Implementation Guide

Jan, 2012

SO -SOC

TenneT

Contents

1. Implementation regulations for bids (pursuant to section 5.1.1.1.a1 of Grid Code)

1.1 Introduction

The Grid Code and System Code contains provisions with respect to offering regulation and reserve capacity by connected parties to TenneT, and of using such capacity by TenneT. These provisions are further specified below.
In case of differences between the text of this document and the text of the Grid Code and/or System Code, the text of the Codes shall prevail.

1.2 Procedure pursuant to section 5.1.1.1.a1 of the Grid Code

1.2.1 Who will offer/bid capacity

In accordance with section 5.1.1.1a1 of the Grid Code, all connected parties with a contractually agreed (in the connection contract) available total capacity of 60 MW or more per connection must offer to TenneT all capacity that is consumed under the agreed volume, or produced over or under the agreed volume.
Connected parties with less than 60 MW may do so.
The PRP of the connected party may do the actually offering/bidding.

1.2.2 What is a bid

A bid of regulating and reserve power is an electronic message with an accountable character: it is an option that gives TenneT, on activation by TenneT, the right to:

- Calculate a volume
- Settle the volume with the supplier
- Adjust the volume on the Imbalance of the PRP of the supplier

The bidder is responsible for meeting the bidding specifications:

- Manual Bidding Rgulating and Reserve Power (www.tennet.org)

Incorrect bids will be ignored by TenneT.

TenneT is responsible for timely activation, and respecting the bidders minimum requirements with respect to activation time and duration.
TenneT is responsible for correct settlement of activated bids and ensuring adjustment of Imbalances.
All bids will be archived by TenneT and might be used for analysis.

1.2.3 Purpose of bids

1.2.3.1 Suppliers

Bids provide suppliers the opportunity:

- To comply to GridCode 5.1.1.1.a1
- To acquire, on its own preconditions and dependent on the requirements of TenneT, additional turnover.
- To manage, to a certain extent the Imbalance price risk
- To reduce the risk that TenneT is forced to commandeer capacity, including the risk of forced load shedding

1.2.3.2 TenneT

System Balancing

- To comply to ENTSO-E RG CE Operational Handbook Policy 1: Load Frequency and performance, to which TenneT has committed itself. A.o. this requires the permanent availability of a certain volume of secondary control, and the meeting of a control target, with respect to the balance of the Control Area.

Other purposes

- Resolve Internal congestions: to comply to GridCode 5.1.1.8e and 5.1.1.9 with respect to solving constraints
- Resolve International Congestions (ENTSO-E RG CE) in order to comply to Operational Handbook Policy 5: Emergency Operations.
- Resolve International Congestions on other Interconnectors (NorNed, BritNed)
- Mutual support TSO's (UCTE, ELIA, StatNett) in order to comply to ENTSO-E RG CE Operational Handbook Policy 5: Emergency Operations, or to comply to TSO-TSO Agreement.

1.2.4 Bidding

The supplier or its PRP will send in bids by means of an electronic message with the following specifications: UTIL TS http://www.edsn.nl/default.asp?id=651
For each Day of Delivery D the bids must be received by TenneT at the latest on D-1 on 14h45.
From this point in time until initial Approval of the E-Programs for the day of Delivery all bids are firm, and cannot be withdrawn or altered by the bidder, unless on request by TenneT, for which TenneT will issue a request number.
Any other bid-message send in this period will be ignored by TenneT and the bidder will be informed by TenneT.
After initial Approval until one hour prior to the PTU of delivery all bids that did not result in a transaction with TenneT may be altered or withdrawn, and new bids may be send in.
This schedule is analogous to the schedule for altering E-Programs.

1.2.5 Categories bids regulating and reserve power

All bids RRP describe a full day in PTU's and belong to one of the following:

- Balancing purposes:
  - Bids regulating power contracted, activation time = 0 PTU, activation duration = 1PTU
  - Bids regulating power not contracted, activation time = 0 PTU, activation duration = 1 PTU
  - Bids reserve power, activation time = 1, 2, 3, 4 PTU, activation duration = 1 PTU
- Other purposes
  a. Bids reserve power, activation time ≥ 5 PTU, activation duration ≥ 4 PTU

For bids for balancing purposes the bid price may vary per PRU; for bids for other purposes the bidprice must be constant.

A regulating power object couples two bids of regulating power (activation time 0 PTU) with opposite sign (upward/downward).

A reservepower object other purposes couples two bids (activation time ≥ 5 PTU) with similar bidsize and activation time, but with different activation duration and price.

The sign of the power bidded and the settlement price dictate the direction of the cash flow:

	Settlement price > 0	Settlement price < 0
Upward (+)	TenneT pays RRP supplier	RRP supplier pays TenneT
Downward (-)	RRP supplier pays TenneT	TenneT pays RRP supplier

1.2.6 Publication on website

TenneT will compose a bidladder for balancing bids (regulating and reserve power bids with activation time less or equal to 4 PTU's.
This ladder has two sides: upward, respectively downward regulation.
Each day the bidprices will be published for each PTU of the current and next day, on
www.tennet.org
Displayed are the prices at + or – 100, + or – 300, + or – 600 MW, and at the end at each side.
A separate overview of bids other purposes will be published.
These publications will be refreshed every PTU.

1.3 TenneT use of bids

1.3.1 System Balancing

1.3.1.1 Procedure

Bids are deployed/dispatched by TenneT in accordance with the bid parameters and TenneT's requirements as derived from ENSO-E RG CE Policy 1.
TenneT can deploy multiple regulating capacity bids in parallel in order to obtain the regulating speed in MW/min that it requires.

Upward adjustment bids (+) are deployed/dispatched by TenneT in order of increasing bid price.
Downward adjustment bids (-) are deployed/dispatched in order of decreasing bid price.
Deployment of a bid of regulating power in a PTU occurs when TenneT allocates a setpoint to a non-deployed bid in the regulating direction.
If a setpoint is allocated to a bid at the end of a PTU_N, that bid will be deployed in the next PTU, unless:

- the bid no longer exists in PTU_{N+1};
- the sign (+/-) of the correction required by TenneT in PTU_{N+1} does not correspond with the sign of the bid's setpoint at the end of PTU_N;
- the correction required by TenneT at the beginning of PTU_{N+1} is allocated to other bids with lower prices (if it concerns upwards adjustment) or other bids with higher prices (if it concerns downwards adjustment).

Setpoints that are allocated to bids of regulating power that are no longer deployed in PTU_{N+1} are readjusted to 0 in PTU_{N+1}, with due regard for the regulating speed of the bid deployed in PTU_N.
TenneT dispatches a bid of reserve capacity balancing by notification to the supplier.

1.3.1.2 Calculation of volume

Volume calculations for regulating capacity bids are performed by integrating all setpoints[1] per supplier, per direction and per PTU.
Dispatch of a reserve capacity bid leads to calculation of a volume of bidvolume * PTU
The volumes to be allocated per supplier per PTU per direction is determined by adding up the volumes for regulating and reserve capacity bids calculated per PTU per direction.

1.3.1.3 Payment

The volume to be allocated to suppliers is settled per PTU per direction. Positive bids are settled at the price of the highest bid deployed or dispatched in that PTU (i.e. the price for upward adjustment). Negative bids are settled at the price of the lowest bid deployed in that PTU (i.e. the price for downward adjustment).
If no price for upward or downward adjustment is available, the volume to be allocated to suppliers per PTU per direction is settled at the upward or downward adjustment price of the previous PTU.

1.3.1.4 Imbalance correction

The volume to be corrected per supplier on the imbalance of the supplier's PRP is determined by netting the volumes for regulating and reserve capacity bids calculated per PTU per direction.

[1] This includes setpoints that cannot be allocated to deployed bids.

1.3.2 Other purposes (1.2.3.2.2)

1.3.2.1 Procedure

Activation by TenneT of bids other purposes (bids with activation time of 5 or more PTU's) can be done from the time such bids are received and accepted by TenneT.

Each accepted bid RRP other purposes defines a transaction space, based on its bidlines and the specified activation duration; overlap of transaction spaces from a single bid is not cumulative.

A transaction space gives TenneT the right to conclude a transaction within this transaction space over at least the number of PTU's specified as activation duration, while respecting the specified minimum activation time; a transaction does not necessarily to start or end on a bidline.

A transaction will be notified by means of a transaction message to the bidder, containing the transaction volume, PTU's, price, reference to the bid, and the ensuing adjustment volume on the imbalance to the PRP.

The PRP will be notified of the adjustment to its imbalance.

Transactions will be concluded on basis of economy, optimizing on integral transaction costs.

And by which respecting article 5.1.1.8b of the Netcode

In case of resolving internal constraints, bids of reserves other purposes outside the constrained grid area will be used to maintain system balance.

In case the reserve bid is called upon to solve internal constraints in a net area the supplier has to fulfil the obligation to activate the reserve power in that specific net area

1.3.2.2 Calculation of volume

Activation of a reserve capacity bid other purposes leads to a transaction of bidvolume * transaction duration in PTU's.

1.3.2.3 Payment

Each transaction due to activation of reservebids other purposes will be settled separately against the appropriate bidprice.

1.3.2.4 Imbalance correction

The net volume of the transactions due to activation of reservebids other purposes will be adjusted per supplier on the imbalance of the supplier’s PRP.

1.3.3 Processing

1.3.3.1 Settlement

- The dispatched bids are totalled per PTU and per sign (+/-). Both totals are used as a basis for settlement.
- A PRP that receives a deployment instruction for regulating and reserve capacity (see section

1.3.7.1) shall receive from TenneT daily information relevant to invoicing, namely:

- name of PRP
- date of delivery
- PTUs
- delivery instructions (kWh) per direction
- deployment price(s)

1.3.3.2 Invoicing

- The invoices for supplied regulating and reserve capacity (positive and/or negative) are submitted to TenneT every Wednesday. The invoices relate to deliveries in the previous period from Saturday up to and including Friday.
- The invoices shall state at least the following information:
  - name of supplier
  - date of delivery
  - PTUs
  - delivery instructions (kWh) per direction per invoicing period
  - total amount
- If the invoice amount is approved, the outstanding amount must be paid within two weeks.

1.3.3.3 Settlement for other purposes

- On a daily basis TenneT provides the suppliers of regulating and reserve capacity which has been used for other purposes an overview of all transactions that can be needed for invoicing:
  - name of PRP
  - name of supplier
  - date of delivery
  - PTUs
  - delivery instructions (kWh)
  - delivery price

1.3.3.4 Invoicing

- The invoices for supplied reserve capacity other purposes(positive and/or negative) are submitted to TenneT every Wednesday. The invoices relate to deliveries in the previous period from Saturday up to and including Friday.
- The invoices shall state at least the following information:
  - name of supplier
  - period start and enddate
  - calculated volumes and amounts (per direction)

- total amount

- If the invoice amount is approved, the outstanding amount must be paid within two weeks.

1.4 Specifications

1.4.1 Attributes of the message RRP

Attribute	*Unit*	*Description*	*Approved values*
Supplier	NA	Identification of the supplier of the regulation and / or reserve power	EAN code
PRP	NA	Identification of the PRP whose imbalance will be adjusted in case the RRP bid is called upon	EAN code
Request number	NA	When the message has to be delivered on request of TenneT the request number provided by TenneT needs to be listed	Request numbers that have been provided by TenneT
Date of delivery	NA	The date of delivery for which the bid is related to	Date between (starting) today and today + 7 days

TenneT informs both the supplier and PRP on the reception of a RRP bid.
TenneT informs the activation of a RRP bid to both supplier and PRP of the supplier.

1.4.2 Attributes of the RRP bid

Attribute	*Unit*	*Description*	*Approved values*
Contract	NA	Identification of the transaction between the supplier and TenneT	Contract number provided by TenneT, 10 alphanumeric characters
ID	NA	Reference that is provided by the supplier to uniquely identify the bid within the message. Reference ID's can be used in newer versions of the messages to update the bid	Determined by supplier
Object	NA	With the object label a supplier can connect two separate bids. Two bids that are part of one object cannot be called upon simultaneously	Determined by supplier
Activation time	PTU	Minimal Relative number of PTU's with respect to current for which activation by TenneT is possible. This value makes a distinction between:	Integer value between (incl.) 0 and 672 regulation capacity (contracted/not contracted): activation time = 0:

Attribute	*Unit*	*Description*	*Approved values*
		Regulating capacity, Reserve capacity for Balancing purposes and Reserve capacity for other purposes	Reserve capacity for balancing purposes: Activation time = 1, 2, 3, 4 Reserve capacity other purposes: Activation time ≥ 5
Duration of activation	PTU	Minimal PTU Interval for which activation is possible. This value makes a distinction between: Regulating capacity, Reserve capacity for Balancing purposes and Reserve capacity for other purposes	Integer value 1, or between (including) 4 and 672 Regulating capacity (contracted /not contracted) or reserve capacity for balancing purposes: Duration of activation = 1 Reserve capacity for other purposes: Duration of activation ≥ 4
Capacity	MW	Seize of the offered capacity + regulating upward capacity - regulating downward capacity	For upward regulating capacity an integer value between (incl.) 4 and 999 For downward regulating capacity an integer value between(incl.) -999 and -4
Regulating speed	% / min	Available regulating speed. Expressed in % of the Total seize of the bid per minute	Value with 1 decimal. Value between (incl.) 7,0 and 100,0
Location / netobject	NA	A location or collection of locations in the Dutch high voltage grid where the offered capacity will be made available. This location or collection of locations has one owner or one administrator	EAN code

1.4.3 Attributes to the bidding rule RRP

For each RRP bid the date of application needs to be declared for all the PTU's separately. The PTU is a 15 minutes period which is defined by standardized clock times.

Attribute	*Unit*	*Description*	*Approved values*
Availability	PTU	Determines the PTU number for which the bid is valid	Per bid the unique integer value between 1 and 100 increasingly
Bid price	€/MWh	The energy price for the offered power	Value with 2 decimals between -100.000,00 and 100.000,00

1.4.4 Other

Bids are either:

- Only the full bid can be called upon (Reserve capacity)
- Variable dispatch is possible (Regulating capacity)

It must be possible for the bids for regulating capacity to be dispatched by making use of the LFC, for this purpose the actual production measurements needs to be made available. The upward and downward regulating speed needs to be at least 7% per minute, the activation time is at most one minute.

A regulation object can be created by using the same regulating ID in both bids (one for regulating upward and one for regulating downward) for the object. By making use of the status of a regulating object it can be prevented that one object needs to regulate both upward and downward simultaneously by the LFC. By combining the bids to one object the regulation speed is limited to only one of both bids.

A reserve object can be created by the supplier by making two bids for reserve power with the same activation time and seize, but with different times of duration and specifying it with the same reserve object name By defining the reserve object the supplier is given the opportunity to make a price differentiation based upon the start-up costs of the object without running the additional risk of having to respond to the activation both bids.

2. Implementation regulations for national grid administrator concerning transmission forecasts (pursuant to sections 5.1.1.2 and 5.1.1.5 of the Grid Code)

2.1 Introduction

The Grid Code contains provisions relating to transmission forecasts (programmes).
Sections 5.1.1.2 and 5.1.1.5 of the Grid Code refer to rules governing the submission of transmission forecasts.
These rules are further specified below with regard to parties connected to the grid operated by the national grid administrator.

In case of differences between the text of this document and the text of the Grid Code and/or System Code, the text of the Codes shall prevail.

2.2 Definitions

D	Operational day
Grid administrator	A company designated by virtue of Section 10, 13 or 14 of the Act as the administrator of one or more grids.
PTU	Programme Time Unit (= 15 minutes)
PRP	Programme-Responsible Party
EDINE	EDINE (Electronic Data Interchange in the Netherlands) is a collection of specifications and agreements. So-called Message Implementation Guides (MIGs) specify how the standard EDIFACT messages are used in the Dutch electricity sector. EDIFACT stands for Electronic Data Interchange for Administration, Commerce and Transport.

2.3 Procedure pursuant to sections 5.1.1.2 and 5.1.1.5 of the Grid Code

2.3.1 Relating to transmission forecasts as referred to in sections 5.1.1.2 and 5.1.1.5 of the Grid Code

2.3.1.1 Procedure and time schedule

a. Connected parties and PRPs (where applicable) submit their T Prognoses by means of an

electronic EDINE message with prescribed content. For a complete overview of the prescribed content of these messages, please consult the DELFOR 1.12 Transport Prognosis Message Implementation Guide (MIG), which is available on the website of Energie Data Services Nederland www.edsn.nl.

b. T Prognoses must be received by the grid administrators before 14.00 p.m. on the operational planning day.

c. Regional grid administrators with a connection to the TenneT grid must send their T Prognoses to TenneT before 14.45 p.m.

The following details must be submitted:

- The load of the constituent grid in kW (average value per hour).
  This load is defined as the total load of the constituent grid, including the entire own load of industrial production units with an installed capacity of more than 60 MW.
  The capacity generated by production units with an installed capacity of less than 60 MW has been discounted in the load.
  Grid losses are also included in the load.
- The output in kW (average value per hour) of every production unit connected with an installed capacity of more than 60 MW

d. Between 14.45and 15.15 p.m., TenneT performs a grid security analysis of the connections to its grid. If requested and required, TenneT sends an overview (in the form of an Excel file) of imports, exports, loads, production levels and expected voltage levels on the 380 kV and 220 kV grid to regional grid administrators or TSOs with a connection to the TenneT grid. This overview is used for grid security calculations.

e. Between 15.15 and 17.30 p.m., the results of the grid security analysis are exchanged if necessary and consultations take place between TenneT and the regional grid administrators concerning any transmission restrictions and how they should be resolved.

Grid security analysis results to be exchanged

Case: name of grid administrator + date + hour

In the basic situation

- transmission (P/Q) over each connection to 380/220 kV grid
- transformer tap positions
- secondary voltage

As part of a disruption analysis

- Overloads of more than 110 %
- Sudden voltage changes of more than 10 %
- Voltages exceeding 110%
- Voltages < 90%
- Non-converged grid security calculations

f. In the period between 15.15 and 16.15 p.m., regional grid administrators can resolve any transmission restrictions in their own grid by taking technical measures or obtaining assistance from producers.
g. Between 16.15 and 17.30 p.m., TenneT will resolve transmission restrictions in its own grid using TenneT's bid system. TenneT will also resolve transmission restrictions in the grids of regional grid administrators if requested to do so.
h. No later than 17.30 p.m. (target time) TenneT will authorise the E Programmes and T Prognoses and send the final results of the grid security analysis to the grid administrators.

If there are transmission restrictions that have not yet been resolved (or that cannot be resolved), TenneT or the regional grid administrators may have to impose restrictions on the market. For that reason, the E Programmes and T Prognoses cannot be authorised until the moment that the grid is found to be operationally (n-1) secure.

2.3.1.2 Changes to T Prognoses

Changes to T Prognoses must be reported if there are significant changes to the load and production values. Significant changes are defined as load and/or production deviations exceeding 5% of the constituent grid load. The limit value used by the regional grid administrators must be known to TenneT (bilateral agreement).

Preferably, operational planning departments and/or control centres should also notify each other by telephone of any changes to T Prognoses.

3. Implementation regulations for Single-Sided Transactions (pursuant to section 3.7.7 of the System Code)

3.1 Introduction

Section 3.7.7 of the System Code refers to a procedure to be determined by the administrator of the national high-voltage grid which describes how Single-Sided Transactions (SSTs) can be realised. This procedure is further specified below.
For the sake of completeness, the use of SSTs in the determination of the imbalance is also described below, in addition to how the transactions are realised.

In case of differences between the text of this document and the text of the System Code, the text of the System Code shall prevail.

3.2 Definitions

Authorised Party	The PRP that submits the single-sided transaction and is authorised to do so by the contract party.
Contract party	The PRP that issued the authorisation to the Authorised Party.
SST	Single-Sided Transaction
PRP	Programme-Responsible Party
Preparation day	Day prior to the day of execution
PTU	Programme Time Unit

3.3 Procedure pursuant to section 3.7.7 of the System Code

3.3.1 Purpose of Single-Sided Transactions

Single-Sided Transactions enable market parties (PRPs) to submit transactions to TenneT without inclusion in E Programmes. The transaction is submitted to TenneT by only one of the parties involved. However, this party must have been authorised to do so by the other party beforehand.

SSTs that have been correctly submitted are further processed without a consistency check or additional authorisation.

3.3.2 Authorisations

In an authorisation[2], one PRP (the Contract Party) indicates that it has authorised another PRP (the Authorised Party) to submit transactions to TenneT on its behalf.

Authorisations are subject to the following rules:

- The Contract Party issues an authorisation by completing and signing the required standard authorisation form and sending it to TenneT by post or fax (to Customers and Markets).
- The Contract party can cancel the authorisation by completing and signing the required standard form and sending it to TenneT by post or fax (to Customers and Markets).
- The Contract Party must also inform the Authorised Party that the authorisation has been cancelled.
- Changes to authorisations must be submitted to TenneT at least two working days before they come into effect.
- Authorisations have an official commencing date.
- Pursuant to section 3.7.7 of the System Code, TenneT will correct the imbalance of both the Authorised Party and the Contract Party with the volume of their Single-Sided Transactions. See 3.3.4.

3.3.3 Submission of transactions

The following rules apply to the submission of Single-Sided Transactions:

- Transactions that have been correctly submitted to TenneT will be confirmed by TenneT in an EDINE message addressed to the Authorised Party and the Contract Party. This EDINE message states which transaction has been submitted to TenneT by which Authorised Party. The relevant transaction is given an opposite sign (+/-) in the message sent to the Contract Party.
- SSTs can be used from the moment of approval on the operational planning day.
- TenneT accepts a correctly submitted SST until the Gate Closure for correctly submitted changes to an approved E-Programme pursuant SystemCode 3.6.19.
- Once submitted, a transaction cannot be cancelled. If a transaction has to be cancelled, a reverse transaction will have to be submitted.
- SSTs are submitted to TenneT by means of an EDINE message intended for that purpose.

[2] An authorisation form can be found in the Appendix to this document.

- Multiple transactions can be submitted in one message. However, no more than one column may be used per Contract Party.
- SSTs cannot be used to submit import or export transactions.
- The SST system exists in addition to the submission og changes to approved E Programmes.
- The use of SSTs is not compulsory.
- Messages containing one or more errors are ignored. If a message contains an error, any correct transactions submitted in that message will therefore not be processed.
- All electronic message traffic takes place in accordance with the EDINE guidelines. The relevant procedures can be found in the Message Implementation Guides (MIGs), among other sources.

3.3.4 Determination of imbalance

When determining the imbalance of a particular PRP, the sum of all Single-Sided Transactions submitted by or on behalf of that PRP is determined per PTU. This total is corrected on the imbalance as described in section 3.7.7 of the System Code. Article 3.7.7 of the System Code also applies for the settlement of imbalance of PRP's with trade acknowledgement.

4. Procedure to change the incentive component of the Imbalance Price (pursuant art. 3.9.8 SystemCode)

The procedure to which Section 3.9.8 of the System Code refers and which relates to the option of changing the incentive component is as follows.
The incentive component forms part of the imbalance price, and has been set as at January 1st 2001 at 0.01 €/kWh = 10 €/MWh.
Changes in the incentive component are required to be made on the basis of objective factors reflecting the operation of the System:

System
=
Autonomous actions by market players
+
Actions by market players at TenneT's instructions

The actions by market players at TenneT's instructions are required to be complementary to the actions by market players independently, if the envisaged performance level is to be achieved. The incentive component from the imbalance pricing system is one of the factors determining the behaviour of market players.

The System is being seen and will continue to be seen as an inadvertent energy exchange with other countries. It has been decided to lay down the system's performance level in the form of parameters based on accountable observations at five-minute intervals formed by the accountable measurements on the cross-border interconnections and exchange-programmes with other countries.

The basic premise is that under the new system, the performance level should not turn out any worse than is currently the case. This will be monitored by comparing the performance level with that during a reference period from 1 July 1999 to 31 December 2000 inclusive, such comparisons to be made once weekly over the period starting at 0.00 hours on Mondays and ending at midnight on Sundays. A new incentive component will take effect at 0.00 hours the next Wednesday.

The following decision tree is applied in this context:

Performance level achieved?	**Yes**	**No**	
Previous incentive change?	**N.A.**	**≤ 0**	**> 0**
new incentive change c€/kWh		**+ 0.1**	**+ 0.2**
new incentive c€/kWh	**0**	**last incentive + new change**	

The System's envisaged performance level consists in not exceeding UCTE standards the essence of which, translated with some licence into the observations as defined, is as follows:

- The number of observations bearing out an absolute imbalance with other countries of less than 300MW is required to be as small as possible.
- The average imbalance with other countries is required to turn out at nil.

The performance level is deemed to have been achieved in so far as each of the following conditions is met:

- The number of inadvertent energy exchanges across a five-minute time span which in terms of MW is greater than 300MW or smaller than –300MW, respectively on a weekly basis is less than 40.
- The weekly average of inadvertent energy exchanges across a five-minute time span in terms of MW works out at more than –20MW and less than 20MW.

No incentive increase will be applied in so far as the performance level has not been achieved due to demonstrable external influences (such as storms, industrial action, and so on).

5. Failures occurring in TenneT's automated systems

If a failure occurs in TenneT's automated systems, TenneT will try to continue the exchange of information with all the parties involved by telephone, fax or e-mail. TenneT is not liable for claims in the event of failures or disruptions.
Further information about the relevant procedures can be found on the TenneT website.

6. Reference documents

Complete version of the technical codes, April 2006 and October 2006
DTe decision no. 101161/4
DTe decision no. 100928
Amendment proposal no. 101526
NMa/EK Besluit 103951

7. Annexes

7.1 Authorisation form for Single-Sided Transactions

AUTHORISATION

…… (hereinafter: "first legal person")[3], with EAN-code ..... and its registered office at ....., a Programme-Responsible Party within the meaning of the System Code with full recognition / trade recognition[4], hereby grants TenneT TSO B.V. unconditional and irrevocable permission to adjust its imbalance without its intervention if …… (hereinafter: "second legal person")[5], with EAN-code ..... and its registered office at ....., a Programme-Responsible Party within the meaning of the System Code with full recognition / trade recognition[6] has submitted to TenneT TSO B.V. a transaction with the first legal person as referred to in section 3.7.7 of the System Code.

Transactions that have been correctly submitted to TenneT TSO B.V. will be confirmed to the parties involved after they have been processed.

This authorisation enters into effect on ....., but no sooner than two working days after the day on which TenneT TSO B.V. received this authorisation.

The authorisation can be cancelled by completing the form below and sending it to TenneT TSO B.V. The cancellation enters into effect on the date stated by the party submitting the cancellation, but no sooner than two working days after the day on which TenneT TSO B.V. received the cancellation.

==========

CANCELLATION OF AUTHORISATION (by the party that issued the authorisation)

The first legal person, with EAN-code ..... and its registered office at .....,

[3] The first legal person is the party that issues the authorisation.
[4] Cross out what is not applicable.
[5] The second legal person is the Authorised Party.
[6] Cross out what is not applicable.

hereby cancels the authorisation it issued on ..... (date) to TenneT TSO B.V. to adjust its imbalance without its intervention for cases in which the second legal person, with EAN-code ..... and its registered office at ..... submitted to TenneT TSO B.V a transaction with the first legal person as referred to in section 3.7.7 of the System Code.

This cancellation enters into effect on ....., but no sooner than two working days after the day on which TenneT TSO B.V. received this cancellation.

The undersigned declares that it has sent a copy of this cancellation to the second legal person.

.....……..... (place), ...…..... (date)

.....…..... (name), ……..…….. (position)

..... (signature)

Send this form by post to:
TenneT TSO B.V.
sub-department Customers and Markes
P.O. Box 718
6800 AS Arnhem
The Netherlands

or fax it to +31 26 373 1390 to TenneT TSO B.V., Customers and Markets
or a scanned copy by e-mail to: servicecentrum@tennet.eu.

7.2 Overview Gate Closure Times IET Nominations

GCT IET Nominations in E-Programmes PRP (*not* Designated Shipper) to TenneT TSO
Normal Operations
no IET nomination required in E-Programme by PRP in case of Designated Shipper

Borders	Long Term	Day Ahead	Intra Day
Belgium	Explicit through CASC; SystemCode 3.6.1, (D-1, 9h00)	X	Designated Shipper; See APX ID
Germany	Explicit through CASC; SystemCode 3.6.1, (D-1, 9h00)	X	See DBS and Procedure TenneT, (h – 1)
CWE (Belgium, Germany, France)	X	Designated Shipper; See APX DA	X
Norway	X	Designated Shipper; See APX DA	Designated Shipper; See APX ID
GB	Designated Shipper; See BritNed	Designated Shipper; See BritNed	Designated Shipper; See BritNed

Long term Belgium, Germany:
In case of difference between nominated by PRP and assigned by TenneT, GCT E-Programme with revised IET: SystemCode 3.6.3, (D–1,14h00)

In Not Normal situations for DA Explicit allocation mechanism through CASC shadow auction for Belgium, Germany, Norway
Corresponding GCT for E-Programmes with IET Nominations: GridCode 5.6.23.4, GridCode 5.2.24.6, (D-1, 15h30)

GCT: Gate Closure Time
IET: Import Export Transactions
PRP: Program Responsible Party
DA: Day Ahead
Bracketed Times: Indicative; Codes and Procedures leading