UNICORN
MORE THAN SOFTWARE

DAMAS ROMANIA

User Guide – Internal Scheduling for Market Participants

Title:	Damas Romania User Guide – Internal Scheduling for Market Participants
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1. CONTENTS

2. PREFACE

2.1. REVISION HISTORY

Version	Date	Author	Description
01.00	29/1/2010	Libor Sluka	First Version.

2.2. APPROVALS

Approver	Sign	Date

2.3. GENERAL FEATURES

2.3.1. Damas Login

Description

The DAMAS application is situated on these addresses:

Environment	Address
Testing Environment	N/A
Production Environment	N/A

Steps

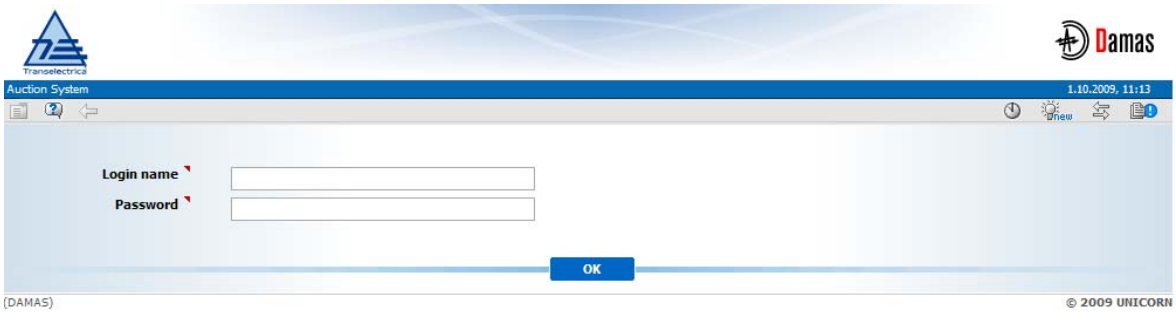
(1) Enter an address to web browser (Internet Explorer 6.0 or newer).

(2) Warning window with security alert could be displayed. Confirm dialog by OK button.

(3) Dialog to choose certificate could be displayed. Cancel dialog by *Cancel* button.

(4) Enter login name and password.

(5) Click the OK button.



Picture 1: Login

2.3.2. Main Screen

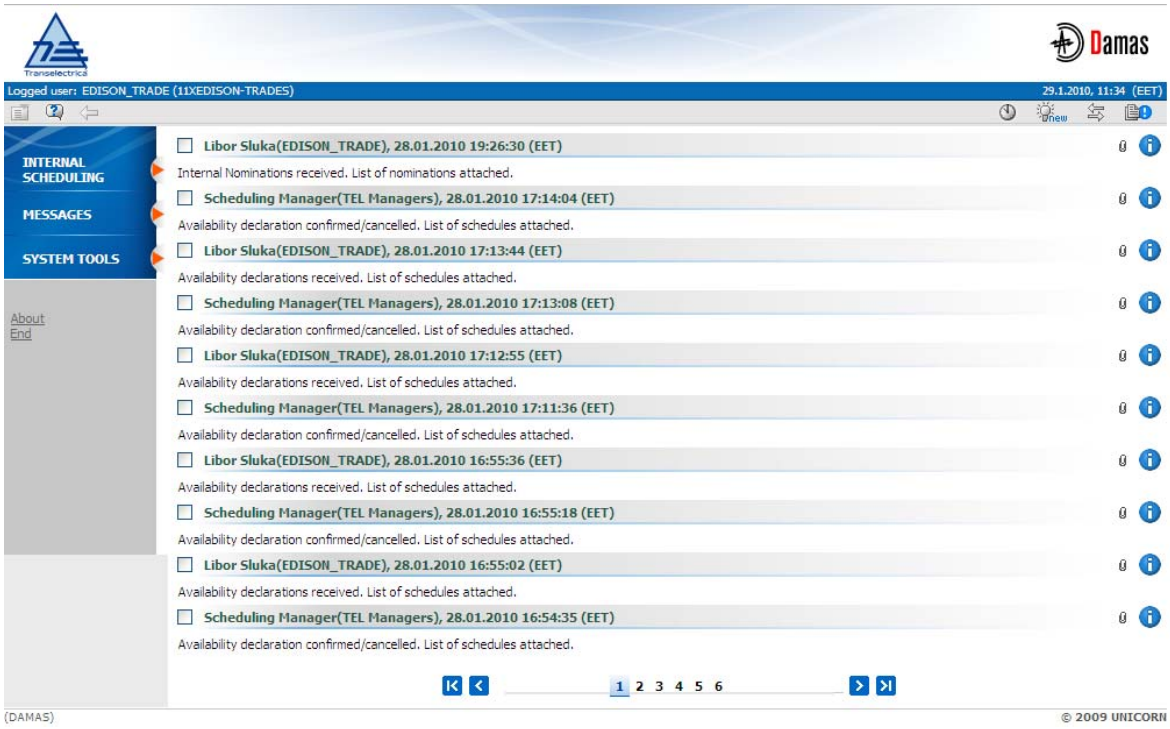
Description

Main screen of Damas is displayed after login to the system. It contains:

1) Information about logged user
2) Name of actual form
3) Date and time of the system
4) Toolbar
5) Menu with a list of web forms
6) Messages delivered to user menu

The main screen contains incoming messages and keeps history of them. The newest messages are displayed at the top of the screen. There are arrows and numbers on the bottom of a list of messages to browse the history of them.

In case there is an attachment within the message a small icon is situated on the right side of a line with the message. Clicking on the icon either the attachment is shown. New window or a download dialog with an appropriate file to be saved is displayed.



Picture 2: Main Screen

2.3.3. Main Menu

Description

The web forms are accessible from the main menu.

Steps

Using main menu which is available on the main screen:

(1) Display main screen. Main menu is available on the left side of the screen.

(2) Move the mouse over main menu labels. The submenu is displayed.

(3) Click on an item in the submenu. The appropriate form is displayed.

Using quick menu that is available on web form:

(1) Display web form.

(2) Select icon in toolbar. Short menu is displayed on the right side of the screen.

(3) Move the mouse over quick menu labels. The submenu is displayed.

(4) Click on an item in the submenu. The appropriate form is displayed.

2.3.4. Time Notation

All data displayed in internal scheduling via web forms are in the EET time. The first hour is a time period from 0:00 to 1:00 etc. System counts with day-light saving days (having 23 or 25 hours).

Some time intervals used in parameter selection are defined as Date From and Date To. Both of these days are included in selected time interval.

Example for selection of two days 1.1.2010 and 2.1.2010 (days are included):

1) Data From = 1.1.2010
2) Date To = 2.1.2010

2.4. SYSTEM TOOLS

2.4.1. Change User's password

Description

The logged user can change his password using the **Password Change** form.

Steps

(1) Choose the menu item **System Tools/Password Change.**
(2) Enter the old password in the **Old password** input field.
(3) Enter a new password in the **New password** input field.
(4) Enter the new password again to confirm it in the **Confirm password** input field.
(5) Click **OK** button to save changes.

2.5. MESSAGES

The following functionalities are available for *Market Participant* in the Messages Module:

- **Display New** – Recently received messages are displayed in the user account.
- **Send Message** – Send any message to selected user
- **Delete Selected** – This menu option deletes messages selected by checkbox in the main menu. Message is deleted only from particular user account.
- **Delete All** – This menu option deletes all messages from the user account.
- **Message Settings** – Enables user to configure message account
- **Message Filter** – Enables filtering of displayed messages

2.5.1. Message Settings

Description

The Message Settings form enables to a user to configure a user message account.

Steps

(1) Choose the menu item Messages/Messages Settings.

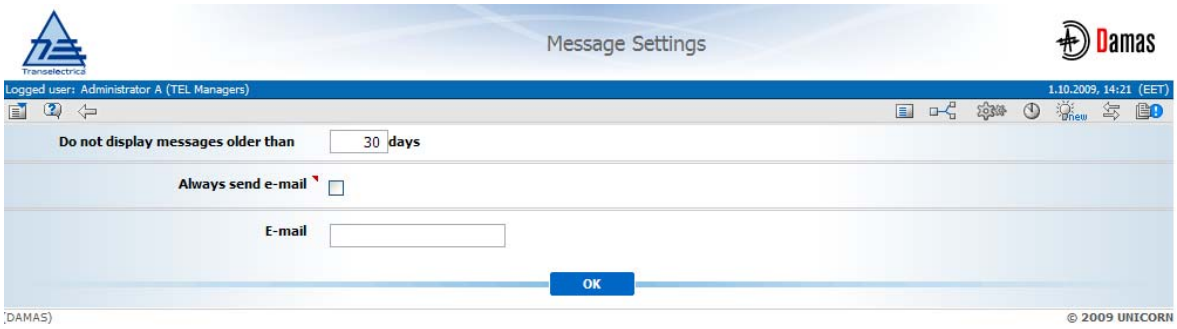
(2) A screen Messages Settings is displayed.

(3) Make a setting according to your preferences.

(4) Specify the period for regular deletion of messages.

(5) Enable the possibility to receive messages by e-mail.

(6) Click the OK button.



Picture 3: Message Settings

2.5.2. Message Filter

Description

The Message Filter form enables a user to view only the messages matching specified conditions.

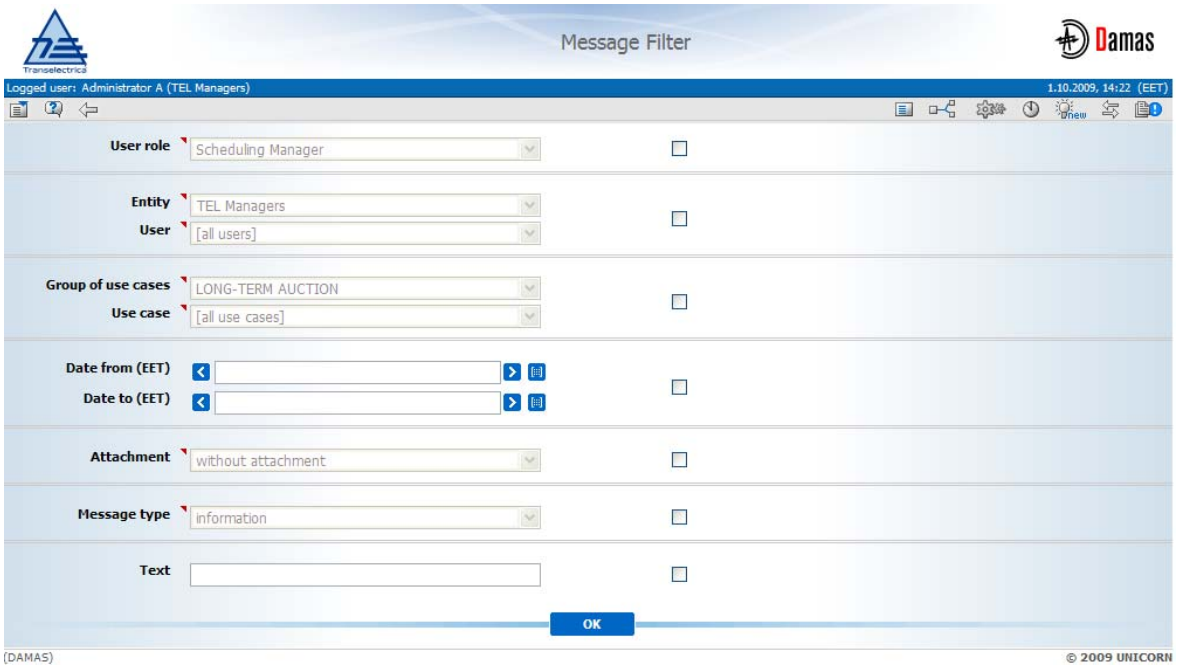
Steps

(1) Choose the menu item Messages/Messages Filter.

(2) A screen Filter is displayed.

(3) Set up a filter according to your preferences.

(4) Click the OK button.



Picture 4: Message Filter

2.6. INTERNAL SCHEDULING DESCRIPTION

Internal Scheduling is a part of the Damas system designed to support submitting internal schedules, generation schedules and availability declarations.

For *Market Participants,* internal scheduling handles the following tasks:

- Administration and management of the internal schedules, generation schedules and availability declaration for Control Area of Transelectrica. (*Note: Management tools are not accessible for Market Participants)*.
- Entering of internal schedules, generation schedules and availability declaration by BRPs.
- Data provision to *Balancing Market* and to *Settlement* system parts.

All schedule types (internal, generation, availability) are submitted for business day (time interval) in Romanian time (means EET).

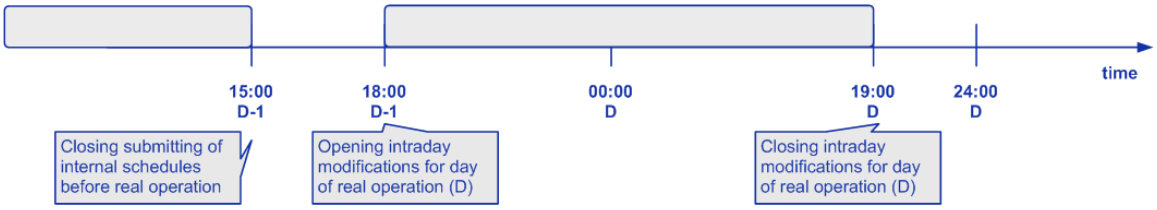
Market Participants may submit schedules:

1. Before day of real operation (day-ahead)
2. During the day of real operation (intraday)

Time of opening / closing gates for schedules submitting differs per schedule type. Default times defined in the system are depicted below, for each schedule type.

Note: Times of gates may be modified by the system operator (Transelectrica).

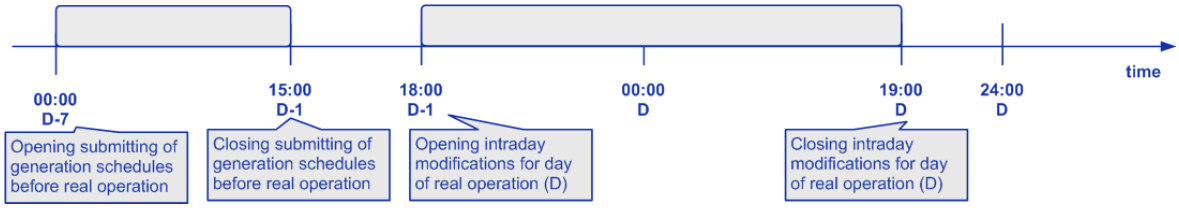
2.6.1. Internal Schedules submitting



Before day of real operation, *Market Participants* may submit internal schedules at any time (there is no explicit gate opening), till 15:00 D-1.

Internal schedules intraday modifications for day of real operation (D) start at 18:00 D-1, till 19:00 D. At this time, *Market Participants* may edit or submit new internal schedules. Exact rules of intraday modifications are defined in chapter *Intraday Modifications*.

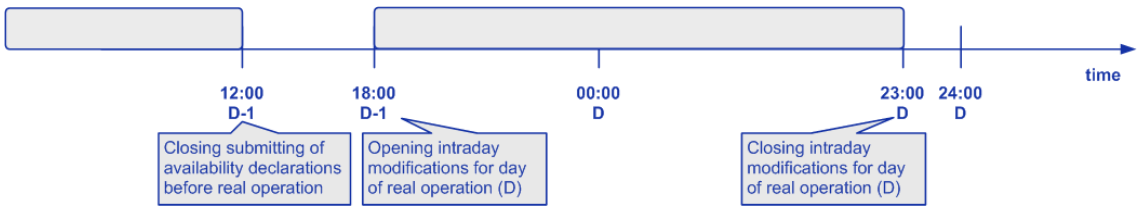
2.6.2. Generation Schedules submitting



Before day of real operation, *Market Participants* may submit generation schedules from 00:00 D-7, till 15:00 D-1.

Generation schedules intraday modifications for day D start at 18:00 D-1, till 19:00 D. At this time, *Market Participants* may edit or submit new generation schedules. Exact rules of intraday modifications are defined in chapter *Intraday Modifications*.

2.6.3. Availability Declarations submitting

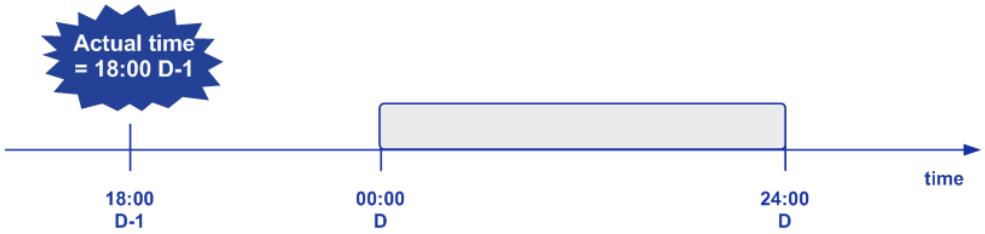


Before day of real operation, *Market Participants* may submit availability declarations at any time (there is no explicit gate opening), till 12:00 D-1.

Availability declarations intraday modifications for day D start at 18:00 D-1, till 23:00 D. At this time, *Market Participants* may edit or submit new availability declarations. Exact rules of intraday modifications are defined in chapter *Intraday Modifications*.

2.6.4. Intraday Modifications

As described above, intraday modifications of all schedule types start at 18:00 D-1. Suppose that actual time has reached this time (see below):



At this time, *Market Participants* may modify (submit new schedules) for all hours of day D. As the time flows, hours are closing themselves one by one.

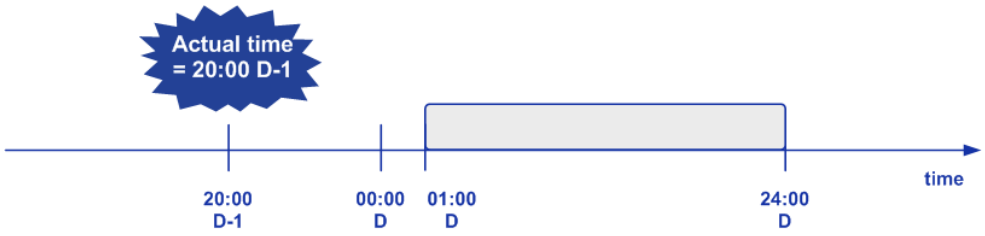
Time of *flowing* gate closure is set by system parameter for each schedule type. Parameters are modifiable for system operator. Default setting is as follows (in minutes):

- 240 – for *Internal Schedules*
- 240 – for *Generation Schedules*
- 0 – for *Availability Declarations*

Gate closure for each hour is shifted to the future by time defied in those parameters.

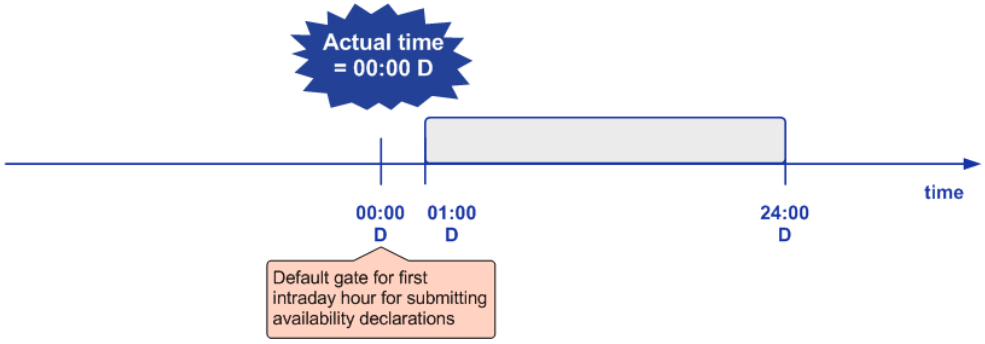
Because, for *Internal* and *Generation Schedules,* time defined in parameters is equal, gate closure for their first intraday hour will be the same, 20:00 D-1.

When this time is reached, first intraday hour is closed for submitting of internal and generation schedules. *Market Participants* are allowed to modify only remaining hours (means from 01:00 – 24:00 D). It is clear, that gate closure for last intraday hour (for internal and generation schedules) is 19:00 D.



By default, gate closure for each hour for submitting *Availability Declarations*, is not shifted into the future at all. That means that gate closure is the beginning of given hour.

For example, gate closure for first intraday hour (for submitting availability declarations) is at 00:00 D. Thus, last intraday hour will be closed at 23:00 D.

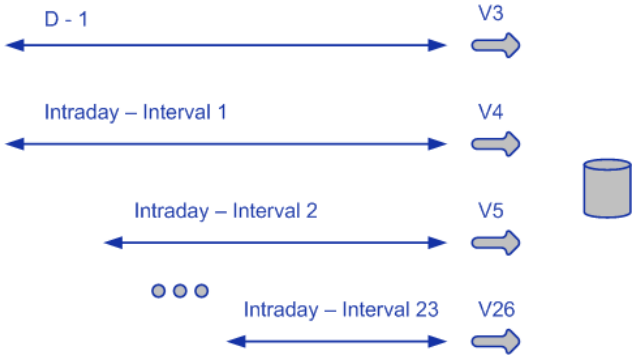


Intraday Automatic Rules

Intraday automatic rules are applied on unmatched *Internal Schedules* submitted for a business day that is in the intraday modifications state for internal schedules. Application of automatic rules is performed at each gate closure for given intraday hour (may be re-planned by system operator).

At given intraday gate closure, unmatched internal schedules are re-written by last valid (*Matched)* version. After application of automatic rules, a copy of internal schedules is created by the system to be used for next hour gate closure.

An example is given on the diagram below, where after D-1 modifications, internal schedules are stored with version *V3.* During intraday, a new, higher version is created in each intraday interval.



AD Automatic Cancellation

Availability declarations whose availability amount is lower than maximum in at least one hour of given business day, must be confirmed by system operator. Unconfirmed schedules will be automatically cancelled by system at predefined time that is different for submitting the schedule during day-ahead and while intraday modifications.

Day-ahead

Time of schedule automatic cancellation is set as the time of gate closure for submitting availability declarations during day-ahead. That means 12:00 D-1, by default.

Intraday

Time of automatic cancellation is set as time of gate closure of the first modified hour.

In both cases, availability declaration schedules are cancelled for the whole time interval.

2.7. List of Use cases

This user guide is written for *Market Participants* who are allowed to access use cases of internal scheduling:

- BMP
- BRP
- OPCOM

Nevertheless, those users have different access rights to internal scheduling use cases. The table with accessibility is depicted below.

Note: OPCOM is a special type of BRP. Therefore, it has similar access rights. The differences will be described in more detail in the following chapters.

Use Case	Access Rights
Internal Schedules Overview	BRP (read-only)
Internal Schedule Form	BRP (write)
Internal Matching Overview	BRP (read-only)
Schedules Upload (XML)	BRP (write)
Schedules Download (XML)	BRP (read-only)
Generation Schedules Overview	BRP (read-only) BMP (read-only)
Generation Schedule Form	BRP (write)
Availability Declarations Overview	BRP (read-only) BMP (read-only)
Availability Declaration Form	BRP (write)
Schedules Overview in EET	BRP (read-only)
Intraday Intervals Overview	BRP (read-only)

2.8. INTERNAL SCHEDULING

BRP are allowed to enter internal schedules as a registration of agreed internal bilateral contracts between domestic BRP. In addition, internal schedules may be received as well from OPCOM as a result of DAM.

Internal schedules are entered by means of the *Internal Schedule Form*. In addition, schedules can be uploaded as *ESS* file using *Schedule Upload (XML)* web form. Immediately after such

schedules submitting, Damas performs the data validation. The user is informed about processing results by a message sent into his account.

BRP may view stored internal schedules via *Internal Schedules Overview*. Nominations entered by BRP may be modified through the *Internal Schedule Form* if the system is in the state for modification. Internal schedules can be downloaded as *ESS* XML file using *Schedule Download (XML)* web form.

After the system receives the internal schedules from OPCOM, the schedule of its partner is automatically generated / updated. Automatically generated internal schedules are not allowed to be modified by BRP at any system state (ex-post modification is allowed for system operator).

After the system receives the internal schedules from BRP, matching process of given internal schedules is immediately performed. Possible mismatches are displayed through the *Internal Schedules Overview* and *Internal Matching Overview* web forms. After gate closure for internal schedules submitting (day-ahead) the lower value rule is automatically applied. During intraday modifications, different rule is used for unmatched schedules.

2.8.1. Internal Schedule Form

Description

Internal schedules can be entered via ***Internal Scheduling -> Internal Schedule Form*** by BRP or Scheduling Manager (on behalf of BRP). The internal nomination submitter must determine which company is the *Source BRP* and *Destination BRP.*

Internal nominations are entered and modified in hourly resolution for a time period (Date From – Date To). For BRP, the system must be in the *Entering of Internal Schedules* state for each business day of the respective time period.

For Intraday modifications, the system must be in the *Internal Intraday Modifications* state for given business day. For BRP, hours that are not allowed to be modified any more are read-only. The business validations are the same as for D-1 submitting.

In order to provide user an immediate notification about possible mismatches, the time-series submitted by both companies are compared immediately after submission (internal matching). Internal nominations overview, together with possible mismatches (background highlighted with red color for each mismatched hour) is displayed through the *Internal Schedules Overview* form.

Internal nominations that remain unmatched after the gate closure for internal nominations submitting the lower values rule is applied. Lower values of the two internal nominations are considered to be final and the internal nominations are adjusted appropriately. During intraday, lower values rule is not applied. Instead, unmatched schedules are re-written by last valid version (for more see chapter *Intraday Modifications*, part *Automatic Intraday Rules*).

Additionally, internal nominations may be submitted into the system by BRP OPCOM. For such nominations, the second part of schedule for BRP will be generated automatically.

Steps

(1)Choose the ***Internal Scheduling -> Internal Schedule Form*** menu item.

(2)Enter input parameters:

a. Seller – selection of the BRP selling the energy

b. Buyer – selection of the BRP buying the energy (*Note: Seller and Buyer must not be the same; at the same time, one of them must be Submitter*)

c. Date From (EET) – selection of the first business day of the time interval

d. Date To (EET) – selection of the last business day of the time interval

(3)Click the **Show data** button to open the form for entering a new schedule.

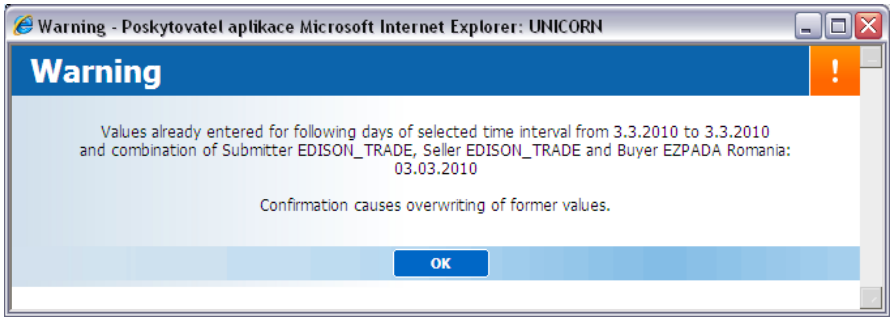
(4)Form for entering hourly values is displayed.

(5)Enter the scheduled amount of power in the **Power [MW]** field.

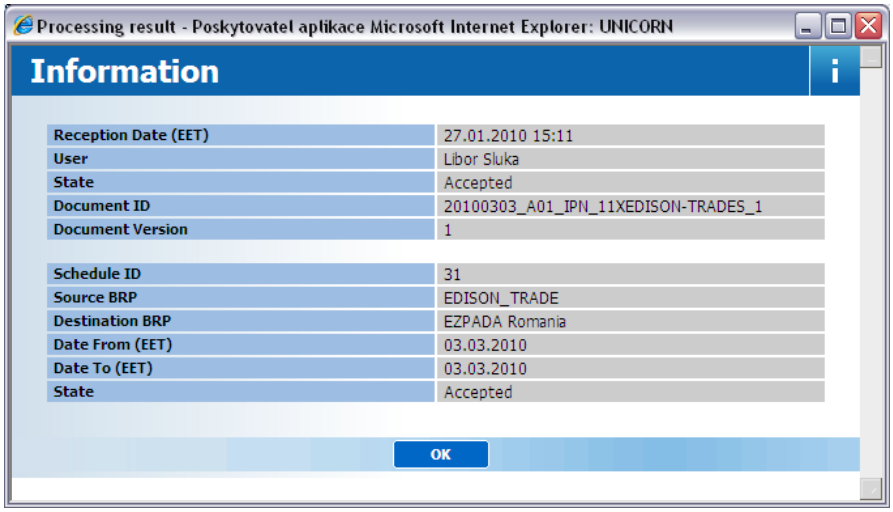
(6)Select the **Save** button to save the schedule.

Immediately after the schedule is submitted, the system performs the validations of the schedule. The user is notified by a dialog window and new message with the processing results. If the validation conditions are met, the schedule is stored in the system.

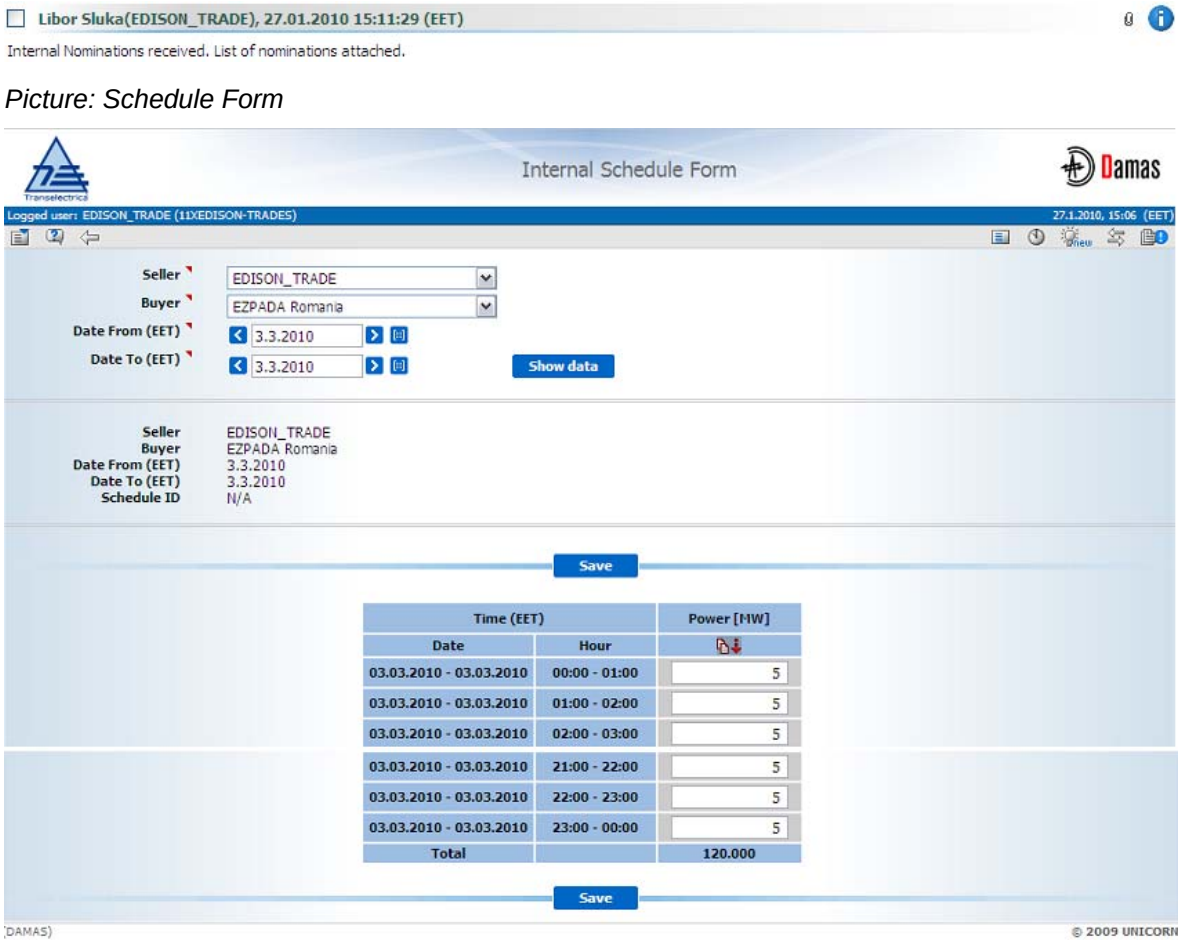
Note: If schedule already exists for combination of parameters (Submitter, Seller, Buyer, business day), warning is displayed, informing about existing diagram.



Dialog window example – schedule saved:



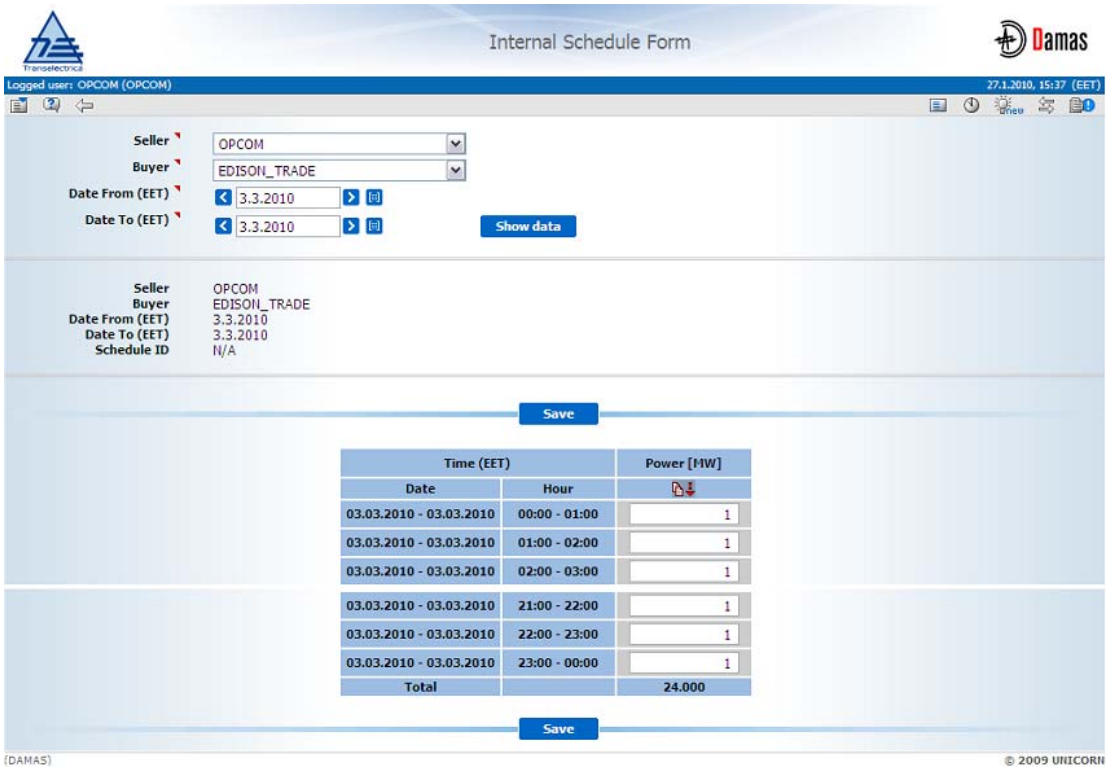
Message example:



Picture: Schedule Form

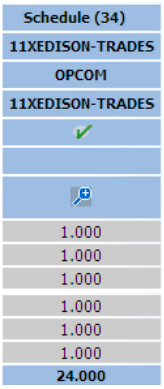
! Important: After saving the schedule, the form with submitted values remains displayed in the browser (for reference). It is necessary to modify the filter (selection parameters) and click the Show data button to enter a new schedule.

Internal Schedule submitted by OPCOM is depicted below.



If valid, same informative dialog is displayed as for schedule submitted by common BRP. Contrary to internal schedule submitted by common BRP, partner schedule is generated automatically as an identical copy of submitted schedule (only *Submitter* is the *Seller* or *Buyer* who is not *OPCOM* in schedule submitted).

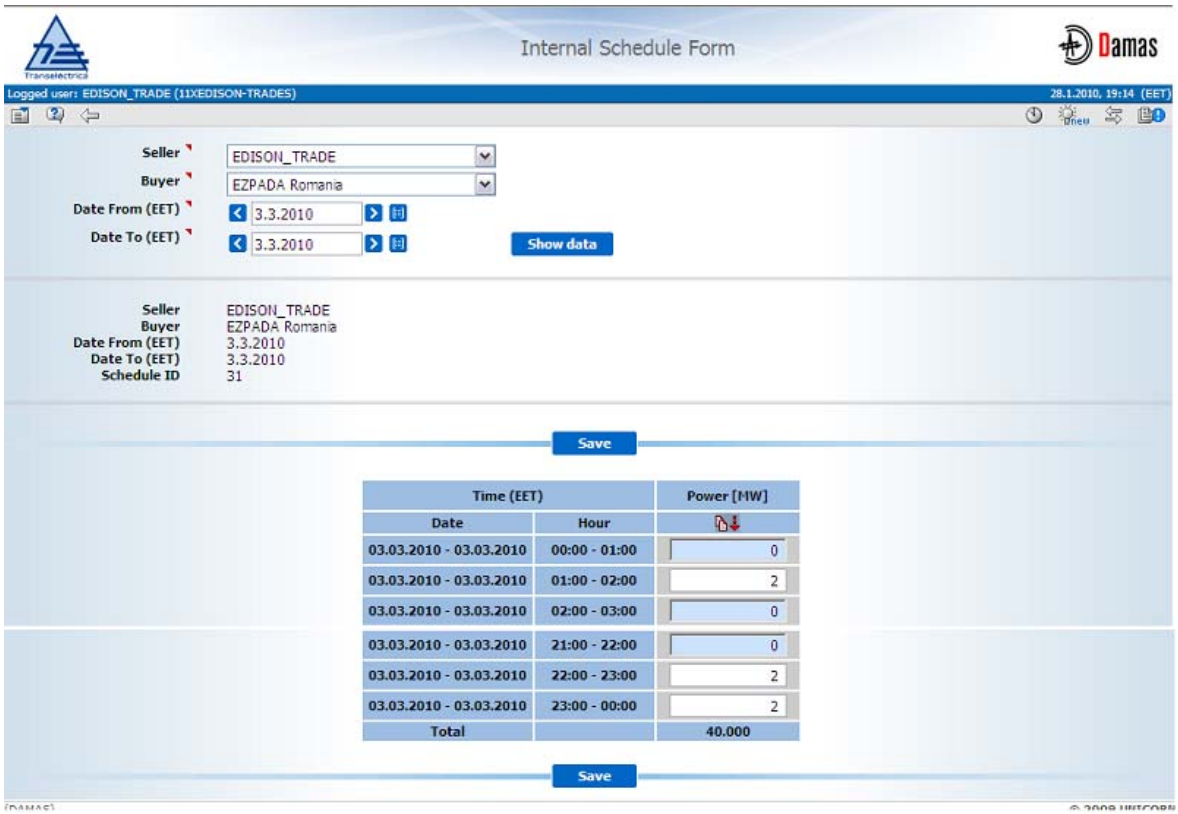
Automatically generated schedule is displayed to partner of OPCOM in the *Internal Schedules Overview* (see schedule example below).



Intraday Modifications

Internal Schedule Form – system is in the state for internal schedules intraday modifications. In this example, first hour is closed because actual time has passed the gate closure for first intraday interval. Remaining read-only hours were deselected in the *Intraday Intervals Overview*.

Note: If schedule submitted via Schedule Upload (XML) in the XML file, closed hours must not change (must be the same as in the last valid version).



2.8.2. Internal Schedules Overview

Description

Internal Schedules Overview form is accessed via menu ***Internal Scheduling -> Internal Schedules Overview***. The *Internal Schedules Overview* form displays internal schedules submitted by BRP. The internal schedules are displayed for particular BRP and business day in read-only mode. Icon redirecting to *Internal Schedule Form* allows schedule modification (if in write mode) or read-only detail displaying.

In addition the overview displays the matching state for each submitted. The matching detail can be displayed as well. Possible mismatches are highlighted by red color.

Steps

(1)Choose the **Internal Scheduling / Internal Schedules Overview** menu item.

(2)Enter input parameters:

a. Date (EET) – select the business day

(3)Click the **Show data** button to display the overview table with summary information about schedules submitted for given business day, including schedules matching state.

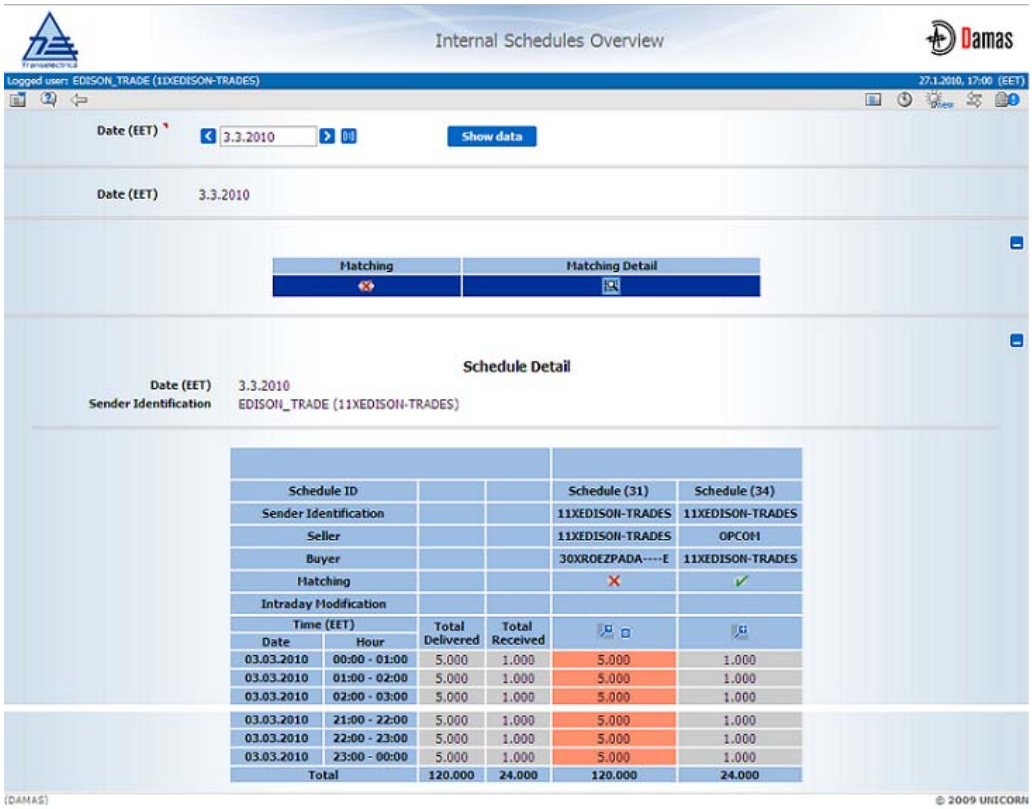
(4)Select one row in the summary overview to view detailed information about schedules.

(5)Click the icon to display the **Internal Schedule Form** with read-only mode.

(6)Click the icon to display the **Internal Schedule Form** for schedule modification.

(7)Click the icon to display the **Internal Matching Overview**

Internal Schedules Overview displaying schedule submitted by BRP (in *Unmatched* state) and automatically generated schedule (can be updated by OPCOM only).



2.8.3. Internal Matching Overview

Description

Internal Matching Overview form is accessed via menu ***Internal Scheduling -> Internal Matching Overview***. The *Internal Matching Overview* enables BRP to view matching state of internal schedules submitted to the system where BRP is defined as Source or Destination BRP.

Steps

(1)Choose the **Internal Scheduling / Internal Matching Overview** menu item.

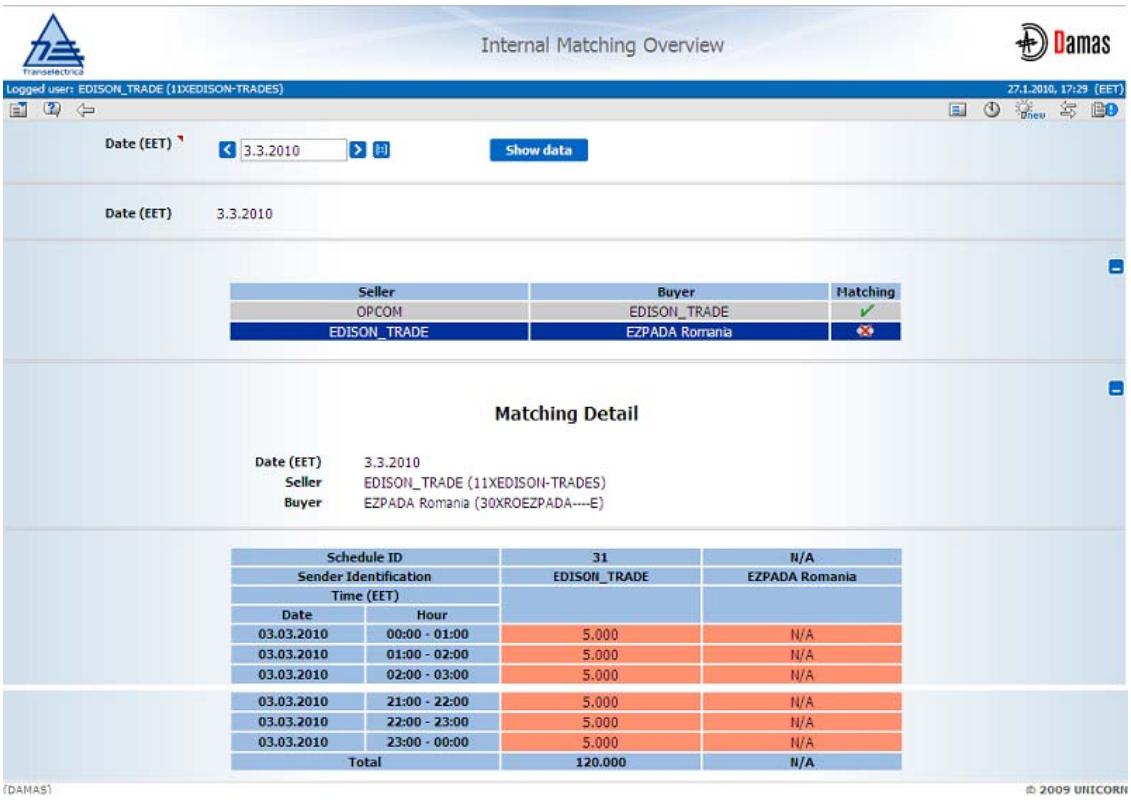
(2)Enter input parameters:

a. Date (EET) – select the business day

(3)Click the **Show data** button to display the overview table with summary information about matching state of schedules submitted for given business day

(4)Select one row in the summary overview to view detailed information about schedules.

Internal Matching Overview – partner schedules are unmatched, one of them was not received yet.



2.8.4. Schedules Upload (XML)

Description

Internal Schedules, Generation Schedules and *Availability Declarations* schedules may be uploaded as XML documents into the system by BRP via ***Internal Scheduling -> Schedules Upload (XML)***. In addition, the form allows submitting of *Priority Production* schedules to OPCOM in CSV file format.

There are the same conditions for uploading all types of schedules as while entering via web form. During intraday, all hours will be sent within the XML (schedules will not be sent only for several hours of the business day). Invalid documents are rejected for whole time interval.

Steps

(1)Choose the ***Internal Scheduling -> Schedules Upload (XML)*** menu item

(2)Enter input parameters:

a. Category – selection of the schedule category (**Internal Schedules**, **Generation Schedules** and **Availability Declarations** are allowed for BRP; OPCOM may submit **Priority Production** only).

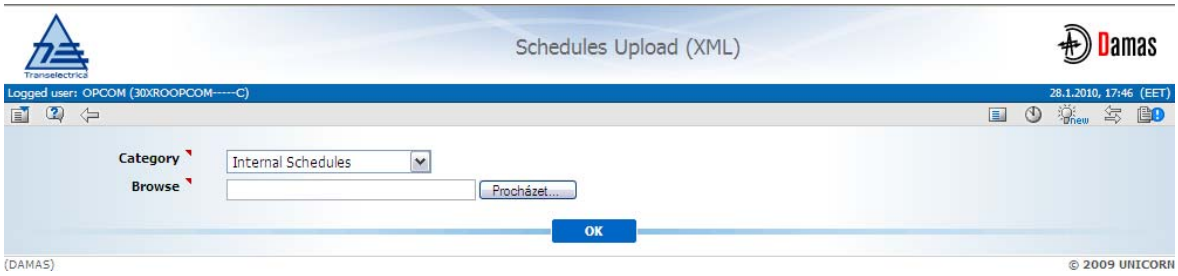
b. Browse – select the respective XML/CSV document from your local drive

(3)Click the **OK** button to upload the selected XML/CSV document into the system.

! Important: Processing of uploaded XML/CSV document is performed asynchronously (means, user is allowed to continue working with the application and does not have to wait for processing results).

User is notified about the processing results by a message sent into his account.

Schedules Upload (XML):



2.8.5. Schedules Download (XML)

Description

Entered *Internal Schedules, Generation Schedules* and *Availability Declarations* may be downloaded via ***Internal Scheduling -> Schedules Download (XML)*** menu item. BRP is allowed to download its schedules entered into Damas. The resulting file will contain data submitted by selected BRP.

Steps

(1)Choose the **Internal *Scheduling -> Schedules Download (XML)*** menu item

(2)Enter input parameters:

a. Date (EET) – selection of the respective business day

b. Border – selection of the border (possible to select *All* as well)

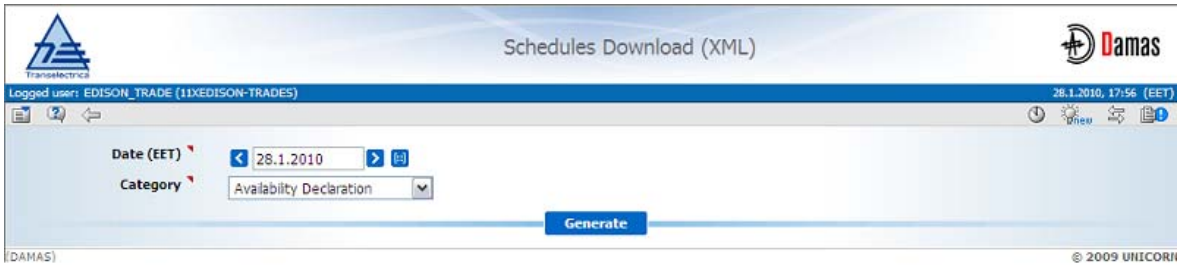
c. Category – selection of the schedule type (possible values: Internal Schedules / Generation Schedules / Availability Declaration)

(3)Click the **Generate** button to create desired XML document.

! Important: Generating of XML document is performed asynchronously (means, user is allowed to continue working with the application. It is not necessary to wait for finishing of the generation).

User is notified about finishing the XML document generation by a message sent into his account.

Schedules Download (XML):



2.9. GENERATION SCHEDULING

BRP are obliged to submit expected availability of their Dispatchable Units (DUs) and Pumping Storages. BRP are allowed to submit availability declaration for a time interval through the *Availability Declaration Form*. After entering the system, the availability declaration is validated. The user is informed by a message sent into his user account about the processing results.

Availability declaration equal to desired limit in each hour of submitted time interval immediately overwrites the original values for given power unit and time interval. Otherwise, the availability declaration must be confirmed / rejected by the system operator.

Hourly availability of given power unit for given business day (time interval) can be displayed in read-only mode by the *Availability Declarations Overview*. Such form is also accessible for BMP who may display availability declaration of its power units (read-only).

Generation schedules may be entered by BRP on power units of given BRP for a time interval through the *Generation Schedule Form*. Submitted generation schedules are validated. Users are informed by the message sent into their user account about the processing results.

Valid generation schedules immediately overwrite the original values stored in the system for each included power unit and business day of the time interval.

Power units' generation schedules may be displayed by BRP through the *Generation Schedules Overview*. In addition, this form may be displayed by Balancing Market Participant (BMP) in read-only mode only for its units.

2.9.1. Availability Declaration Form

Description

Availability Declarations of *Dispatchable Units* and *Pumping Storages* can be entered via **Internal *Scheduling -> Availability Declaration Form*** by BRP for a time interval (Date From – Date To).

Availability declarations are allowed to be submitted if the system is in the *Entering of Availability Declarations* system state for given business day. After submission, each availability declaration is validated. BRP are informed by a message sent into their user accounts about the processing results.

For Intraday modifications by BRP, the system must be in the *AD Intraday Modifications* state for given business day. Hours that are not allowed to be modified any more are read-only. The business validations are the same as for D-1 submitting.

If valid, availability declaration is stored into the system and must be approved by the system operator. Before acceptation / rejection, the already entered values remain unchanged for the respective DU and business day.

After confirmation, the values in the system are overwritten by values of the respective availability declaration for each business day of the respective time interval. The BRP is informed by a message sent into his user account about the acceptation / rejection.

Availability declaration can be accepted / rejected per DU for whole time interval via the *Availability Declaration Confirmation* form. Before acceptation / rejection schedule may not be submitted for the same DU and time interval (or its part, no overlapping).

Availability declarations that remain unconfirmed at predefined time are automatically rejected for the whole time interval (for more see chapter *Intraday Modifications*, part *AD Automatic Cancellation*).

Steps

(1)Choose the **Internal Scheduling -> Availability Declaration Form** menu item.

(2)Enter input parameters:

a. Date From (EET) – selection of the first business day of the time interval

b. Date To (EET) – selection of the last business day of the time interval

c. Power Unit – selection of power unit of *Unit* or *Pumping Storage* type that are assigned to given BRP

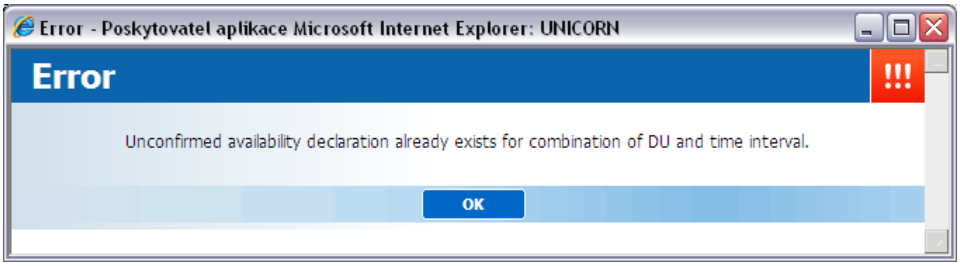
(3)Click the **Show data** button to open the form for entering a new schedule.

(4)Enter the scheduled amount of power in the **Required Power [MW]** field. If lower than *Maximal [MW]* in any hour, **Request ID** and **Request Type** fields are mandatory.

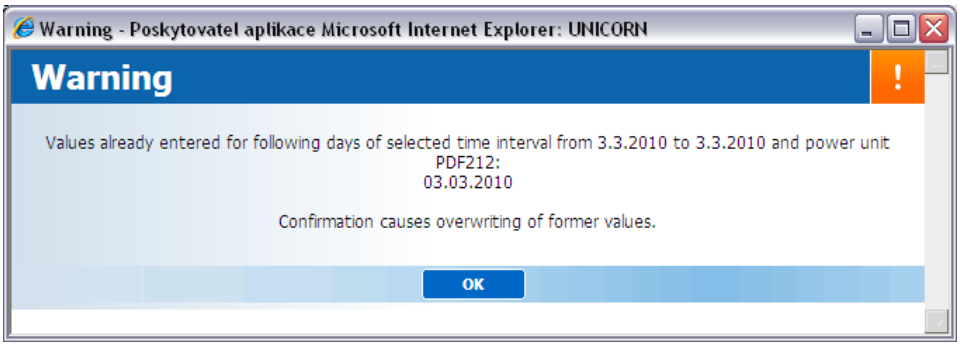
(5)Select the **Save** button to save the schedule.

Immediately after the schedule is submitted, the system performs the validations of the schedule. The user is notified by a dialog window and new message with the processing results. If the validation conditions are met, the schedule is stored in the system.

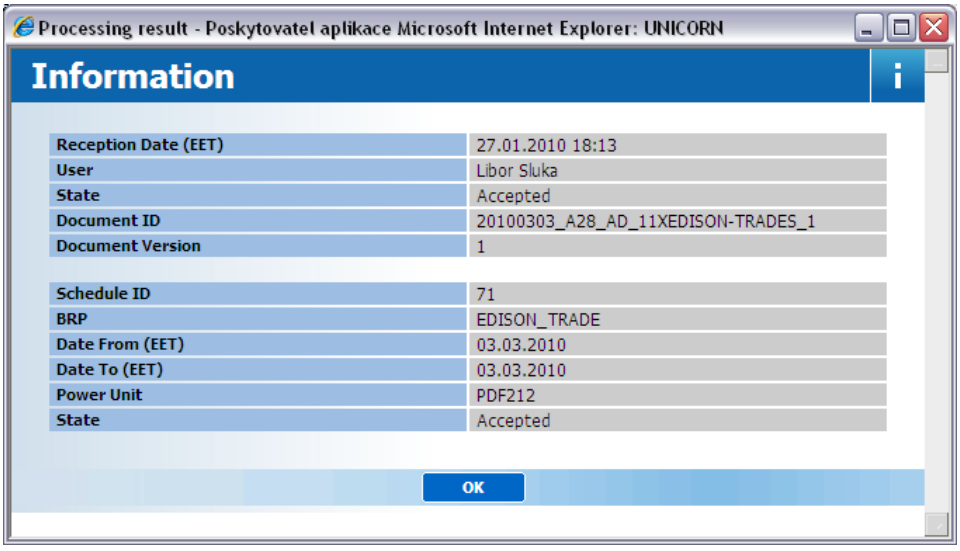
! Important: Before acceptation / rejection, schedule may not be submitted for the same DU (Pumping Storage as well) and time interval (or its part, no overlapping). In such case, error message is displayed.



Note: If confirmed schedule already exists for combination of parameters (Submitter, Seller, Buyer, business day), warning is displayed, informing about existing diagram.

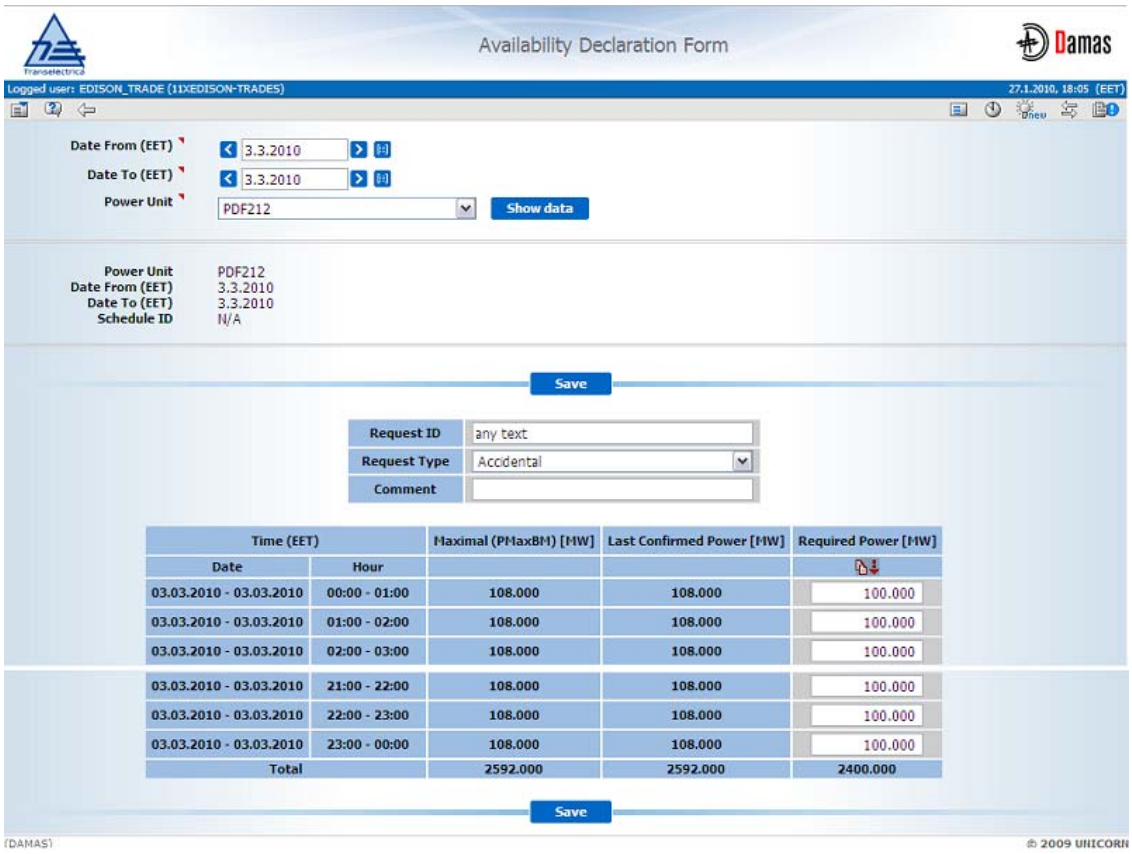


Dialog window example – schedule saved:



Message example:

Picture: Availability Declaration Form – required power of the unit is lower than maximum in at least one hour, *Request ID* and *Request Type* must be entered.

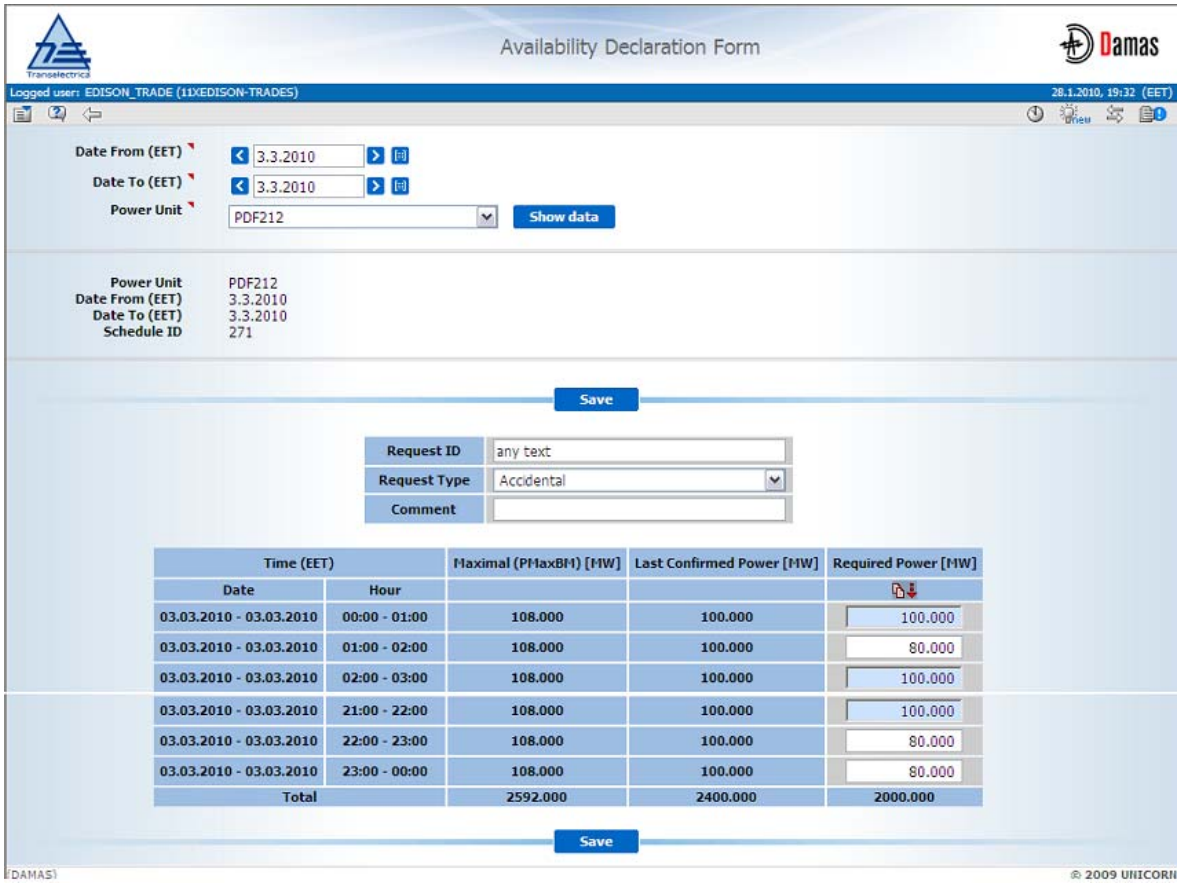


! Important: After saving the schedule, the form with submitted values remains displayed in the browser (for reference). It is necessary to modify the filter (selection parameters) and click the Show data button to enter a new schedule.

Intraday Modifications

Availability Declaration Form – system is in the state for availability declarations intraday modifications. In this example, first hour is closed because actual time has passed the gate closure for first intraday interval. Remaining read-only hours were deselected in the *Intraday Intervals Overview*.

Note: If schedule submitted via Schedule Upload (XML) in the XML file, closed hours must not change (must be the same as in the last valid version).



2.9.2. Availability Declarations Overview

Description

A summary overview of submitted availability declarations is available in the **Internal *Scheduling* -> Availability Declarations *Overview*** web form for one business day. Displayed values were automatically accepted by the system or approved by the system operator, after receiving the availability declaration into the system.

Form can be displayed by Balancing Market Participant (BMP) in read-only mode. Such user may display availability of his power units only.

Steps

(1)Choose the **Internal *Scheduling -> Availability Declarations Overview*** menu item

(2)Enter input parameters:

a. BRP – selection of BRP (not displayed for BRP)

b. Date (EET) – selection of the business day

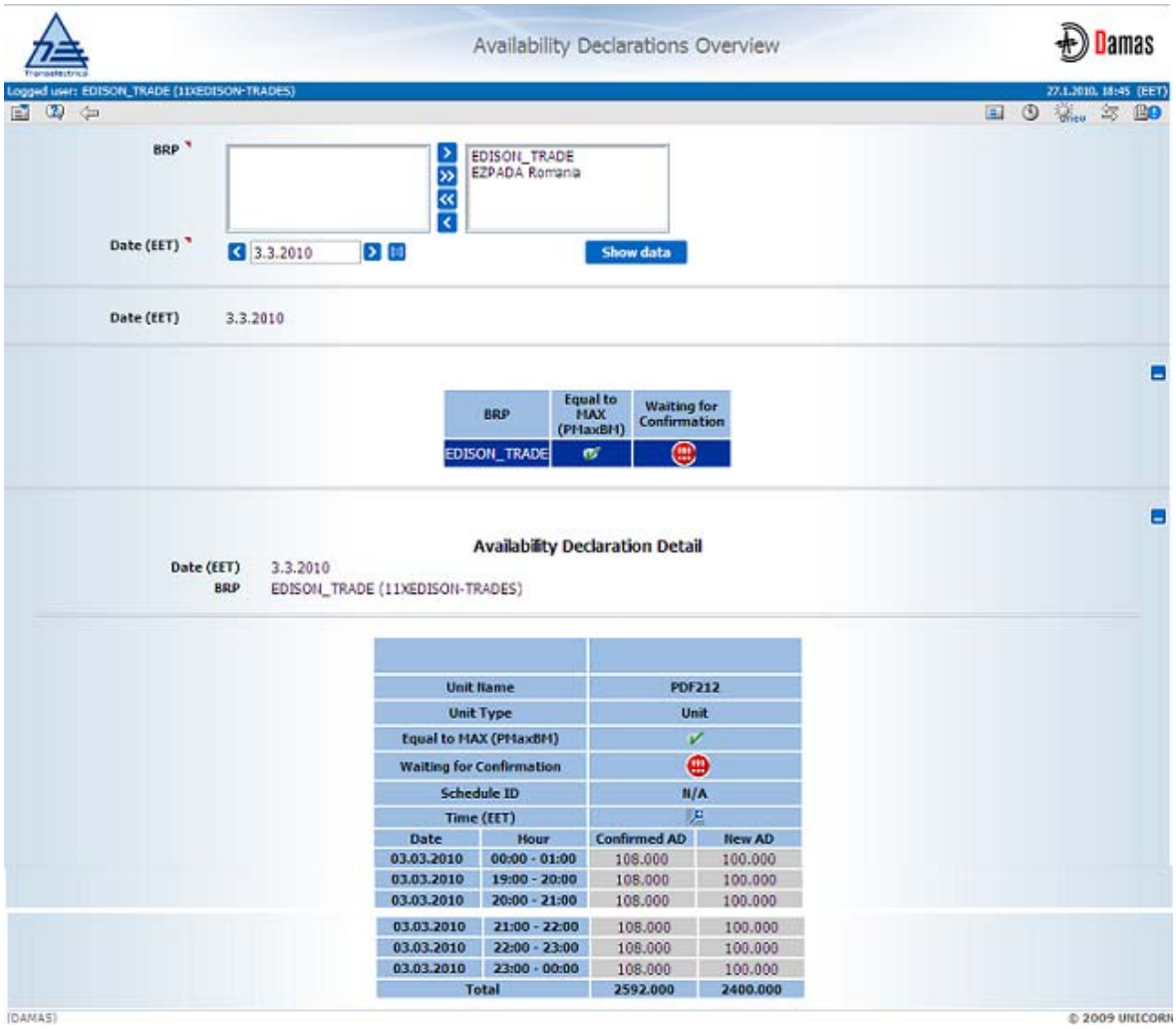
(3)Click the **Show data** button to display the overview table with summary information about schedules submitted for the combination of BRP, border direction, scheduling type and capacity identification for given business day.

(4)Select one row in the summary overview to view detailed information about schedules submitted for combination of BRP and business day, including availability equality to *Maximum* for each power unit of BRP (for given day) and whether any schedule of given BRP waits for confirmation.

(5)Click the icon to display the **Availability Declaration Form** with read-only mode.

(6)Click the icon to display the **Availability Declaration Form** for schedule modification (displayed if no diagram waits for confirmation for given unit and business day; or if the unit is not displayed for BMP whose is its BRP at the same time).

Picture: Availability Declarations Overview – schedule waiting for confirmation by system operator. Unit availability still equals to *Maximal,* because new schedule not confirmed yet.



Information about schedule acceptation / rejection is sent to BRP into his message menu.

Picture: Availability Declarations Overview – no schedule waiting for confirmation. Unit availability was reduced from *Maximal.*

Date (EET) 3.3.2010

BRP	Equal to MAX (PMaxBM)	Waiting for Confirmation
EDISON_TRADE	!	

Availability Declaration Detail

Date (EET) 3.3.2010
BRP EDISON_TRADE (11XEDISON-TRADES)

Unit Name	PDF212
Unit Type	Unit
Equal to MAX (PMaxBM)	!
Waiting for Confirmation	
Schedule ID	271
Time (EET)	

Date	Hour	Confirmed AD	New AD
03.03.2010	00:00 - 01:00	100.000	N/A
03.03.2010	01:00 - 02:00	100.000	N/A
03.03.2010	02:00 - 03:00	100.000	N/A
03.03.2010	21:00 - 22:00	100.000	N/A
03.03.2010	22:00 - 23:00	100.000	N/A
03.03.2010	23:00 - 00:00	100.000	N/A
Total		2400.000	

2.9.3. Generation Schedule Form

Description

Generation schedules of power units can be entered via **Internal *Scheduling -> Generation Schedule Form*** by BRP for a time interval (Date From – Date To). BRP may submit daily generation (production / consumption) schedules, if the system is in the *Entering of Generation Schedules* state for given business day.

Generation schedules are submitted on generation / consumption units assigned to BRP. BRP may submit hourly schedules for Dispatchable Units (DUs), Non-Dispatchable Units (Non-DUs), Dispatchable Loads (DLs) and Non-Dispatchable Loads (Non-DLs).

In addition, BRP may submit generation for Non-DUs and consumption for Non-DLs, whose installed power is lower than 10 MW (resp. *Pmax* in *Power Unit Code Table*). Both values are submitted separately as hourly values (may differ in each hour) for a business day, identified as *Virtual Non-DU* and *Virtual Non-DL*.

As well, BRP may submit amounts of *Euav* (*Energy upward available for DU and business day*) and *Edav* (*Energy downward available for DU and business day)* for each DU unit of water type. The values are submitted separately as aggregated values for a business day.

After submission the generation schedules are validated. If valid, the original values stored in the system are overwritten by values of given generation schedule for each business day of the time

interval. The read-only generation schedule values are available on the *Generation Schedule Overview* form.

For Intraday modifications by BRP, the system must be in the *GS Intraday Modifications* state for given business day. Hours that are not allowed to be modified any more are read-only. The business validations are the same as for D-1 submitting.

Availability declarations are allowed to be submitted if the system is in the *Entering of Availability Declarations* system state for given business day. After submission, each availability declaration is validated. BRP are informed by a message sent into their user accounts about the processing results.

For Intraday modifications by BRP, the system must be in the *AD Intraday Modifications* state for given business day. Hours that are not allowed to be modified any more are read-only. The business validations are the same as for D-1 submitting.

Steps

(1)Choose the **Internal Scheduling -> Generation Schedule Form** menu item.

(2)Enter input parameters:

a. Date From (EET) – selection of the first business day of the time interval

b. Date To (EET) – selection of the last business day of the time interval

c. Dispatchable Unit – selection of dispatchable units that are assigned to given BRP

d. Non-Dispatchable Unit – selection of non-dispatchable units that are assigned to given BRP

e. Dispatchable Load – selection of dispatchable loads that are assigned to given BRP

f. Non-Dispatchable Load – selection of non-dispatchable loads that are assigned to given BRP

g. Others – selection of virtual power units that are assigned to given BRP

(3)Click the **Show data** button to open the form for entering a new schedule.

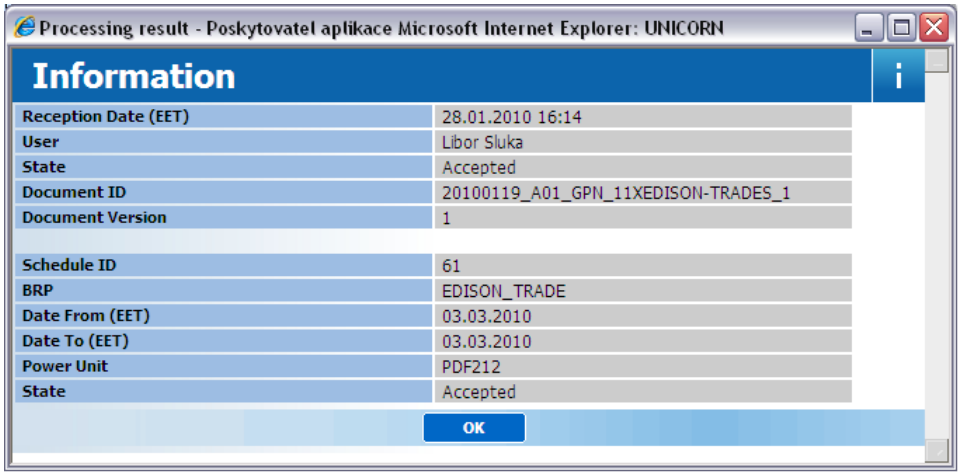
(4)Enter the scheduled amount of power for given units (*Note: for Pumping Storages the hourly values may be negative, as well*).

(5)Select the **Save** button to save the schedule.

Immediately after the schedule is submitted, the system performs the validations of the schedule. The user is notified by a dialog window and new message with the processing results. If the validation conditions are met, the schedule is stored in the system.

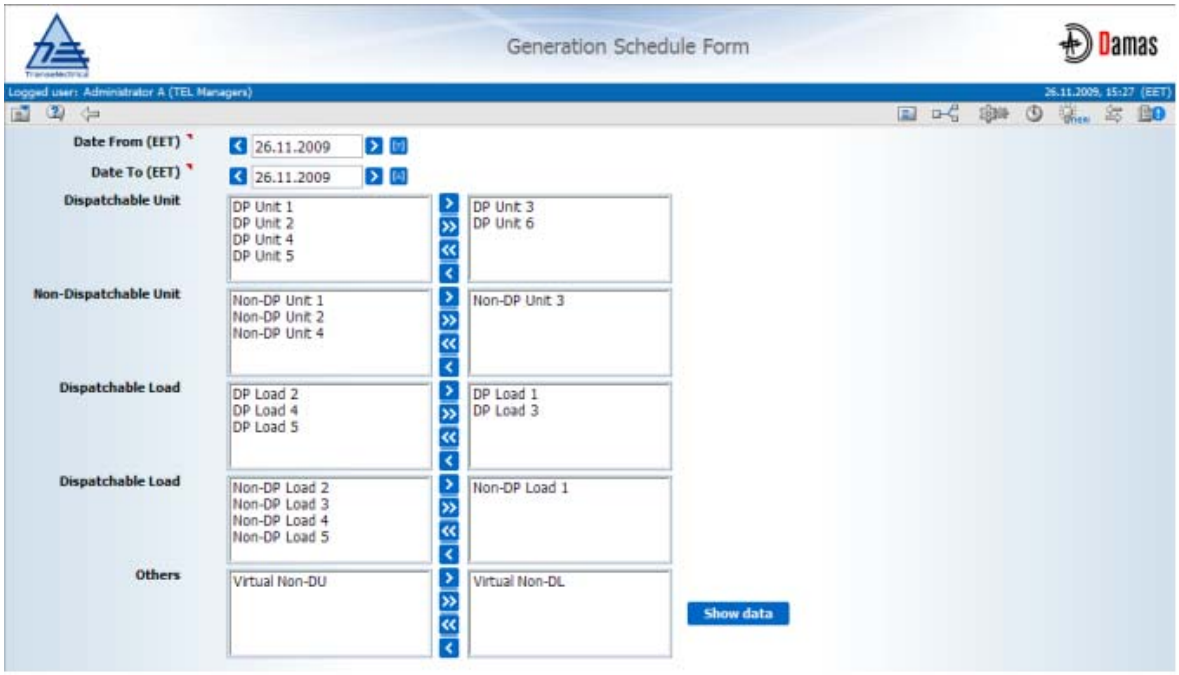
Note: If schedule already exists for combination of parameters (BRP, Power Unit, business day) warning is displayed, informing about existing diagram.

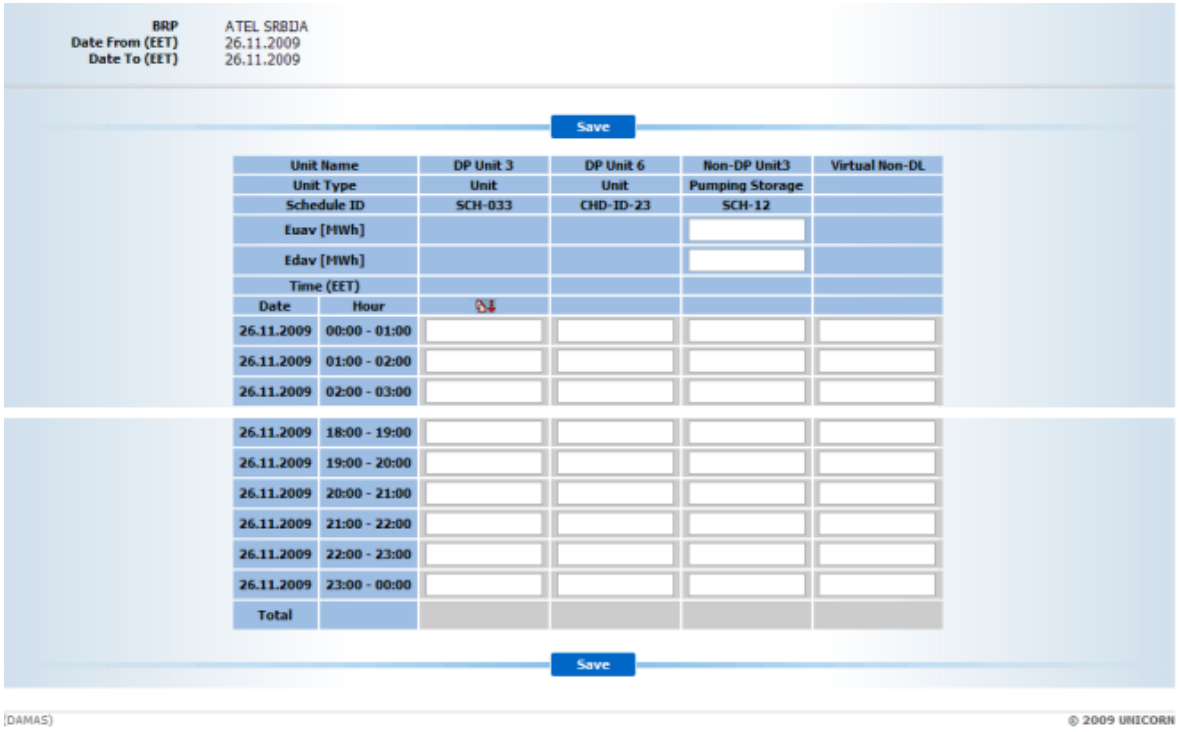
Dialog window example – schedule saved:



Message example:

Picture: Generation Schedule Form



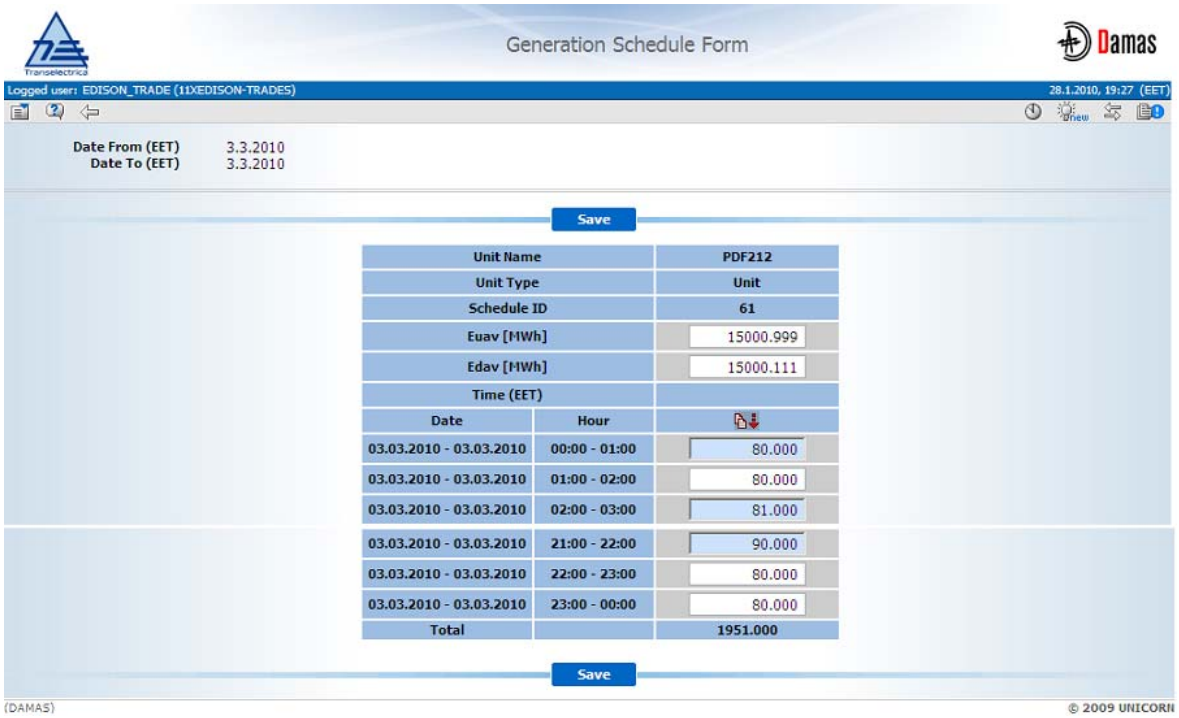


! Important: After saving the schedule, the form with submitted values remains displayed in the browser (for reference). It is necessary to modify the filter (selection parameters) and click the Show data button to enter a new schedule.

Intraday Modifications

Generation Schedule Form – system is in the state for generation schedules intraday modifications. In this example, first hour is closed because actual time has passed the gate closure for first intraday interval. Remaining read-only hours were deselected in the *Intraday Intervals Overview*.

Note: If schedule submitted via Schedule Upload (XML) in the XML file, closed hours must not change (must be the same as in the last valid version).



2.9.4. Generation Schedules Overview

Description

A summary overview of submitted generation schedules is available in the **Internal *Scheduling -> Generation Schedules Overview*** web form for one business day. If a new, valid generation schedule is received through the *Generation Schedule Form*, values from this schedule overwrite the original ones for given business day and unit.

The form allows displaying of *Priority production* for given business day and power unit that is received from OPCOM via *Schedules Upload (XML)* in CSV file format. OPCOM is allowed to display only diagrams of priority production.

Except hourly values, the overview displays aggregated values of Euav and Edav for a business day.

Form can be displayed by Balancing Market Participant (BMP) in read-only mode. Such user may display generation / production of his power units only.

Steps

(1)Choose the **Internal Scheduling -> Generation Schedules Overview** menu item

(2)Enter input parameters:

a. BRP – selection of BRP (not displayed for BRP)

b. Date (EET) – selection of the business day

c. Power Unit – selection of the power unit that are assigned to given BRP or BMP

(*Note: subject can be BMP and BRP also at one time*). Not displayed for OPCOM.

d. Priority Production – selection whether priority production schedules submitted by OPCOM shall be displayed if received.

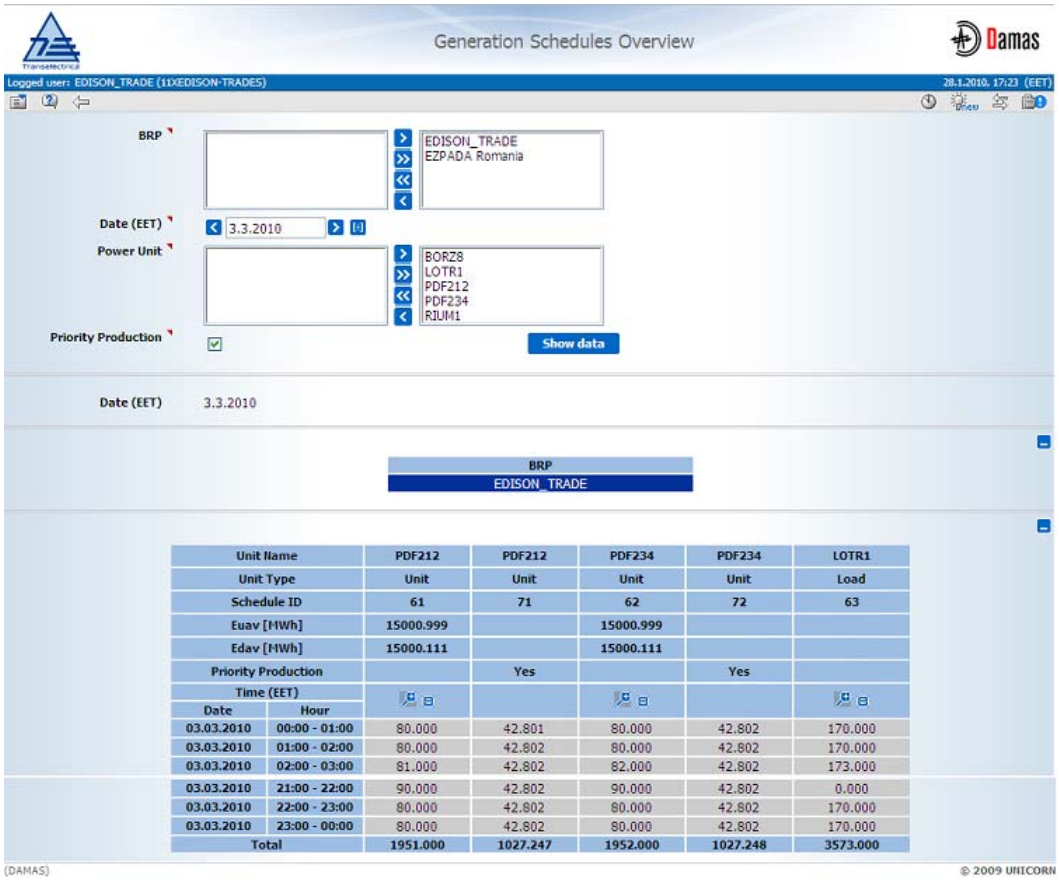
(3)Click the **Show data** button to display the overview table with selection of given BRP.

(4)Select one row in the summary overview to view detailed information about schedules submitted for combination of BRP and business day.

(5)Click the icon to display the **Generation Schedule Form** with read-only mode.

(6)Click the icon to display the **Generation Schedule Form** for schedule modification (displayed if the unit is displayed for BMP whose is its BRP at the same time).

Picture: Generation Schedules Overview – displayed by BRP that is BMP at the same time; including schedules of priority production for two units



Unit Name		PDF212	PDF212	PDF234	PDF234	LOTR1
Unit Type		Unit	Unit	Unit	Unit	Load
Schedule ID		61	71	62	72	63
Euav [MWh]		15000.999		15000.999		
Edav [MWh]		15000.111		15000.111		
Priority Production			Yes		Yes	
Time (EET)						
Date	Hour					
03.03.2010	00:00 - 01:00	80.000	42.801	80.000	42.802	170.000
03.03.2010	01:00 - 02:00	80.000	42.802	80.000	42.802	170.000
03.03.2010	02:00 - 03:00	81.000	42.802	82.000	42.802	173.000
03.03.2010	21:00 - 22:00	90.000	42.802	90.000	42.802	0.000
03.03.2010	22:00 - 23:00	80.000	42.802	80.000	42.802	170.000
03.03.2010	23:00 - 00:00	80.000	42.802	80.000	42.802	170.000
Total		1951.000	1027.247	1952.000	1027.248	3573.000

Picture: Generation Schedules Overview – displayed by OPCOM (may see only schedules of priority production)

2.9.5. Intraday Intervals Overview

Description

Internal Intervals Overview (accessible via ***Internal Scheduling -> Intraday Intervals Overview*** menu item) displays the states and gate closure times for each intraday interval for given business day, separately for internal schedules, generation schedules and availability declarations. The form is available for BRP in read-only mode.

System operator may modify intervals' state before opening intraday modifications for given business day. By selecting particular interval, system operator defines what intervals will be available during intraday modifications of given business day for submitting diagrams of internal schedules, generation schedules and availability declarations.

Steps

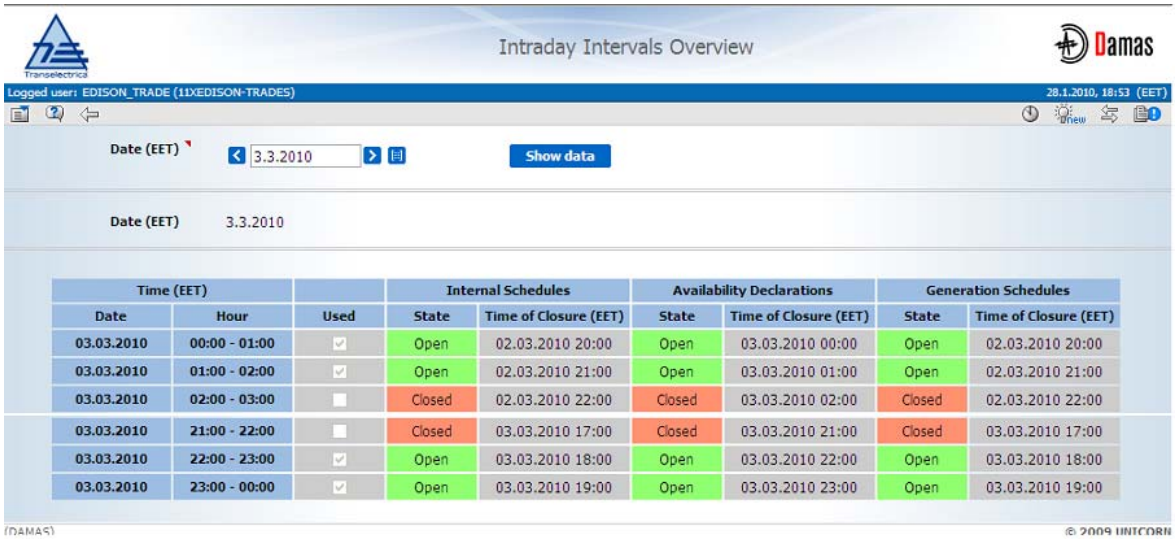
(1)Choose the ***Internal Scheduling -> Intraday Intervals Overview*** menu item

(2)Enter input parameters:

a. Date (CET) – selection of a business day

(3)Click the **Show data** button to display the form

Picture: Intraday Intervals Overview – some intraday intervals (hours) are deselected (means, scheduled amount may not change during intraday); actual time has not reached gate closure of the first hour, yet.



Intraday Intervals Overview

Logged user: EDISON_TRADE (11XEDISON-TRADES) 28.1.2010, 18:53 (EET)

Date (EET) 3.3.2010 Show data

Date (EET) 3.3.2010

Time (EET)			Internal Schedules		Availability Declarations		Generation Schedules	
Date	Hour	Used	State	Time of Closure (EET)	State	Time of Closure (EET)	State	Time of Closure (EET)
03.03.2010	00:00 - 01:00	☑	Open	02.03.2010 20:00	Open	03.03.2010 00:00	Open	02.03.2010 20:00
03.03.2010	01:00 - 02:00	☑	Open	02.03.2010 21:00	Open	03.03.2010 01:00	Open	02.03.2010 21:00
03.03.2010	02:00 - 03:00	☐	Closed	02.03.2010 22:00	Closed	03.03.2010 02:00	Closed	02.03.2010 22:00
03.03.2010	21:00 - 22:00	☐	Closed	03.03.2010 17:00	Closed	03.03.2010 21:00	Closed	03.03.2010 17:00
03.03.2010	22:00 - 23:00	☑	Open	03.03.2010 18:00	Open	03.03.2010 22:00	Open	03.03.2010 18:00
03.03.2010	23:00 - 00:00	☑	Open	03.03.2010 19:00	Open	03.03.2010 23:00	Open	03.03.2010 19:00

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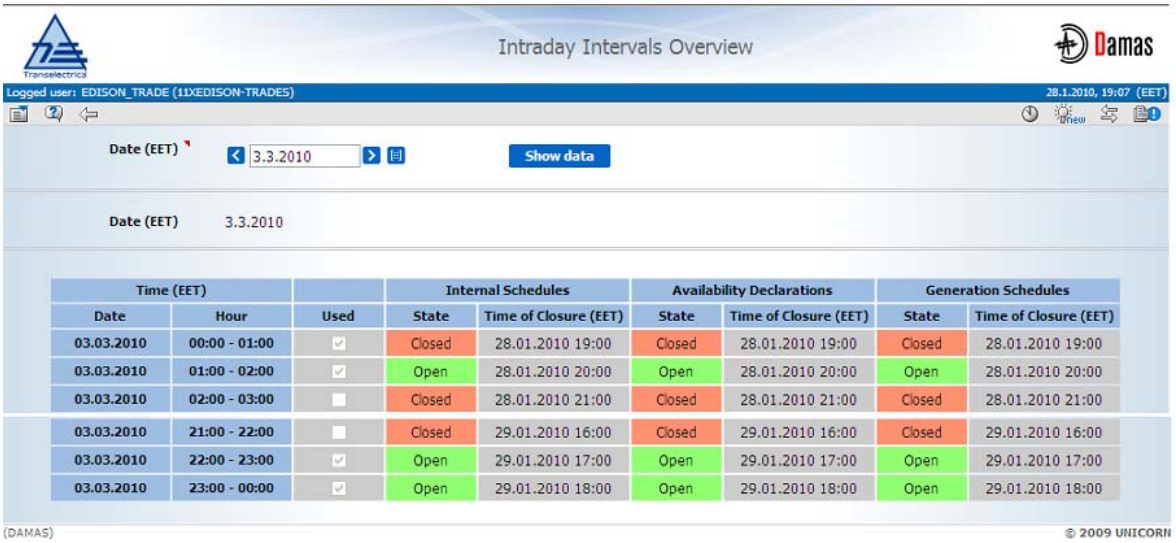
Picture: Intraday Intervals Overview – some intraday intervals (hours) are deselected; actual time has already passed gate closure of the first hour (BRP may not change this hour as well, since now).



Intraday Intervals Overview

Logged user: EDISON_TRADE (11XEDISON-TRADES) 28.1.2010, 19:07 (EET)

Date (EET) 3.3.2010 Show data

Date (EET) 3.3.2010

Time (EET)			Internal Schedules		Availability Declarations		Generation Schedules	
Date	Hour	Used	State	Time of Closure (EET)	State	Time of Closure (EET)	State	Time of Closure (EET)
03.03.2010	00:00 - 01:00	☑	Closed	28.01.2010 19:00	Closed	28.01.2010 19:00	Closed	28.01.2010 19:00
03.03.2010	01:00 - 02:00	☑	Open	28.01.2010 20:00	Open	28.01.2010 20:00	Open	28.01.2010 20:00
03.03.2010	02:00 - 03:00	☐	Closed	28.01.2010 21:00	Closed	28.01.2010 21:00	Closed	28.01.2010 21:00
03.03.2010	21:00 - 22:00	☐	Closed	29.01.2010 16:00	Closed	29.01.2010 16:00	Closed	29.01.2010 16:00
03.03.2010	22:00 - 23:00	☑	Open	29.01.2010 17:00	Open	29.01.2010 17:00	Open	29.01.2010 17:00
03.03.2010	23:00 - 00:00	☑	Open	29.01.2010 18:00	Open	29.01.2010 18:00	Open	29.01.2010 18:00

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2.9.6. Schedules Overview in EET

Description

Schedules Overview in EET (accessible via ***Internal Scheduling -> Schedules Overview in EET***) displays the balance on Romanian borders differentiated by hour of the day. The form is available for BRP in read-only mode.

The balance includes internal schedules sent as bilateral contracts between BRPs, cross-border schedule types (long-term, daily) and production / consumption of power units / consumptions of given BRP.

Steps

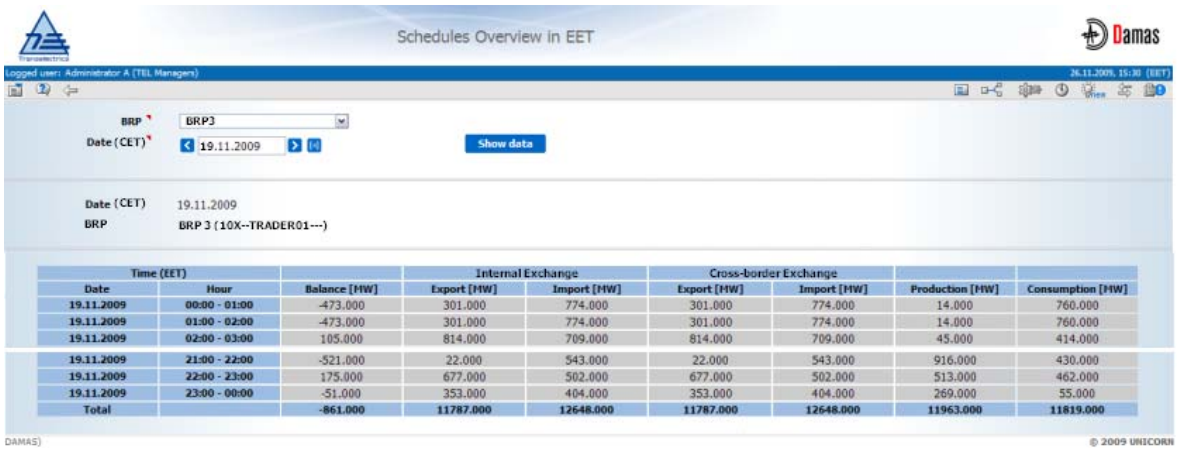
(1)Choose the ***Internal Scheduling -> Schedules Overview in EET*** menu item

(2)Enter input parameters:

a. Date (EET) – selection of the respective business day

(3)Click the **Show Data** button to display the form.

Schedules Overview in EET:



Time (EET)			Internal Exchange		Cross-border Exchange			
Date	Hour	Balance [MW]	Export [MW]	Import [MW]	Export [MW]	Import [MW]	Production [MW]	Consumption [MW]
19.11.2009	00:00 - 01:00	-473.000	301.000	774.000	301.000	774.000	14.000	760.000
19.11.2009	01:00 - 02:00	-473.000	301.000	774.000	301.000	774.000	14.000	760.000
19.11.2009	02:00 - 03:00	105.000	814.000	709.000	814.000	709.000	45.000	414.000
19.11.2009	21:00 - 22:00	-521.000	22.000	543.000	22.000	543.000	916.000	430.000
19.11.2009	22:00 - 23:00	175.000	677.000	502.000	677.000	502.000	513.000	462.000
19.11.2009	23:00 - 00:00	-51.000	353.000	404.000	353.000	404.000	269.000	55.000
Total		-861.000	11787.000	12648.000	11787.000	12648.000	11963.000	11819.000