

Manual Bidding of Regulating and Reserve Power (RRP)

Amendments to Register:

0.1	18 September 2000	Initial version
0.2	27 September 2000	Incorporation of project members' comments Incorporation of new version of MIG QUOTES 0.5
0.3	20 October 2000	- Workshop version - Incorporation of definitive version of MIG QUOTES 1.0
1.0	04 December 2000	- Definitive version - Adjustment of permissible values for object of regulation and dispatch time - Amendment of closing term as at day of delivery
1.1	12 December 2001	Revision of objects of regulation and update of handbook
1.2	12 May 2003	Changes to chapter 2 (PTU adjustment)
2.0	June 2010	Adaptation to UTIL TS, Blockbids
2.1	February 2011	Adjustment limits Blockbids

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1. Introduction

This document contains instructions to submitting bids regulating and reserve power bids (RRP) to TenneT TSO, as guideline for the bidders of RRP. Examples of topics discussed are the attributes of the bid (significance, permissible values), the timetable, the transitions from summer to winter time.

A bid is an option, with the bidder setting a minimum condition (bid price) for acceptance of the risks of allowing some volume (up to the extent of the bid per PTU) in adjustment of its Imbalance.

The bidder is responsible for meeting the bidding requirements; incorrect bids will be rejected 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 ensuing adjustment of Imbalances.

Further information on regulating and reserve power can be found in the Implementation Regulations for Grid Code and System Code on www.tennet.org.

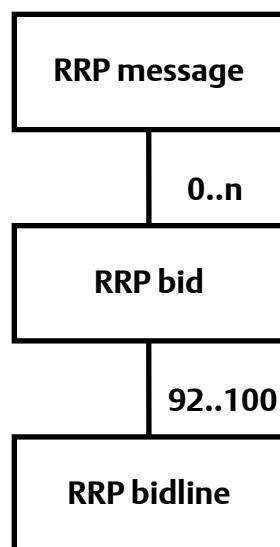
1.1 Categories bids regulating and reserve power

All bids RRP belong to one of the following:

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

2. Structure of RRP message

The diagram below shows the structure of the messages of RRP submitted by the suppliers:



The RRP message is made up of a combination of RRP bids, whose number per RRP message is unlimited (n).

A RRP message with number of RRP bids nil (0) indicates the bidder does not want to submit RRV. Each new RRP message sent overrules all previous RRP messages.

The RRP messages are exchanged in a standardised format, in compliance with the EDI standard for the Dutch energy sector (EDINE).

For a detailed description of this format:

http://www.edsn.nl/docs/Berichtenspecificatie/blokbieding_1.1.dpdf

The message is sent to the CPS, the central mailbox system, and should be addressed to TenneT/SO.

Each bid RRV is composed of bidlines, one for each PTU (clock quarter of an hour).

Any normal day counts 96 PTU, see also chapter 4 transition summer/winter time.

Number of positions and character (numeric, alphanumeric, ...) of the attributes are defined in the UN/Cefact UNSM (in this case UTILTS). With exception of Data Element C506.1154 in the RFF-segment: the number of positions for this Data Element in the messages defined in this document is an..35 instead of the standard an..70 specified in the UNSM.

2.1 Attributes of RRP message

The RRP bidder is required to confer values upon the following attributes in its RRP message:

<i>Attribute</i>	<i>Unit</i>	<i>Description</i>	<i>Permissible values</i>
Supplier	N/A	Identification of the RRP supplier	EAN code
PRP	N/A	Identification of the PRP (Programme Responsible Party) whose imbalance will be adjusted on activation.	EAN code
Request	N/A	If the message is submitted at TenneT's request, the TenneT-issued request number must be included	TenneT-issued request number
Date of delivery	N/A	The date for which the bids relate	Date in the range ¹ current and current + 7 days

¹ Inclusive threshold values

2.2 Attributes of RRP bid

Each bid in the RRP message is specified through the following attributes:

<i>Attribute</i>	<i>Unit</i>	<i>Description</i>	<i>Permissible values</i>
Contract	N/A	Identification of the contract between the supplier and TenneT	TenneT-issued contract number comprising 10 alphanumerical characters
Reference	N/A	Bidder-issued unique identification of the bid as part of the message	bidder's choice
Object	N/A	An object enables a bidder to couple two bids. From an Object only one bid can be activated.	bidder's choice
Activation time	PTU	Minimum PTU interval relative to current for which Bid is available to be activated by TenneT; distinguishes Regulating Power, Reserve Power Balancing, Reserve Power Other purposes	Integer value in the 0 to 672 range ¹ (7 days) Regulation Power (contracted/not contracted Activation Time = 0 Reserve Power Balancing Activation Time = 1, 2, 3, 4 Reserve Power Other purposes Activation Time ≥ 5
Activation Duration	PTU	Minimum number of consecutive PTU's for admissible activation by TenneT	Integer value 1 or in the range 0 to 672 range ¹ (7 days) Regulation Power (contracted/not contracted Reserve Power Balancing Activation Duration = 1 Reserve Power Other purposes Activation duration ≥ 4
Power	MW	Bidsize + upward - downward	Upward: Integer in range ¹ 4 to 200 Downward: Integer in range ¹ -4 to -200
Regulation rate	% per minute	Regulation rate, as percentage of bidsizes per minute	One decimal place, value in the range ¹ 7.0 to 100.0
Location/Grid object	N/A	A connection, or set of connections, within the Dutch high-voltage grid, from which bidder will dispatch on activation. This connection or set of connections belongs to one owner or administrator.	EAN code

- A regulating power object couples two bids of opposite sign (upward/downward)
- A reservepower object other purposes couples two bids with similar bidsizes and activation time, but with different activation duration and price.

2.3 Attributes of RRP bidline

Each PTU on the date of delivery for which the bid is available must be specified.

<i>Attribute</i>	<i>Unit</i>	<i>Description</i>	<i>Permissible values</i>
Availability	PTU	PTU number for which bid applies	Unique Integer value in range ¹ 1 to 100, ascending
Bid price	€/MWh	Energy price	Two decimal places Value in the range ¹ -100,000.00 to +100,000.00

- For bids for balancing purposes the bid price may vary per PRU; for bids for other purposes the bidprice must be constant.
- The symbol (sign) of the product of the bidsize and the settlement price denotes the direction of the cash flow, with + indicating that that pays the supplier and -, that the supplier that pays TenneT.
- If power = 0, the bided price does not apply.
- € 1.23/MWh = € 0.00123/kWh = c€ 0.123/kWh
- The symbol (sign) of the power bided and the deployment price derived from the bided price dictate the direction of the cash flow:

	Deployment price > 0	Deployment price < 0
Upward regulating power (+)	TenneT pays RRP supplier	RRP supplier pays TenneT
Downward regulating power (-)	RRP supplier pays TenneT	TenneT pays RRP supplier

2.4 Optional aspects of attributes

As the table below shows, the attributes of the message, the bid and the bidding line are either mandatory or optional depending on the category of RRP bid:

<i>Attribute</i>	<i>Regulating power Contracted</i>	<i>Regulating power Not contracted</i>	<i>Reserve power Balancing</i>	<i>Reserve power Other purposes</i>
Supplier	Mandatory	Mandatory	Mandatory	Mandatory
PRP	Mandatory	Mandatory	Mandatory	Mandatory
Request	Optional	Optional	Optional	Optional
Date of delivery	Mandatory	Mandatory	Mandatory	Mandatory
Contract	Mandatory	N/A	N/A	N/A
ID	Mandatory	Mandatory	Mandatory	Mandatory
Object	Optional	Optional	N/A	Optional
Activation time	Mandatory	Mandatory	Mandatory	Mandatory
Activation duration	Mandatory	Mandatory	Mandatory	Mandatory
Regulation rate	Mandatory	Mandatory	N/A	N/A
Location	Mandatory	Mandatory	Mandatory	Mandatory
Power	Mandatory	Mandatory	Mandatory	Mandatory
Bid price	Mandatory	Mandatory	Mandatory	Mandatory

Mandatory implies that a value must be specified, in accordance to admissible or prescribed values in 2.2, 2.3 and 2.4

Optinal implies that a value might be specified, in accordance to admissible values in 2.2, 2.3 and 2.4

N/A implies that no value must be specified

3. Timetable

The RRP messages are required to be sent in accordance with a fixed timetable so as to enable TenneT's timely processing of the bids. Time of receipt in the CPS (central mailbox system) is deciding.

3.1 Day of preparation

The RRP bids for the day of delivery are required to reach TenneT by 1.00 p.m. daily on the day prior to that of delivery. RRP messages received by TenneT between 1.00 p.m. and the time of approval that have not been provided with a valid application number will be ignored (on notification of the sender). As soon as the time of approval has passed, the RRP bids for the day of delivery can be revised. The procedure for the day of delivery comes into operation at 11.00 p.m. on the day of preparation.

3.2 Day of delivery

On the day of delivery, the deadline for submitting revised RRP bids always closes one hour ahead of each PTU.

Example:

It is 2.42 p.m. and an RRP supplier decides to revise its RRP bids for the current day. At this time the supplier will be permitted to submit changes for the PTU from 3.45 to 4.00 p.m. and all further PTUs. In the event of the supplier having changed one or more PTUs preceding that from 3.45 to 4.00 p.m., all its RRP bids will be rejected.

4. Transition from winter to summer time and vice versa

On the day of transition from summer (i.e. daylight saving) to winter time (clock put back at 3.00 a.m.), four additional bidding lines are required to be bided in respect of the third hour. This implies for those suppliers which compile their bids using Excel templates that all bidding lines relating to the fourth and further hours are put back four rows.

A similar mechanism applies on the day of transition from winter to summer time (clock put forward at 2.00 a.m.). Here there are no bidding lines for the third hour, which implies that all bidding lines relating to the fourth and further hours are moved up four lines.

In de nu volgende voorbeelden zijn de periodes gemarkeerd die afwijken van een 'normale' dag.

Transition from summer to
winter time
(100 bidding lines)

Period (Excel)	Clock hour
....
01:30 - 01:45	01:30 - 01:45
01:45 - 02:00	01:45 - 02:00
02:00 - 02:15	02:00 - 02:15
02:15 - 02:30	02:15 - 02:30
02:30 - 02:45	02:30 - 02:45
02:45 - 03:00	02:45 - 03:00
03:00 - 03:15	02:00 - 02:15
03:15 - 03:30	02:15 - 02:30
03:30 - 03:45	02:30 - 02:45
03:45 - 04:00	02:45 - 03:00
04:00 - 04:15	03:00 - 03:15
....
....
24:00 - 24:15	23:00 - 23:15
24:15 - 24:30	23:15 - 23:30
24:30 - 24:45	23:30 - 23:45
24:45 - 25:00	23:45 - 24:00

Transition from winter to
summer time
(92 bidding lines)

Period (Excel)	Clock hour
....
01:30 - 01:45	01:30 - 01:45
01:45 - 02:00	01:45 - 02:00
02:00 - 02:15	03:00 - 03:15
02:15 - 02:30	03:15 - 03:30
....
....
22:15 - 22:30	23:15 - 23:30
22:30 - 22:45	23:30 - 23:45
22:45 - 23:00	23:45 - 24:00
23:00 - 23:15	N/A
23:15 - 23:30	N/A
23:30 - 23:35	N/A
23:45 - 24:00	N/A
24:00 - 24:15	N/A
24:15 - 24:30	N/A
24:30 - 24:45	N/A
24:45 - 25:00	N/A