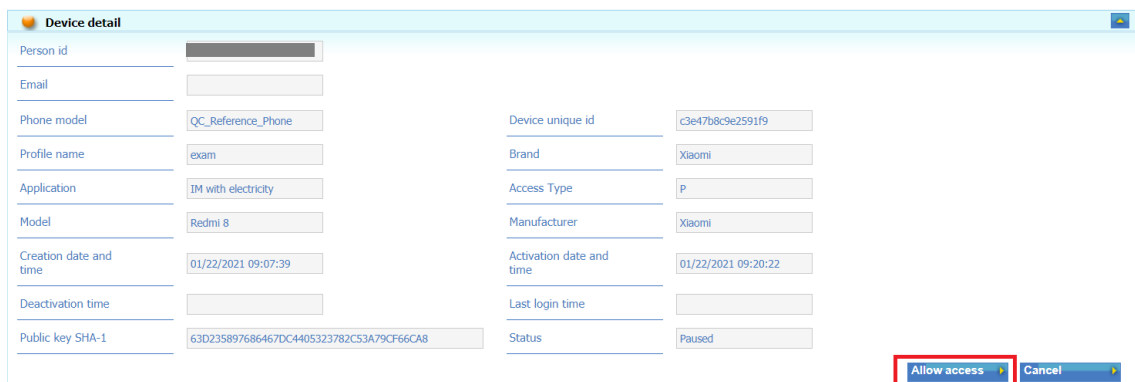
- Click **Accept**



This screenshot is identical to the one above, showing the 'Activation wizard' for a mobile device. The 'Accept' button is highlighted with a red box.

- Fig. 11) and sign with certificate.

- After pressing the **Accept** button and confirming by **signature** the mobile device is paired and from now is clearly identifiable for CS OTE. Now your account is in the "**Suspended**" status and your mobile device can't sign in to the mobile app yet. CS OTE Portal now displays **Mobile Device Detail** (Fig. 12 –)



Person id		Device unique id	c3e47b8c9e2591f9
Email		Brand	Xiaomi
Phone model	QC_Reference_Phone	Access Type	P
Profile name	exam	Manufacturer	Xiaomi
Application	IM with electricity	Activation date and time	01/22/2021 09:20:22
Model	Redmi 8	Last login time	
Creation date and time	01/22/2021 09:07:39	Status	Paused
Deactivation time			
Public key SHA-1	63D235897686467DC4405323782C53A79CF66CA8		

Allow access **Cancel**

Fig. 12 – Direct activation – Web portal – Device detail

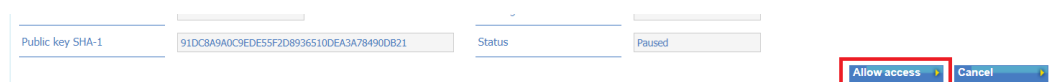
- Having the RMP Administrator role, you now see the **Allow Access** button. Press it to allow the mobile device access the IMP network. Continuation – **Error! Reference source not found.**
- Attention: If you do not see the **Allow access** button on the page, please contact the **Master Data Manager** for your company, who can activate this account page by clicking on **Allow access** on the **Mobile detail** page.

----- person with role RMP Administrator -----

Log in to **CS OTE**, menu **Registration / Mobile access / Device management**

Clicking on the record will display the **Mobile Device Detail** and

at the bottom of the screen, you can see the **Allow access** button, which when pressed will give your account an "**Approved**" status and mobile device can be used normally in mobile application.



Public key SHA-1	91DC8A9A0C9EDE55F2D8936510DEA3A78490DB21	Status	Paused
------------------	--	--------	--------

Allow access **Cancel**

Pressing button **Allow access** activate possibilities for Access suspension, Account deactivation, or Certificate export - see below.

- Now the account is in the **Approved** status and the direct activation is completed successfully. The mobile application can be logged in and after the import of a valid qualified certificate registered in CS OTE, the mobile application can be fully used.

1.1.2 Administrator Activation (user with role RMP Administrator)

- Administrator activation for another user registered in master data is applicable to a user who may or may not have a certificate to access CS OTE. Activation is performed in three steps. The process is done in the three steps.

1st step – Administrator

- Log in to the portal CS OTE (<https://portal.sand.ote-cr.cz/otemarket/>)
- Menu **Registration** choose **Mobile access – Device management**

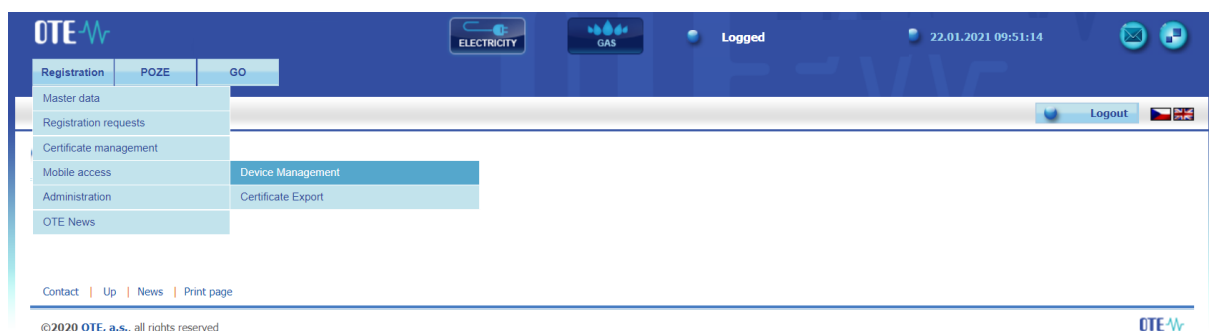


Fig. 13 – Administrator Activation – Menu Web portal– Devices management

- After selecting **New activation**, the **Device detail** is displayed on the page.
- Select a person from the list: **Person ID** - the ID of the person for whom you are creating mobile access. When you select the desired user, an **email** field appears that can be left or changed (Fig. 14 –).

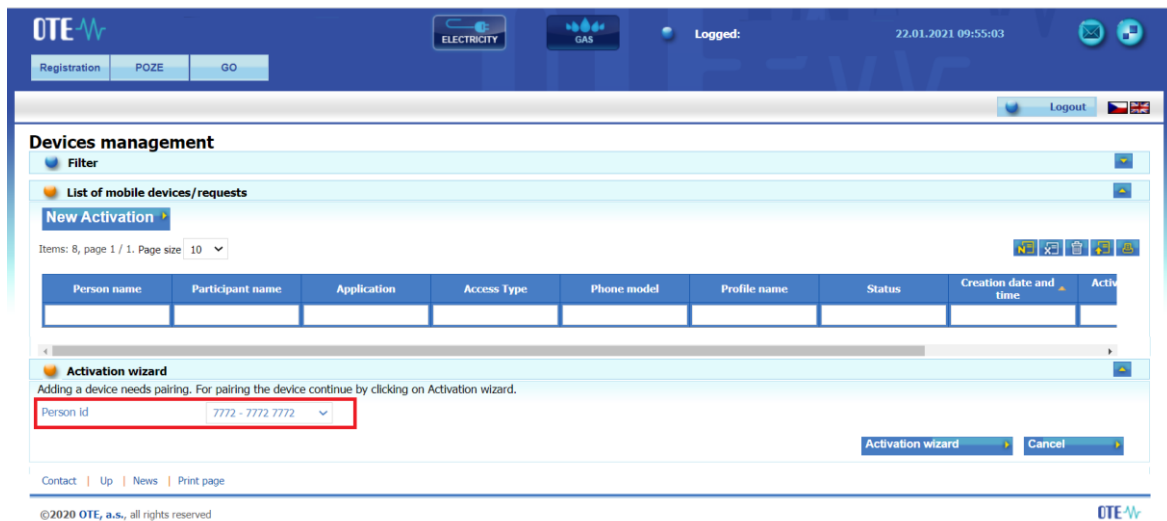


Fig. 14 – Administrator Activation – Web portal– Devices management

- After selecting the person and possibly changing the email, click on the **Activation Wizard** button (Fig. 14).
- A message containing the QR code designed to activate your mobile device has been sent to the email. The system now waits for one hour to retrieve the QR code of the selected user as the second part of the process activating new profile in the mobile app (Fig. 15).
- It is necessary to read the QR code by the mobile device (Fig. 8 – Direct activation – Mobile app – Activation code) within one hour, otherwise the activation will expire.
- The person with the mobile device must transfer the QR code (**2nd step - lower**) from the activation email to the activation process of the mobile application (see above). The code must be loaded and paired with CS OTE within one hour, otherwise the activation will expire and the activation process must be repeated.

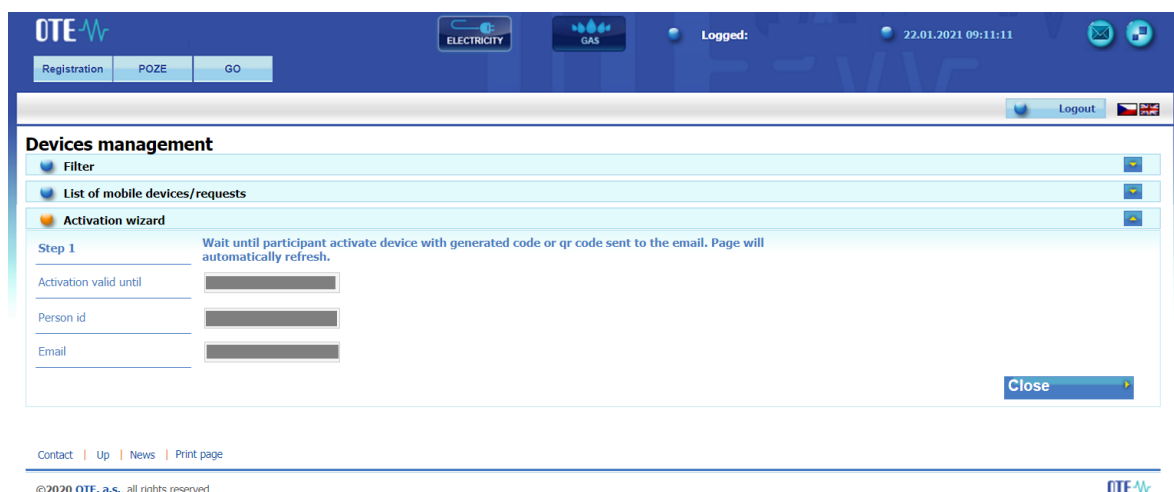


Fig. 15 – Administrator Activation – Web portal

2nd step – User setting up a Profile on his Mobile Device

- Launch mobile application OTE IM Power on your Mobile Device.
- If you start a newly installed application, you are asked to agree to the License Terms ([Fig. 5](#)). The Licence is necessary to confirm otherwise it will not be allowed to access the application.
- Click **New profile**

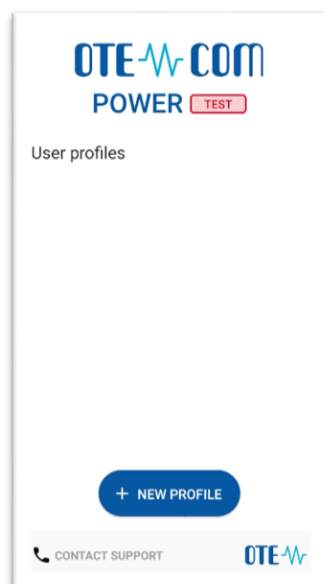


Fig. 16 – User activation with support of the Administrator - Mobile App – New profile

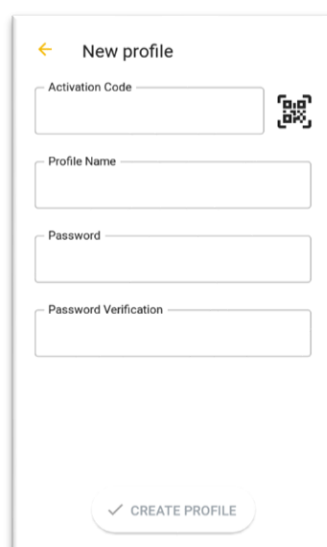


Fig. 17 – User activation with support of the Administrator - Mobile App – Profile information

- In the Activation Code field, enter the QR code from the email sent by your administrator ([Fig. 18](#)):

Device activation

Activate device with generated activation code or qr code.

Activation code : EV5VDCP4GOVA7PB2



Fig. 18 – Administrator Activation – E-mail with Activation QR code


- Click  on the mobile device to launch the camera of your mobile device ([Fig. 17 –](#)). Point the camera at the QR code on the screen. The mobile device records the code, which is usually reflected in the device's vibration.



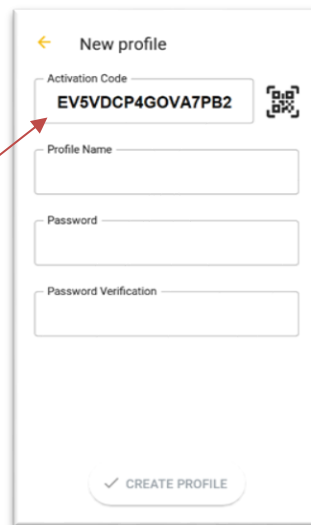
Fig. 19 – Scanning QR code Screen

- The second option is to copy the **Activation Code** itself (from the CS OTE web portal) to the field **Activation code**:

Device activation

Activate device with generated activation code or qr code.

Activation code: **EV5VDCP4GOVA7PB2**

New profile

Activation Code
EV5VDCP4GOVA7PB2

Profile Name


Password

Password Verification

✓ CREATE PROFILE

Fig. 20 – Administrator Activation – New profile – Typing QR code

- Enter a name for the new profile in the **Profile Name** field.
- Create a **Password** that contains at least 4 characters and repeat it in the **Password** field **again**. The password you enter is used to secure your profile and certificate against unauthorized use.
- Clicking **Create profile** (Fig. 20) you create a new, not yet approved profile in IM Power mobile app.



Profile Activation

Profile name
Example

Registration status
INACTIVE

Info
Profile is not active, finish registration at CS OTE web portal

Hash
f5f87331234156a6abbf43f8e3299963f6952c4b

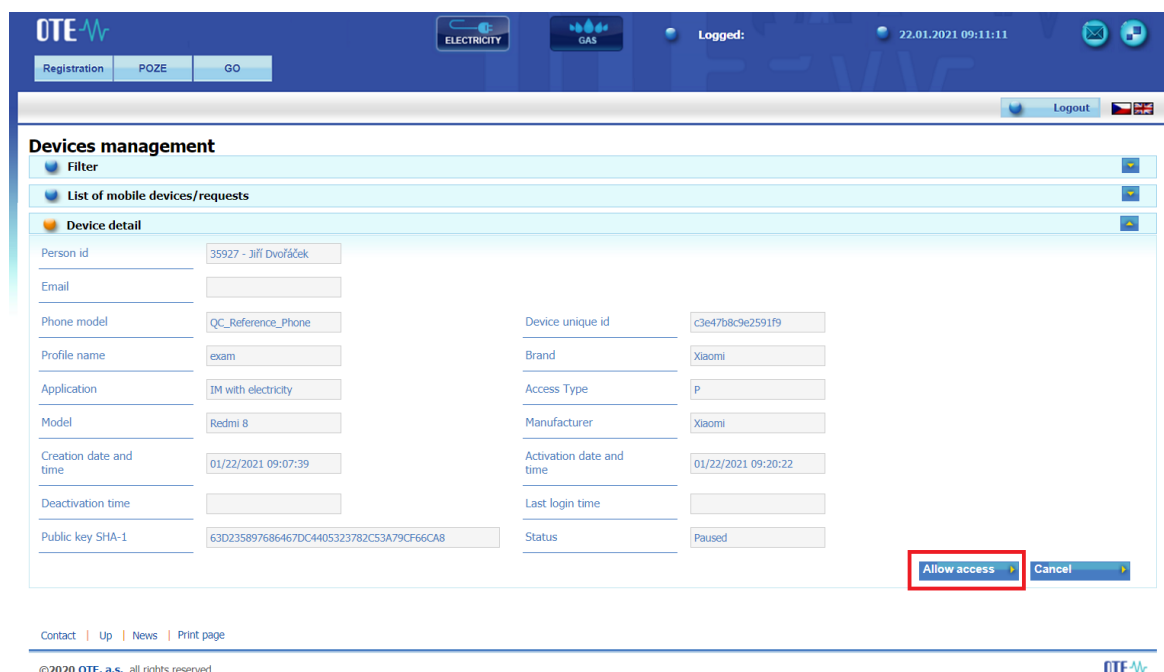
✕ CLOSE

Fig. 21 – New Profile Information (suspended yet)

3rd step – Administrator

- After you create **New profile** on a mobile device, the **Activation Wizard page** on the RMP master data web portal automatically goes to the point where it can be checked which application was triggered and the public key fingerprint on the mobile device and CS OTE portal.
- **We recommend checking**
 - whether column **Application** contains the desired application for which the activation is to be performed;
 - If the red-framed codes ([Fig. 21 – New Profile Information \(suspended yet\)](#)) a 21 (**Error! Reference source not found.**), displaying the public key fingerprint are identical on the mobile device and in the CS OTE web portal.
- By clicking on **Accept (Error! Reference source not found.)** and signing with certificate, the mobile device of the user for whom you approve mobile access is clearly identifiable for CS OTE. However, this profile is currently **suspended** and **cannot be signed in**.

At the same time, CS OTE also displays the **Mobile Device Detail** in Device Manager, where after checking the linked application it is possible to allow access of the mobile device to the IM Power network by clicking on the **Allow access** ([Fig. 22](#)).



The screenshot shows the 'Devices management' section of the OTE web portal. Under 'Device detail', the following information is displayed:

Person id	35927 - Jiří Dvořáček	Device unique id	c3e47b8c9e2591f9
Email		Brand	Xiaomi
Phone model	QC_Reference_Phone	Access Type	P
Profile name	exam	Manufacturer	Xiaomi
Application	IM with electricity	Activation date and time	01/22/2021 09:20:22
Model	Redmi 8	Last login time	
Creation date and time	01/22/2021 09:07:39	Status	Paused
Deactivation time			
Public key SHA-1	63D235897686467DC4405323782C53A79CF66CA8		

At the bottom right, there are two buttons: 'Allow access' (highlighted with a red box) and 'Cancel'.

Fig. 22 – Administrator Activation – Device detail

1.1.3 Launching Application

When you start a newly installed application, you are asked to agree to the License Terms. These terms have to be confirmed otherwise it will not be allowed to access the OTE IM Power application.

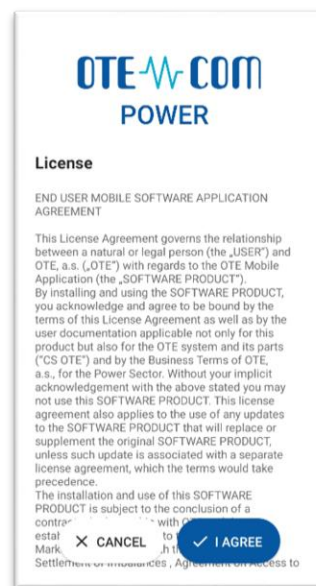
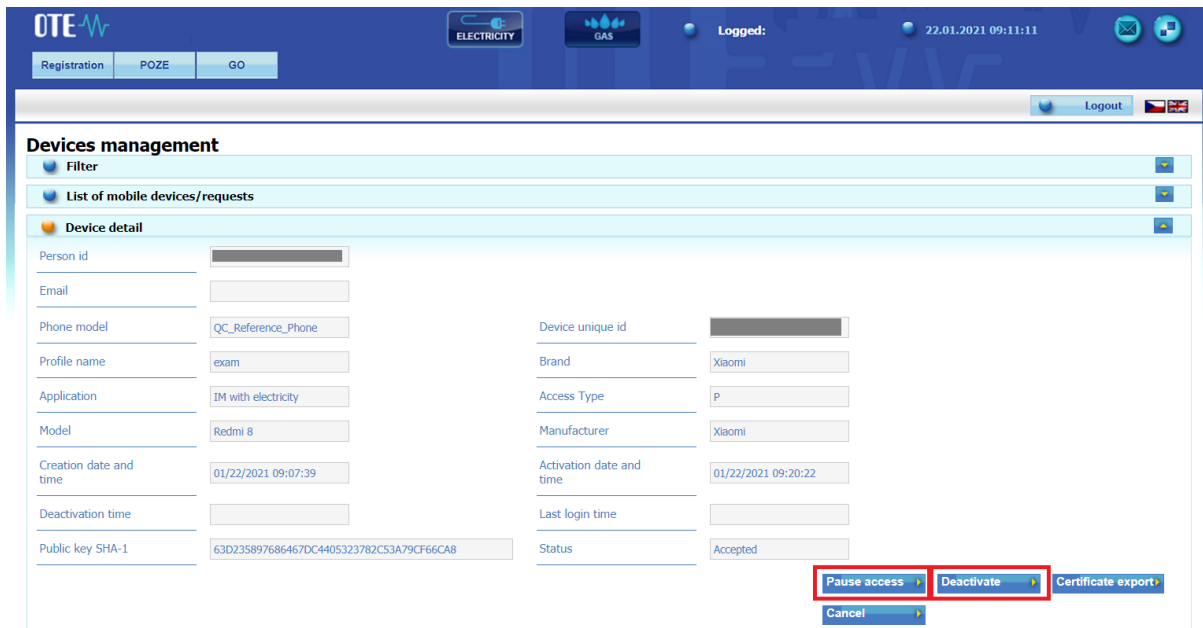


Fig. 23 – Acceptance of the IM Power license agreement

1.1.4 Limitations on the function of the profile

- a) To temporarily suspend the profile function go to **Mobile Access / Device Management**, select the profile and press the button **Pause access**(Fig. 23). Ten minutes after entering this request, it will not be possible to use the selected profile.
Subsequently, the profile can be activated again by clicking on **Allow access**.

- b) To permanently deactivate the account, select the **Deactivate** option (Fig. 23), thus permanently deleting this profile. Ten minutes after entering this request, it will not be possible to use the selected profile.



The screenshot shows the 'Devices management' interface. Under the 'Device detail' tab, there are two columns of fields. The left column includes: Person id, Email, Phone model (QC_Reference_Phone), Profile name (exam), Application (IM with electricity), Model (Redmi 8), Creation date and time (01/22/2021 09:07:39), Deactivation time, and Public key SHA-1 (63D235897686467DC4405323782C53A79CF66CA8). The right column includes: Device unique id, Brand (Xiaomi), Access Type (P), Manufacturer (Xiaomi), Activation date and time (01/22/2021 09:20:22), Last login time, and Status (Accepted). At the bottom right, there are three buttons: 'Pause access', 'Deactivate' (highlighted with a red box), and 'Certificate export'. A 'Cancel' button is also visible below 'Pause access'.

Fig. 24 – Mobile Device detail (already Activated)

- 1) Removing the role for trading on VDT from the mobile phone (EmtasMIIns) has a delay of up to 5 minutes, the trading of the user from OTECOM will not be limited.
- 2) Removing the role for any business on VDT (EmtasMIIns) is effective immediately, ie from the mobile up to 5 minutes. bids will be sent, but will return with an error immediately after the role is removed.

1.1.5 Profile Login

To sign in to the app, select your profile and enter your password on the mobile app home screen:

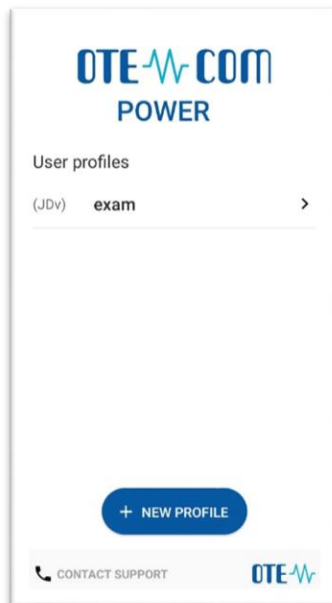


Fig. 25 – Available Profiles

- The **first** time you **start the application**, the **Setup Wizard** is launched automatically after login. You need to **set the PIN** - by entering and repeating it on the displayed numeric keypad and **import the certificate** (Transfer of the signing certificate to the mobile device). If this process is not completed, it will automatically start the next time IM Power is started until both steps are performed correctly.

1.2 Transfer of Signing Certificate to the mobile device

The process of transferring a certificate from the CS OTE system requires the simultaneous use of a PC with activated local storage for the CS OTE or PKi component and a mobile device.

1.2.1 Preparation of export of a certificate stored in Master Data

- Log in to the web portal CS OTE (<https://portal.ote-cr.cz/otemarket/>).
- To transfer your certificate to a mobile device, it is necessary to have the certificate uploaded to **Local Storage**. („how to“ is described below).
- Menu **Registration** choose **Mobile Access – Certificate Export**:

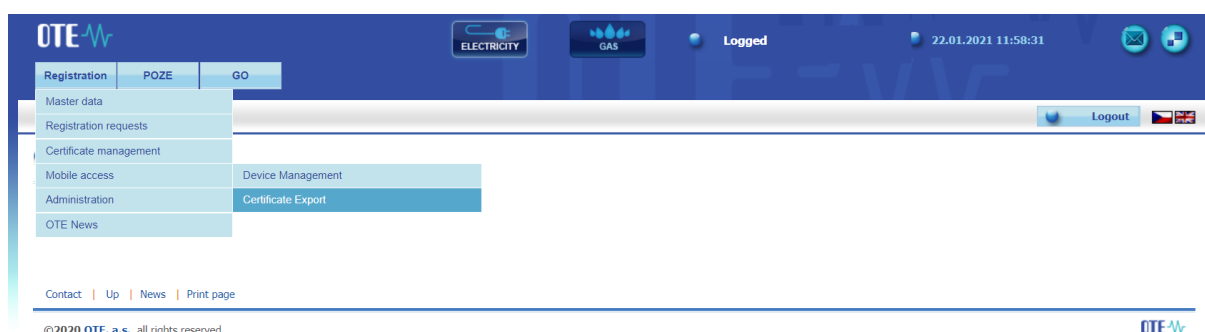


Fig. 26 – Certificate Export – Web portal

- a) In the case of an **active Local Storage**, certificates are displayed directly, which can be exported to a mobile device by clicking on **Export QR** (see below):

Loaded certificates for export					
DN	Valid from	Valid to	Serial number	Certification authority	
	04/23/2020 09:14:23	05/13/2021 09:14:23			Export QR
QR codes					

- b) In the case of an **active PKi component**, a form will be displayed allowing to load the given certificate from the * .p12 file with all the necessary security elements:

Now it is necessary to upload a certificate for transmission that is **qualified**, must **contain a private part** and is **registered in CS OTE** by clicking on **Select file**. After selecting the file **xxxxx.p12** and entering the password for this certificate, click **Add**. *(The private part is not sent to the server - it is stored locally in the browser directory with PKCS # 12 security. After the certificate is transferred to the mobile device, the private part of the certificate can be deleted from the browser.)*

- Clicking on **Export QR**, which is located in the last column of the table next to the given certificate, will start the transfer process using QR codes.
- You will then be prompted to enter the password and repeat it for the certificate transfer. The password will be required when saving the certificate to the mobile device and is used to secure the certificate against unauthorized use.
- The following screens will contain a specified number of QR codes containing information about the certificate that needs to be transferred to the mobile device.

You can increase the number of QR codes on the 1st screen on the portal ([Fig. 27 –](#)) – by clicking on the menu at 4 above the QR code - for better transfer if you have a mobile device with an older camera:

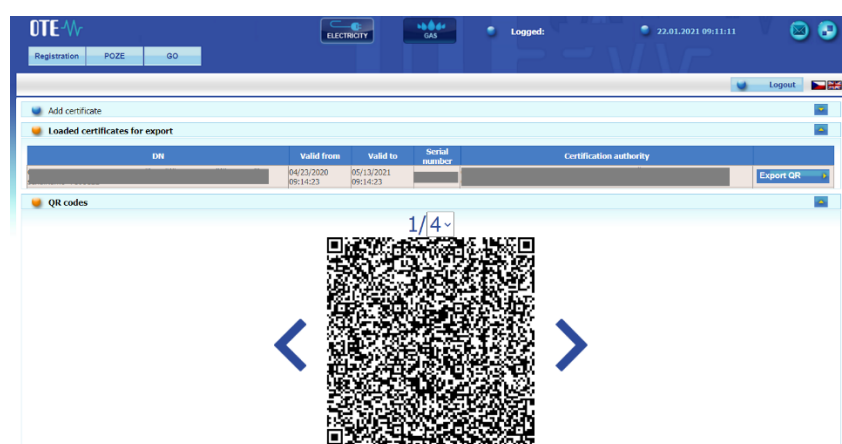


Fig. 27 – Certificate Export – QR codes generated by computer

1.2.2 Importing certificate to Mobile Device

- Mobile application requires signing by certificate for the work, If you first open the app, as the second necessary step of the **Setup Wizard** is import Certificate. By clicking the **Import** button in the Mobile App. the certificate could be imported to Mobile Device (continue **IMPORT** below).
- If you want to replace an already uploaded certificate with another certificate registered in CS OTE (eg. when renewing the certificate) we can do this by selecting **Certificate** from the menu IM Power application:
 - Information about the saved certificate is displayed, if one has already been imported (Fig. 28 –)
 - The buttons for **Import** new certificate and **Test** validity of saved certificate are displayed (Fig. 28 –)

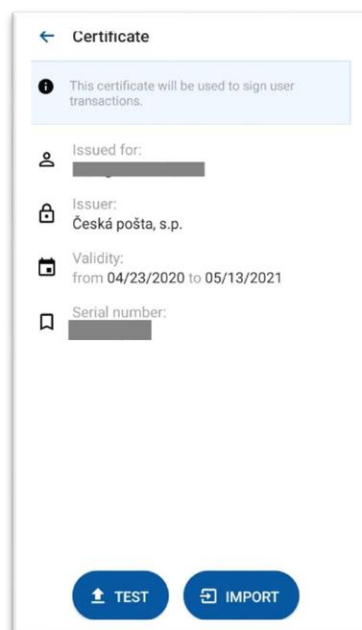


Fig. 28 – Imported Certificate information

- To upload new certificate, choose **IMPORT** and use your mobile device camera to scan the codes:

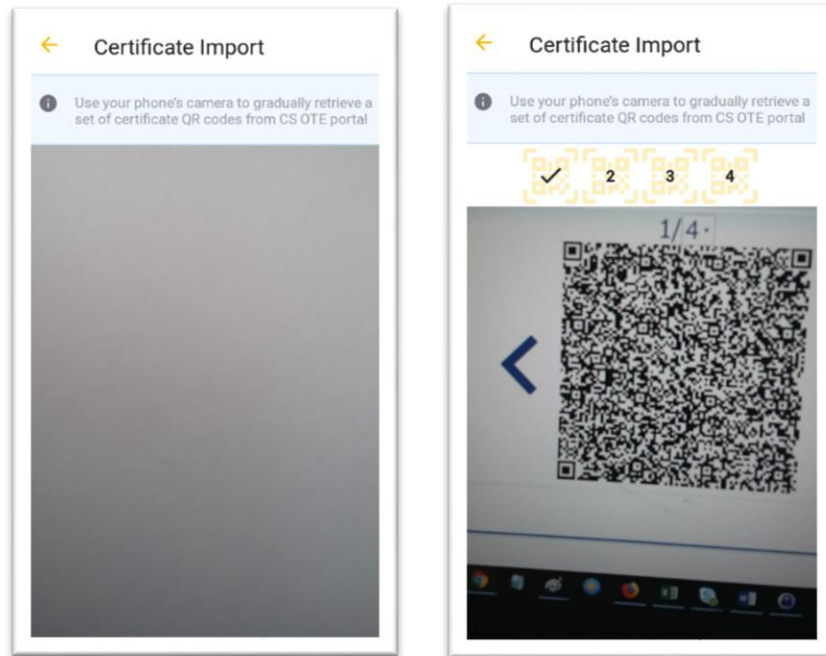


Fig. 29 – Certificate Export – Mobile app – Scanning QR codes

- To move between QR codes on the PC, use the "<" ">" icons next to the QR code in the CS OTE portal.
- The mobile device automatically recognizes which QR code it is, and therefore the reading can be performed in a different order.
- After reading the last code, the dialog for the password is displayed - after entering the password for certificate transfer.
- Then the information about the retrieved certificate is displayed (Fig. 30 –). Press the **Test** button to verify that the downloaded certificate can be used in the OTE IM Power application and if sign is OK, the **Save** button will be displayed.

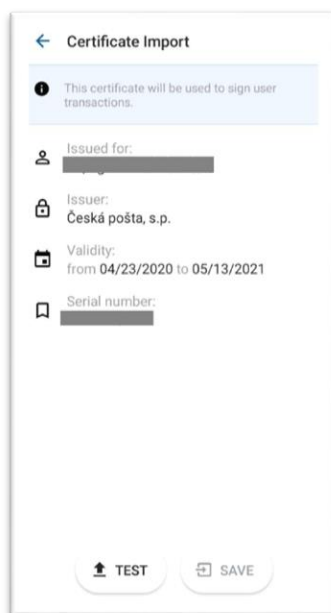


Fig. 30 – Imported certificate

- Clicking **Save Certificate**, you store this certificate in the device and it could be used to sign reports and the **IM Power application is ready** to use.

1.3 Screens headers

The header of each primary screen of the application contains following icons: System menu, Market name, Connection status and identification of the logged user, Content refresh, News.

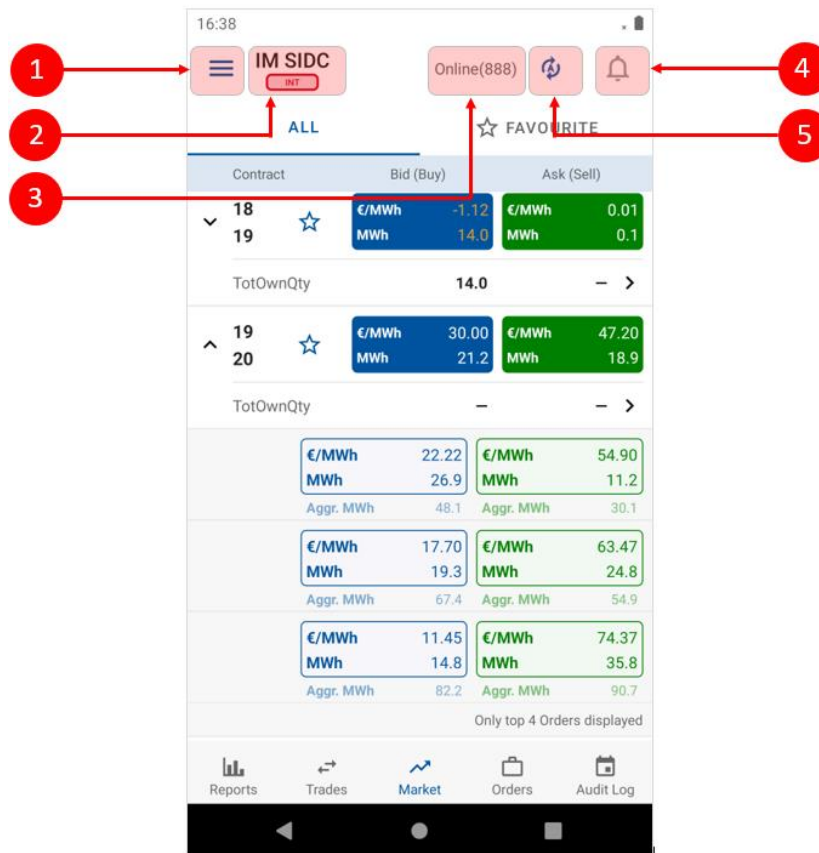


Fig. 31 - Screens headers

- 1 System menu – guide to information and settings screens Profile Details, Certificate, Settings, About Application, Contact Support, Logout
- 2 Market name – currently active market to which the displayed information and operations are related
- 3 Connection status and identification of the logged user – connection status of the mobile application (Online/Offline), shortcut of logged user is written in the brackets
- 4 Content refresh – button for manual refresh of screen content (A – indicates auto refresh enabled)
- 5 News – contains information messages, also signals new VIP news (colored icon indicates unread messages)

1.4 Control elements

- Back button – button is active only outside the primary screen, allows you to return to the previous screen
- Return to the top of the list

1.5 Market screen

After logging to the application the Market screen is displayed. This screen provides the user with up-to-date information about the status of active orders and about the market depth (the next 3 orders with the lowest price for sale and three orders with the highest price for purchase; the price and quantity values for own orders are color-coded), which can be "collapsed" by the user. The orders are shown as aggregated, sorted by price, and the quantity is also shown in the cumulative quantity (Aggr. MWh.).

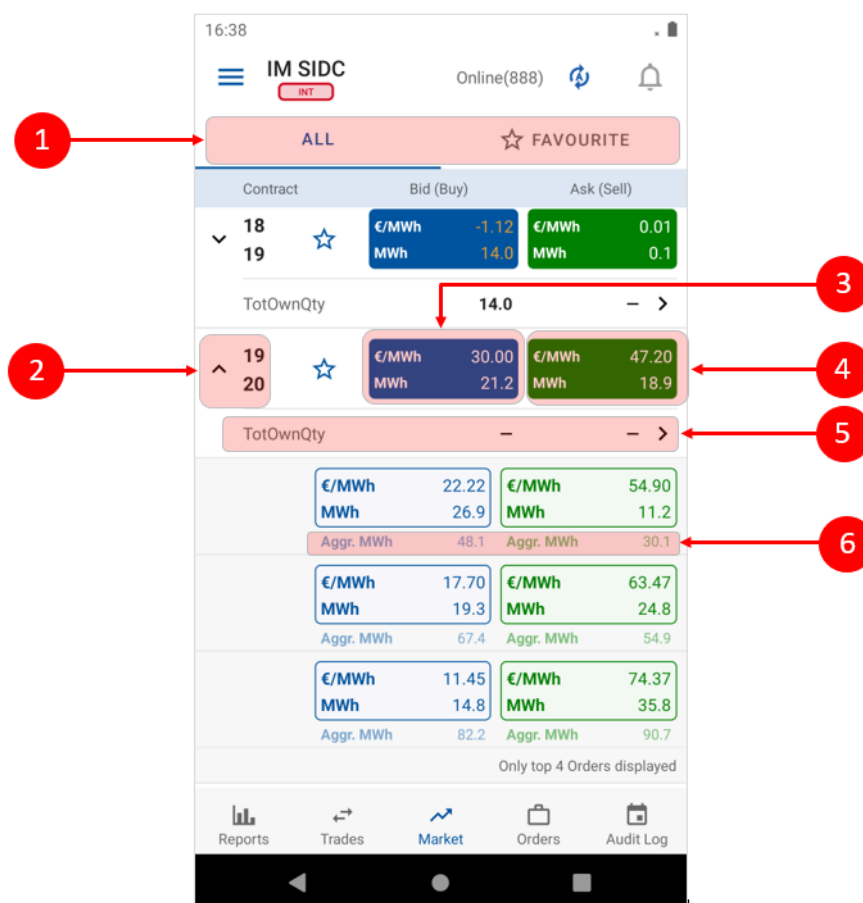


Fig. 32 - Market screen

- 1 Toggle display of all and favorites contracts
- 2 The name of the contract with the possibility of collapsing market depth (after clicking)
- 3 Best order to buy – after clicking user is forwarded to the *Create Order screen* – create order Sell / Quick Accept
- 4 Best order to sell - after clicking user is forwarded to the *Create Order screen* – create order Buy / Quick Accept
- 5 Total Own Quantity – after clicking user is forwarded to *Orders by contract* screen
- 6 Aggregated quantity (MWh)

1.5.1 Create Order screen

The *Create Order* screen allows users to enter their own orders or take advantage of the quick acceptance option. **Quick Accept** serves for a buy / sell operation through predefined values that correspond to the opposite operation (sell / buy) entered by another user. If the contract does not contain any active order, the *Create Order* form opens with blank price and quantity parameters.



The screenshot shows the 'Create Order' screen with the following elements and callouts:

- 1**: Contract / Date selection (19-20, December 2, 2020)
- 2**: Order to (BUY / SELL) switch button
- 3**: Type (Restriction) (LMT (NON))
- 4**: State (ACTIVE) switch button
- 5**: Price (€/MWh) input field (47.18)
- 6**: Quantity (MWh) input field (18.7)
- 7**: Bid (Buy) and Ask (Sell) buttons
- 8**: Table of Top 5 Orders displayed

Qty MWh	Price €/MWh	Price €/MWh	Qty MWh
21.2	30.00	47.20	18.9
26.9	22.22	54.90	11.2
19.3	17.70	63.47	24.8
14.8	11.45	74.37	35.8
0.6	0.06	100.00	35.0

Top 5 Orders displayed

BUY

Fig. 33 - Create Order screen

- 1 Date and name of the contract – possibility of contract selection
- 2 Order to – switch button to select the buy/ sell operation
- 3 Type – display of order type and its restriction (LMT/ICB/BLK, (NON)/(FOK)/(IOC)/(AON))
- 4 State – switch button for setting the active / inactive order
- 5 Quantity / price setting field using the keypad
- 6 Quantity / price setting buttons
- 7 Update content manually
- 8 View of a maximum five best orders to buy and sell

1.6 Reports Screen

Provides list of all reports in the mobile app.



Fig. 34 - Reports screen

- 1 Report – Current Limit Status – Power – displays an overview of the current BRP limits
- 2 Report – Orders Overview – displays the order data related to the selected contract
- 3 Report – Trades Overview – displays trades data
- 4 Report – IM Power Results – displays the summary results of the intraday power market
- 5 Report – Subject position on Power market – displays the current position of BRP

1.6.1 Reports control

Click the report to view its content with default values. Each report has its own selection parameters. These include: Date selection, Hour selection, Order Status, Order Direction, Contract Type and Market. Some parameters are used only in certain reports.

16:17
Online(888)

Orders Report

Orders Overview

Date
December 2, 2020

Retrieve

Hour:

From
1.

To
25.

State:

ACTIVE

INACTIVE

DELETED

CLOSED

Order to:

BUY

SELL

Contract Type:

HOURLY

BLOCK

Market:

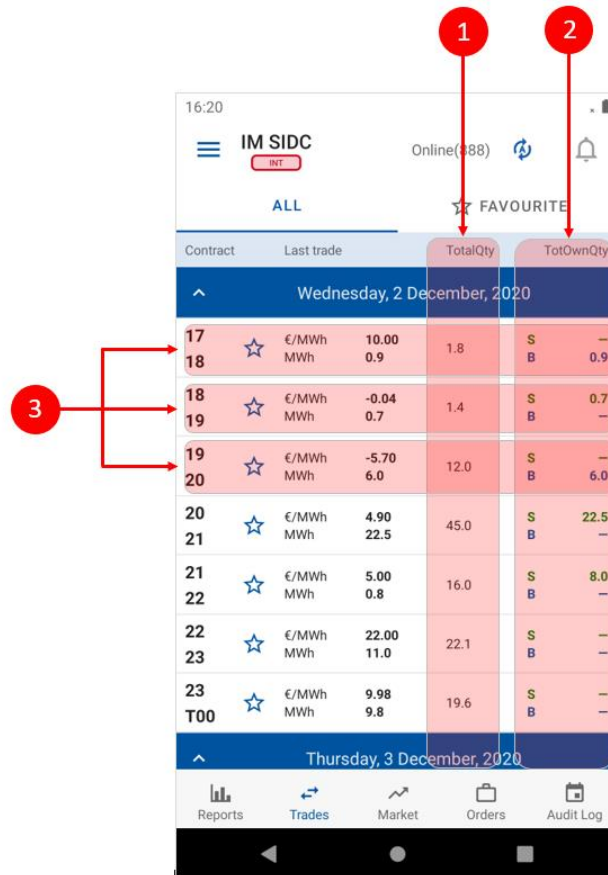
SIDC

LOCAL

Fig. 35 - Report Orders Overview - header

1.7 Trades screen

It is used for monitoring the progress of trading and current trading results. Only contracts opened for trading are displayed on the screen.



Contract	Last trade	TotalQty	TotOwnQty
Wednesday, 2 December, 2020			
17	☆ €/MWh 10.00	1.8	S —
18	☆ MWh 0.9	1.4	B 0.9
18	☆ €/MWh -0.04	1.4	S 0.7
19	☆ MWh 0.7	12.0	B —
19	☆ €/MWh -5.70	12.0	S —
20	☆ MWh 6.0	45.0	B 22.5
20	☆ €/MWh 4.90	16.0	S 8.0
21	☆ MWh 22.5	22.1	B —
21	☆ €/MWh 5.00	19.6	S —
22	☆ MWh 0.8		B —
22	☆ €/MWh 22.00		S —
23	☆ MWh 11.0		B —
23	☆ €/MWh 9.98		S —
T00	☆ MWh 9.8		B —
Thursday, 3 December, 2020			

Fig. 36 - Trades screen

- 6 TotalQty – quantity of all trades created during the session in MWh
- 7 TotOwnQty – Total own quantity
 - The total quantity sold, calculated as the sum of all trades for a given contract where the participant acts on the **sales** side in MWh.
 - The total quantity purchased, calculated as the sum of the quantity of all trades for a given contract where the participant acts on the **purchase** side in MWh.
- 8 Click the contract for displaying the *Trading History* screen

1.8 Trading History screen

Displays trading data related to the contract selected on the Trades screen.



Fig. 37 - Trading History

- 9 Best order to buy - after clicking user is forwarded to the *Create Order* screen – create order Sell / Quick Accept
- 10 Best order to sell - after clicking user is forwarded to the *Create Order* screen – create order Buy / Quick Accept
- 11 Last price (€/MWh) – price of the last trade in EUR / MWh with trend indication
- 12 Last quantity (MWh) - quantity of the most recent trade in MWh
- 13 Total quantity (MWh) - quantity of all trades created during the session in MWh
- 14 Own quantity (MWh) – displays:
 - Total quantity sold, calculated as the sum of all trades for a given contract where the participant acts on the sales side in MWh.
 - The total quantity purchased, calculated as the sum of the quantity of all trades for the given contract, where the participant acts on the purchase side in MWh.
- 15 Graph – used for displaying progress of the prices and traded quantities of the selected contract in time
 - Points curve – price progression

- Columns – quantity progression
- 16 Timeframe – time span of graph, *2D* (2 days), *1D* (1 day), *4H* (4 hours), *1H* (1 hour), *15M* (15 minutes)
- 17 Information about trades of a chosen contract (select all or own)
 - Ag. - Aggressor – accepting party of the trade (buyer / seller), if the value is not filled, it means that the trade was created in the auction
 - Price (€/MWh) – Price of the created trade in Eur / MWh
 - Quantity (MWh) - The quantity of the created trade in MWh
 - Realized – Time stamp of trade creation
 - TotOwnQty – The cumulative **own** quantity at a time point in MWh – calculated as the sum of the quantity of all trades for a given contract and the direction of a given trade where the participant acts on the **sale / purchase** side in MWh.

1.9 Orders screen

It provides an overview of all orders created by a logged market participant and related to currently open contracts. Allows you to go to the *Modify Order* screen.

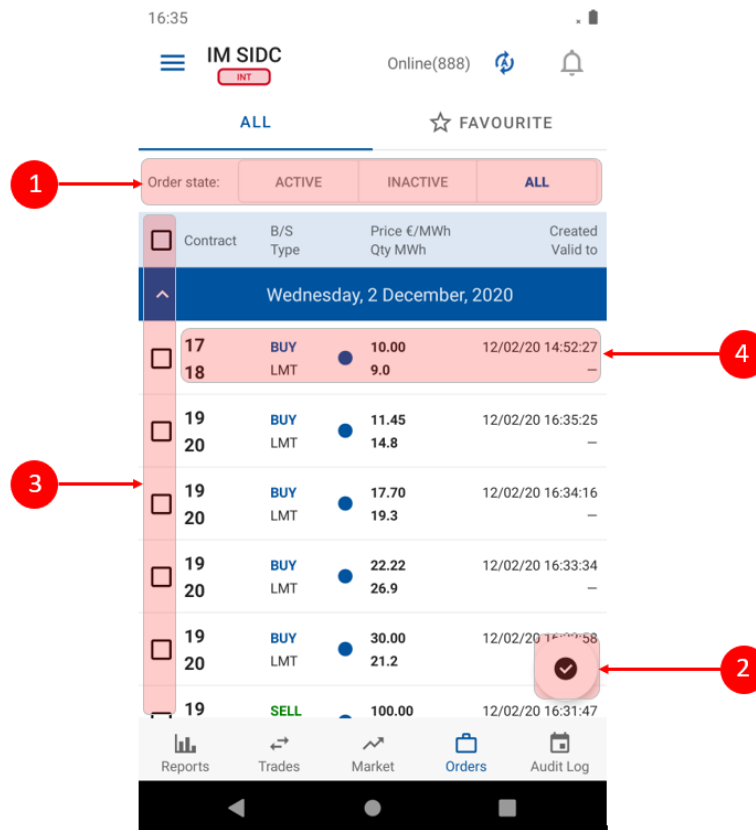


Fig. 38 - Orders screen

- 18 Filters orders according to whether they are active/inactive or both
- 19 Floating action button
- 20 Selection of order/orders for their activation/deactivation/delete -> after selection, the confirmation buttons for these operations are displayed
- 21 After click the order form *Modify Order* is opened

1.9.1 Modify Order screen

This screen allows the logged user to adjust the orders.

Limit order modification allows the user for changing only following attributes:

- order state (Active/Inactive),
- order quantity,
- order price.

Iceberg and Block order modification allows the user for changing only following attributes:

- Order state (Active/Inactive).

An order cannot be modified if:

- it is deleted or withdrawn from trading (has expired);
- ID order is invalid;
- Max. version of the bid in the system does not match with the required bid version for modification.



Fig. 39 - Modify Order screen

- 22 The identification number, version, date and time of the created order that the user wants to modify
- 23 Order to – information about the order direction (Buy / Sell)
- 24 Valid to – time period of order validity for trading (time restriction)
- 25 State – switch button for setting the active / inactive order
- 26 Type – type of order and its restriction (LMT/ICB, (NON))/(FOK)/(IOC))
- 27 Quantity / price setting field using the keypad
- 28 Quantity / price setting buttons
- 29 Update content of the best orders table (Automatic or Manual)
- 30 View of a maximum five best orders to buy and sell
- 31 Buttons for delete order or its modification

1.10 Audit log screen

Informs user of the following events for the currently active market:

- Order reception
- Order modification
- Order activation/deactivation
- Order deletion
- System order deletion
- Trade creation
- Contract generation
- Change state of contract
- Change the deactivation flag of contract
- Change of market settings
- Acceptance/cancelation of VIP news

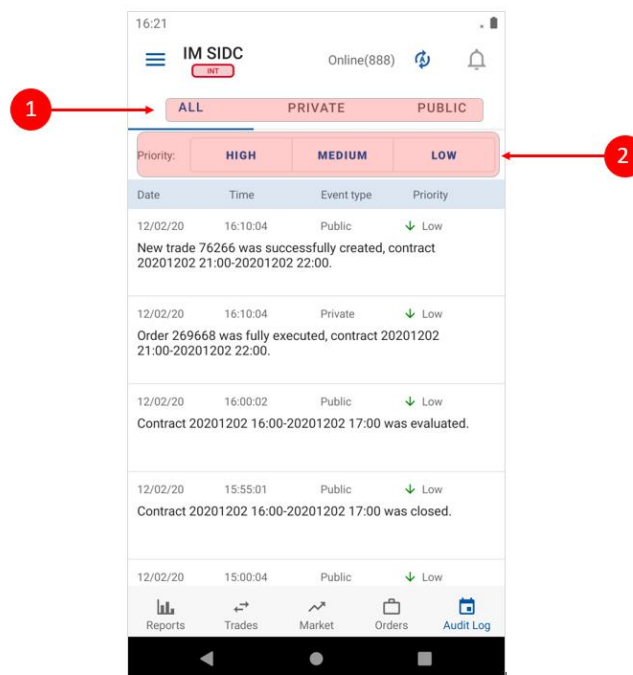


Fig. 40 - Screen Audit log

- 32 Filter by message type – ALL/PRIVATE/PUBLIC
- 33 Filter by message priority – HIGH, MEDIUM, LOW

1.11 Changes when VDT is active

When the backup VDT is active, the change in the header and color coding of contracts will be reflected in all top-level screens. The report screen is not affected by market switching, as it always contains information from both markets. Only records related to the backup VDT are displayed on the event screen.

The figure displays two side-by-side screenshots of the IM SIDC and Local IM application interfaces, illustrating the difference in display when VDT is active. Both screens show a top navigation bar with a menu icon, the application name, and a status bar. Below the navigation bar, there are tabs for 'ALL' and 'FAVOURITE'. The main content area displays contract data and order books.

IM SIDC Screenshot (Left):

- Time: 16:38
- Status: Online(888)
- Contract 18: Bid (Buy) €/MWh -1.12, MWh 14.0; Ask (Sell) €/MWh 0.01, MWh 0.1
- TotOwnQty: 14.0
- Contract 19: Bid (Buy) €/MWh 30.00, MWh 21.2; Ask (Sell) €/MWh 47.20, MWh 18.9
- TotOwnQty: -
- Order Book (Top 4 Orders displayed):

€/MWh	MWh	€/MWh	MWh
22.22	26.9	54.90	11.2
Aggr. MWh	48.1	Aggr. MWh	30.1

Local IM Screenshot (Right):

- Time: 17:21
- Status: Online(888)
- Contract 18: Bid (Buy) €/MWh 14.40, MWh 21.8; Ask (Sell) €/MWh 21.20, MWh 18.8
- TotOwnQty: -
- Contract 19: Bid (Buy) €/MWh 26.90, MWh 18.0; Ask (Sell) €/MWh 38.60, MWh 23.9
- TotOwnQty: 16.6
- Order Book (Top 4 Orders displayed):

€/MWh	MWh	€/MWh	MWh
19.80	24.8	54.60	31.1
Aggr. MWh	42.8	Aggr. MWh	55.0

Fig. 41 - Difference in display XBID and backup VDT