

# **USER MANUAL**

RPS Creator 1.0

**EM-FAMILY**

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## 01 INTRODUCTION

### 01.1 Scope

The manual describes use of an offline tool to create RPS documents. Data provided in EXCEL cells are transformed into a XML document that conforms to a standard ENTSO-E IEC RPS.

No other spreadsheet tool than MS-EXCEL is supported. Created documents are designed for a standard ENTSO-E RPS process.

### 01.2 Interrelation with other Documents

MMS User manual "MASTER DATA".

MMS User manual "Nomination"

MMS Global glossary

IEC Reference: iec62325.351:tc57wg16:451-7:plannedresourcescheduledocument:6:0

### 01.3 Target Audience

This manual is made for agents of Balance responsible parties.

The users of this product have good knowledge on

- computer operation (including skills in MS-EXCEL)
- The new Georgian Energy Market Model
- The process of ENTSO-E nomination (commercial & technical)

### 01.4 Terms & Abbreviations

**Global Position**      The set of all schedules within a document. They represent all required technical data for resources (power plants) of a balance group.

**MBA**                      Market balance area.

**RPS**                        Resource plan schedule.

### 01.5 Writing Conventions

Names and terms are under quotation marks.

The screenshots help to visualize the verbal description. Their content may be completely artificial.

## 02 RESOURCE PLAN SCHEDULES

The BRP is responsible to announce all his production plans for power plants as RPS (resource plan schedules document) per balance group to the respective TSO. This is done in respect to nomination phases (longterm, shortterm, Intraday) and a published timeline. At least one version of RPS has to be sent day ahead.

A schedule is understood as a complete series of value positions within a given time range and resolution.

### 02.1 Production Plan

A production plan is the schedule of net amount of energy produced by a power plant on the specified. This plan is to be executed by appropriate control equipment. That plan values are determined by the BRP of the plant considering his total market activity.

Such a production plan never contains energy amounts that are instructed by the TSO in the process of reserve activation (ie. AFRR or MFRR).

### 02.2 Consumption Plan

It is generally possible to provide the planned own resource consumption. This might be relevant if planned production is given as gross value, but at the moment market rules do not require that data.

### 02.3 Minimum Possible

It is generally possible to describe the minimum power that the plant is able to generate if running. At the moment market rules does not require that data.

### 02.4 Maximum Possible

It is generally possible to describe the maximum power that the plant is able to generate if running. At the moment market rules does not require that data.

### 02.5 Document Constraints

Each schedule category occurs only once (max) in a RPS for a resource.

The given resource provider must be the valid balance group for the resource. The document sender must be the BRP of the resource provider.

All schedule values are positive.

Values are to be provided in 15 minutes resolution for exactly one specified day (CET boundaries). No position may be omitted.

On updating a plan the sender must send a message with same message ID but a higher message version than before.

## 02.6 Market Constraints

Time periods and timestamps are interpreted in CET time zone.

A BRP that is in a BSP role to provide regulation reserves will separate the power plant in an own balance group. Therefore the respective RPS will only deal with this single plant.

## 03 EXCEL SPREADSHEET LAYOUT

The provided EXCEL Map is a data container for relevant resource data

The map contains 3 sheets

- RPS\_DATA: actual data for a specific day
- RPS\_TradeRelations: a list of resources relation information (like a template)
- RPS\_Config: configuration visibility, defaults and creation switches

The fields in each sheet are identified by names. It is not permitted to change Sheet names or field names.

## 04 USAGE

### 04.1 General Preparation

Have a recent version of MS Excel installed on your computer. Get the current version of the RPS Creator from the TSO. Copy it to a working directory. Prepare a directory C:/temp for the created XML documents.

On registering as a market participant you receive an EIC party code and another EIC for each balance group that you are responsible for. Have those codes ready.

### 04.2 BRP customization

In this step you create a kind of template for subsequent (day by day) copying/adaption. Save it under a meaningful file name.

#### 04.2.1 RPS\_Data

Put your own party EIC (BRP) as "SenderIdentification"

Set the "MessageVersion" initially to 1

#### 04.2.2 RPS\_TradeRelations

List the typical resource data relations in the sheet "RPS\_TradeRelations":

- For each new trade relation copy the "B" column to the next free right column.
- Give the relation a semantically valid /speaking name (line header "name" i.e. "PLAN", "MAX"
- Fill in the columns according the table below or consult at the official ENTSO-E ESS documentation

Name	Value	Constraint
BusinessType	A01 (Production plan) A04 (Own Consumption forecast) A60 (Minimum possible) A61 (Maximum possible)	One-of
Product	8716867000016	mandatory
ObjectAggregation	A03 (party)	mandatory
ConnectingDomain	EIC of area	Specify, i.e. 10Y1001A1001B012
ConnectingDomain_Scheme	A01	mandatory

RegisteredResource	EIC of resource	specify
RegisteredResource_Scheme	A01	mandatory
ResourceProvider	EIC of balance group	specify
ResourceProvider_Scheme	A01	mandatory

Trade Relation Attributes

	A	B	C	D	E
1 Name	PLAN1	CONS1	MIN1	MAX1	
2 BusinessType	A01	A04	A60	A61	
3 Product	8716867000016	8716867000016	8716867000016	8716867000016	
4 ObjectAggregation					
5 ConnectingDomain	10Y1001A1001B012	10Y1001A1001B012	10Y1001A1001B012	10Y1001A1001B012	
6 ConnectingDomain_Scheme	A01	A01	A01	A01	
7 RegisteredResource	65WENGURHESIBSPD	65WENGURHESIBSPD	65WENGURHESIBSPD	65WENGURHESIBSPD	
8 RegisteredResource_Scheme	A01	A01	A01	A01	
9 ResourceProvider	65YBG-ENGURHESIU	65YBG-ENGURHESIU	65YBG-ENGURHESIU	11X000000100741R	
10 ResourceProvider_Scheme	A01	A01	A01	A01	

Example Trade Relation

04.2.3 RPS\_Config

You may choose to see/hide some columns, and set default values for new data columns

It is highly recommended not to modify fields other than visibility.

04.3 RPS for a Day

- In the sheet "RPS\_Data" update the "Day" to the nominated day (day of delivery) as a date formatted value.
- In the Line "SendersTimeSeriesIdentification" type a name (unique within this document) for a trade. → Fields below will be populated with initial values.
- In the Line "TradeRelation" click the field to see a drop down menu for prepared relations. Select one. → Fields below will be populated with relation values.
- Update each Position cell with the trade volume as planned (procured)
- Click on the button "Create RPS". → the XML nomination document is created in the creation directory C:/temp/<date\_as YYYY-MM-DD>.
- Fetch the XML and transmit it to the TSO



	A	B
1	<b>Day</b>	<b>15.05.2020</b>
2		
3	MessageIdentification	RPS-20200515-65XBG-ENGURHESI7
4	MessageVersion	1
8	SenderIdentification	65XBG-ENGURHESI7
14	MessageDateTime	2020-09-30T18:31:56Z
15	ScheduleTimeInterval	2020-05-14T22:00Z/2020-05-15T22:00Z
20		
21	<b>SendersTimeSeriesIdentification</b>	<b>TS001</b>
22	SendersTimeSeriesVersion	1
23	BusinessType	A01
26	<b>TradeRelation</b>	<b>PLAN1</b>
27	ConnectingDomain	10Y1001A1001B012
29	RegisteredResource	65WENGURHESIBSPD
31	ResourceProvider	65YBG-ENGURHESIU
40		
41	Pos.1	20,000
42	Pos.2	20,000
43	Pos.3	20,000
44	Pos.4	20,000
45	Pos.5	20,000
46	Pos.6	20,000
47	Pos.7	20,000

Example Data Sheet

#### 04.4 Renominate RPS for a Day

- Copy the previous EXCEL data collection as a new one
- You will be using the same Message Identification, but increase the message version
- Update the trade column and values as needed.
- For a modified trade column increase the "SenderTimeSeriesVersion"
- Create and transmit the new XML document.

#### 04.5 Other

The usage of this tool is not mandatory. Any other way to create a valid RPS is permissible.

In case of EXCEL VBA processing anomalies save the document with a new name, reload and retry.