DEUTSCHE BÖRSE
SYSTEMS

Capacity Service

Trader User Guide

Products DE-DK
AMP-NL
TPS-NL

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Abbreviations

AMP	Amprion GmbH (TSO) – Auction Office / Administrator for the product DE-FR; formerly RWE
ATC	Available Transfer Capacity
BG	Balancing Group / Trader
CAS	Control Area Schedules
CET	Central European Time
CSV	Character/Comma separated Values (file structure)
DBS	Deutsche Börse Systems AG
DST	Daylight Savings Time
EIC	ETSO-Identifications-Code-System
ENDK	Energinet.dk (TSO)
ESS	ETSO Scheduling System
ETSO	European Transmission System Operators
GUI	Graphical user interface
MW	Megawatts
NTC	Net Transfer Capacity
RCA	Reserved Capacity Allocation
TenneT	TenneT TSO – Auction Office / Administrator for the product TPS-NL and AMP-NL
TPS	transpower stromübertragungs GmbH (TSO) - Auction Office / Administrator for the product DE-DK; formerly E.ON
TSO	Transmission System Operator
UTC	Universal Time Coordinated
XML	Extensible Markup Language

Definitions

Contract	The contract is defined by the delivery period which is the start and end time of the contract allocation period.
Contract Delivery Period	The delivery period is the start and end time during which power is to be physically transmitted.
Contract Allocation Period	The contract allocation period is the period between contract start and end time in which capacity can be requested.
Contract Status	A contract can have the following states § Delivery = a contract is in delivery § Inactive = before and after contract allocation period § Active = a contract is in the allocation period - differentiated between § Allocation: requests can be entered § HALT: requests cannot be entered
Capacity Request	A capacity request is the act of asking for permission to physically transfer a specific amount of power (in MW) over the interconnection for a specific hour of the day.
Product	A Product describes the cross-border allocation of capacity between two countries. It includes allocation in both directions.

1 Document Content

This document is the Capacity Service User Handbook for products DE-DK, AMP-NL and TPS-NL.

The GUI screenshots in this document alternate the products. Since the GUIs of the three products mainly differ only in the product tags (e.g. DE-DK), each screenshot is an adequate demonstration of the GUI of all products.

1.1 Capacity Service

The purpose of the Capacity Service is to enable the timely allocation of cross-border grid capacity. The aim of the Service is to simplify and standardize the overall processes and procedures for the allocation of cross-border grid capacity.

The Service is a web-based solution which does not require specific software installation on the end-user side. The participants can access the service 24 hours a day 7 days a week using a standard internet browser for continuous, anonymous allocation of cross-border network capacity. Using the Capacity Service the participants can reserve cross-border grid capacity on the registered products via the registered TSOs. Straight through processing is guaranteed with:

- electronic interfaces for the automatic transfer of capacity schedules from the TSOs.
- the automatic generation and transfer of the delivery schedules for the participants and TSOs based on the ETSO standard.

The Capacity Service provides the

- TSOs in the role of auction office with a Service for the allocation of intraday cross-border grid capacity, thus helping to fulfil the EU directive on interconnection capacity.
- Traders (Balancing Groups) with a facility for making short term adjustments to their physical requirements by requesting capacity.

The commercial capacity made available to the market is called Available Transfer Capacity (ATC). The capacity is differentiated between:

- Available capacity
- Allocated capacity

1.2 Traders: DE-DK

The interconnection capacity for the product DE-DK includes the values between the German TSO transpower (TPS) and the Danish TSO energinet.dk. The traders of the Capacity Service for DE-DK are authorized Balancing Groups within the control area of the TSO TPS.

1.3 Traders: TPS-NL and AMP-NL

The interconnection capacity for the products TPS-NL and AMP-NL includes the values between the German TSOs TPS and AMP, respectively, and the Dutch TSO TenneT. The traders of the Capacity Service on the German - Dutch interconnections are authorized Balancing Groups within the control area of the TSOs TenneT, AMP and TPS.

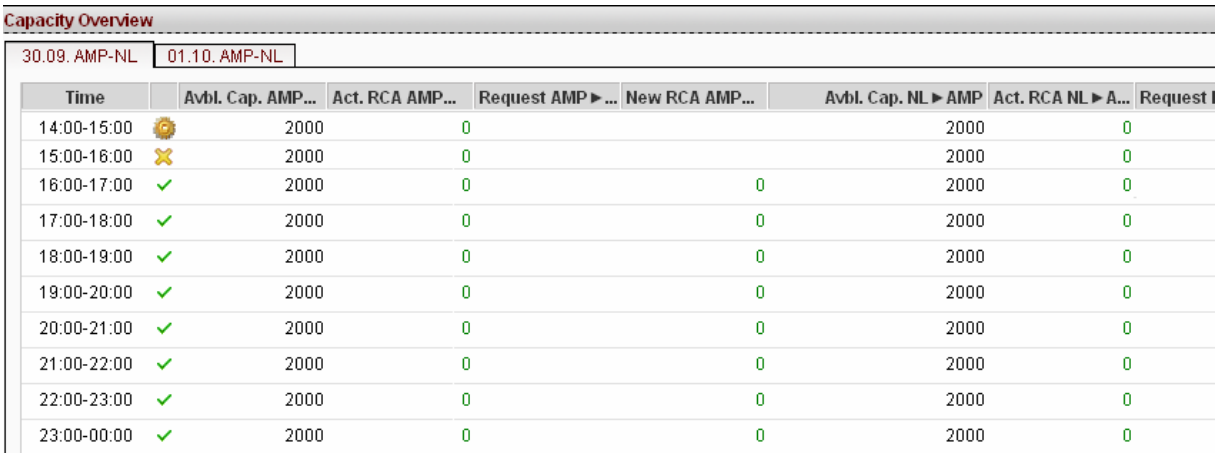
In the Netherlands, a Balancing Group is identified with a unique EAN code. In Germany, a Balancing Group is identified with a unique EIC code.

1.4 Cross-border Couple Relationship for AMP-NL and TPS-NL

- In order to trade on the Intraday Capacity Service for the Dutch-German products, authorized Balancing Groups (traders) must have a counterparty relationship, called cross-border couple, registered by the Administrator (TenneT).

- Traders will operate in a fixed couple per interconnector. The cross-border couple always is composed of one Dutch and one German Balancing Group. On each interconnector a trader may participate in a different relationship; however, per interconnector there is only one counterparty relationship per trading day.

- In every couple, either the German (with EIC code) or the Dutch Balancing Group (with EAN code) is defined as trading rightsholder. The other corresponding Balancing Group only has viewing rights. This means, that users of the Balancing Group without trading rights can view the Capacity Service GUI. However, the input fields to enter capacity requests are missing (see screenshot below).


Capacity Overview

30.09. AMP-NL | 01.10. AMP-NL

Time		Avbl. Cap. AMP...	Act. RCA AMP...	Request AMP►...	New RCA AMP...	Avbl. Cap. NL►AMP	Act. RCA NL►A...	Request
14:00-15:00		2000	0			2000	0	
15:00-16:00		2000	0			2000	0	
16:00-17:00	✓	2000	0		0	2000	0	
17:00-18:00	✓	2000	0		0	2000	0	
18:00-19:00	✓	2000	0		0	2000	0	
19:00-20:00	✓	2000	0		0	2000	0	
20:00-21:00	✓	2000	0		0	2000	0	
21:00-22:00	✓	2000	0		0	2000	0	
22:00-23:00	✓	2000	0		0	2000	0	
23:00-00:00	✓	2000	0		0	2000	0	

Figure 1: GUI for Balancing Group without trading rights

2 Functional Overview

Available capacity is published and requested via the Capacity Service.

The administrators (TenneT, TPS) provide capacity information to the Capacity Service by uploading the following information:

- NTC (net transfer capacity) per interconnection and direction
- already allocated capacity (day-ahead) per interconnection and direction

After the administrator (TenneT, TPS) has confirmed (published) the release of the uploaded data the Capacity Service calculates the available capacity and displays the values in the trader and administrator GUI.

Traders can see the available capacity and the capacity which has already been allocated through yearly, monthly, and daily auctions as well as through the Capacity Service by logging onto the Service. Starting at a specific time the day before, traders can request additional capacity for 60 minute periods (=contracts) corresponding to the hours of the day in megawatts (MW) either via manual input on the GUI or via BG Request file upload, (see Annex in Section 7). The Capacity Service allocates requested capacity to the traders according to the “First come - first serve” principal.

The Capacity Service informs the TSOs about the current allocation for each Balancing Group/ product by sending an RCA or PTR file via e-mail.

2.1 Principles of Capacity Allocation

- The available interconnection capacity is displayed in megawatts.
- The available interconnection capacity can be requested by an authorized trader.
- The interconnection capacity is allocated according to the “first come – first serve” principle. Only the time of request is used to determine the allocation of available capacity.
  - Each allocation request receives a timestamp upon receipt by the application server. No two requests can receive the same timestamp.
  - There is no allocation based on price.
- Allocated interconnection capacity is netted and made available for the opposite direction.

2.2 Parameters Set-up

Each product (AMP-NL, TPS-NL, DE-DK) is configured according to the following parameters:

Parameter	DE - DK	AMP-NL	TPS-NL	Comment
Automatic Publish	17:30	--	--	DE-DK: Capacity data is published and displayed
Start of Allocation Period	18:00 on the day before	21:00 on the day before	21:00 on the day before	May be modified by the administrator
End of Allocation Period-	120 minutes prior to delivery	75 minutes prior to delivery	75 minutes prior to delivery	May be modified by the administrator
Decimal places (.) on GUI for Unit (MW)	1	No	No	
Smallest tradable Unit	0.1 MW	1 MW	1 MW	
Maximum Quantity per Request	999.9 MW	999 MW	999 MW	
Direction HALT	X	--	--	

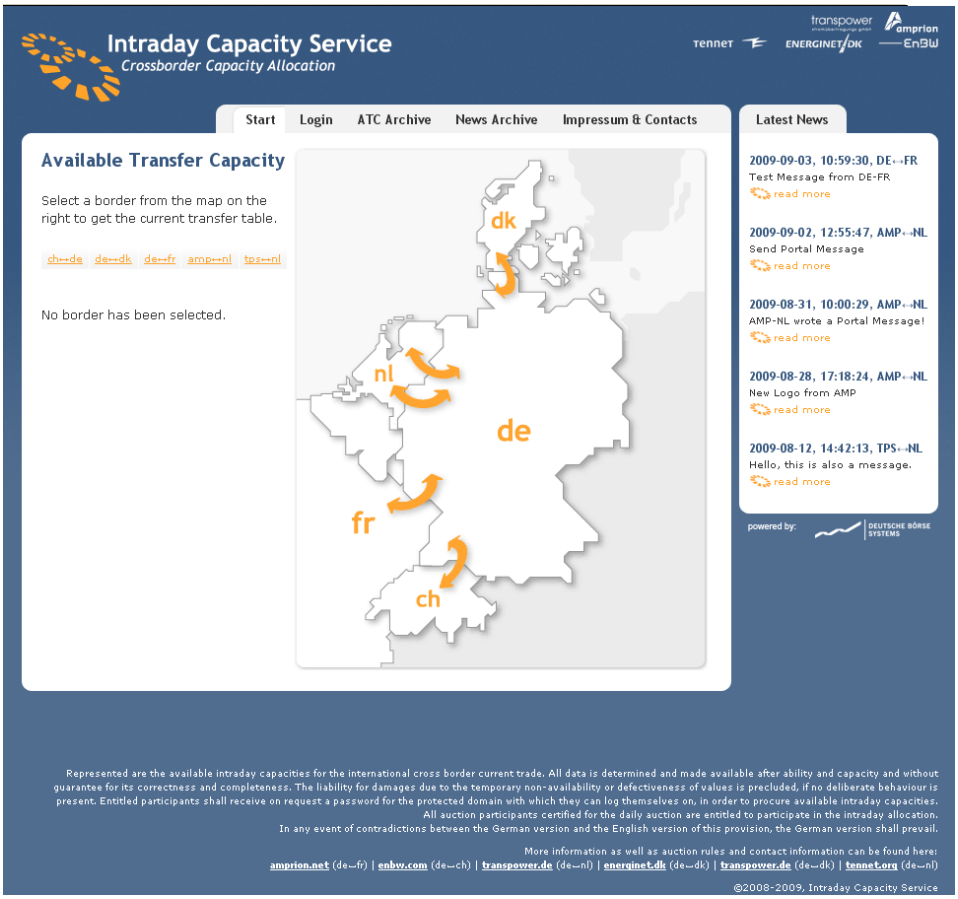
3 Accessing the Capacity Service

3.1 Capacity Portal

The Capacity Service can be accessed via http://www.intraday-capacity.com which directs the user to the Start layer of the Capacity Portal.

The Capacity Portal webpage is layered into six main sections. They can be accessed by clicking on the menu items on the tab bar at the top.

1. Start: In the center is the country map of central Europe. The respective interconnectors are displayed on this map. By clicking on the arrow of the interconnector or by clicking to the product tabs to the left of the map the respective ATC-values table is displayed on the left of the map. The timestamp of the latest refresh is below the ATC-value table. On the bottom of the Start layer is the disclaimer.
2. Login: Opens the login dialog window for users with an installed certificate.
3. ATC Archive: ATC values archive: downloadable into CSV file.
4. News Archive: Portal news messages archive: downloadable into CSV file.
5. Impressum & Contacts: Impressum and contact information; English disclaimer on the bottom.
6. Latest News: Portal news panel with five latest portal news messages (truncated to 100 characters), displayed with date, time and product stamp.

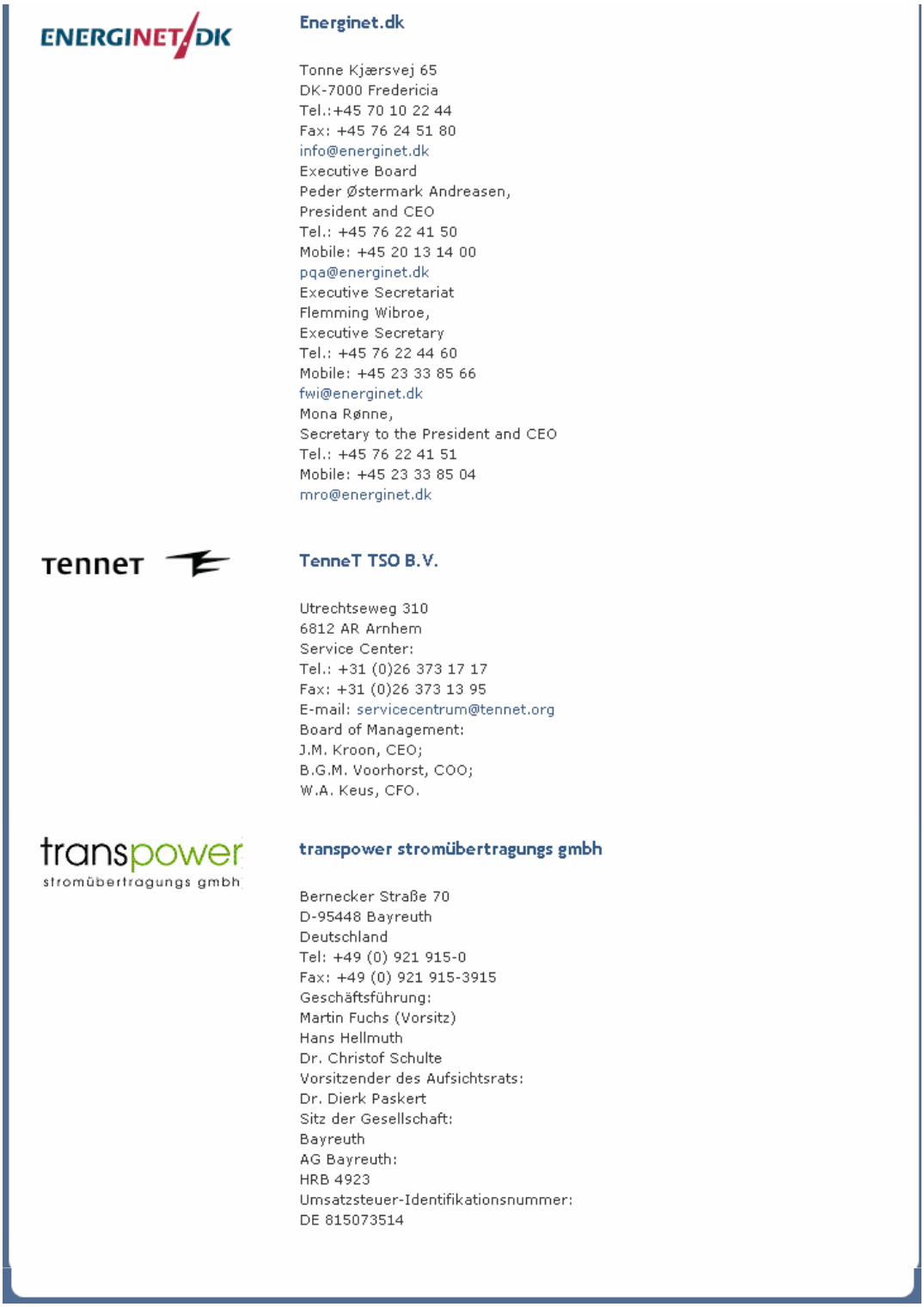


Screenshot 2: Capacity Service portal, Start layer

3.2 Capacity Portal: Impressum & Contacts

Clicking on the tab “Impressum & Contacts” on the Capacity Service portal displays the impressum and contact information of all Capacity Service partners (see Screenshots below).

Screenshot: The layer Impressum & Contacts (…)



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Screenshot 3: Impressum on Capacity Portal

3.3 Preconditions – Internet Browser Settings

The Capacity Service is browser-based and only requires an Internet connection with an Internet browser. No application software needs to be installed locally on the market participant's PC.

The Capacity Service's target internet address is: https://www.intraday-capacity.com

- Supported browsers are Internet Explorer 6.0 and Mozilla Firefox 3.
- The speed of the internet connection should be at least 128 kb/sec.

When starting an Internet connection to the Capacity service:

- The browser opens an encrypted SSL connection to the Capacity Service.
- When using Internet Explorer 6.0, the ActiveX component should be activated.

In order to do this:

- open the Internet browser window,
- in the menu bar, select Tools > Internet Options > Security,
- click on "Trusted Sites", then "Sites". Add the exchange's internet address as a trusted site. Click "OK".

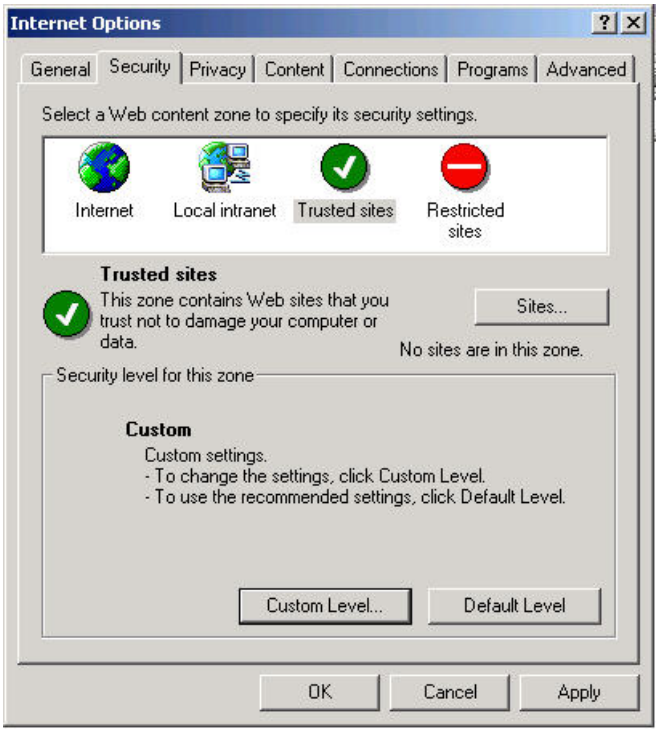


Figure 4: Internet Options

In the same dialogue window, the Custom Settings should be set up by clicking the "Custom Level" button. In the "Security Settings" window the Capacity Service user should enable the following settings:

- Download signed ActiveX controls
- Download unsigned ActiveX controls
- Run ActiveX controls and plug-ins
- Script ActiveX controls marked safe for scripting
- File download
- Active Scripting

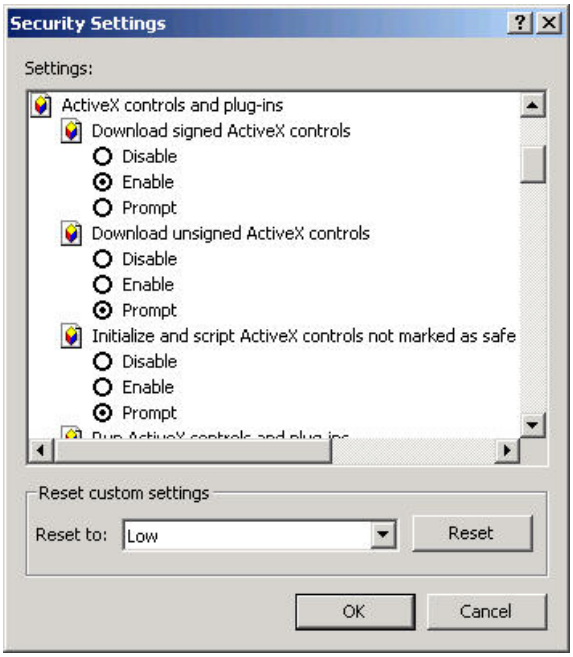


Figure 5: Security Settings

3.4 Certificates Installation

The Capacity Service requires an advanced electronic signature which obliges all participants to install their qualified user certificates into their Internet browser before login.

All participants of Capacity Service can only login with a successfully installed certificate.

The Certificate can be installed as shown in the figures below:

1. Click on “Internet Options”

Figure 6: Open “Internet Options”

2. Click on “Content”

Figure 7: “Content / Certificates… “

3. Click on “Certificates”

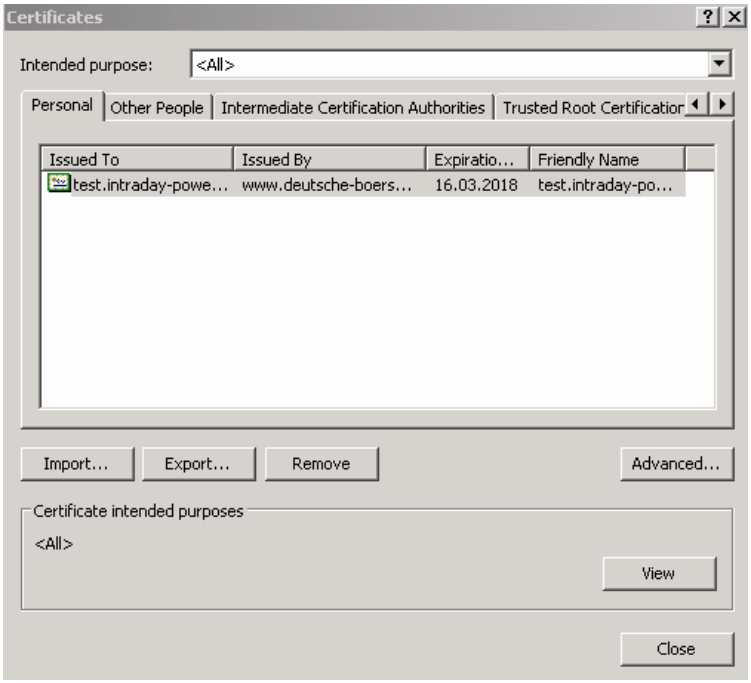


Figure 8: “Certificates / Import“

4. Click on “Import”

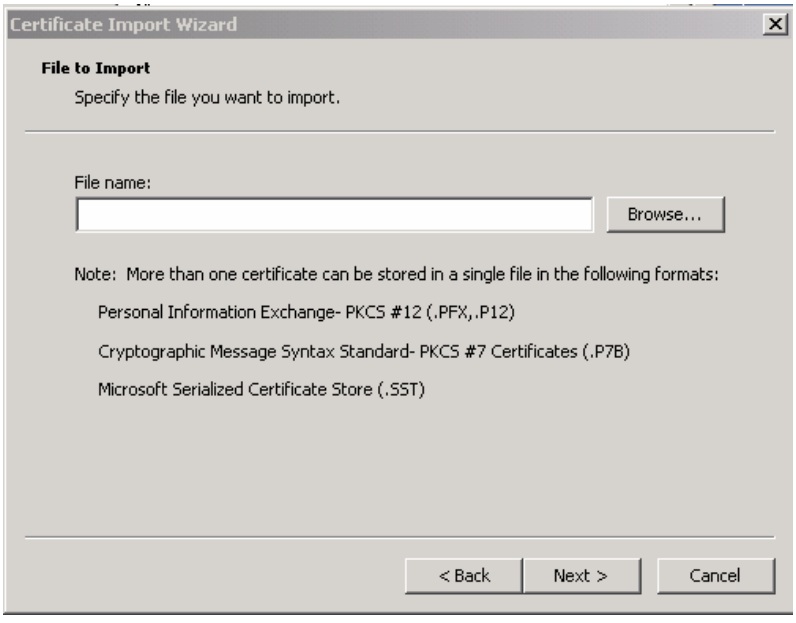


Figure 9: “Certificates Import Wizard“

5. Browse to the directory where the received certificate file is stored, import this certificate file and enter the password received together with the certificate.

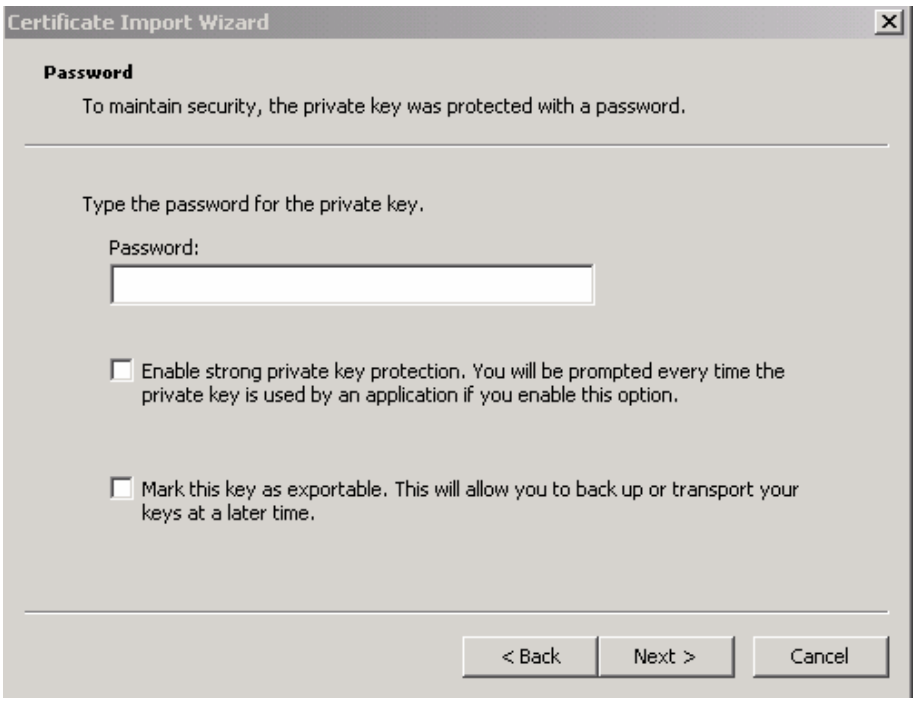
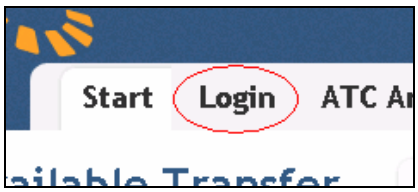


Figure 10: "Certificates Import Wizard – Private Key"

Then the certificate will be installed automatically and the user can log on securely.

3.5 Login

By clicking on "Login" on the tab bar on the top of the Capacity Service Portal, the user can log in to the Capacity Service.



Screenshot 11: *Login menu item on tab bar*

Clicking on "Login" opens an SSL connection to the service which requires the user to have a qualified user certificate installed into the browser. If the user has installed the certificate, a Login dialog window opens. The user can now enter the RACF Login ID and password. The fields User name and Password are case-sensitive. Having entered the correct User name and Password, the authorized user can access the Capacity Service by clicking "OK".

Screenshot 12: Login dialog window

Clicking on “Cancel” will redirect the user to the Capacity Service portal.

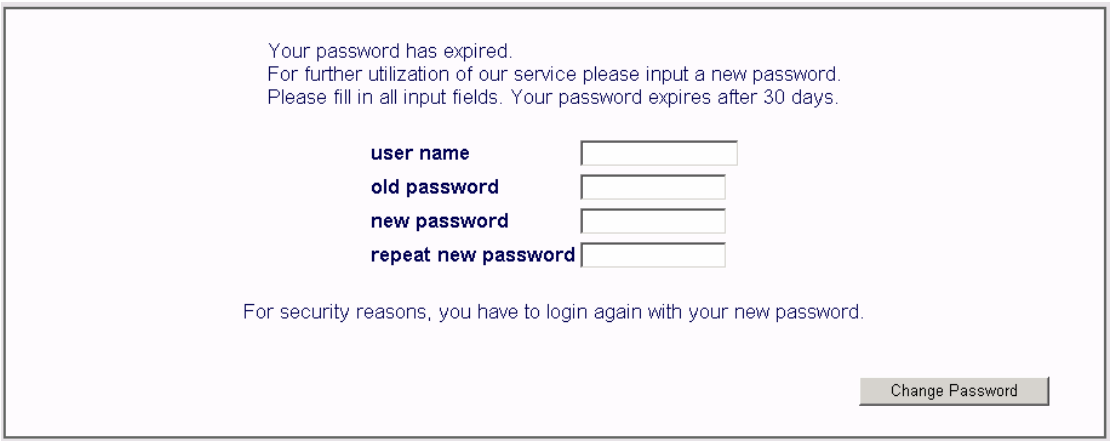
After successful authentication the Capacity Service is accessed. If an invalid RACF Login ID and password is entered, the user will receive an error message and will be denied access to the Capacity Service (see also section 3.8):
Clicking on “Cancel” will direct the user to an “Access denied” webpage.

3.6 Change Password

The screen “Change Password” on the menu item “File” allows the user to change the password.

After the initial login the user is forced to change the assigned password and is directed to the “Change Password” screen. For security reasons, previous passwords may not be reused.

The password is changed via the “Change Password” screen.

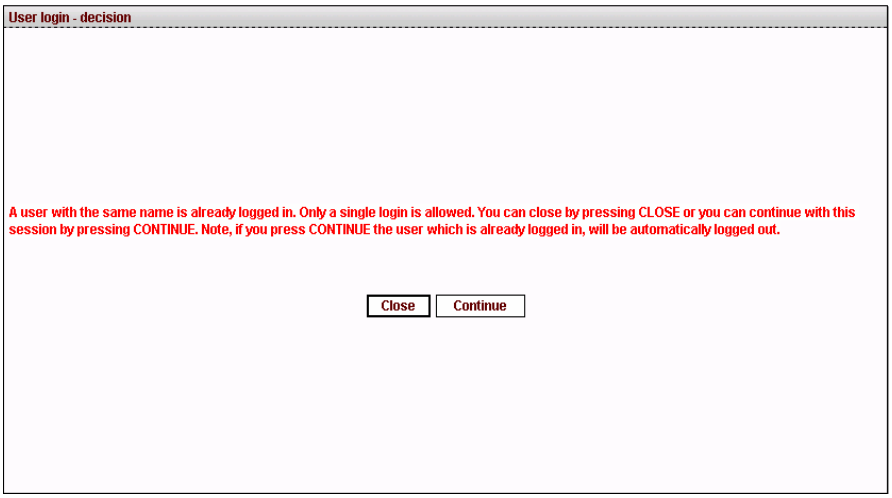


Screenshot 13: Change Password

3.7 Single Login

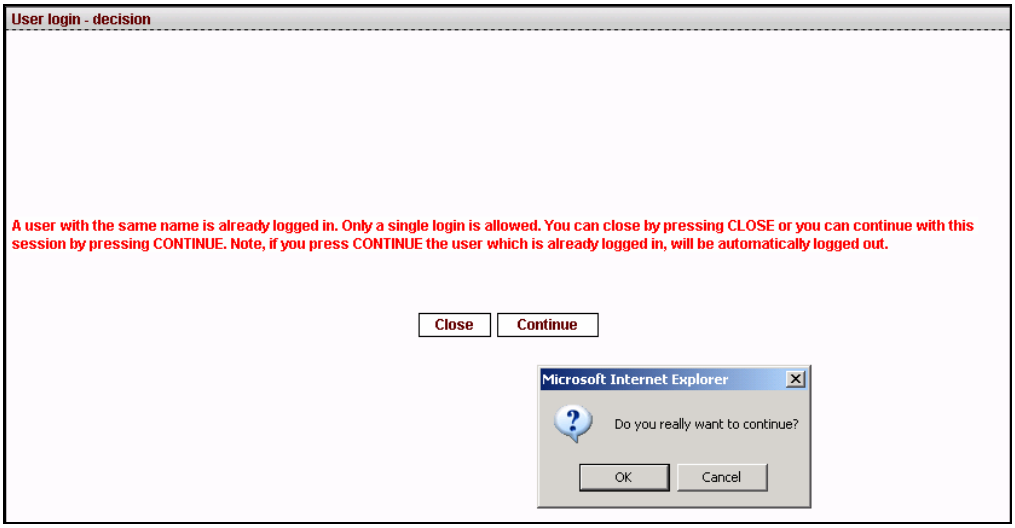
Single login allows each authorized Capacity Service user to login to the Capacity Service one time per RACF Login ID. If a user is already logged into the Capacity Service Production system with the same RACF Login ID, a second login attempt will be only be successful once the first login session has been terminated.

If the user tries to login twice with the same RACF Login ID, the Capacity Service will display the following Screen:



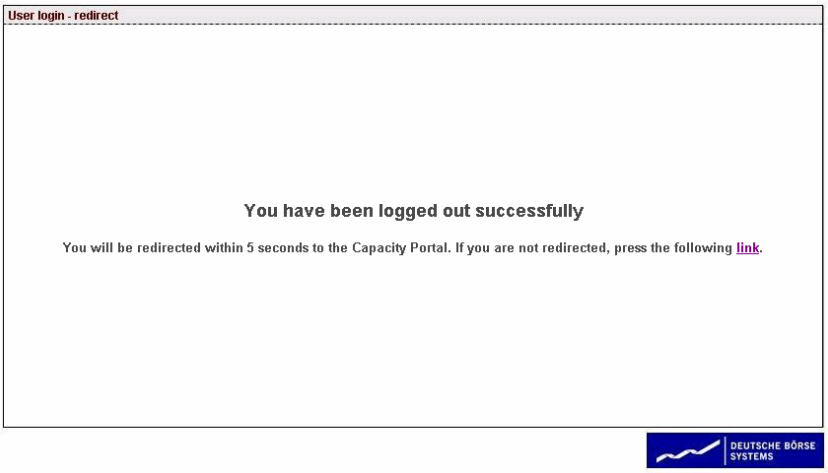
Screenshot 14: Single Login

Now the user can choose between the 'Close' and 'Continue' Button. If the 'Close' Button is pressed, the user will be redirected to the Capacity Service Login (PORTAL) Page. If the 'Continue' Button is pressed, the following screen will appear on the Capacity Service:



Screenshot 15: Single Login - Continue

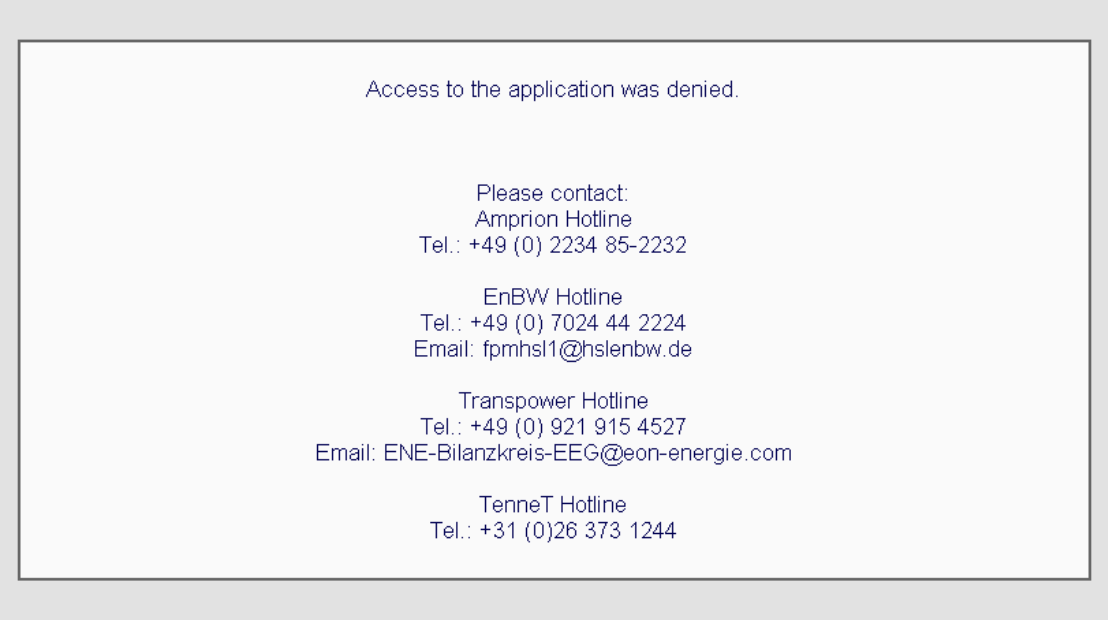
The User now again has two choices. If the 'Cancel' Button is pressed, the user will return to the page before. If the 'OK' Button is pressed, the user will login to the Capacity Service. The first login of this user will then be terminated, and the following Capacity Service Screen will be displayed to the first user:



Screenshot 16: Single Login – Logout screen

3.8 Login with wrong password

The password can be entered incorrectly two times.
After entering the wrong password for the third time, the following screen will appear:

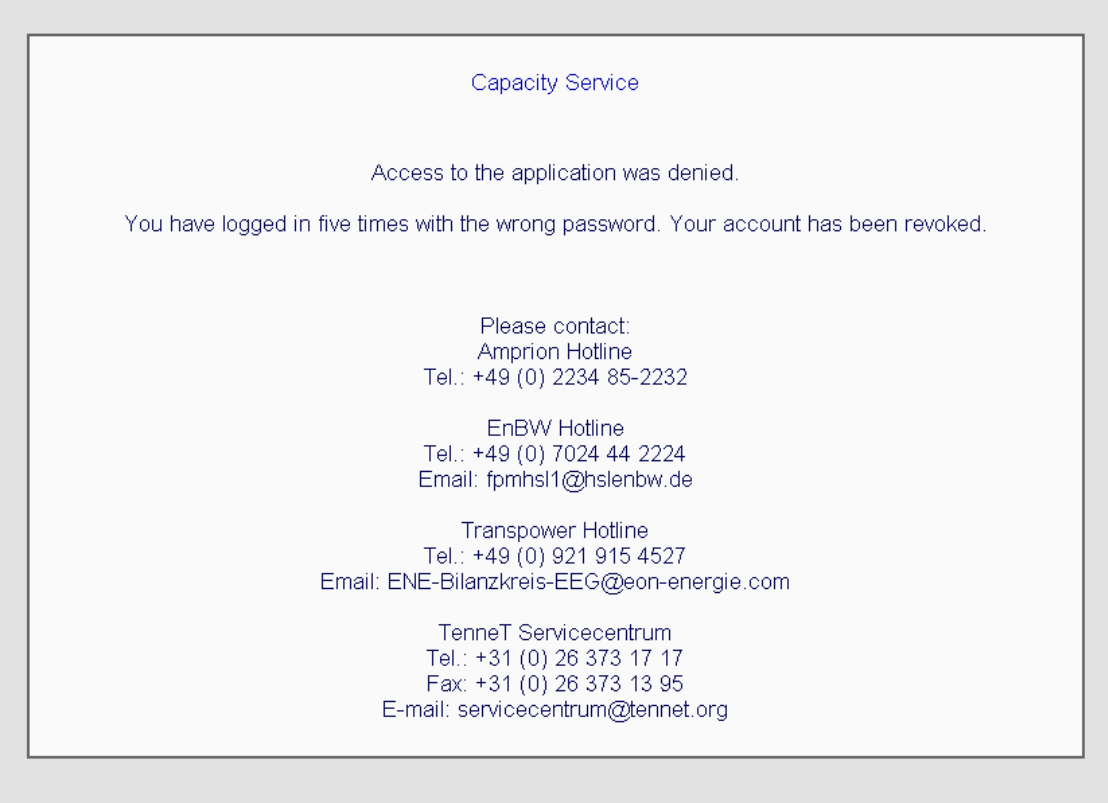


The password has not been revoked.

In order to login again:

1. Close the browser
2. Open the browser again,
3. Enter the login id and password, correctly.

The user now has two more chances to enter the login id and password correctly. If the RACF Login ID and password are entered incorrectly two more times, the Capacity Service will display the following screen:

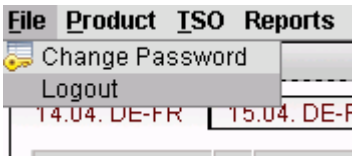


The password is now revoked.

The user should contact their responsible TSO. The responsible TSO may contact the DBS Technical Support for a new password.
After a correct login, the revoke procedure starts again, i.e. the next time the user tries to log-in to the Capacity Service he may try 5 times before the RACF Login ID is revoked.

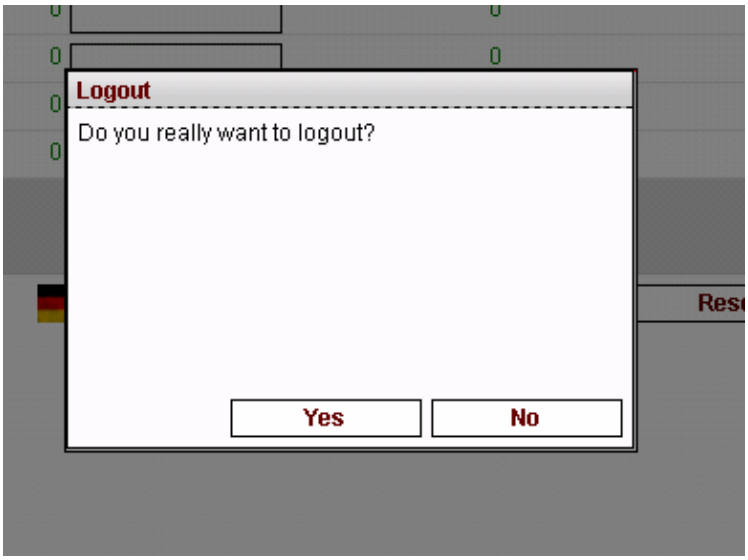
3.9 Log-out

When finished with a Capacity Service work session, the user can log out selecting the menu item “Logout” from the tab “File” in the task bar (see screenshot below).



Screenshot 17: Logout menu item

A window then pops up, asking the user “Do you really want to logout?”:



Screenshot 18: Logout pop-up window

Clicking on “Yes” will lead the user to a page stating “You have been logged out successfully”:

Screenshot 19: Capacity window after successful logout

The user now is successfully logged out. After closing the browser window the user can log in again, starting a new (single) user session.

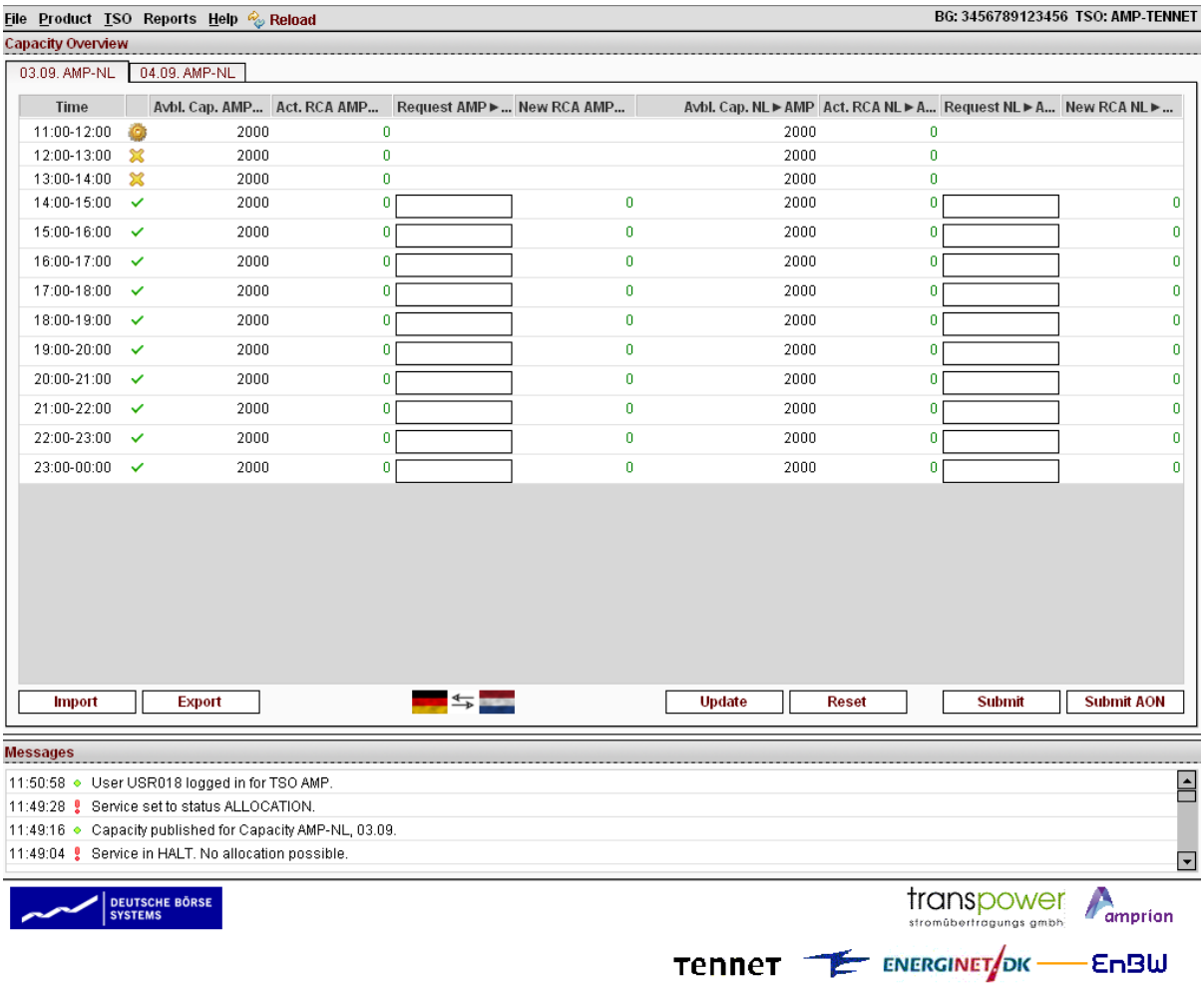
4 Trader GUI

This chapter describes the Capacity Service's graphical user interface (GUI) for the trader.
After successful trader login, the Capacity Service Trader GUI opens automatically.

If Login Messages are available, the user will receive a pop-up window (please refer to chapter 4.10.2).
If a user is admitted for more than one product, one of the products must be defined as the default product as part of the reference data setup. The default product will be visible after the login.
If the default product has more than one TSO, then one of the TSOs must be defined as the default TSO as part of the reference data setup. The default TSO will be visible after the login.

The Capacity Service window can be closed by clicking on the  symbol in the Internet browser or by logging out (see chapter 3.9).

The Capacity Service window is divided into 3 panels Menu Bar, Capacity Overview and Messages panel as depicted in the following example.
Flags are displayed at the bottom of the "Capacity Overview" windows. The flags correspond to the product for which the user is logged in.


File Product TSO Reports Help Reload
BG: 3456789123456 TSO: AMP-TENNET
Capacity Overview
03.09. AMP-NL
04.09. AMP-NL
Time | Avbl. Cap. AMP... | Act. RCA AMP... | Request AMP►... | New RCA AMP... | Avbl. Cap. NL►AMP | Act. RCA NL►A... | Request NL►A... | New RCA NL►...
11:00-12:00 2000 0 2000 0
12:00-13:00 2000 0 2000 0
13:00-14:00 2000 0 2000 0
14:00-15:00 2000 0 0 2000 0 0
15:00-16:00 2000 0 0 2000 0 0
16:00-17:00 2000 0 0 2000 0 0
17:00-18:00 2000 0 0 2000 0 0
18:00-19:00 2000 0 0 2000 0 0
19:00-20:00 2000 0 0 2000 0 0
20:00-21:00 2000 0 0 2000 0 0
21:00-22:00 2000 0 0 2000 0 0
22:00-23:00 2000 0 0 2000 0 0
23:00-00:00 2000 0 0 2000 0 0
Import
Export
Update
Reset
Submit
Submit AON
Messages
11:50:58 User USR018 logged in for TSO AMP.
11:49:28 Service set to status ALLOCATION.
11:49:16 Capacity published for Capacity AMP-NL, 03.09.
11:49:04 Service in HALT. No allocation possible.

4.1 Menu Bar

The Capacity Service Menu bar has the items File, Product, TSO, Reports, Help and Reload. It also displays the selected Trader's Balancing Group and the selected TSO.

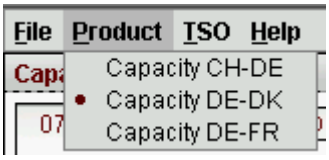
In case of Service HALT or Direction HALT (only DE-DK) a message in red font is displayed to the right of the item Reload: "SERVICE HALT" or "DIRECTION HALT [direction]".

4.2 File

The menu item File allows the user to change the password.

4.3 Product

The menu item *Product* allows the trader to switch to another product. The product list only displays products for which the Trader's Balancing Group is registered.



4.4 TSO

The menu item *TSO*, allows the Trader to switch to another *TSO* if his Balancing Group is registered in more than one TSO area.

The selected TSO is displayed in the right corner on the menu bar next to the Trader's Balancing Group. The corresponding interconnection TSO is also displayed on the right-hand side.

4.5 Help

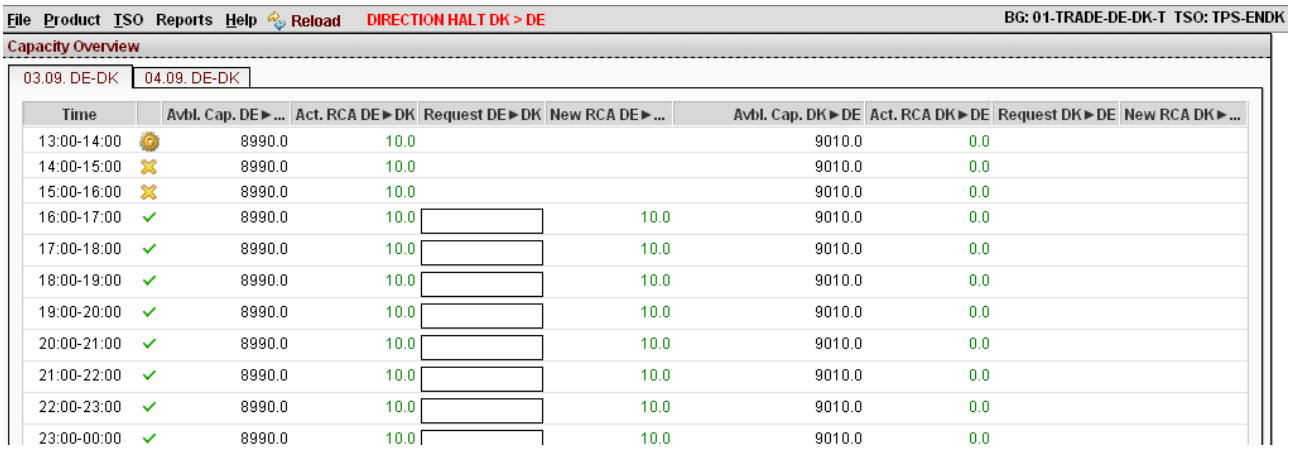
Clicking on *About* in the menu item *Help* provides the Trader with the information about the Capacity Service software version in production.

4.6 Reload

The Capacity Service window is updated and adapted to the size of the browser by clicking *Reload* on the menu bar.

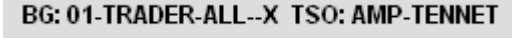
4.7 Service HALT/ Direction Halt

A product can be set to HALT by the administrator. If the product is on Service HALT, the GUI shows “SERVICE HALT” in the menu bar and no capacity can be allocated until the administrator sets the status back to ALLOCATION.
If one direction of a product is set to Halt, the GUI displays “DIRECTION HALT *X* > *X*” and the request fields for the corresponding direction are disabled (only for product DE-DK, see Screenshot below).



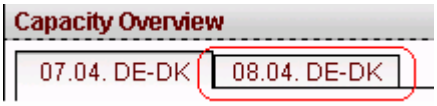
4.8 Trader’s Balancing Group

The trader’s Balancing Group is displayed to the left of the label “TSO” on the menu bar.



4.9 Capacity Overview

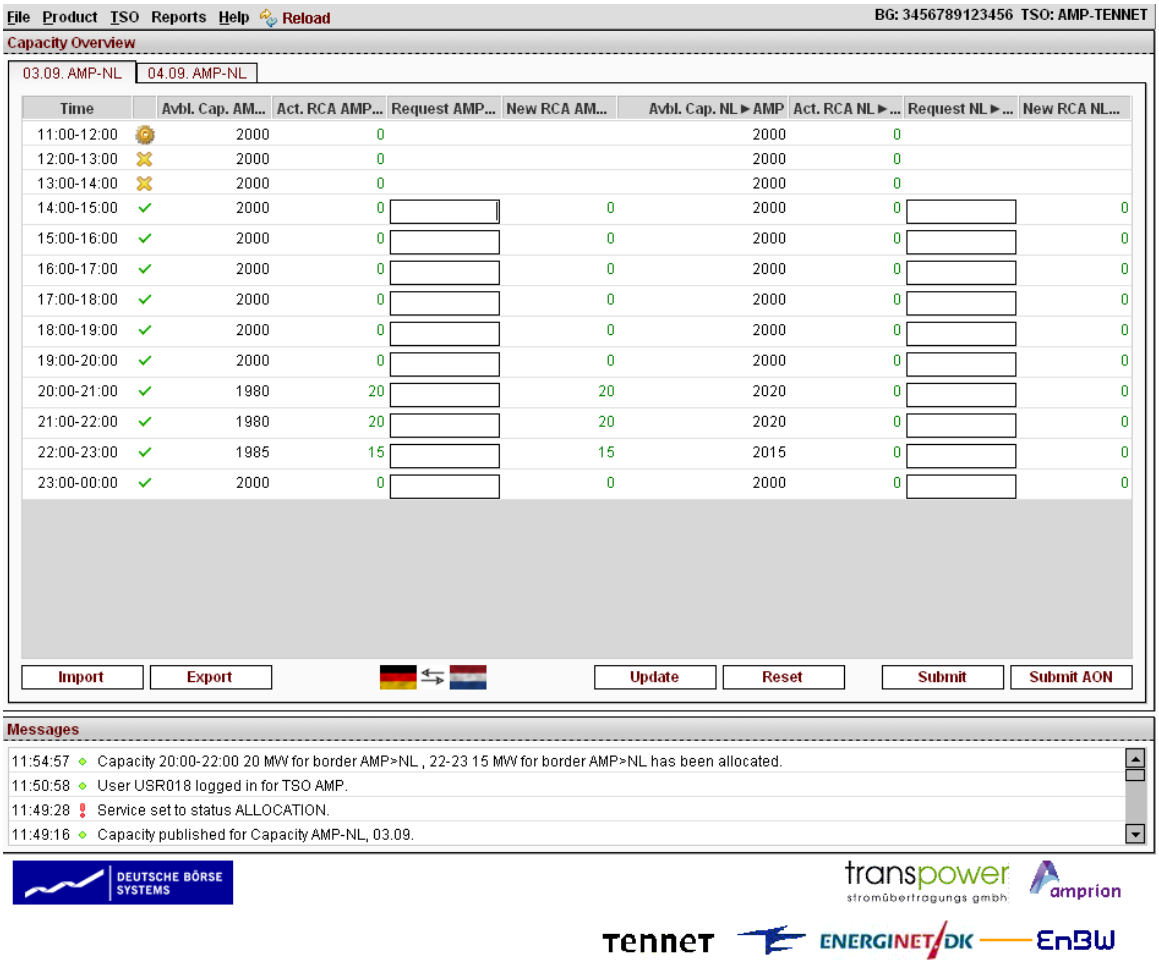
There are two tabs in the Capacity Overview window, one for the present day and one for the next day. The date and the selected product are displayed in the label of the tab.



Each tab of the Capacity Overview window displays the following information.

- Time
- Status Symbols (status of contract)
- Available Capacity
- Actual RCA (for each direction)
- Request (for each direction)
- New RCA (for each direction).

The values are displayed in MW in the Capacity Overview.

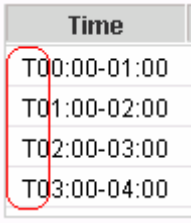


4.9.1 Capacity Overview - Columns

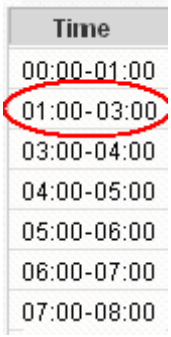
4.9.1.1 Time

The column Time displays all contracts, which have not been delivered yet and which are in delivery, for the time period. Capacity can only be requested by traders for contracts which are active and not in HALT. Capacity for a specific contract can be requested for a limited period of time, the so called contract allocation period. Inactive capacity allocation periods are disabled (a respective symbol is shown and input is no longer possible in the requested columns).

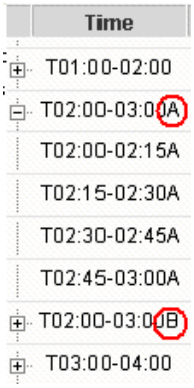
If the next day is selected, the hours are marked with a “T” (for tomorrow) in front of the contracts name e.g. T04:00-05:00.



On the days of clock changes from/ to DST with 25/ 23 hours, the column “Time” on the Capacity Service GUI takes into account the additional/ skipped hour. On days of clock change to DST with 23 hours, the GUI jumps from 01:00 – 03:00 (see Screenshot A). On days of clock change from DST, the hours 02:00-03:00 takes place twice and is denoted with an “A” and “B” (see Screenshot B).



Screenshot A: 23 hours day



Screenshot B: 25 hours day

4.9.1.1.1 Status Symbols

The following symbols display the contract status:

- Active contract.
- Active but currently in HALT (Service HALT / Contract HALT) or

Inactive contract after delivery period.


Inactive contract currently being delivered.


Inactive contract before delivering.

4.9.1.1.2 Available Capacity

The available interconnection capacity is displayed in the columns Avbl. Cap. The label also displays the selected product.

Avbl. Cap. TPS ▶ NL
825
795
795
795
795

4.9.1.1.3 Actual RCA

In the columns Act. RCA, the capacity is shown which has already been allocated by the trader. The label displays the selected product.

Act. RCA DE ▶ DK
0.0
0.0
0.0
0.0
100.0

This value contains the capacity from the CAS (yearly, monthly and daily capacity) which has been uploaded by the TSO plus any capacity allocated via a request to the intraday capacity service.

4.9.1.1.4 Request

In the columns Request, capacity can be requested for each active contract and direction. The label displays the selected product.

The input fields in the Request columns can only be used to enter capacity requests for contracts, which are active.

For contracts in HALT, the input fields are not visible.

Function Direction HALT (only available for product DE-DK): If the Admin sets one direction to DIRECTION HALT, the contracts for that direction are in HALT and the input fields are not visible. Therefore, in this case, the trader can only request capacity in the opposite direction.

In the fields it is only possible to enter numbers. Negative numbers are not allowed.
Note: Product DE-DK: One decimal place is allowed and the maximum quantity per request is 999.9 MW.
Products AMP-NL and TPS-NL: No decimal places can be entered. For TPS-NL, the maximum quantity per request is 1500. For AMP-NL, the maximum quantity per request is 2000 (for further details, please see Parameter setup 2.2)

If the entered quantity is invalid, the affected field is highlighted in red and a validation error message appears in the *Messages* window.

If capacity is requested for both directions for the same contract, then the RCA values are netted and only the difference is displayed.

There is no cancellation functionality. If the trader wants to cancel an allocation, then the equivalent amount should be entered in the opposite direction.

If the requested capacity is higher than that which is available, the Request field is highlighted in red (after the button *Update* or *Submit AON* has been pressed).

It is possible to enter more than one request at once. However, requests will only be accepted if all fields contain data with the correct format and with the correct value. If one field is erroneous, the entire request will be rejected.

For more details please refer to the chapter 5.

4.9.1.1.5 New RCA

The columns New RCA display the projected total allocated capacity in MW for the Trader's Balancing Group (sum of the columns Actual RCA and Request). The label is dependent on the selected product. If the amount requested is greater than the currently available capacity, then the amount displayed in the New RCA column is equivalent to the sum of Actual RCA plus the maximum available.

To re-enquire the New RCA columns the *Update* button has to be pressed.
The columns will also be updated automatically when a request has been successfully executed with the button *Submit* or *Submit AON*.

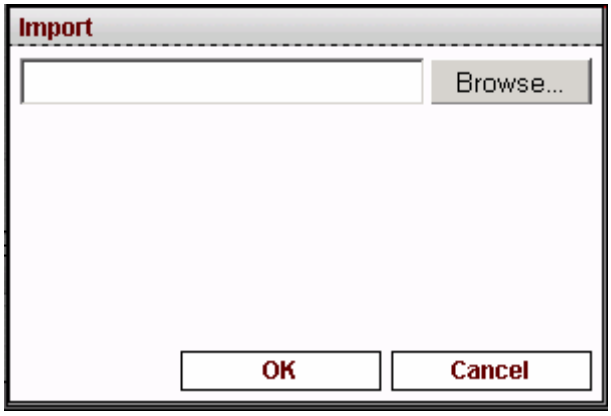
The New RCA field is displayed in red if the requested capacity is greater than the capacity available (after button *Update* or *Submit AON* has been pressed).

4.9.2 Capacity Overview - Buttons

4.9.2.1 Import

With the Import button the trader can upload a BG Request file (in XML or CSV format) containing capacity requests (refer to Annex 7) filling the request fields automatically.

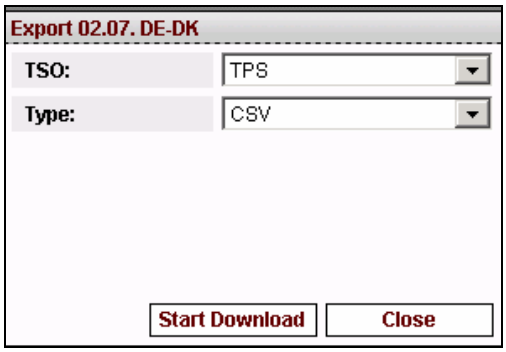
A popup appears asking the trader to search for that file. After the right path to the file is displayed, the trader can start or cancel the procedure by pressing “OK” or “Cancel”.

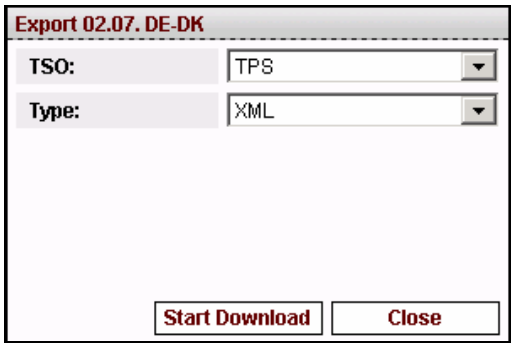


4.9.2.2 Export

A trader can use the Export button to download his Balancing Group’s allocated capacity in each direction (columns Actual RCA), for the selected TSO, product, and date (as per selected tab). (refer to 6.1.2 and 6.1.3).

After pressing the Export button, a popup appears. The trader can select the TSO and the format (XML or CSV) of the BG Allocation File. Via the “Start Download” Button the BG Allocation File can be downloaded, the “Close” Button closes the popup window.





Once Start Download has been initiated, a browser related dialogue window appears asking the trader to either open, save the file or to cancel the procedure.
After export, a message is displayed in the *Messages* panel.

4.9.2.3 Update

With the Button Update the trader can re-enquire the current available capacity and refresh the columns Avbl. Cap. and New RCA.

4.9.2.4 Reset

The Reset button clears all entries in the Request fields (fields are set to blank) and updates the columns Avbl. Cap. and New RCA.

4.9.2.5 Submit

Capacity is requested by clicking the Submit button. The amount to be requested is input into the Request fields (more than one request at once is possible). An internal process calculates and allocates the available capacity. Any requested capacity which cannot be allocated is discarded. The Request columns are reset (set to blank) after completion of the request process.

The columns Avbl. Cap., Act. RCA and New RCA will be updated after pressing Submit.

For more details please refer to the chapters 4.9.1.1.4 and 4.9.1.1.5.

4.9.2.6 Submit AON

The Submit AON button is used, if the trader wants to get all requested capacity in all requested capacity allocation periods or no capacity at all (All or Nothing). If the requested capacity for one contract is not available, then none of the capacity will be allocated. In this case, the corresponding Request fields will be highlighted in red.

Upon successful allocation, the Request columns are reset (set to blank).

For more details please refer to the chapters 4.9.1.1.4 and 4.9.1.1.5.

The columns Avbl. Cap. Act. RCA (only in case of successful allocation) and New RCA (only in case of successful allocation) are updated after pressing Submit AON.

4.9.2.7 Submit vs. Submit AON

Capacity is requested by clicking the Submit button. If the Submit button is used, the user gets the requested capacity as far as it is available for each individual contract. If the available capacity for a contract is less than the requested capacity, all of the available capacity will be allocated.

The Submit AON button is used if the user wants to get all requested capacity in all requested capacity allocation periods or no capacity at all (All or Nothing).

For example: If 20 MW are available, but the user requests 30 MW

- via the Submit button: he will only get 20 MW, or
- via the SUBMIT AON button, he will get nothing.

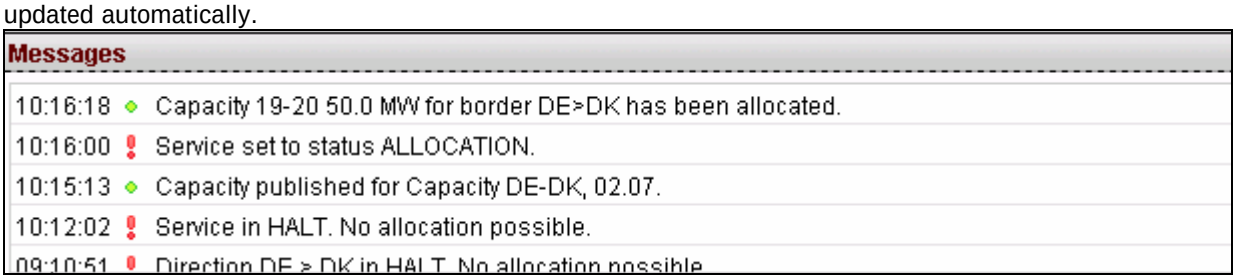
4.10 Messages

4.10.1 Messages Window

In the Messages panel, the trader is informed about activities and changes on the Capacity Service. The messages can be triggered by the Service, the administrator, the trader or another user of the same Balancing Group.
Messages Types:

- Product related messages distributed to all administrators and Traders (Service/Contract/Direction HALT (only DE-DK), Portal messages, OnLogin messages, etc.)
- Trader related messages (capacity allocation, export of BG Allocation files etc.)
- Validation error messages which disappear after update and are shown to the current user only.

Messages are displayed with a timestamp for the selected product. The *Messages* window is updated automatically.



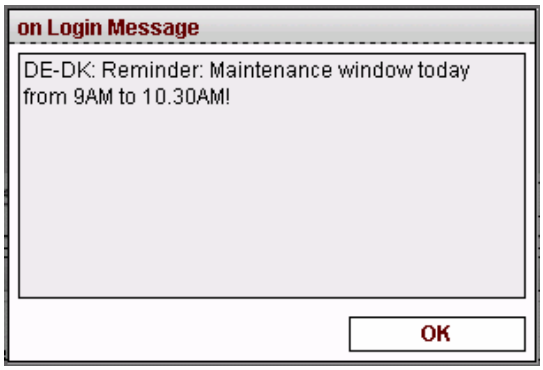
The following symbols display the message priority:

- High priority message.
- Medium priority message.
- Low priority message.
- Validation error message (only visible for the user).

4.10.2 On Login Message

An OnLogin Message is triggered by the administrator for a specific product and is displayed as a high priority message in the messages panel when published.

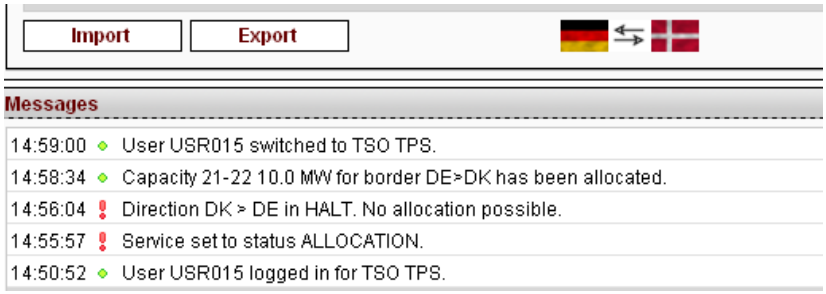
This message is also displayed in a popup window when the trader logs on to the Capacity Service. The OnLogin Message is only visible for 12 hours after the message has been published. Only the last OnLogin Message is displayed in the popup.



Pressing the OK Button closes the on Login popup.

4.11 Messages Report

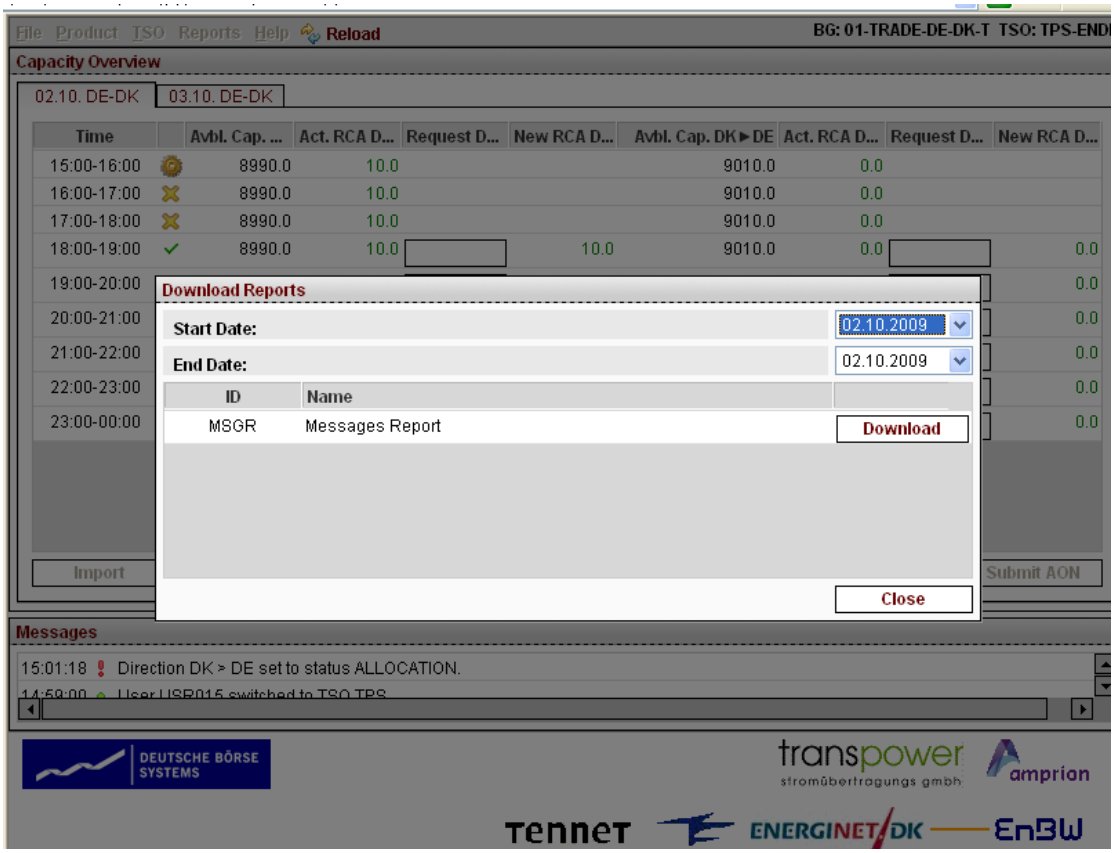
On the Capacity Service trader GUI, the message window of a logged-in trader displays all messages of a trader's Balancing Group for the selected product and all public messages (see Screenshot below).



Screenshot: Example Message Window of logged-in trader.

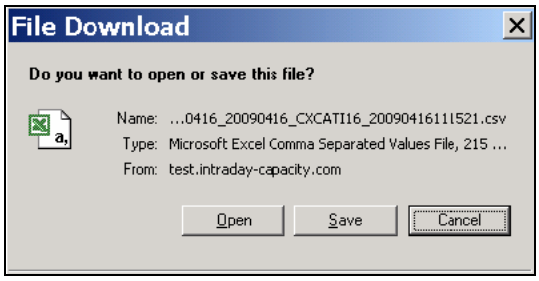
The messages history functionality saves these messages into a report. This function is accessible through the tab Reports on the Capacity Service trader GUI (see Screenshot below).

Clicking on "Reports" in the menu bar will open the Messages Reports download dialogue window (see Screenshot below).



Screenshot 20: Report Selection Window

The message report function allows the trader to download a report with all messages of the trader's Balancing Group for the assigned product and all public messages for up to two calendar days (current calendar day and today -1).
Clicking on the button "Download" for the messages report, a file-download window opens. The user can now download by opening or saving the messages report in a CSV File format (see Screenshot below).



Screenshot 21: Example download dialog

A sample CSV messages report, downloaded for the period from 18.05.2009 to 18.05.2009, contains the data fields as seen in the sample messages report below. The content of the CSV-file is sorted in date and time (CET), starting with the most recent message. The type Common

message is abbreviated in the column “Type” of the message report to CMN, Login message to LOG and Portal message to PRL.

Date	Time (CET)	Priority	Text	Type
18.05.2009	12:03:27	LOW	Capacity 19:00-20:00 100.000 MW for product TPS>NL has been allocated.	CMN
18.05.2009	12:03:06	LOW	User USR013 logged in for TSO TPS.	CMN
18.05.2009	10:40:48	MEDIUM	Important Reminder: Maintenance Window on June 24, 2009, 9-10am CET On Wednesday, June 24!	PRL
18.05.2009	07:21:41	LOW	Capacity published for Capacity TPS-NL, 18.05.	CMN
18.05.2009	07:13:57	HIGH	Service set to status ALLOCATION.	CMN
18.05.2009	07:11:54	HIGH	TPS-NL: All capacity has been allocated for today!	LOG
Message History Report for product Capacity TPS-NL from 18.05.2009 till 18.05.2009 created 18.05.2009 12:09:05 (CET) by CXCATI13				

Figure 22: Sample Trader Messages Report

The timestamps in the column Time and in the footer of the Messages Report are in CET.

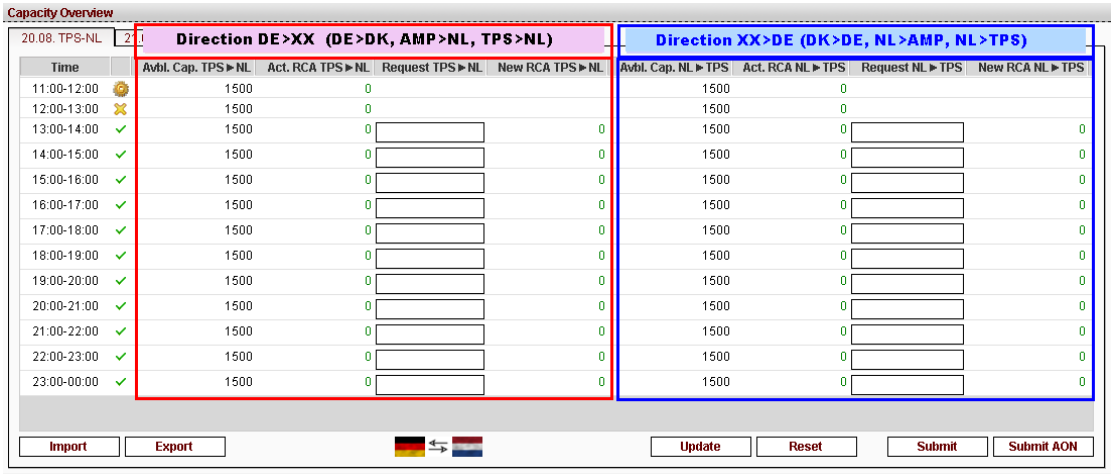
5 Use-Case - Entering a Capacity Request

A capacity request (Traders GUI) is entered as follows:

- Insert quantity into request field of an active contract.
- Press Update button (this provides the trader with a forecast or projection and is optional)
- Press Submit or Submit AON button which starts the internal processing and results in
  - Capacity Overview update
  - Messages.

Insert quantity into request field

The input fields in the columns in direction DE>XX (see columns in red box on the left in screenshot below) and, in the other direction, XX>DE (in the right box in screenshot below) are used to enter capacity requests only for active contracts. It is possible to enter more than one request at once.



Screenshot 23: *Capacity Service Trader GUI. Left: Direction DE>XX; Right: Direction XX>DE.*

Press Update button (projection – optional)

After entering all requests, the trader can use the button *Update*

- To re-inquire the available capacity in the columns Avbl. Cap. of direction DE>XX and Avbl. Cap. XX>DE and
- To update the columns New RCA in direction DE>XX and New RCA XX>DE in order to get a projection of the total allocated capacity.

If the requested capacity is greater than the available capacity

- The columns Avbl. Cap. DE>XX and Avbl. Cap. XX>DE are updated.
- The corresponding fields in the columns Request DE>XX and Request XX>DE are highlighted in red.
- The corresponding values in the columns New RCA DE>XX and New RCA XX>DE are updated as a projection (sum of Act. RCA and max. Available capacity) and displayed in red.

- No message appears.

If the requested capacity is available

- The columns Avbl. Cap. DE>XX and Avbl. Cap. XX>DE are updated,
- The columns Request DE>XX and Request XX>DE remain as supplied,
- The columns New RCA DE>XX and New RCA XX>DE are updated as a projection (sum of Act. RCA and Request RCA columns),
- No message appears.

Press Submit button

When the button *Submit* has been pressed, the following columns are updated

- Avbl. Cap. DE>XX and Avbl. Cap. XX>DE.
- New RCA DE>XX and New RCA XX>DE (projection of the total allocated capacity).
- Act. RCA DE>XX and Act. RCA XX>DE.

If the requested capacity is greater than the currently available capacity

- The currently available capacity for each contract will be allocated.
- Requested capacity which cannot be allocated is discarded.
- The columns Avbl. Cap. DE>XX and Avbl. Cap. XX>DE are updated.
- The columns Act. RCA DE>XX and Act. RCA XX>DE are updated (sum of old value plus allocated capacity).
- The columns Request DE>XX and Request XX>DE will be reset and not populated (left blank).
- The columns New RCA DE>XX and New RCA XX>DE are updated as a projection (sum of Act. RCA and max. Available capacity).
- One or more message(s) related to the result of the allocation will be displayed in the *Messages* window.

If the requested capacity is available

- The requested capacity will be allocated,
- The columns Avbl. Cap. DE>XX and Avbl. Cap. XX>DE are updated.
- The columns Act. RCA DE>XX and Act. RCA XX>DE are updated (sum of old value plus allocated capacity).
- The columns Request DE>XX and Request XX>DE will be reset and not populated (left blank).
- The columns New RCA DE>XX and New RCA XX>DE are updated as a projection (sum of Act. RCA and Request RCA columns).
- A message related to the result of the allocation will be displayed in the *Messages* window.

Press Submit AON button

When the button *Submit AON* has been pressed the following columns are updated

- Avbl. Cap. DE>XX and Avbl. Cap. XX>DE.
- New RCA DE>XX and New RCA XX>DE.
- Act. RCA DE>XX and Act. RCA XX>DE.

If the requested capacity is higher than the capacity currently available

- No request will be executed.
- The request fields will not be reset, they will stay as requested.
- The columns Avbl. Cap. DE>XX and Avbl. Cap. XX>DE are updated.
- The corresponding fields in the columns Request DE>XX and Request XX>DE are highlighted in red.
- The corresponding values in the columns New RCA DE>XX and New RCA XX>DE are updated as a projection (sum of Act. RCA and max. Available capacity) and displayed in red.
- A validation error message appears in the *Messages* window.

If the requested capacity is available

- The requested capacity will be allocated,
- The columns Avbl. Cap. DE>XX and Avbl. Cap. XX>DE are updated,
- The columns Act. RCA DE>XX and Act. RCA XX>DE are updated (sum of old value plus allocated capacity),
- The columns Request DE>XX and Request XX>DE will be reset and not populated (left blank),
- The columns New RCA DE>XX and New RCA XX>DE are updated as a projection (sum of Act. RCA and Request RCA columns),
- A message related to the result of the allocation will be displayed in the *Messages* window.

6 File Specification

6.1 BG Allocation File Specification

6.1.1 General

The Balancing Group Allocation file can be exported online from the BG GUI by the trader as XML or CSV. They are offered to the Balancing Group user with the capacity allocations for the own Balancing Group and the currently assigned TSO.

The files are created

- Per Balancing Group,
- Per assigned TSO,
- Per calendar day.

The BG Allocation file contains

- the header for identification and
- the assigned capacities for the Balancing Group.

6.1.2 CSV

6.1.2.1 Header Area

6.1.2.2 Sender-, Receiver Identification

For the Sender- and Receiver Identification the EIC Party Codes are specified for the Capacity Service.

6.1.2.3 Time Series Area

The time series area is made up of 4 rows per hour (one for each 15 minute period).
The table is made up of 96 rows (four rows per hour). At the days of clock change from or to Daylight Saving Time the table consists of 92 respectively 100 rows.
Each row has three fields.

Field	Field description	Content/Format	Remark
Field 1	Contract long name, delivery period start date/time and end date/time	Char (31) YYYYMMDD_hh:mm(X)-YYYYMMDD_hh:mm(X)	(X) = 'A' or 'B' when time changes to winter time
Field 2	Allocated capacity in MW	integer	Netted capacity data from the trade file according to the products

Field	Field description	Content/Format	Remark
Field 3	Allocated capacity in MW	integer	Netted capacity data from the trade file according to the products

6.1.3 XML

The Balancing Group (BG) Allocation file is based on the standardised ETSO Scheduling System (ESS) formats in XML.
The ESS file standard differentiates between the maximum (assigned) and the minimum (approved with schedule) capacity. Within intraday capacity allocation, there is no distinction between minimum and maximum capacity; values for the minimum series are set to those of the maximum series.

6.1.3.1 Product

The field Product in the Time series header is defined as 8716867000016.

6.1.3.2 Area and Party Codes

The BG Allocation files contain the elements InArea, OutArea and InParty, OutParty. These elements are specified as follows.

Element	Field description	Content
InArea	TSO area Code to which the capacity is directed	According to reference data (10Y…)
OutArea	TSO area Code from which the capacity is directed	According to reference data (10Y…)
InParty	BG party Code to which the capacity is directed	According to reference data (10X…)
OutParty	BG party Code from which the capacity is directed	According to reference data (10X…)

Note: InParty and OutParty have the same content.

6.1.3.3 Schedules, Capacity Allocation Periods (Contracts)

- Maximum, minimum:
  The ESS file standard differentiates between the maximum (assigned) and the minimum (approved with schedule) capacity. The Capacity Service however only recognizes one value for capacity; the maximum and the minimum capacity are equivalent.

- Sort:
  The time series are created for each Balancing Group with maximum and minimum values. The order of the time series values are: max, min for one direction, min, max for the other direction.
- Netting:
  The time series contain netted trade data. Therefore the values for one direction are zero.

7 Annex: BG Request File Specification

7.1 CSV BG Request files in CSV format

The CSV Capacity Request file consists of a header area and a time series area containing capacity requests. The file is structured in rows with 3 fields each, separated by ";". Both areas have to be sent completely without any additional content between the rows.

7.1.1 Header Area of CSV BG Request file

1 Message Version	Any desired string.
2 OutArea	From Balancing Group;<EIC (or EAN) Area code>;<EIC (or EAN) Area code>. See explanation below.
3 InArea	To Balancing Group;<EIC (or EAN) Area code>;<EIC (or EAN) Area code>. See explanation below.
4 Party	BG Party-code of logged in user;<Balancing Group EIC party code> or Party;<Balancing Group EAN code>.

Further explanation:
Row 2+3, Out/In Area: The EIC (EAN) Area codes of responsible TSOs have to match the TSOs the user is currently logged in for (e.g. AMP if the user is logged in for product DE-NL, with TSO AMP). The EIC (EAN) Area Codes of the OutArea are the same as the EIC (EAN) Area Codes of the InArea, only switched around. This restriction ensures that both time series apply to the same border.

7.1.2 Time Series Area of CSV BG Request file

- The time series area is made up of 96 rows (4 rows per hour, one for each 15 minute period).
- The file has to contain at least four 15min time intervals.
- In case of hourly contracts, the capacity requests for all four quarters of an hour have to be equal.
- Entering capacity values for inactive time intervals triggers an error message.
- BG Request files with capacity requests higher than the maximum quantity per request will not be accepted by Capacity Service.
- For product DE-DK: Decimal values in the BG Request file in CSV format can be separated with a comma (",") or with a decimal point (".").

7.1.3 Sample of CSV BG Request file (DE-DK Border)

```
MessageVersion;100
OutArea;10YDE-EON------1;10YDK-1--------W
InArea;10YDK-1--------W;10YDE-EON------1
Party;01-TRADER-ALL--X
20090902 00:00-20090902 00:15;0;0
20090902 00:15-20090902 00:30;0;0
20090902 00:30-20090902 00:45;0;0
20090902 00:45-20090902 01:00;0;0
20090902 01:00-20090902 01:15;100;0
20090902 01:15-20090902 01:30;100;0
20090902 01:30-20090902 01:45;100;0
20090902 01:45-20090902 02:00;100;0
20090902 02:00-20090902 02:15;0;0
20090902 02:15-20090902 02:30;0;0
20090902 02:30-20090902 02:45;0;0
20090902 02:45-20090902 03:00;0;0
20090902 03:00-20090902 03:15;0;0
20090902 03:15-20090902 03:30;0;0
20090902 03:30-20090902 03:45;0;0
20090902 03:45-20090902 04:00;0;0
```

7.2 BG Request files in XML format

The BG Request file in XML format consists of a more extensive header area and a time period area. A file name is not mandatory.

BG Request files with capacity requests higher than the maximum quantity per request will not be accepted by Capacity Service.

For product DE-DK: In BG Request files in XML format, the decimal place for request values has to be a decimal point (“.”).

7.2.1 Structure of XML BG Request file

	Tag	Explanation
1.	Title Row	Constant: Do not change.
Sample:	<?xml version="1.0" encoding="UTF-8"?><AuctionMessage xmlns="auctionmessage.xsd" DtdVersion="1" DtdRelease="0">	
2.	DocumentIdentification	Any desired string.
Sample:	<DocumentIdentification v="Test-Import-CH"/>	
3.	DocumentType	Constant: Do not change.
Sample:	<DocumentType v="X04"/>	
4.	DocumentVersion	Change does not produce any errors. Not considered by Capacity Service.
Sample:	<DocumentVersion v="101"/>	
5.	DocumentProcessType	Process type list: A01=Day ahead. Constant: Do not change.
Sample:	<DocumentProcessType v="A01" />	
6.	DocumentClassificationType	Classification type list: A01. Constant: Do not change.
Sample:	<DocumentClassificationType v="A01" />	
7.	DateOfDocumentCreation	Date must have valid format, but is not processed by Capacity Service.
Sample:	<DateOfDocumentCreation v="2008-01-29T13:34:29Z"/>	
8.	SenderIdentification	BG-User which imports the file
Sample:	<SenderIdentification v="CXDBST-BG2-----9"	
9.	CodingScheme	A01 for EIC-BGs, A10 for EAN-BGs
Sample:	codingScheme="A01" />	
10.	SenderRole	Role type list: A01. A01 for EIC-BGs, A10 for EAN-BGs (Matching to Coding Scheme).
Sample:	<SenderRole v="A01" />	
11.	ReceiverIdentification	The currently logged in TSO Party Code (EIC or EAN code)
Sample:	<ReceiverIdentification v="10XDE-RWENET---W" codingScheme="A01" />	
12.	codingScheme	A01 for EIC-BGs, A10 for EAN-BGs
Sample:	<codingScheme="A01" />	
13.	ReceiverRole	Role type list: A07= Transmission capacity allocator. Constant: Do not change.
Sample:	<ReceiverRole v="A07" />	
14.	AuctionTimeInterval	The day the file is imported for (time stamp in UTC).
Sample:	<AuctionTimeInterval v="2009-02-26T23:00Z/2009-02-27T23:00Z" />	
15.	AuctionTimeSeriesVersion	Any desired string.

Sample:	<AuctionTimeSeriesVersion v="101"/>	
16.	BusinessType	Business type list: Y09. Constant: Do not change.
Sample:	<BusinessType v="Y09" />	
17.	Product	“8716867000016” Constant: Do not change.
Sample:	<Product v="8716867000016" />	
18.	ObjectAggregation	Object aggregation type list: A01, Constant: Do not change.
Sample:	<ObjectAggregation v="A01" />	
19.	InArea and OutArea	Have to equal the BG of the two TSOs the user is logged in for
Sample:	<InArea v="10YFR-RTE------C" codingScheme="A01" /> <OutArea v="10YDE-ENBW-----N" codingScheme="A01" />	
20.	InParty and OutParty	Both In and OutParty have to be the currently logged in BG Party Code. Note: On the Dutch border, In/OutParty correspond to BG code of Cross Couple.
Sample:	<InParty v="CXDBST-BG2-----9" codingScheme="A01" /> <OutParty v="CXDBST-BG2-----9" codingScheme="A01" />	
21.	MeasurementUnit	Measurement unit type list: MAW”=Unit in Megawatt. Constant: Do not change.
Sample:	<MeasurementUnit v="MAW" />	
22.	TimeInterval	The day the user is logged in for (time stamp in UTC).
Sample:	<TimeInterval v="2009-02-26T23:00Z/2009-02-27T23:00Z" />	
23.	Resolution	PT15M= Interval in 15 Minutes steps. Constant: Do not change.
Sample:	<Resolution v="PT15M" />	
24.	Period	First interval position has to be 1, Following have to be predecessor + 1 (1,2,3,...96)
Sample:	<Pos v="1"/>	
25.	Quantity	To be allocated capacity per period position (contract).
Sample:	<Qty v="10"/>	

7.2.2 Sample of XML BG Request file (DE-DK Border)

```
<?xml version="1.0" encoding="UTF-8"?>
<AuctionMessage xmlns="auctionmessage.xsd" DtdVersion="1" DtdRelease="0">
        <DocumentIdentification v="TESTIMPORT DK"/>
        <DocumentType v="X04"/>
        <DocumentVersion v="102"/>
        <DocumentProcessType v="A01"/>
        <DocumentClassificationType v="A01"/>
        <DateOfDocumentCreation v="2008-01-29T13:34:29Z"/>
        <SenderIdentification v="11XEON-TEST----Q" codingScheme="A01"/>
        <SenderRole v="A01"/>
        <ReceiverIdentification v="10XDE-EON-NETZ-C" codingScheme="A01"/>
        <ReceiverRole v="A07"/>
        <AuctionTimeInterval v="2009-03-02T23:00Z/2009-03-03T23:00Z"/>
        <AuctionTimeSeries>
                <AuctionTimeSeriesIdentification v="Test"/>
                <AuctionTimeSeriesVersion v="XXX"/>
                <BusinessType v="Y09"/>
                <Product v="8716867000016"/>
                <ObjectAggregation v="A01"/>
                <InArea v="10YDK-1--------W" codingScheme="A01"/>
                <OutArea v="10YDE-EON------1" codingScheme="A01"/>
                <InParty v="11XEON-TEST----Q" codingScheme="A01"/>
                <OutParty v="11XEON-TEST----Q" codingScheme="A01"/>
                <MeasurementUnit v="MAW"/>
                <Period>
                        <TimeInterval v="2009-03-02T23:00Z/2009-03-03T23:00Z"/>
                        <Resolution v="PT15M"/>
                        <Interval>
                                <Pos v="1"/>
                                <Qty v="0"/>
                        </Interval>
                        <Interval>
                                <Pos v="2"/>
                                <Qty v="0"/>
                        </Interval>
                        [...]
```

.