

ENERJİ PİYASALARI İŞLETME ANONİM ŞİRKETİ (EPIAŞ)
ENERGY EXCHANGE ISTANBUL (EXIST)

INTRADAY MARKET WEB APPLICATION

USER GUIDE

MARKET OPERATIONS DIRECTORATE

2017



This document describes screens and rules of Intraday Market Web Application which has come into service as of July 1st, 2015.

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1 INTRODUCTION

As efforts and works are carried out to ensure Turkish Electricity Market becomes more transparent, more efficient, financially stronger, more integrated with European markets; establishment of the Intraday Market mainly aims for participants of the Turkish Electricity Market- which is continuously developing and advancing towards a more free market structure- to take a more-balanced and active role.

In addition to operational Day-Ahead, Ancillary Services and Balancing Markets, Intraday Market provides market participants the opportunity to continue trading closer to real time and balancing their portfolios in short term.

Intraday Market acts as a bridge between the Day-Ahead and the Balancing Markets, herewith this characteristic it primarily contributes to the balancing and the sustainability of the electricity markets

As Intraday Market becomes operational, factors resulting in imbalance such as utility breakdowns and fluctuations of power generation from renewables, can be mitigated; market participants are allowed to minimize or balance positive/negative imbalances that they might experience during the day.

Participants can utilize their capacities through Intraday Market trading following the closure time of the Day ahead Market and hereby an additional trading ground has been established. Thus, trading and balancing volume of the Balancing Market expected to be decreased accordingly.

2 INTRADAY MARKET GENERAL PRINCIPLES

- Any license holder legal entity that signs the Intraday Market Participation Agreement, comprises obligations for participation, can join the Intraday Market.
- Intraday Market transactions are executed on an hourly basis every day.
- In case a new order matches with an existing offer on order book, exchange price would be equal to the price of the existing offer.
- Settlement prices applied for Intraday Market transactions, are defined by taking into account all offers and trades executed in Intraday Market, for each settlement period and matching.
- Regarding to Intraday balancing practices of participants following the settlement calculations; advance payment notification consist of participant's Intraday Market transaction advance payable or receivable amounts based on each day of a billing month is announced by Market Operator through Central Clearing Bank (TAKASBANK) to respective market participants together with Day-Ahead market advance payments

3 PROCESSES

- Intraday market is a continuous market. Orders can be given until 1.5 hours before the physical delivery and can be updated, cancelled or rendered inactive.
- Intraday market trading is carried out on hourly basis. Intraday Market day begins at 12:00 am (00:00 hours) and ends at 12:00 am (00:00 hours) the following day. Intraday market orders that are given for the following day can only be given after 06:00 pm (18:00 hours) which is also the opening time for Intraday market contracts for the following day.
- Before trading can take place, collateral requirements are checked twice each working day at 11:30 and 17:30 before the Intraday Market opening time. Participants that are disqualified at 11:30 collateral check may fulfill their respective requirements until 17:00 and may continue trading once they fulfill their respective requirements until the second collateral check at 17:30.
- Unlike the single session tender of the day-ahead market, intraday market orders are interpreted instantaneously and are matched with offers in the opposite side.
- The status of the intraday market orders can be instantaneously monitored over the Intraday Market web application.

4 ORDERS

4.1 GENERAL PRINCIPLES

- Participants may place their orders in hourly and/or block orders for a particular time period at the Intraday Market. Orders comprise quantity and price information which may vary for different times.
 - a. All prices have a precision of 2 (two) decimal points
 - b. All orders would be given in Turkish Lira(s). (TL/MWh)
 - c. Orders are placed in the form of TL/MWh.
 - d. Orders are placed in Lot(s) in whole numbers. 1 Lot is equivalent to 0.1 MWh.
- Order status are classified as the following:
 - a. **Active:** an order which has not been matched and is waiting on the order book.
 - b. **Passive:** an order which has been de-activated and can be re-activated by the user. Orders in the *Passive* status cannot be traded.
 - c. **Cancelled:** an order which has been cancelled by the user or the market operator due to order type i.e. Immediate or Cancel (IoC), Fill or Kill (FoK), Fixed Time. Cancelled orders cannot be reactivated.
 - d. **Expired:** an order which has not been matched until the predefined expiration time. Expired orders will be deemed void and taken out of the list of other active orders.
 - e. **Matched:** an order which has been matched under given conditions.
 - f. **Partially Matched:** a single hourly order in which the original volume has been partially matched. Unmatched volume remains open until gate closure. When a Partially Matched order is updated, previously placed order would be cancelled and a new order would be placed. Depending on the changes made upon an order, the following conditions might emerge in regard to the matter of priority:
 - i. Decrease in priority:
 - a. Order price changes (increase or decrease)
 - b. Order volume increases
 - c. Order status changed from Passive to Active
 - ii. No change in priority:
 - a. Order volume decreases
 - g. Unmatched orders can be updated, cancelled or rendered inactive until 1.5 hours before the physical delivery. Participants can change volume, price and status of the order.

- Participants see the best hourly and block orders (ask & bid) pertaining to contracts on the order book. All orders related to a particular contract are accessed from the `Order Depth` screen.
- There is no limit to the number of orders a participant can place for a trade period.
- Minimum Ask/Bid price for the Intraday Market is set to be 0 (zero) TL.
- Orders can only be placed by authorized users of the participant companies on behalf of their organizations.
 - a. Authorized users of the participant companies can place new orders, view orders that might previously be placed by different users from the same organization and update orders.
 - b. As for the matching, latest updates regarding to orders would be taken into consideration.

4.2 HOURLY ORDERS

- Hourly orders are considered to be traded as divisible orders i.e. they can be matched partially or as a whole.
- Users can select one of the following 3 order types for placing hourly orders:
 - a. **Active order:** It is the default order type. Placed orders are active for matching until 90 minutes before the physical delivery. In the meantime:
 - i. Unless the order matches, system would change the order status to *Expired* and it would be taken out of the list of other active orders.
 - ii. If the order matches as a whole, system would change the order status to *Matched* and it would immediately be taken out of the list of other active orders.
 - iii. If the order matches partially, system would change the order status to *Matched* and matched part would be taken out of the list of other active orders, remaining part would be kept for matching.
 - b. **Immediate or Cancel (IoC):** This order type are not taken in queue for matching. If this order is placed AND is:
 - i. Matched with awaiting order on the list, order status would change to *Matched*
 - ii. Partially matched, remaining part would be cancelled
 - iii. Not matched, order would be cancelled and would not be processed any further

- c. **Expiration time:** If this type of order is selected, participant would need to provide active duration of order for matching. This duration can only be designated until 90 minutes before the physical delivery
 - d. **Fill or Kill (FoK):** This order type are not taken in queue for matching. When FoK is in place, order would not match partially. If the entire volume of the order does not match, it would be cancelled immediately and cannot be processed any further.
- Hourly order is in the format of PH14012018 and the format consists of the following:
- a. PH: Power Hour
 - b. 14: Year 2014
 - c. 01: Month 01 i.e. January
 - d. 20: Day 20
 - e. 18: Hour 1800

4.3 BLOCK ORDER

- Block orders are not divisible therefore they can only be traded as a whole.
 - Each block order is either accepted or rejected for the total time period of contract.
 - Block orders would be placed for a minimum of 1 and a maximum of 24 hour(s).
 - Block orders cannot include the hours belonging to 2 different of days.
 - Users can select one of the following 2 order types for placing block orders:
 - a. **Active order:** It is the default order type. Placed orders are active for matching until 90 minutes before the physical delivery. In the meantime:
 - i. Unless the order matches, system would change the order status to *Expired* and it would be taken out of the list of other active orders.
 - ii. If the order matches, system would change the order status to *Matched* and it would immediately be taken out of the list of other active orders.
 - b. **Expiration time:** If this type of order is selected, participant would need to provide active duration of order for matching. This duration can only be designated until 90 minutes before the physical delivery
- Block order is in the format of PB14012018 and the format consists of the following:
- a. PB: Power Block
 - b. 14: Year 2014
 - c. 01: Month 01 i.e. January
 - d. 20: Day 20

- e. 19: Block start time 1900 hours
- f. 04: Duration of the order i.e. 4 hours

5 MATCHING

- An order with the best available price has the priority.
- As for 2 orders with the same price, order having earlier system record time, has the priority.
- Orders with the highest bidding price and the lowest asking price are listed on the order book as top offers.

5.1 HOURLY ORDERS

- When an order matches with an existing offer, matching price would be equal to existing offer's price.

5.1.1 MATCHING RULES FOR HOURLY BUY ORDERS

Hourly orders in 'buy' side:

- If the bid price is greater or equal to best available ask price of sell order, quantities would be compared:
 - a. If bid quantity is equal to the best ask quantity, orders would match.
 - Transaction would be executed in line with the matching price which is equal to the existing ask price.
 - Order status would be updated as MATCHED, matched sell order would be taken out of the list of other active orders and the list of best available orders would be updated.
 - b. If bid quantity is greater than the best ask quantity, orders would match.
 - Transaction would be executed in line with the matching price which is equal to the existing ask price.
 - Buy order would be executed in the amount of ask quantity. Sell and buy order status would be updated as MATCHED and PARTIALLY MATCHED respectively and matched sell order would be taken out of the list of other active orders.

- As for the remaining bid quantity, a new possible matching; would be searched and unless no match is found, the order would be recorded as the best available bid on the order book. Top orders list would be updated and arranged in order.
- c. If bid quantity is less than the best ask quantity, orders would match.
 - Transaction would be executed according to the matching price which is equal to the existing ask price.
 - Buy order would be executed in the amount of bid quantity. Buy and sell order status would be updated as MATCHED and PARTIALLY MATCHED respectively and partially matched sell order quantity would be updated and kept on the order book.
- If bid price is less than the best ask price, order would be put on the order book among best buy orders based on its price.

5.1.2 MATCHING RULES FOR HOURLY SELL ORDERS

Hourly orders in 'sell' side:

- If the ask price is less than or equal to the best available bid price of buy order, quantities would be compared:
 - a. If ask quantity is equal to the best bid quantity, orders would match.
 - Transaction would be executed in line with the matching price which is equal to the existing bid price.
 - Order status would be updated as MATCHED, matched buy order would be taken out of the list of other active orders and the list of best available orders would be updated.
 - b. If ask quantity is greater than the best bid quantity, orders would match.
 - Transaction would be executed in line with the matching price which is equal to the existing bid price.
 - Sell order would be executed in the amount of bid quantity. Buy and sell order status would be updated as MATCHED and PARTIALLY MATCHED respectively and matched buy order would be taken out of the list of other active orders.
 - As for the remaining ask quantity, a new possible matching; would be searched and unless no match is found, the order would be recorded as the best available bid on the order book. Top orders list would be updated and arranged in order.
 - c. If bid quantity is less than the best ask quantity, orders would match.

- Transaction would be executed according to the matching price which is equal to the existing ask price.
 - Sell order would be executed in the amount of ask quantity. Sell and buy order status will be updated as MATCHED and PARTIALLY MATCHED respectively and partially matched buy order quantity would be updated and kept on the order book.
- If ask price is greater than the best bid price, order would be put on the order book among best sell orders based on its price.

5.2 BLOCK ORDERS

Order start times, durations and quantities should be equal for block orders to be matched. In addition prices should be proper for matching.

5.2.1 MATCHING RULES FOR BLOCK ORDERS IN BUY SIDE

Once a new block order-in buy side-is placed, it is compared with suitable orders on the order book.

- If the starting time, duration and the quantity of a block order in the buy side are equal to those of a sell order:
- In case the ask price is less than or equal to bid price of the newly placed block order-in buy side, orders would match.
 - Transaction would be executed according to matching price which is equal to the existing ask price.
 - Matched order would be taken out of the order book and block order list would be updated.
 - Unless these conditions are met, no matching would be executed and this block order would be added to the block order list.

5.2.2 MATCHING RULES FOR BLOCK ORDERS IN SELL SIDE

Once a new block order-in sell side-is placed, it is compared with suitable orders on the order book.

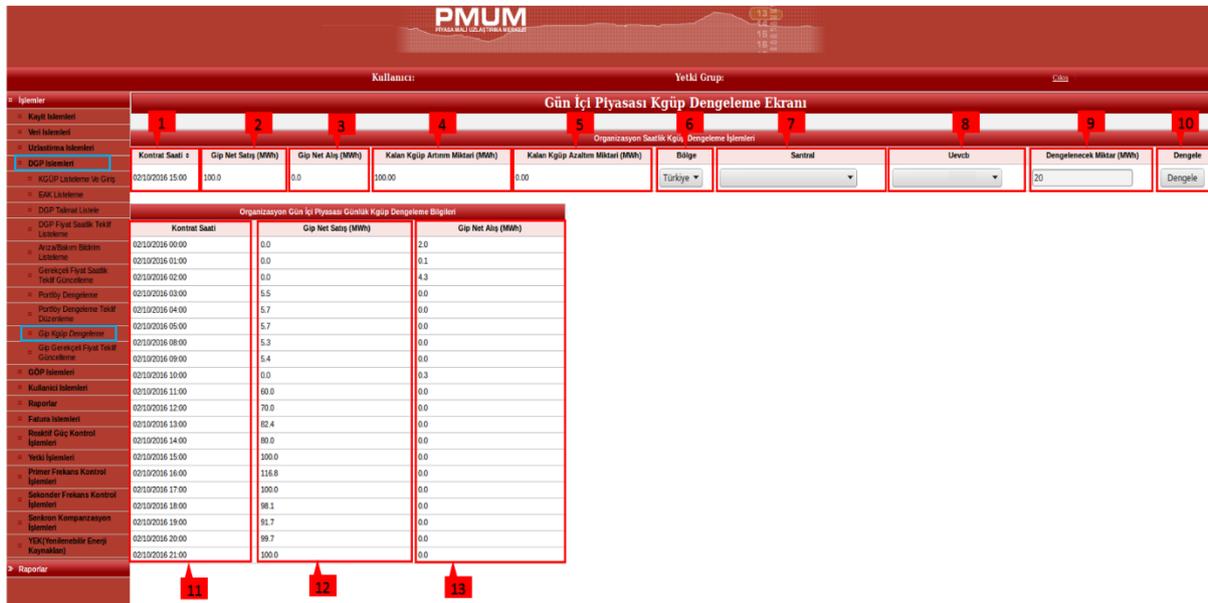
- If the starting time, duration and the quantity of a block order in the sell side are equal to those of a buy order:

- In case the proper bid price is greater than or equal to ask price of the newly placed block order-in sell side, orders would match.
- Transaction would be executed in line with the matching price which is equal to the existing bid price.
- Matched order would be taken out of the order book and block order list would be updated.
- Unless these conditions are met, no matching would be executed and this block order would be added to the block order list.

6 SCREENS

6.1 IDM FDGS BALANCING

IDM (Intraday Market) FDGS (Final Daily Generation Schedule) balancing operation must be performed by market participants having generation license according to their changes in their generation plans due to IDM transactions. IDM FDGS Balancing Screen can be accessed via clicking dgpys.epias.com.tr link and following “BM Operations” >> “IDM Operations” titles.



Kontrat Saati	Güç Net Satış (MWh)	Güç Net Alış (MWh)
02102016 15:00	100.0	0.0
02102016 16:00	0.0	100.00
02102016 17:00	0.0	0.00
02102016 18:00	0.0	0.00
02102016 19:00	0.0	0.00
02102016 20:00	0.0	0.00
02102016 21:00	0.0	0.00
02102016 22:00	0.0	0.00
02102016 23:00	0.0	0.00
02102016 00:00	0.0	2.0
02102016 01:00	0.0	0.1
02102016 02:00	0.0	4.3
02102016 03:00	5.5	0.0
02102016 04:00	5.7	0.0
02102016 05:00	5.7	0.0
02102016 06:00	5.3	0.0
02102016 07:00	5.4	0.0
02102016 08:00	0.0	0.3
02102016 09:00	60.0	0.0
02102016 10:00	70.0	0.0
02102016 11:00	62.4	0.0
02102016 12:00	80.0	0.0
02102016 13:00	100.0	0.0
02102016 14:00	116.8	0.0
02102016 15:00	100.0	0.0
02102016 16:00	98.1	0.0
02102016 17:00	91.7	0.0
02102016 18:00	99.7	0.0
02102016 19:00	100.0	0.0

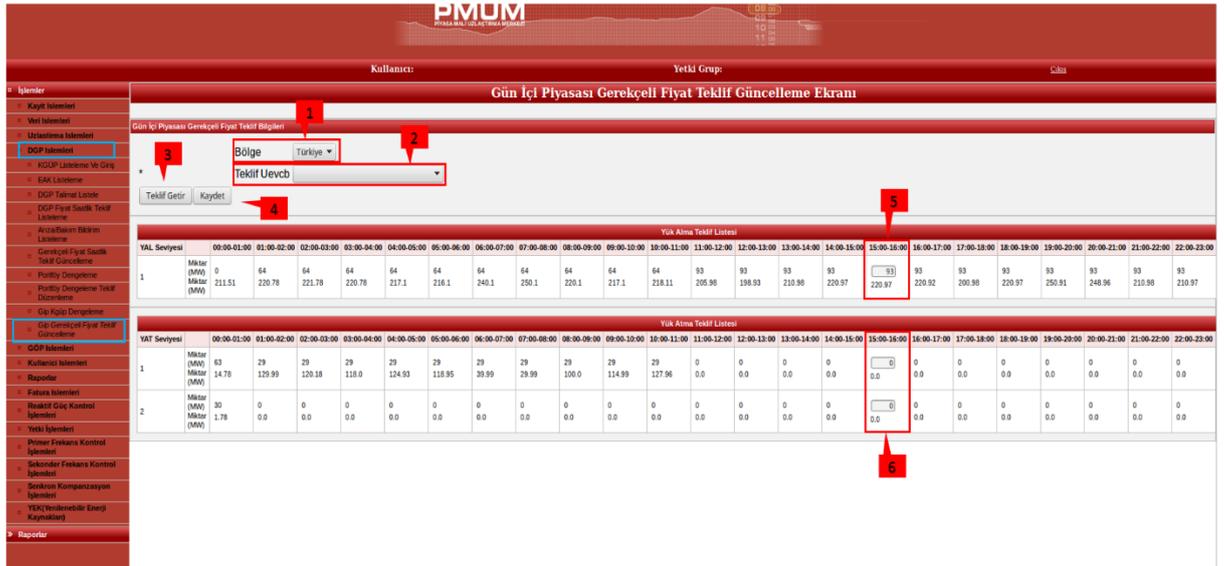
FIGURE 1: IDM FDGS Balancing Screen

1. Contract's hour at which balancing operation would be performed can be viewed at IDM FDGS balancing screen. FDGS balancing operation will be closed up to 60 minutes before physical delivery on each hour. When time for balancing operation starts at a particular hour, relevant contract for IDM FDGS balancing operation will be displayed automatically on the screen.

2. Transaction's net sales amount (in MWh) can be viewed for relevant contract in Intraday Market.
3. Transaction's net purchase amount (in MWh) can be viewed for relevant contract in Intraday Market.
4. FDGS quantity (in MWh) to be increased for a relevant hour can be viewed.
5. FDGS quantity (in MWh) to be decreased for a relevant hour can be viewed.
6. Region; when multiple-zone transactions become effective, filtering according to regions will be active. There is one region (TR1) currently and filtering is not activated.
7. Generation facility at which IDM FDGS balancing operation to be performed can be selected
8. Injection and Withdrawal Unit Basis to Settlement (IWUBS) at which IDM FDGS balancing operation to be performed can be selected
9. FDGS Volume (in MWh) for IDM FDGS balancing operation for a particular IWUBS can be entered.
10. "Dengele" button; is enable to save selected data.
11. Contracts at which transactions are performed in Intraday Market can be viewed.
12. Net sale amount corresponding to contracts at which transactions are performed in Intraday Market can be viewed.
13. Net purchase amount corresponding to contracts at which transactions are performed in Intraday Market can be viewed.

6.2 IDM JUSTIFIED BID UPDATING

IDM Justified Price Bid Updating must be performed by every market participant having balancing units under their generation license. By clicking dgpys.epias.com.tr link and following "BM Operations" >> "IDM Justified Price Bid Updating" titles, IDM Justified Price Bid Update Screen can be accessed.



The screenshot shows the 'IDM Justified Price Bid Updating' screen. The interface includes a header with 'PMOM' and 'Gün İçi Piyasası Gerekçeli Fiyat Teklif Güncelleme Ekranı'. Below the header, there are input fields for 'Bölge' (Region) and 'Teklif Uevcb' (Bid Uevcb). A table displays bid data for various hours, with a 'Dengele' button highlighted in red. The table has columns for 'YAL Sevyesi' and 'Yük Alma Teklif Listesi'.

YAL Sevyesi	00:00-01:00	01:00-02:00	02:00-03:00	03:00-04:00	04:00-05:00	05:00-06:00	06:00-07:00	07:00-08:00	08:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-13:00	13:00-14:00	14:00-15:00	15:00-16:00	16:00-17:00	17:00-18:00	18:00-19:00	19:00-20:00	20:00-21:00	21:00-22:00	22:00-23:00
1	Miktar (MW)	0	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64
1	Miktar (MW)	211.51	220.78	221.78	220.78	217.1	216.1	240.1	250.1	220.1	217.1	218.11	205.98	198.93	210.98	220.97	220.97	220.92	200.98	220.97	250.91	248.96	210.98
2	Miktar (MW)	83	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
2	Miktar (MW)	14.78	129.99	120.18	118.0	124.93	118.95	99.99	29.99	100.0	114.99	127.96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Miktar (MW)	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Miktar (MW)	1.78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FIGURE 2: IDM Justified Price Bid Updating Screen

1. When multiple-zone transactions become effective, filtering according to regions will be active. There is one region (TR1) at the present time and filtering is inactive.
2. Injection and Withdrawal Unit Basis to Settlement (IWUBS) subject to bid updating can be viewed

3. “Teklif Getir” button; is enable to view selected IWUBS ’s offers.
4. “Kaydet” button; is enable to save updated data.
5. Area for updating IDM Justified Up Regulation Bid for the relevant hour for the purpose of IDM FDGS balancing operation. Up Regulation bid can be increased by amount of FDGS increase and Up Regulation bid can be decreased by amount of FDGS decrease
6. Area for updating IDM Justified Down Regulation Bid for the relevant hour for the purpose of IDM FDGS balancing operation. Down Regulation bid can be increased by amount of FDGS increase and Down Regulation bid can be decreased by amount of FDGS decrease

Only volume update are permitted while updating BMP offers due to transactions at IDM. The current control of 10 MWh volume increments for BPM offers is still applicable for IDM Justified Bid Updating. In case difference between Available Generation Capacity (AGC) and FDGS is less than 10 MWh after FDGS increment due to IDM FDGS balancing operation, Up Regulation volume automatically set to zero. In case difference between Available Generation Capacity (AGC) and FDGS is less than 10 MWh after FDGS increment due to IDM FDGS balancing operation, Down Regulation volume automatically set to zero.

Updating IDM justified price bid when FDGS change is less than 1 MWh is not allowed. Only increments and decrements of 1 MWh and its integer multiples are allowed for IDM Justified Price Bid Updating operations

6.3 IDM USER AUTHORITY AND SELL-BUY LIMITS DETERMINATION

For determining IDM user authority and limits regarding to buy-sell side, click on the “User Operations” on the Balancing Market Screen. Clicking “” symbol to determine user operations for relevant user, User Entrance/Update Screen will open.

İşlemler		Kullanıcı Giriş/Güncelleme Ekranı	
<ul style="list-style-type: none"> Kayıt İşlemleri <ul style="list-style-type: none"> Kayıt Bilgileri Uevcb Santral Lisans İşlemleri Uevcb ve Sayaç İzleme DSG Listeleme GÖP Katılım Durum GİP Katılım Durum Eski Serbest Tüketici İşlemleri Sayaç İşlemleri Serbest Tüketici İşlemleri Veri İşlemleri Uzlastırma İşlemleri DGP İşlemleri GÖP İşlemleri Kullanıcı İşlemleri <ul style="list-style-type: none"> Kullanıcı İşlemleri GÖP Kullanıcı Limitleri Raporlar Fatura İşlemleri Reaktif Güç Kontrol İşlemleri Yetki İşlemleri Primer Frekans Kontrol İşlemleri Sekonder Frekans Kontrol İşlemleri Senkron Kompanzasyon İşlemleri YEK(Yenilenebilir Enerji Kaynakları) 	<p>Kullanıcı Bilgileri</p> <p>* Ad</p> <p>* Eposta</p> <p>* Gerçek Ad</p> <p>* Şifre</p> <p>* Şifre Doğrulama</p> <p>* Tc Kimlik No</p> <p>* Telefon</p> <p>* Durum <input type="text" value="Onayli"/></p> <p>* Yetki Grup <input type="text"/></p> <p>* GİP Alış Miktar (Lot) <input type="text" value="99999"/></p> <p>* GİP Satış Miktar (Lot) <input type="text" value="99999"/></p> <p>* GİP Max Alış Fiyat <input type="text"/></p> <p>* GİP Min Satış Fiyat <input type="text"/></p> <p>* GİP Yetki Grup <input type="text" value="Tam Yetkili"/></p>	<p>Kullanıcı İletim Tercihleri</p> <p><input checked="" type="checkbox"/> PTF Sonuçlarını Email İle Almak İstiyorum</p> <p><input checked="" type="checkbox"/> İkili Anlaşma Gönderim Uyarılarını Eposta Olarak Almak İstiyorum.</p> <p><input checked="" type="checkbox"/> Gün sonunda bekleyen ikili anlaşma uyarılarını eposta olarak almak istiyorum.</p> <p><input checked="" type="checkbox"/> İtiraz e-postalarını almak istiyorum.</p> <p><input checked="" type="checkbox"/> Süreç değişikliklerini e-posta ile almak istiyorum.</p> <p><input checked="" type="checkbox"/> süreç değişikliklerini sms ile almak istiyorum</p>	<p>Kayıt</p> <p>Kaydet</p>

FIGURE 3: IDM User Authority and Sell-Buy Limits Determination

- Limits regarding to sell-buy volume and sell-buy price are required for operating in Intraday Market. Limit setting operations can only be modified by users having initials of "PK".
- Displaying the IDM user authority for performing operations. They are;
 - Unauthorized:** the user cannot operate any transaction in Intraday Market.
 - Read only:** the user can log in the Intraday Market system and follow transactions but cannot operate any transaction.
 - Fully-authorized:** the user can log in the Intraday Market system and operate transactions in accordance with determined limits.

6.4 HOMEPAGE (EXIST)

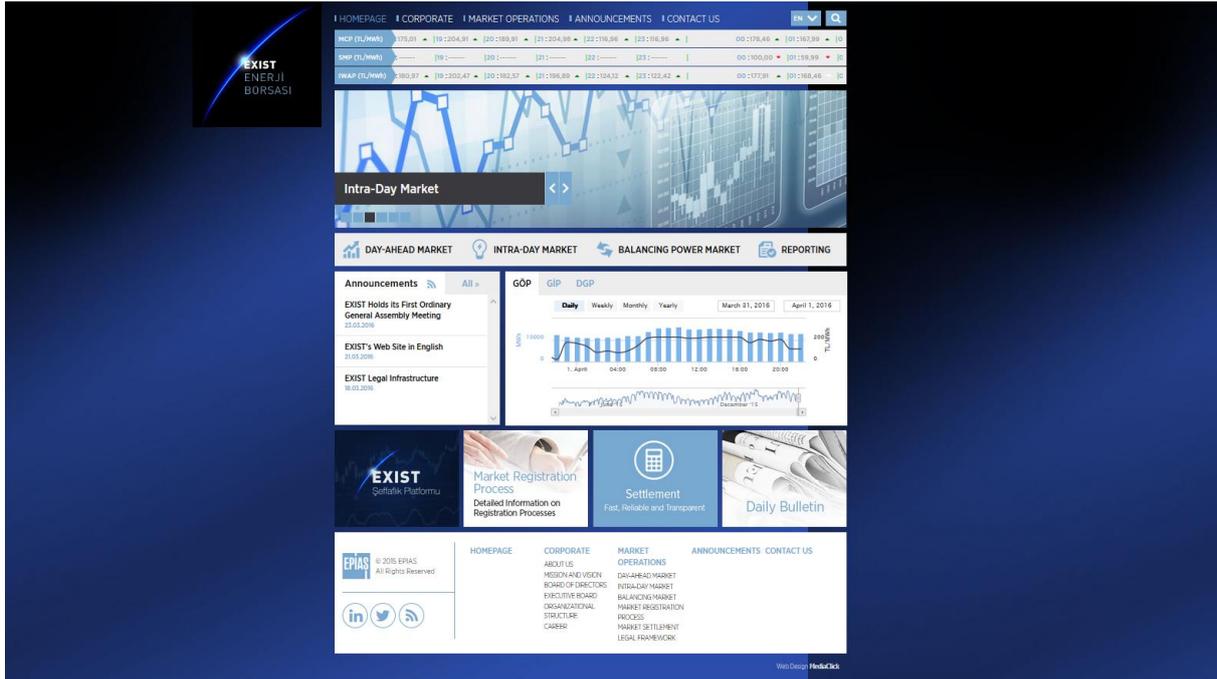


FIGURE 4: EXIST Portal Screen

- THE ENERGY EXCHANGE of TURKEY (EXIST) system website can be accessed at ***www.epias.com.tr***
- Essential documents and information, notifications and market reports can be accessed at EPIAŞ's website.
- In the English version of the website, user can click the "DAY-AHEAD MARKET" button and access the Day a-head Market portal.
- User can click the "INTRADAY MARKET" button and access the Intraday Market's website.
- User can click the "BALANCING POWER MARKET" button and access Balancing Power Market's website.

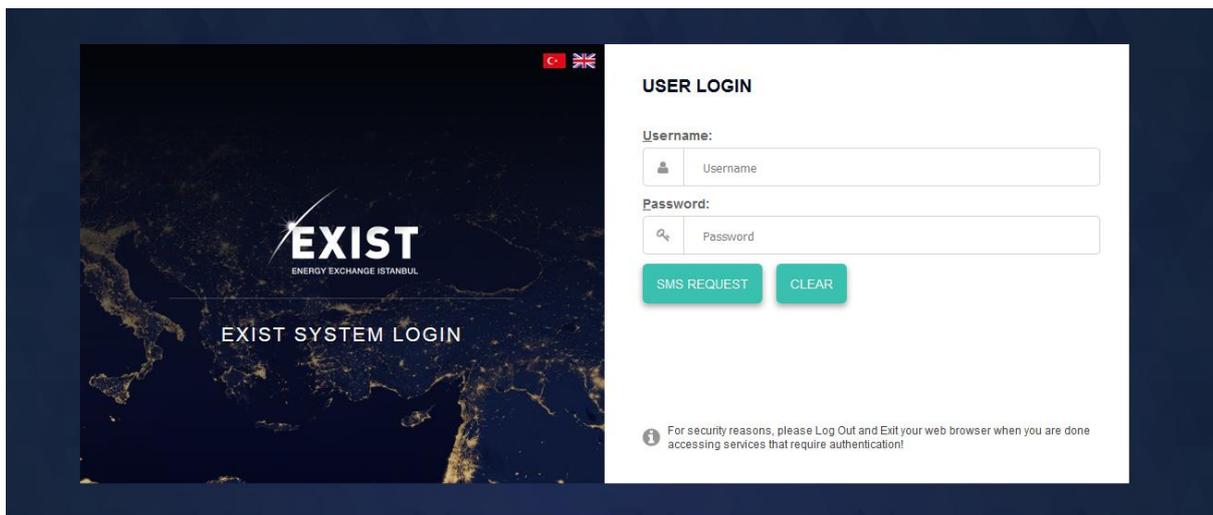


FIGURE 5: Intraday Market Entry Page

- To access Intraday Market's portal, participants can use their Balancing Power Market username and password. System will send a temporary authentication password to user's mobile phone; this password will be used to enter system.

6.5 HOMEPAGE (INTRADAY)

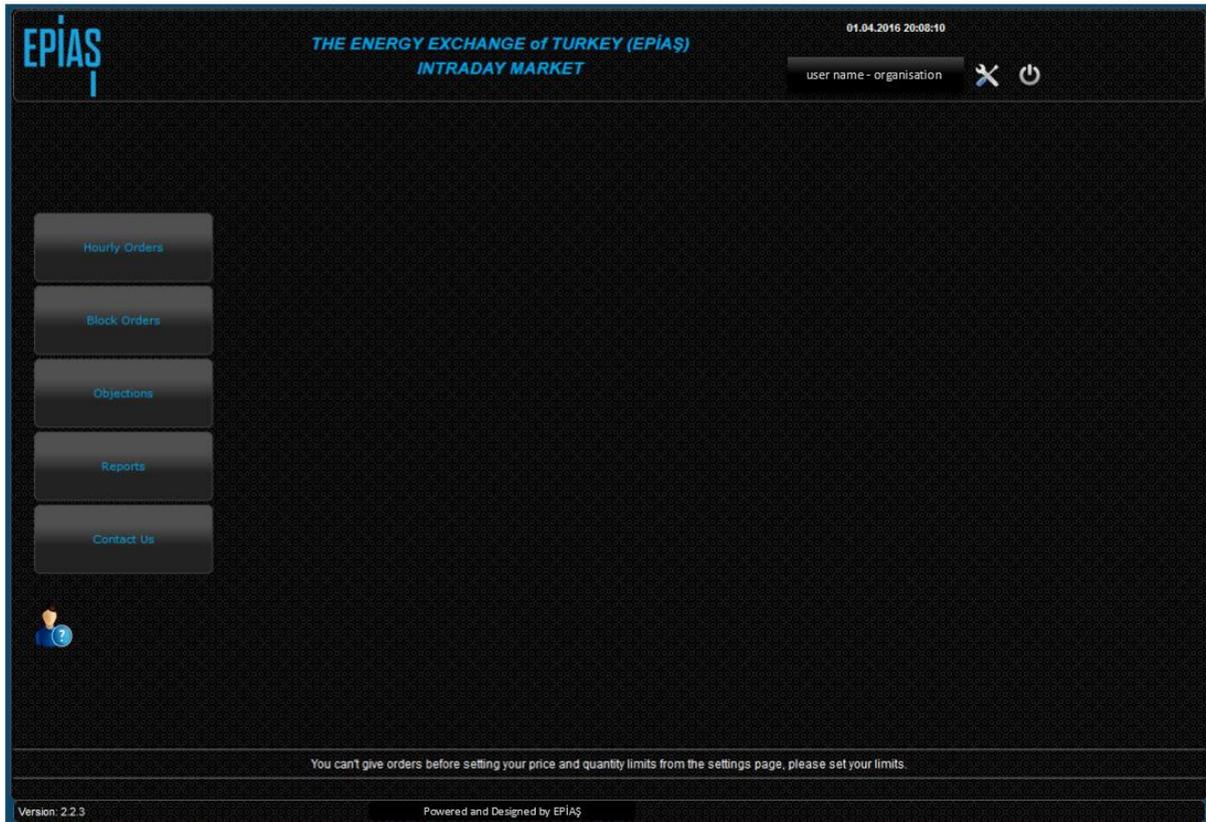


FIGURE 6: Intraday Market Participant Screen

- Once the participant enters the correct username and password, homepage screen seen above will be shown. Single Hourly Order Market, Block Order Market, Reports, Contact Information, Customized System Settings and Intraday Market User Manual can be accessed via homepage.

6.6 SETTINGS SCREENS

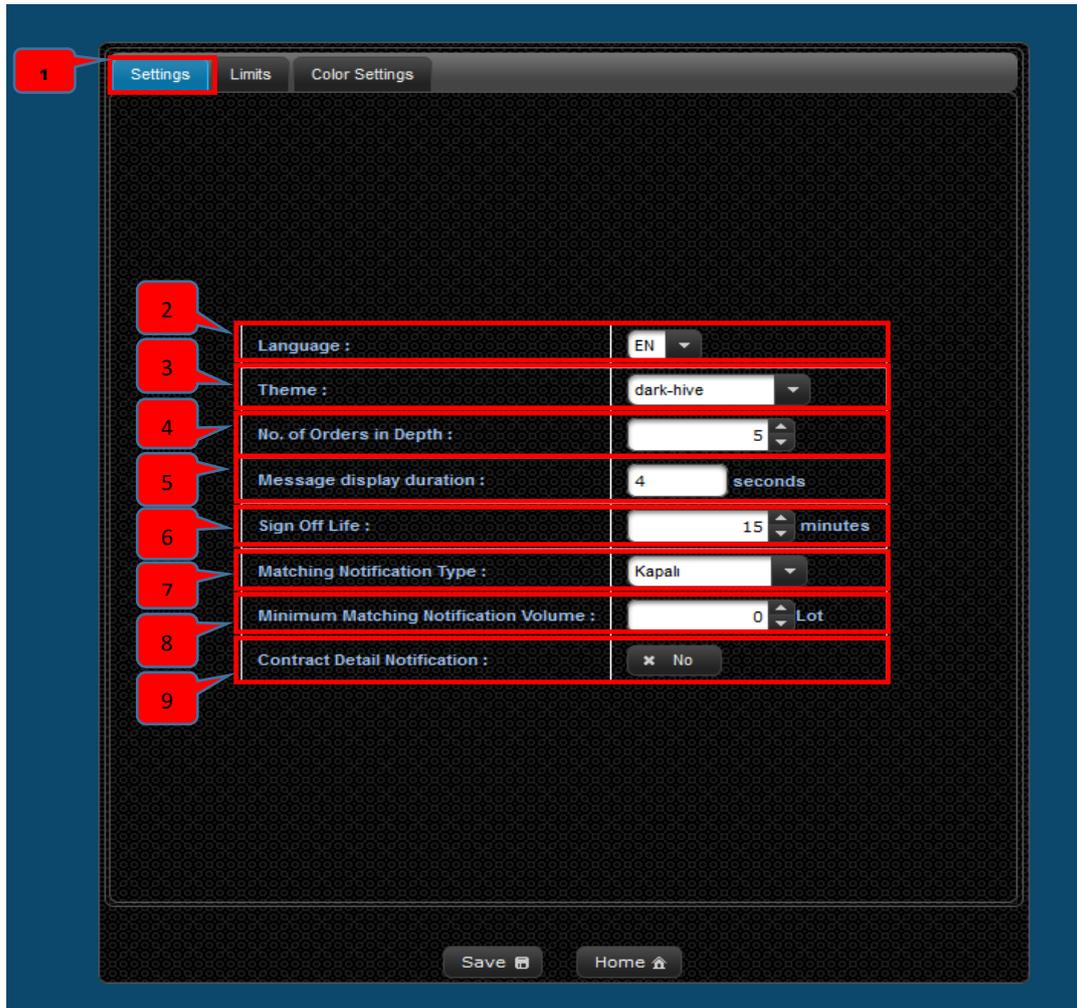
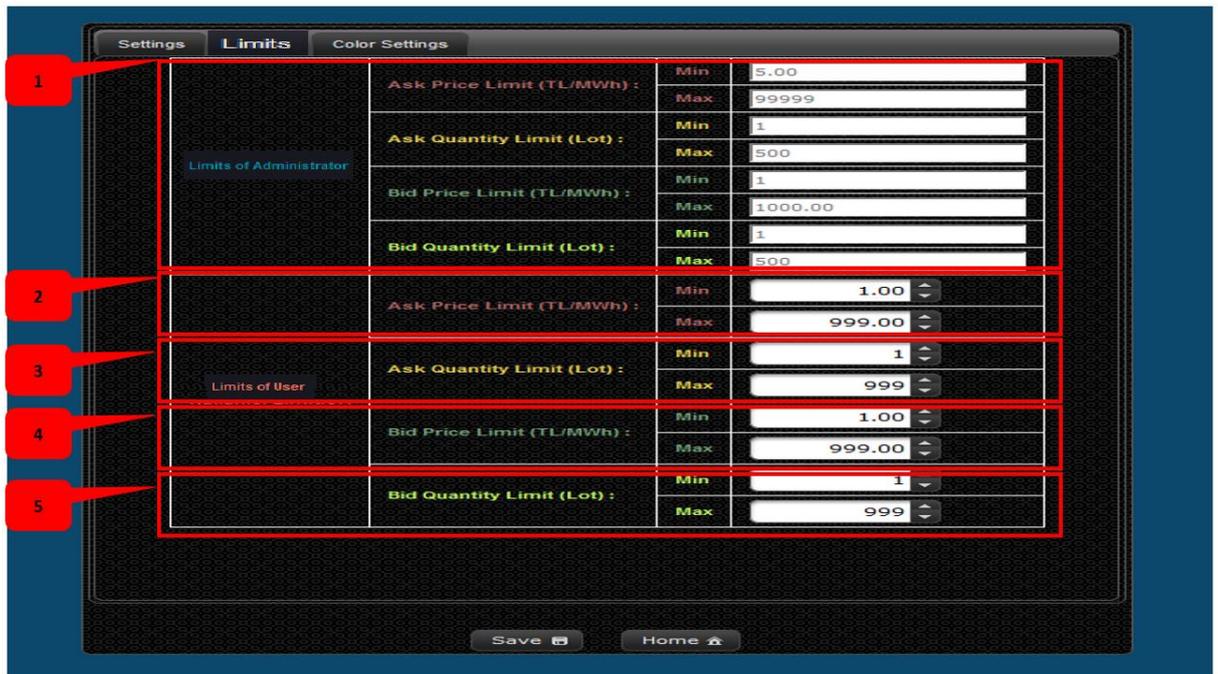


FIGURE 7: Intraday Market Settings Screen-1

- Participants should define order limits and preferred language in case they log in to intraday system first time.
 - Order limit will prohibit incorrect order entry and prevent faulty trading. Participant is responsible for changes in limits.
 - Theme and color settings can be customized for using user-interface more efficiently. Screen display color settings can be changed under `Settings` tab.
1. Screen display color settings can be changed under `Settings` tab.
 2. Intraday portal can be used in Turkish and English languages. Default system language is Turkish.
 3. Intraday portal theme can be selected among other listed themes. Default system theme is Dark-Hive.
 4. Number of contracts to be displayed in Order Depth can be changed. By default number of contracts to be displayed in Order Depth is 5.
 5. Display duration of error, warning and notification messages can be customized in seconds. By default display duration is 4 seconds.

6. Desired time to be remained signed in the system can be changed. By default this time is 15 minutes
7. Type of notification to the user who has a matched offer can be set off, set on with e-mail notification, set on with SMS notification, or set on for both SMS and e-mail notification at this combo box.
8. Minimum matching volume that will be notified can be set in terms of lot at this number box
9. Contract Detail Notification can be set on or set off via this button



Section	Limit Type	Min	Max
Limits of Administrator	Ask Price Limit (TL/MWh) :	5.00	99999
	Ask Quantity Limit (Lot) :	1	500
	Bid Price Limit (TL/MWh) :	1	1000.00
	Bid Quantity Limit (Lot) :	1	500
Limits of User	Ask Price Limit (TL/MWh) :	1.00	999.00
	Ask Quantity Limit (Lot) :	1	999
	Bid Price Limit (TL/MWh) :	1.00	999.00
	Bid Quantity Limit (Lot) :	1	999

FIGURE 8: Intraday Market Settings Screen-2

1. Administrative limits can be defined via DGPYS screen by the authorized ADMIN user.
2. Minimum and maximum price limits are defined for sell offer.
3. Minimum and maximum quantity limits are defined for sell offer.
4. Minimum and maximum price limits are defined for buy offer.
5. Minimum and maximum quantity limits are defined for buy offer.



FIGURE 9: Intraday Market Settings Screen-3

1. When there is a lower or a higher priced offer placed in the sell side, the display color of that line can be customized separately based on the status of that order.
 2. When there is a lower or a higher priced offer placed in the buy side, the display color of that line can be customized separately based on the status of that order.
 3. After each matching, the display color of the system trend can be customized separately based on the status of matching.
 4. The display color of the `Offer Depth` can be customized.
 5. The display color of the `Offer Status` can be customized. Orders that are placed by participants are compared against limiting price and quantity values.
 6. The display color of the sell and buy offers-that are viewed on the offer page-can be customized.
- Unless the price and quantity values of an order are within the predefined limits, user will be shown the following warning message demonstrated below. These limits can be defined via DGPYS screen by the ADMIN user.

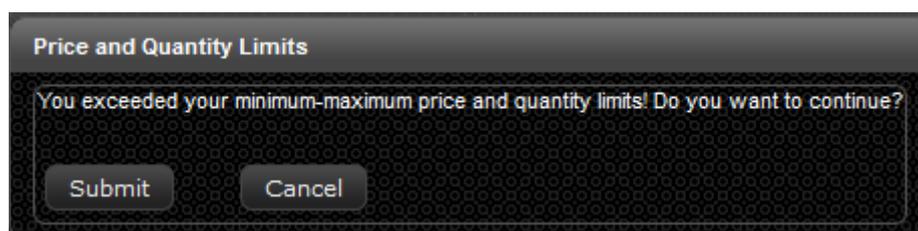


FIGURE 10: Quantity-Price Limits Warning

- At this stage, even though the participant exceeded limits and is willing to continue with trading, operation will be executed, and if the participant wishes to go no further operation will be cancelled and order can be corrected and re-entered.

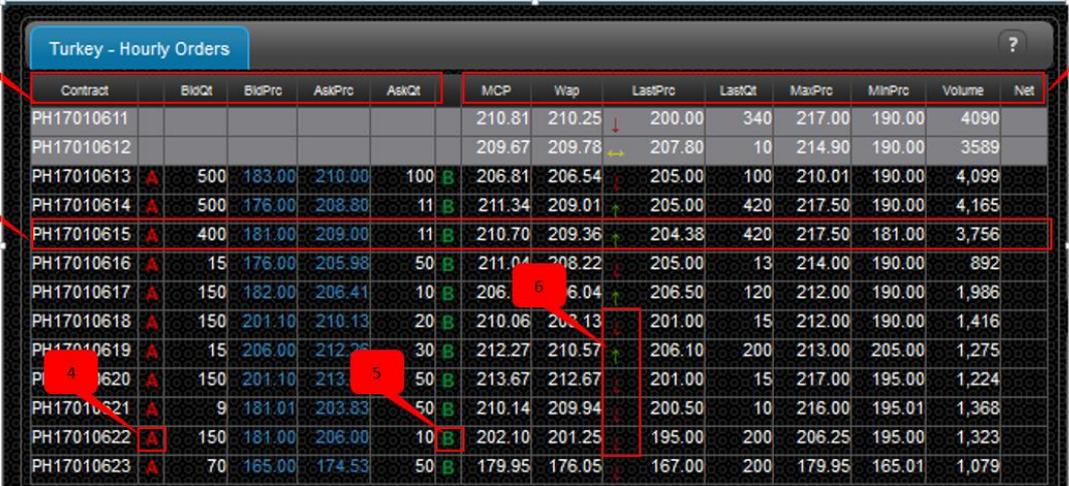
6.7 SINGLE HOURLY ORDER SCREENS

The screenshot displays the 'Turkey - Hourly Orders' interface. The main table (1) lists various contracts with columns for BidQ, AskQ, BidP, AskP, and Volume. The top bar (4) shows the user's name and organization, along with the date and time (01.04.2016 20:34:45). The order entry form (5) includes fields for Contract, Price (TL/MWh), and Quantity (Lch), along with an Expiration Time field and a Submit button. The 'Marked by Contract' table (3) shows no orders found. The 'Trade History' table (6) lists recent trades with columns for Hour, Contract, Price, and Quantity. The 'System Messages' table (2) shows messages from 01.04.2016 14:36:00 regarding block and hourly contract creation. The 'Own Orders and Trades' table (7) shows one order found.

FIGURE 11: Single Hourly Order Homepage

- Single Hourly Order Market page can be viewed via selecting Single Hourly Order section from Intraday Market homepage.
- Certain sections of the screen shown above (FIGURE-8) will be explained in detail in the following parts of this manual.

6.7.1 SINGLE HOURLY ORDER BOOK



Contract	BidQt	BidPrc	AskPrc	AskQt	MCP	Wap	LastPrc	LastQt	MaxPrc	MinPrc	Volume	Net
PH17010611					210.81	210.25	200.00	340	217.00	190.00	4090	
PH17010612					209.67	209.78	207.80	10	214.90	190.00	3589	
PH17010613	▲ 500	183.00	210.00	100	206.81	206.54	205.00	100	210.01	190.00	4,099	
PH17010614	▲ 500	176.00	208.80	11	211.34	209.01	205.00	420	217.50	190.00	4,165	
PH17010615	▲ 400	181.00	209.00	11	210.70	209.36	204.38	420	217.50	181.00	3,756	
PH17010616	▲ 15	176.00	205.98	50	211.04	208.22	205.00	13	214.00	190.00	892	
PH17010617	▲ 150	182.00	206.41	10	206.00	206.04	206.50	120	212.00	190.00	1,986	
PH17010618	▲ 150	201.10	210.13	20	210.06	207.13	201.00	15	212.00	190.00	1,416	
PH17010619	▲ 15	206.00	212.28	30	212.27	210.57	206.10	200	213.00	205.00	1,275	
PH17010620	▲ 150	201.10	213.33	50	213.67	212.67	201.00	15	217.00	195.00	1,224	
PH17010621	▲ 9	181.01	203.83	50	210.14	209.94	200.50	10	216.00	195.01	1,368	
PH17010622	▲ 150	181.00	206.00	10	202.10	201.25	195.00	200	206.25	195.00	1,323	
PH17010623	▲ 70	165.00	174.53	50	179.95	176.05	167.00	200	179.95	165.01	1,079	

FIGURE 12: Single Hourly Order Book

➤ The display color of the values on the order book can be customized from the Settings menu.

1. Best bid and ask priced offers with quantities are listed under this section.
 - a. Quantities of orders with the same price level and side (buy or sell) are aggregated and shown under orders list.
 - b. Detailed information in regard to orders can be viewed under order depth.
2. Trading data regarding contracts can be viewed under this section.
 - a. **MCP** shows Day-Ahead market clearing price of the hour that contract under consideration is associated
 - b. **Wap** shows the weighted average price of exchanges succeeded at contract under consideration
 - c. **LastPrc** shows the price of the latest exchange succeeded at contract under consideration
 - d. **LastQt** shows the quantity of the latest exchange succeeded at contract under consideration
 - e. **MaxPrc** shows the value of the maximum priced exchange succeeded at contract under consideration so far
 - f. **MinPrc** shows the value of the minimum priced exchange succeeded at contract under consideration so far
 - g. **Volume** shows the sum of ask and bid quantities contract under consideration so far
 - h. **Net** shows the difference of ask and bid quantities of participant's own orders that already matched at contract under consideration so far

3. For contract **PH17010615** the following information can be viewed: Best buy and sell orders, price and quantity information of the latest trade, minimum and maximum price information of the previously executed exchanges and trade volume of the related contract.
4. When button **"A"** is clicked, order will automatically be filled in the *Single Hourly Ask* field based on the best buy offer information for this related contract under Single Hourly Order Market and once the user clicks *Ask* button order will be placed.
5. When button **"B"** is clicked, order will automatically be filled in the *Single Hourly Bid* field based on the best sell offer information for this related contract under Single Hourly Order Market and once the user clicks *Bid* button order will be placed.
6. Compares the price of the latest exchange with the previously succeeded trade under same contract.
 - a. **"↑"** shows that the price of the latest exchange is greater than the former matching price.
 - b. **"↔"** shows that the price of the latest exchange is equal to the former matching price.
 - c. **"↓"** shows that the price of the latest exchange is less than the former matching price.

6.7.2 SINGLE HOURLY ORDER SCREEN MESSAGES



System Messages		
Date	Priority	Message
01.04.2016 14:36:00	Info	Block contracts for the day 02.04.2016 have been created.
01.04.2016 14:36:00	Info	Hourly contracts for the day 02.04.2016 have been created.

FIGURE 13: Single Hourly Order Screen Messages

1. System messages published by EPIAS can be viewed here.
2. User can click **"⊗"** button in the right hand corner to expand and view messages in a pop-up window

6.7.3 SINGLE HOURLY ORDER SCREEN STATUS BAR

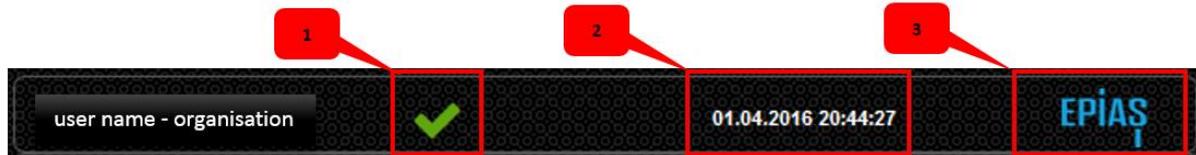


FIGURE 14: Single Hourly Order Screen Status Bar

1. Guarantee adequacy check:
 - a. If the icon is green, guarantee is adequate.
 - b. If the icon is red, guarantee is inadequate and participant cannot trade.
 - c. When you click the  symbol, pop-up figure 15 would open.

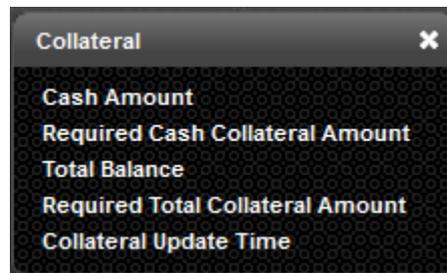


FIGURE 15: Collateral Standing Pop-up Screen

- On the pop-up screen, “Cash Amount”, “Required Cash Guarantee Amount”, “Total Balance”, “Required Total Guarantee Amount” and “Guarantee Update Time” can be displayed related to online user’s organization.
2. Shows the Intraday Market Web Application system date and time information.
 3. It indicates that system is enabled or disabled state.
 - a. If the color of “EPIAS” logo is blue, system is enabled.
 - b. If the color of “EPIAS” logo is red, system is disabled.

6.7.4 SINGLE HOURLY ORDER ENTRY SCREEN

6.7.4.1 SINGLE HOURLY ASK ENTRY

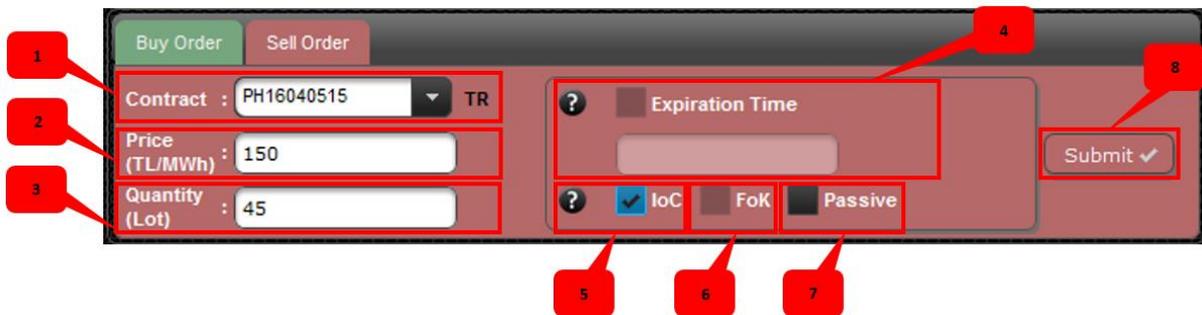


FIGURE 16: Single Hourly Sell Order Entry

1. User can select a predefined single hourly order contract from the drop down menu.
2. Order price are entered in this field.
 - a. Orders are placed in TL/MWh
 - b. Currency is in Turkish Lira(s) (TL)
 - c. Have a precision of 2 decimal points (“Kuruş” sensitivity)
3. Order quantity is entered in this field. Orders are placed in Lot(s) in whole numbers.
4. If the user is willing to place a single hourly order and keep it active for a certain amount of time, expiration field should be checked.
 - a. Once this option is activated, user selects the expiration date and time.
5. Participant can place a single hourly order using the IoC (Immediate or Cancel) option by checking this field.
 - a. IoC selection can be used with Passive function.
6. Participant can place a single hourly order using the FoK (Fill or Kill) option by checking this field.
 - a. FoK selection can be used with Passive option.
7. Participant can place a single hourly order for a future use via checking *Passive* field.
 - a. Passive order selection can be used simultaneously with one of Expiration Time, IoC and FoK options. For that case, order is recorded as passive; once turned into Active, it becomes active based on recorded selection options.
8. Once the contract, quantity and price information are defined and input, order can be placed via clicking *Ask* button.

6.7.4.2 SINGLE HOUR BID ENTRY

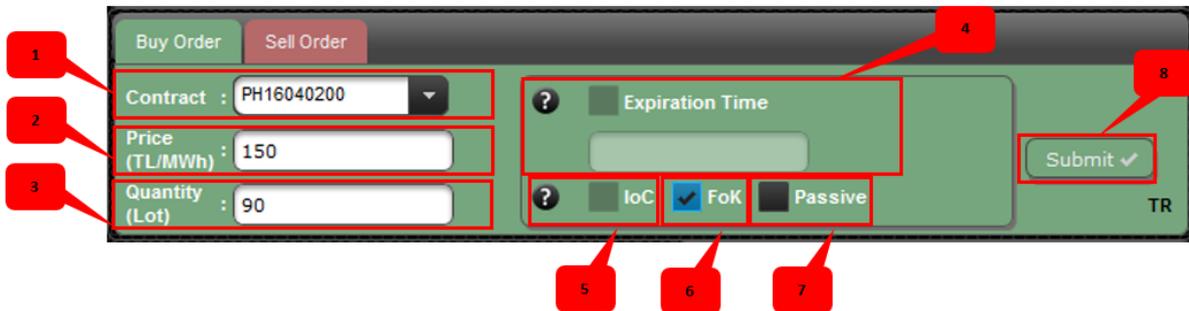


FIGURE 17: Single Hour Bid Entry Screen

1. User selects a predefined hourly order contract from the drop down menu.
2. Order price is entered in this field.
 - a. Orders are placed in TL/MWh
 - b. Currency is in Turkish Lira(s) (TL)
 - c. Have a precision of 2 decimal points (“Kuruş” sensitivity)
3. Order quantity is entered in this field. Orders are placed in Lot(s) in whole numbers.
4. If the user is willing to place a single hourly order and keep it active for a certain amount of time, expiration field should be checked.
 - a. Once this option is activated, user selects the expiration date and time.
5. Participant can place a single hourly order using the IoC (Immediate or Cancel) option by checking this field.
 - a. IoC selection can be used with Passive function.
6. Participant can place a single hourly order using the FoK (Fill or Kill) option by checking this field.
 - a. FoK selection can be used with Passive option.
7. Participant can place a single hourly order for a future use via checking *Passive* field.
 - a. Passive order selection can be used simultaneously with one of Expiration Time, IoC and FoK options. For that case, order will be recorded as passive; once turned into Active, it becomes active based on recorded selection options.
8. Once the contract, quantity and price information are defined and input, order can be placed via clicking *Bid* button.

6.7.5 SINGLE HOURLY ORDER DEPTH SCREEN

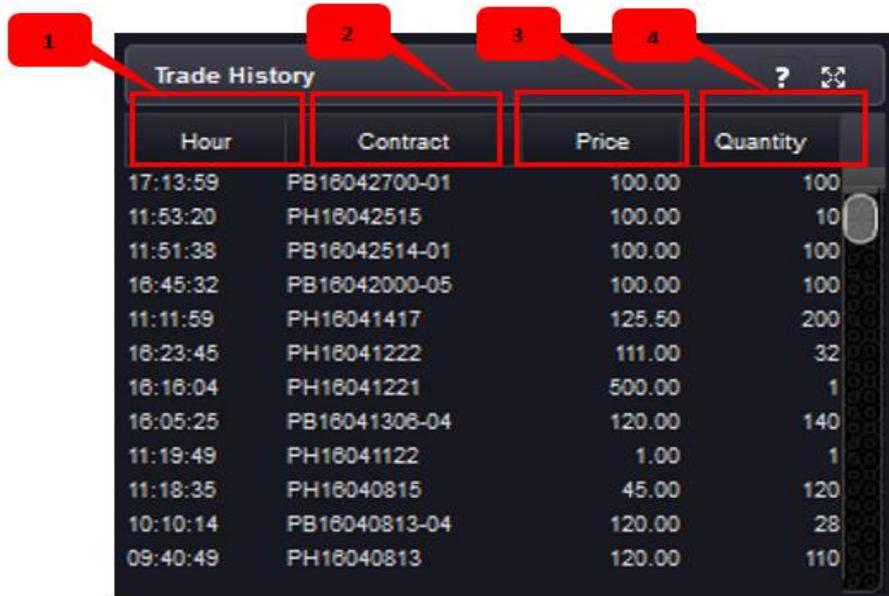


PH16040521 Market by Contract					
	BidPrc	BidQt		AskPrc	AskQt
☺	65.00	47	☺	66.00	19
		19			19
		28			13
			☺	67.00	13
					1
					12

FIGURE 18: Single Hourly Order Depth

- Participants' individual orders are shown in customized color under order depth section.
1. This screen shows orders in buy side for the selected contract PH16040521 in detail. Orders are sorted starting from the best buy order.
 2. This screen shows orders in sell side for the selected contract PH16040521 in detail. Orders are sorted starting from the best sell order.
 3. Starting with the best offer, preset number of order levels—customized from the settings menu—are displayed. Orders with in the same price level are displayed in aggregated fashion. Detail can be revealed via clicking button on the left hand side.
 4. Orders with in the same price level can be viewed in detail by clicking the button next to that price level. Number of detailed orders cannot exceed the number preset in the settings menu.

6.7.6 SINGLE HOURLY ORDER TRADE HISTORY WINDOW



Hour	Contract	Price	Quantity
17:13:59	PB16042700-01	100.00	100
11:53:20	PH16042515	100.00	10
11:51:38	PB16042514-01	100.00	100
16:45:32	PB16042000-05	100.00	100
11:11:59	PH16041417	125.50	200
16:23:45	PH16041222	111.00	32
16:16:04	PH16041221	500.00	1
16:05:25	PB16041308-04	120.00	140
11:19:49	PH16041122	1.00	1
11:18:35	PH16040815	45.00	120
10:10:14	PB16040813-04	120.00	28
09:40:49	PH16040813	120.00	110

FIGURE 19: Hourly Order Trade History Window

- Latest 100 finalized trades are shown under this section. Contract number, price, quantity and time of matching information are listed on this window.
- User can click "  " button in the right hand corner to expand and view trade history in a pop-up window.
 1. Matched contracts' date and time can be viewed.  buttons sort by date from last matched order to first or from first matched order to last.
 2. Matched contracts' details can be viewed. Click **Kont**  button filtering on the basis of contracts.  buttons sort contracts by matched time ascending or descending.
 3. Matched contracts' price can be viewed. Matching prices that are entered into price field can be viewed at price display.  buttons sort contracts by matched price in ascending or descending order.
 4. Matched contracts' volume can be viewed. Matching quantities that are entered into quantity field can be viewed at quantity display.  buttons sort contracts by matched volume in ascending or descending order.

6.7.7 OWN ORDERS AND TRADES WINDOW



Time	Order ID	Contract	A	Type	Price	Quantity	Balance	Status	
10:56:00	4419201	PH18040521	TR	Buy	66.00	28	28	Active	
10:55:35	4419296	PH18040521	TR	Sell	67.00	12	12	Active	
10:55:16	4419292	PH18040521	TR	Sell	66.00	13	13	Canceled	
10:46:05	4419290	PH18040522	TR	Buy	146.00	160	0	Matched	
10:46:40	4419277	PH18040521	TR	Buy	66.00	19	19	Active	
10:45:13	4419274	PH18040521	TR	Sell	66.00	19	19	Active	
10:44:51	4419271	PH18040519	TR	Sell	467.00	124	124	Active	
10:44:37	4419268	PH18040518	TR	Buy	466.00	123	123	Active	
10:44:18	4419265	PH18040523	TR	Buy	150.00	50	50	Active	
10:44:05	4419262	PH18040520	TR	Buy	134.00	60	60	Active	
10:43:50	4419255	PH18040519	TR	Buy	345.00	234	224	Partially Matched	
10:43:34	4419252	PH18040518	TR	Buy	333.00	19	19	Active	
10:43:17	4419249	PH18040517	TR	Buy	234.00	23	23	Active	
10:43:06	4419246	PH18040514	TR	Buy	241.00	25	25	Active	
10:42:41	4419239	PH18040513	TR	Buy	123.00	25	2	Partially Matched	
10:42:19	4419236	PH18040521	TR	Sell	67.00	1	1	Active	

FIGURE 20: Own Orders and Trades (Hourly)

1. Participants' individual orders within the last 4 days are listed in sequence under this section.
2. Display the contract ID of Single Hourly Orders.
3. Display the contract according to Single Hourly Orders. Click **Kont** button filtering on the basis of contracts.
4. Display the region where Single Hourly Orders are applicable. There is one region (TR1) at the present time.
5. Display the Single Hourly Order side/type. Click **Heps** button for filtering order side.
6. Display the all Single Hourly Orders' prices.  buttons sort by single hourly orders' prices in ascending or descending order.
7. Display the Single Hourly Orders' volume.  buttons sort by single hourly orders' volume in ascending or descending order.
8. Display the all Single Hourly Orders' the rest of volume of matched transactions.  buttons sort by the rest of volume in ascending or descending order.

9. Display the all Single Hourly Orders' last status. Click **Heps** button filtering last status.

10. Order filtering and status changing operations menu can be viewed.

a. Under filter menu following options can be selected:

- i. All
- ii. Updatable
- iii. Non updatable

b. Under orders menu following options can be selected:

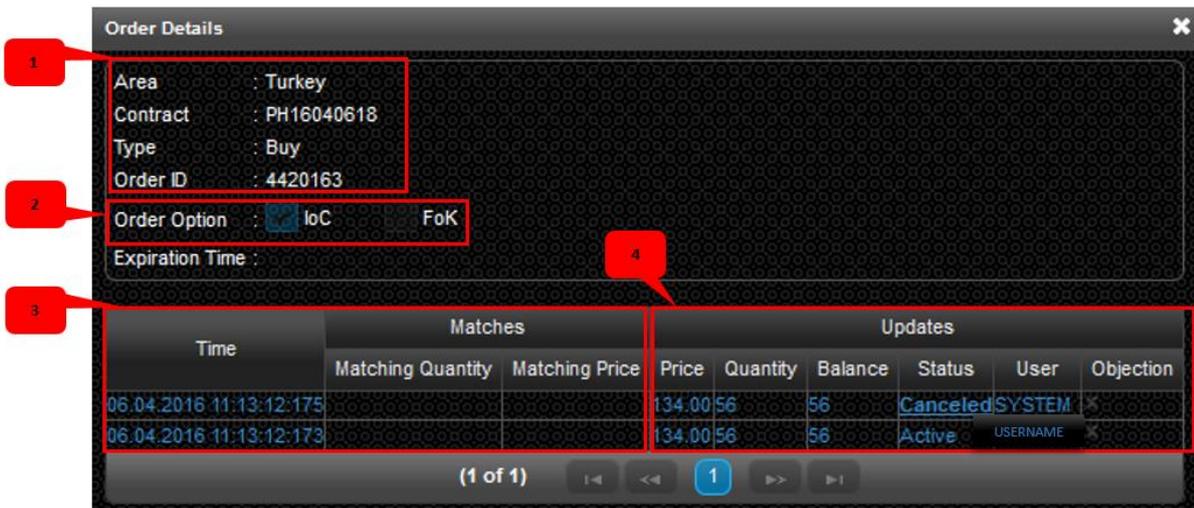
- i. Whole Active offers set passive
- ii. Whole Passive offers set active

11. Values of orders with Active or Passive statuses can be updated, in addition operations such as changing statuses from Active, Passive or Partially Matched can be changed using this button.

12. Trade history for a placed order can be viewed. Data in regard to an order such as order time, quantity, and price, change of status and time of status change can be viewed in detail.

13. In case participants' individual orders within the last 24 hours cannot be displayed on a single page, this bar enables users to navigate between pages to view rest of offers.

6.7.7.1 SINGLE HOURLY ORDER DETAIL SCREEN



The screenshot shows the 'Order Details' screen with the following information:

- Area:** Turkey
- Contract:** PH16040618
- Type:** Buy
- Order ID:** 4420163
- Order Option:** loC FoK
- Expiration Time:**

The table below shows the order's history:

Time	Matches		Updates					
	Matching Quantity	Matching Price	Price	Quantity	Balance	Status	User	Objection
06.04.2016 11:13:12:175			134.00	56	56	Canceled	SYSTEM	
06.04.2016 11:13:12:173			134.00	56	56	Active	USERNAME	

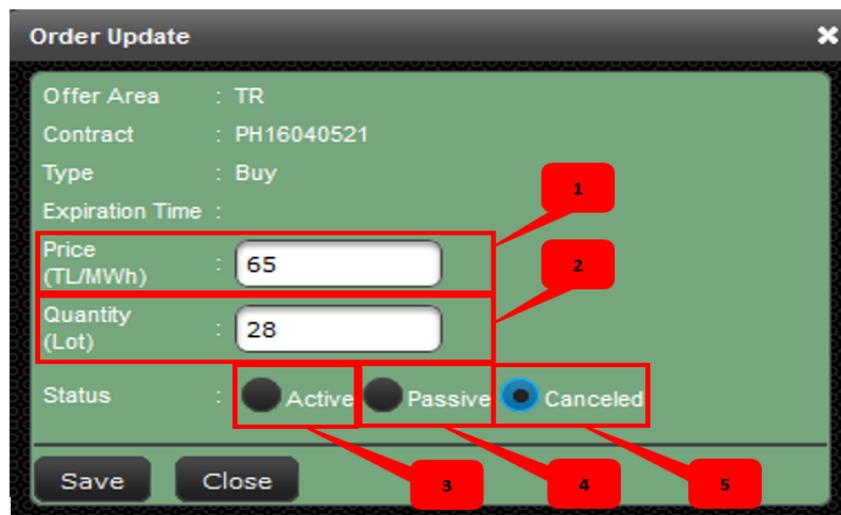
Navigation bar: (1 of 1) | < << 1 >> >

FIGURE 21: Single Hourly Order Detail

- Order detail screen can be accessed via clicking **p** icon from Own Orders and Trades section.

1. Shows an order's up to date information (zone, contract, order side, price, quantity, status) and time of modifications.
2. Shows whether IoC, FoK and Expiration Time options are selected and if Expiration Time option is selected, shows the time of expiry.
3. If the order is matched, matching quantity and price would be viewed.
4. Logs regarding to updates and user who made the modifications regarding to an order are displayed sorted as latest modified order being at top of list.

6.7.7.2 SINGLE HOURLY ORDER UPDATE WINDOW



The screenshot shows the 'Order Update' window with the following details:

- Offer Area : TR
- Contract : PH16040521
- Type : Buy
- Expiration Time :
- Price (TL/MWh) : 65
- Quantity (Lot) : 28
- Status : Active Passive Canceled
- Buttons: Save, Close

Red callouts indicate the following elements:

1. Points to the Price input field.
2. Points to the Quantity input field.
3. Points to the Active radio button.
4. Points to the Passive radio button.
5. Points to the Canceled radio button.

FIGURE 22: Single Hourly Order Update Window

- Order update window can be reached via clicking  icon from Own Orders and Trades section.
 - If a partially matched order status is changed to Passive, the status of the original order would be updated as Canceled and the price of the remaining quantity would be kept original and the status would be presented as Passive. Order status can always be changed to Active and made available for trading.
1. Price of previously placed Active/Passive orders can be changed from this field.
 2. Quantity of previously placed Active/Passive orders can be changed from this field.
 3. Status of a previously placed order can be changed to Active here.
 4. Status of a previously placed Active order can be changed to Passive here.
 5. Previously placed order can be cancelled here.

6.8 BLOCK ORDER SCREENS

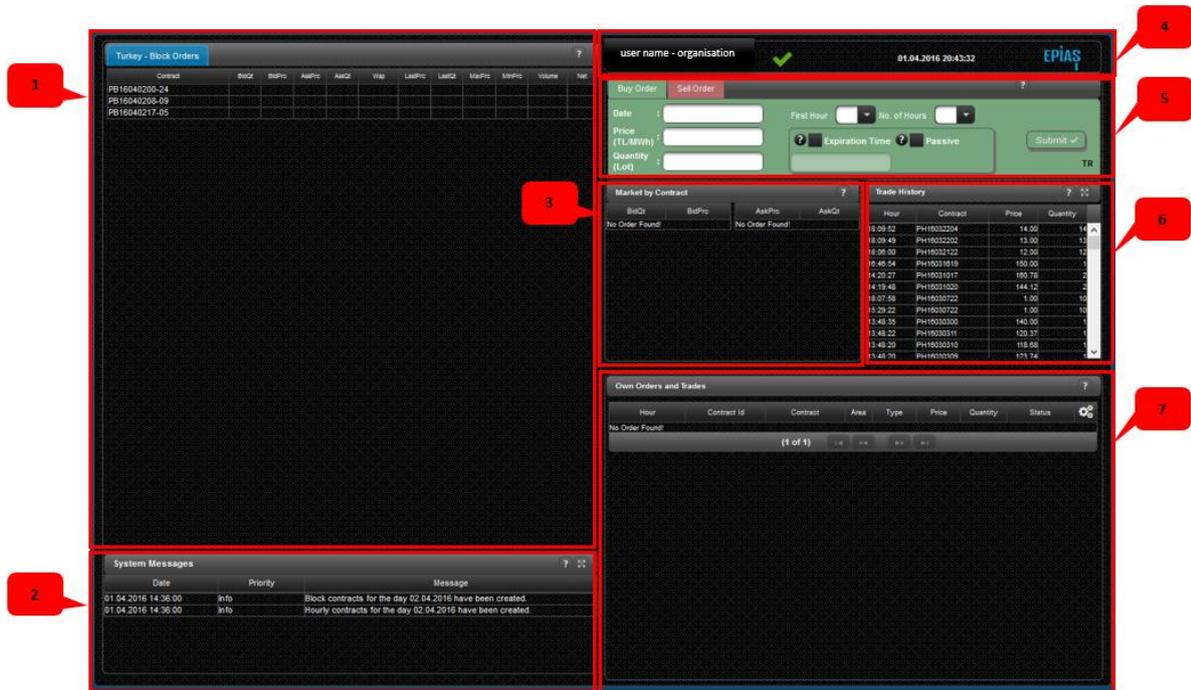


FIGURE 23: Block Order Homepage

- Block Order Market page can be viewed via selecting Block Order section from the Intraday Market homepage.
- Certain sections of the screen shown above (FIGURE-19) will be explained in detail in the following parts of this manual.

6.8.1 BLOCK ORDER SCREEN STATUS BAR

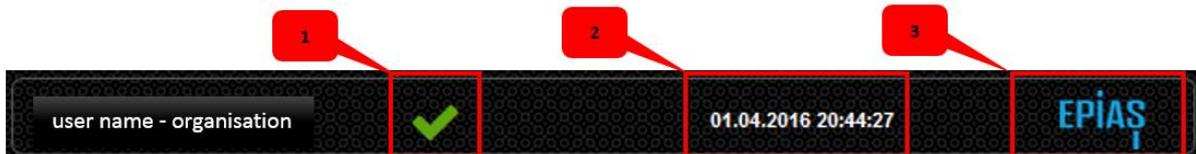


FIGURE 24: Block Order Screen Status Bar

1. Guarantee adequacy check:

- If the icon is green, guarantee is adequate.
- If the icon is red, guarantee is inadequate and participant cannot trade.
- When you click the symbol, pop-up figure 12 would open.

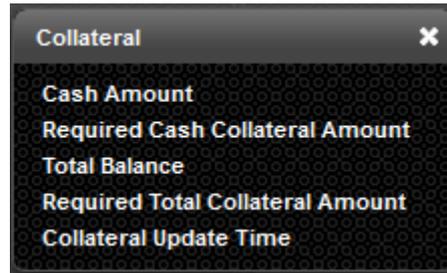


FIGURE 25: Collateral Standing Pop-up Screen

- On the pop-up screen, “Cash Amount”, “Required Cash Guarantee Amount”, “Total Balance”, “Required Total Guarantee Amount” and “Guarantee Update Time” can be displayed related to online user’s organization.

2. Shows the Intraday Market Web Application system date and time information.

3. It indicates that system is enabled or disabled state.

- c. If the color of “EPIAS” logo is blue, system is enabled.
- d. If the color of “EPIAS” logo is red, system is disabled.

6.8.2 BLOCK ORDER ENTRY SCREEN

6.8.2.1 BLOCK ORDER ASK ENTRY


 A screenshot of the 'Block Order Sell Order Entry' form. The form has a header with 'Buy Order' and 'Sell Order' tabs. The main area contains several input fields and controls:

- 1. Date: 06.04.2016
- 2. Price (TL/MWh): 240
- 3. Quantity (Lot): 50
- 4. First Hour: 03
- 5. No. of Hours: 19
- 6. Submit button
- 7. Expiration Time: 06.04.2016 18:38
- 8. Passive checkbox
- 9. A question mark icon

FIGURE 26: Block Order Sell Order Entry

1. User selects a date (Start-Duration).
2. Order price is entered in this field.
 - a. Orders are placed in TL/MWh
 - b. Currency is in Turkish Lira(s) (TL)
 - c. Have a precision of 2 decimal points (“Kuruş” sensitivity)
3. Order quantity is entered in this field. Orders are placed in Lot(s) in whole numbers.
4. Block Order start time is selected in this field.
5. Duration of a block order is defined. (2 hours: from 18 to 20)

6. Once the date, hour, duration, quantity and price information are defined and input, order can be placed via clicking *Ask* button.
7. If the user is willing to place a block order and keep it active for a certain amount of time, expiration time field should be checked to activate the field where the expiration date and time can be input.
 - a. Once this option is activated, user selects the expiration date and time.
8. Participant can place a block order for a future use via checking *Passive* field. Passive order selection can be used simultaneously with expiration time field. For that case, order is recorded as passive; once turned into Active, it becomes active based on recorded selection options

6.8.2.2 BLOCK ORDER BID ENTRY



The screenshot shows a web form for entering a block order. It has two tabs: 'Buy Order' (selected) and 'Sell Order'. The form contains the following fields and options:

- 1:** Date field with value '06.04.2016'.
- 2:** Price (TL/MWh) field with value '150'.
- 3:** Quantity (Lot) field with value '20'.
- 4:** First Hour dropdown menu with value '02'.
- 5:** No. of Hours dropdown menu with value '9'.
- 6:** Submit button with a checkmark.
- 7:** Expiration Time checkbox, which is checked.
- 8:** Expiration Time field with value '06.04.2016 21:26'.
- 9:** Passive checkbox, which is unchecked.

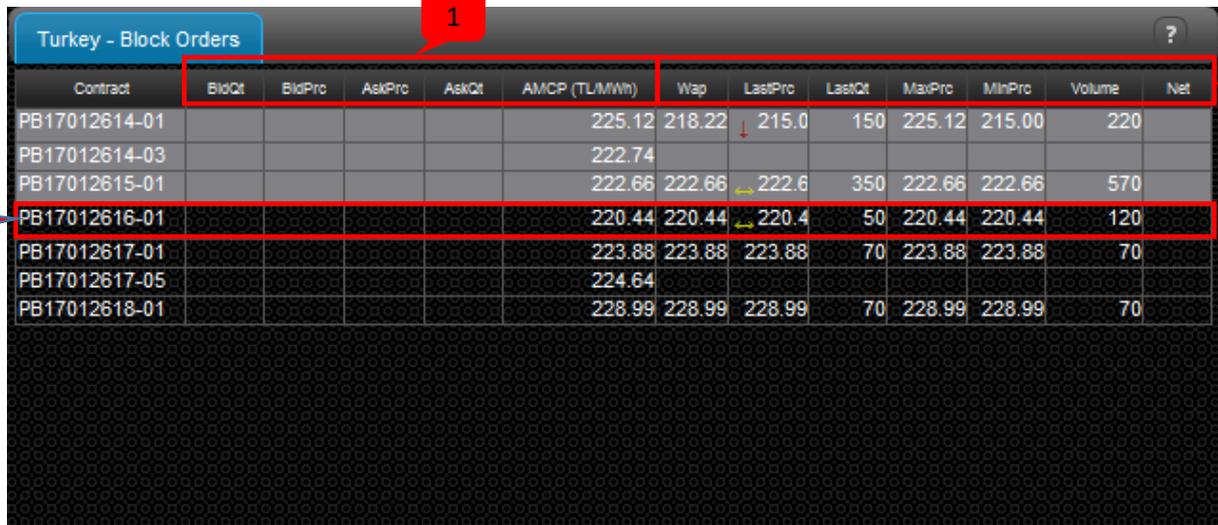
The form also includes a 'TR' label in the bottom right corner.

FIGURE 27: Block Order Buy Order Entry

1. User selects a date (Start-Duration).
2. Order price is entered in this field.
 - a. Orders are placed in TL/MWh
 - b. Currency is in Turkish Lira(s) (TL)
 - c. Have a precision of 2 decimal points (“Kuruş” sensitivity)
3. Order quantity is entered in this field. Orders are placed in Lot(s) in whole numbers.
4. Block Order start time is selected in this field.
5. Duration of a block order is entered to this field
6. Once the date, hour, duration, quantity and price information are defined and input, order can be placed via clicking *Bid* button.
7. If the user is willing to place a block order and keep it active for a certain amount of time, expiration field should be checked.
 - a. Once this option is activated, user selects the expiration date and time.
8. Participant can place a block order for a future use via checking *Passive* field. Passive order selection can be used simultaneously with expiration time field. For that case, order is

recorded as passive; once turned into Active, it becomes active based on recorded selection options

6.8.3 BLOCK ORDER BOOK



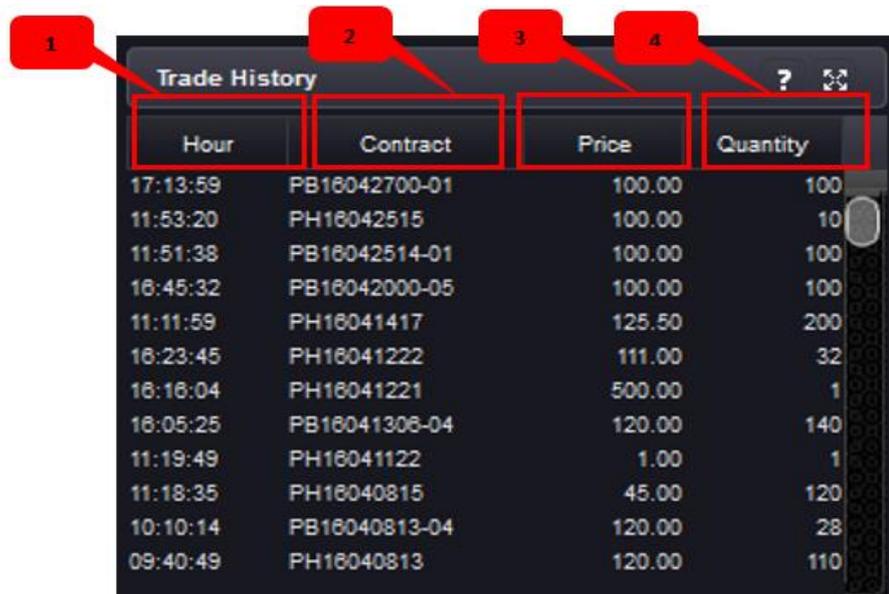
Contract	BldQt	BldPrc	AskPrc	AskQt	AMCP (TL/MWh)	Wap	LastPrc	LastQt	MaxPrc	MinPrc	Volume	Net
PB17012614-01					225.12	218.22	215.0	150	225.12	215.00	220	
PB17012614-03					222.74							
PB17012615-01					222.66	222.66	222.6	350	222.66	222.66	570	
PB17012616-01					220.44	220.44	220.4	50	220.44	220.44	120	
PB17012617-01					223.88	223.88	223.88	70	223.88	223.88	70	
PB17012617-05					224.64							
PB17012618-01					228.99	228.99	228.99	70	228.99	228.99	70	

FIGURE 28: Block Order Book

1. Best bid and ask priced offers with quantities are listed under this section.
 - a. Quantities of orders with the same price level and side (buy or sell) are aggregated and shown under orders list.
 - b. Detailed information regarding to orders can be viewed under order depth.
2. Trading data regarding contracts can be viewed under this section.
 - a. **Wap** shows the weighted average price of exchanges succeeded under related contract.
 - b. **LastPrc** shows the price of the latest exchange succeeded under related contract.
 - c. **LastQt** shows the quantity of the latest exchange succeeded under related contract.
 - d. **MaxPrc** shows the value of the maximum priced exchange-among multiple- succeeded under related contract.
 - e. **MinPrc** shows the value of the minimum priced exchange-among multiple- succeeded under related contract.
 - f. **Volume** shows the sum of ask and bid quantities under related contract.
 - g. **Net** shows the difference of ask and bid quantities of participant's own orders that already matched.

3. As for the **PB15061220-04** contract following information can be viewed: Best buy and sell orders, price and quantity information of the latest trade, minimum and maximum price information of the previously executed exchanges and trade volume of the related contract.

6.8.4 BLOCK ORDER TRADE HISTORY WINDOW



Hour	Contract	Price	Quantity
17:13:59	PB16042700-01	100.00	100
11:53:20	PH16042515	100.00	10
11:51:38	PB16042514-01	100.00	100
16:45:32	PB16042000-05	100.00	100
11:11:59	PH16041417	125.50	200
16:23:45	PH16041222	111.00	32
16:16:04	PH16041221	500.00	1
16:05:25	PB16041306-04	120.00	140
11:19:49	PH16041122	1.00	1
11:18:35	PH16040815	45.00	120
10:10:14	PB16040813-04	120.00	28
09:40:49	PH16040813	120.00	110

FIGURE 29: Block Order Trade History Window

- Latest 100 finalized trades are shown under this section. Contract number, price, quantity and time of matching information are listed on this window.
- User can click " ✕ " button in the right hand corner to expand and view trade history in a pop-up window.
 1. Matched contracts' date and time can be viewed.  buttons sort by date from last matched order to first or vice-versa
 2. Matched contracts' details can be viewed. **Kont** button can be used to view contracts in which trading has occurred.  buttons sort contracts by matched time in ascending or descending order.
 3. Matched contracts' price and filter entering needed matched price.  buttons sort contracts by matched price ascending or descending.
 4. Matched contracts' volume can be viewed. Matching quantities that are entered into quantity field can be viewed at quantity display .  buttons sort contracts by matched volume ascending or descending.

6.8.5 BLOCK ORDER DEPTH SCREEN



BidQt	BidPrc	AskPrc	AskQt
25	145.00	123.00	23
25	145.00	145.00	45
34	136.00	156.00	65
34	124.00		

FIGURE 30: Block Order Depth Screen

1. Orders in buy side for the selected contract PB16040607-01 are shown in detail. Orders are sorted starting from the best buy order.
2. Orders in sell side for the selected contract PB16040607-01 are shown in detail. Orders are sorted starting from the best sell order.

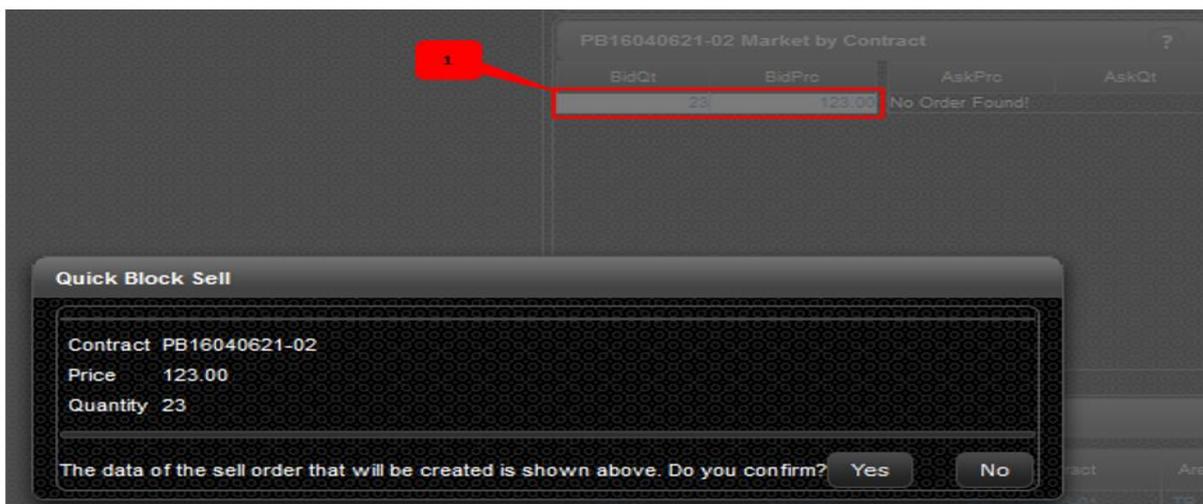


FIGURE 31: Block order screen- fast block order (sell) entry

1. At block order depth screen, quick block sell can be performed via double clicking on the order having desired terms of trading. Quick Block Sell screen allows participants to form a counter offer in the opposite side immediately.

6.8.6 OWN ORDERS AND TRADES WINDOW



Hour	Contract Id	Contract	Area	Type	Price	Quantity	Status	
11:21:07	4419984	PB18040823-01	TR	Sell	234.00	34	Matched	⌵
11:21:07	4420174	PB18040823-01	TR	Buy	234.00	34	Matched	⌵
11:00:00	4419948	PB18040816-01	TR	Sell	466.00	34	Active	⌵
11:00:00	4419942	PB18040813-01	TR	Buy	122.00	22	Expired	⌵
11:00:00	4419994	PB18040813-08	TR	Sell	145.00	67	Expired	⌵
11:00:00	4419958	PB18040813-08	TR	Sell	168.00	34	Expired	⌵
10:43:12	4419899	PB18040813-01	TR	Buy	122.00	22	Matched	⌵
10:43:12	4419903	PB18040813-01	TR	Sell	111.00	22	Matched	⌵
08:00:00	4419578	PB18040808-01	TR	Sell	67.00	12	Expired	⌵
05:00:00	4419652	PB18040807-01	TR	Buy	145.00	25	Expired	⌵
05:00:00	4419675	PB18040807-01	TR	Sell	168.00	65	Expired	⌵
05:00:00	4419671	PB18040807-01	TR	Sell	145.00	45	Expired	⌵
05:00:00	4419667	PB18040807-01	TR	Sell	123.00	23	Expired	⌵
05:00:00	4419661	PB18040807-01	TR	Buy	124.00	34	Expired	⌵
05:00:00	4419657	PB18040807-01	TR	Buy	136.00	34	Expired	⌵
05:00:00	4419556	PB18040807-05	TR	Buy	383.00	45	Expired	⌵
01:00:00	4419566	PB18040803-19	TR	Sell	234.00	55	Expired	⌵
23:26:00	4419448	PB18040802-09	TR	Buy	234.00	23	Expired	⌵

FIGURE 32: Own Orders and Trades (Block)

1. Participants' individual orders within the last 4 days are listed in sequence under this section.
2. Display the contract ID of Block Orders.
3. Display contracts according to Block Order. Click **Kont** button for filtering on the basis of contracts.
4. Display region according to Block Order. There is one region (TR1) at the present time.
5. Display the Block Order side/type. Click **Heps** button for filtering order side.
6. Display all Block Orders' prices.  buttons sort by block orders' prices in ascending or descending order.
7. Display Block Orders' volume.  buttons sort by block orders' volume in ascending or descending order.
8. Display all Block Orders last status. Click **Heps** button for filtering last status.
9. Order filtering and status changing operations menu

- c. Under filter menu following options can be selected:
 - i. All
 - ii. Updatable
 - iii. Non updatable
- d. Under orders menu following options can be selected:
 - i. Whole Active offers set passive
 - ii. Whole Passive offers set active

10. Values of orders with Active or Passive status can be updated, in addition operations such as modifying of Active, Passive or Partially Matched orders can be performed.

11. Trade history for a placed order can be viewed. Information regarding to an order such as order time, quantity, and price, change of status and time of status change can be viewed in detail.

12. In case participants' individual orders within the last 4 days cannot be displayed on one page, this bar allow users to navigate between pages to view the rest of offers.

6.8.6.1 BLOCK ORDER DETAIL SCREEN



Order Details

Area : Turkey
 Contract : PH16040620
 Type : Buy
 Order ID : 4420266
 Order Option : IoC FoK
 Expiration Time :

Time	Matches		Updates					Objection
	Matching Quantity	Matching Price	Price	Quantity	Balance	Status	User	
06.04.2016 12:11:13:04327		177.00	178.00	54	0	Matched	SYSTEM	X
06.04.2016 12:11:13:03327		177.00	178.00	54	27	Partially Matched	SYSTEM	X
06.04.2016 12:11:13:029			178.00	54	54	Active	USERNAME	X

(1 of 1) << 1 >>

FIGURE 33: Block Order Detail

1. Shows a block order's up to date information (zone, contract, order side, price, quantity, status) and time of change.
2. If the order is matched, matching quantity and price would be viewed.
3. Logs regarding to updates and user who made the modifications regarding to an order are displayed sorted as latest modified order being at top of list.

- Intraday Market participants have a right to object in 15 minutes via clicking *Objections* button in case there is an error regarding to information at their transaction confirmation notifications. Objections would only be accepted if EPIAŞ is responsible for the mistake.

6.8.6.2 BLOCK ORDER UPDATE WINDOW



The screenshot shows a window titled "Order Update" with a close button (X) in the top right corner. The window contains the following fields and controls:

- Offer Area : TR
- Contract : PB16040607-01
- Type : Sell
- Price (TL/MWh) : 145 (Callout 1 points to the price field)
- Quantity (Lot) : 45 (Callout 2 points to the quantity field)
- Status : Active Passive Canceled (Callout 3 points to the Active radio button, Callout 4 points to the Passive radio button, and Callout 5 points to the Canceled radio button)
- Buttons: Save, Close (Callout 3 points to the Close button)

FIGURE 34: Block Order Update Window

Price, quantity and status modifications of a block order, placed previously, can be performed using this section.

As for the block order mentioned under this contract:

1. Price can be changed from this field.
 2. Quantity can be changed from this field.
 3. Status of a previously placed order can be changed to Active.
 4. Status of a previously placed Active order can be changed to Passive.
 5. Previously placed order can be cancelled.
- Each update performed on an order would decrease priority of order.
 - For modifications on a block order to remain valid, users should click the save button after each modification.

6.8.7 BLOCK ORDER SCREEN MESSAGES

System Messages		
Date	Priority	Message
05.04.2016 14:36:00	Info	Block contracts for the day 06.04.2016 have been created.
05.04.2016 14:36:00	Info	Hourly contracts for the day 06.04.2016 have been created.

FIGURE 35: Block Order Screen Messages

1. System messages that are published by EPIAŞ can be viewed
2. User can click “  ” button in the right hand corner to expand and view messages in a pop-up window

6.9 OBJECTIONS SCREEN

Order Details								
Area	Turkey							
Contract	PH16040620							
Type	Buy							
Order ID	4420266							
Order Option	IoC	FoK						
Expiration Time								
Time	Matches			Updates				Objection
	Matching Quantity	Matching Price	Price	Quantity	Balance	Status	User	
06.04.2016 12:11:13:04327		177.00	178.00 54	0		Matched	SYSTEM	
06.04.2016 12:11:13:03327		177.00	178.00 54	27		Partially Matched	SYSTEM	
06.04.2016 12:11:13:029			178.00 54	54		Active	USERNAME	

FIGURE 36: Order Detail Screen Objections Section

1. Objections button can be used on the order detail screen to initiate an objection.
 - Intraday Market participants have a right to object in 15 minutes via clicking *Objections* button in case there is an error regarding to information at their transaction confirmation notifications. After 15 minutes, button will be de-active and the right of objection will be end for this contract.

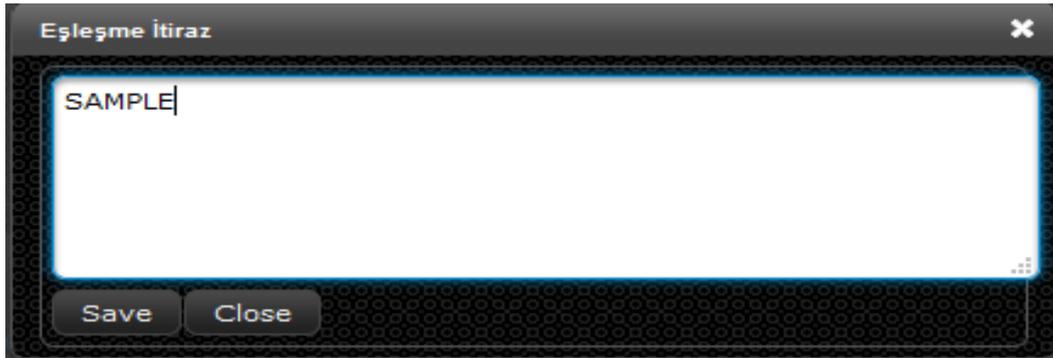


FIGURE 37: Matching Objections Screen

- When the participant clicks “X” under objections section, the participant would be directed to screen shown above on (FIGURE 37). User can enter the text regarding the objection of the corresponding contract on this screen. Once Save button clicked, objection would be send to EPIAŞ.

6.9.1 OBJECTION MONITORING SCREEN



FIGURE 38: Intraday Market Participant Screen Objections Entry

1. Status of the objections can be tracked via clicking the objections button on the participant screen.

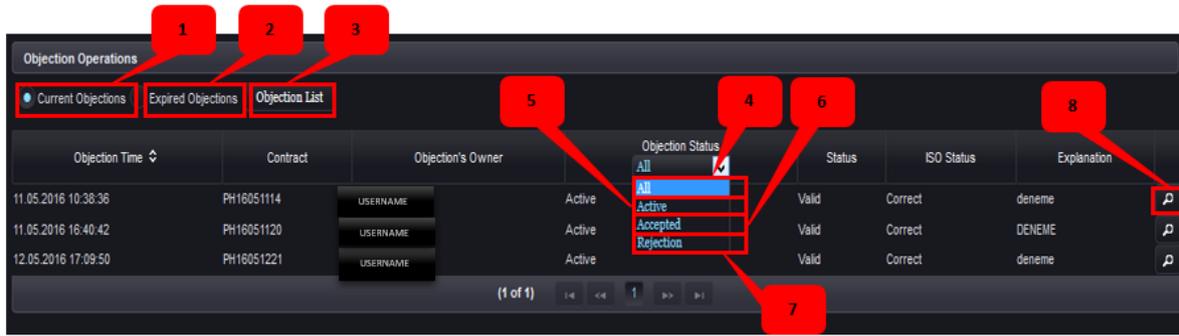


FIGURE 39: Objection Operations Screen

1. **Current Objections:** If EPIAŞ has not taken any action yet, it can be viewed under here. Click the  button under the “Current Objections” tab and then click the “Objection List” button displaying this field.
2. **Expired Objections:** If EPIAŞ has taken an action, it can be viewed under here. Click the  button under the “Expired Objections” tab and then click the “Objection List” button displaying this field.
3. **Objection List:** Display “Current Objections” and “Expired Objections” fields via clicking Objection List button.
4. **All:** Display last status (Active, Accepted, Rejected) of objection
5. **Active:** Objection is active status, if EPIAŞ has not taken any action yet
6. **Accepted:** If objection considered as valid, results would be displayed along with the justification at this field
7. **Rejection:** If objection considered as non-valid, results would be displayed along with the justification at this field
8. Objection evaluations by EPIAŞ as well as results would be viewed here.

6.10 REPORTS SCREEN

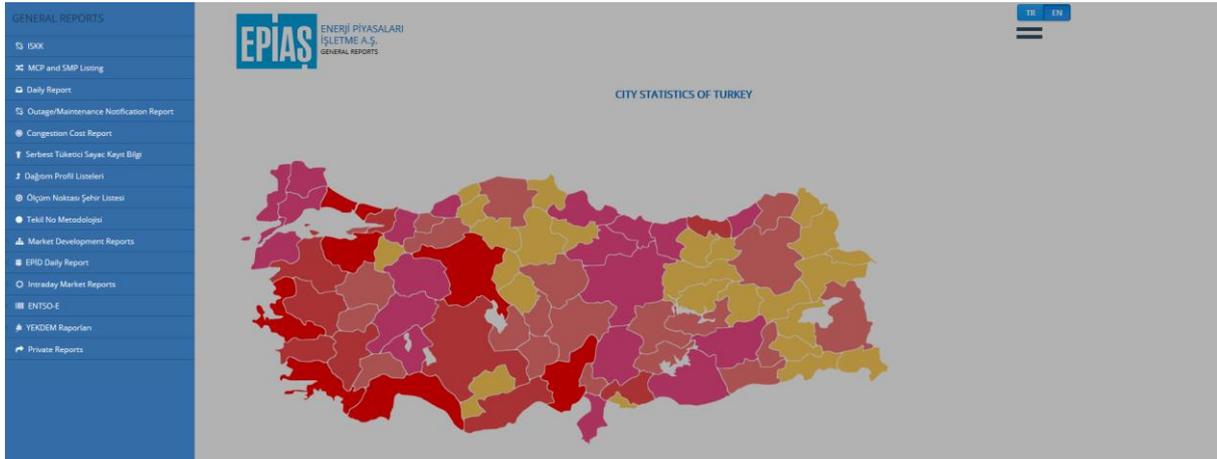


FIGURE 40: Reports Screen Homepage

1. First and latest versions Transmission System Loss Factor information can be accessed via clicking the “ISKK” (Transmission System Loss Factor) section on the general reports screen.
2. On a daily basis for each hour, Market Clearing Price and System Marginal Price can be tracked via clicking the “MCP and SMP Listing” section.
3. For every hour; load forecasting plan, bilateral contracts volume, system purchase volume (SAM), system sales volume (SSM), offer volume of balancing entity-up regulation volume (YALM) and bid volume of balancing entity-down regulation volume (YATM) can be accessed via clicking the section of “Daily Report”.
4. The outage and maintenance information and justification presented by respective generators can be tracked via clicking the section of the “Outage/Maintenance Notification Report”.
5. Number of instruction given due to congestion and related congestion cost on provincial basis can be accessed via clicking the section of “Congestion Cost Report”.
6. Information regarding to meters of eligible consumers and number of eligible consumers can be accessed on provincial basis via clicking the “Eligible Consumer Meter Record Information” (Serbest Tüketici Sayaç Kayıt Bilgi) section.
7. Profile coefficients can be accessed on distribution region and profile consumption group basis via clicking the “Distribution Profile List” (Dağıtım Profil Listeleme) section.
8. Institution responsible for meter reading and subscriber number, and consumption type information can be viewed.
9. Measurement points on province and town basis can be accessed via “Provincial Measurement Point Listing” section
10. Number of participants classified in type of licenses, periodic market volumes and arithmetic prices, increase in number of eligible customers and associated meters, SMP and MCP averages and 3-period average prices can be accessed via “Market Development Reports” section.
11. Daily prices, amount of market clearing volume, financial and physical volumes of electricity market, balancing power market instructions, YEKDEM (Renewable Energy Support Mechanism) generation forecast data can be accessed via “EPID Daily Report” section.

12. Intraday Market contracts summary, Intraday Market order list, Intraday Market transaction history can be accessed via “Intraday Market Report” section.
13. The ENTSO-E (X, W, and Z) codes can be accessed via “ENTSO-E” section.
14. YEKDEM generation forecasts, Spot Market orders, YEKDEM Portfolio Income (YPG), YEDKEM realized generation, total gross cost of YEKDEM support mechanism (YEKBED), total net cost of YEKDEM support mechanism (YEKTOB), total gross cost of unlicensed generation (LÜYTOB), imbalance volume, imbalance cost, YEKDEM unit cost and system withdrawal basis to settlement under the procurement liability can be accessed via “YEKDEM Reports” section.
15. Market participants can access their own data and information at Day-Ahead Market, Intraday Market and Settlement sections via “Private Reports” section and using their own username and password

6.11 VERSION HISTORY

Version	Version Interchange	Prepared By	Date
1.0	Intraday Market User Manual v.1.0 is prepared.	Spot Market Department	01.07.2015
1.1	Reformed pages and Settings are inserted.	Spot Market Department	28.07.2016
1.2	IDM FDGS updating and IDM justified price bid updating pages are inserted.	Spot Market Department	12.10.2016
1.3	Changes are made according to new rules and legislation. Grammar mistakes and typos are corrected	Spot Market Department	05.06.2016

