

PUBLIC

# BMRS API and Data Push User Guide

## Draft for Phase 3 Release

### Intellectual Property Rights, Copyright and Disclaimer

The copyright and other intellectual property rights in this document are vested in ELEXON or appear with the consent of the copyright owner. These materials are made available for you for the purposes of your participation in the electricity industry. If you have an interest in the electricity industry, you may view, download, copy, distribute, modify, transmit, publish, sell or create derivative works (in whatever format) from this document or in other cases use for personal academic or other non-commercial purposes. All copyright and other proprietary notices contained in the document must be retained on any copy you make.

All other rights of the copyright owner not expressly dealt with above are reserved.

No representation, warranty or guarantee is made that the information in this document is accurate or complete. While care is taken in the collection and provision of this information, ELEXON Limited shall not be liable for any errors, omissions, misstatements or mistakes in any information or damages resulting from the use of this information or action taken in reliance on it.

**The use of the API is governed by the [BMRS Data Terms of Use Policy](#)**

**Service Desk Support: [bscservicedesk@cgi.com](mailto:bscservicedesk@cgi.com)**

Zaahir Ghanty

Version 0.12

17 October 2016

# BMRS API AND DATA PUSH USER GUIDE

---

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>7</b>
1.1	The BMRS.....	7
1.2	New BMRS Project.....	7
1.3	Purpose and Scope.....	8
1.3.1	What is covered in this document? .....	8
1.3.2	Are there any prerequisites? .....	8
1.3.3	Which data can I access via the API?.....	8
1.3.4	Can I access the data from the API by putting the URL in the web browser?.....	8
1.3.5	What do I need to the Data Push Service? .....	8
1.3.6	What support does ELEXON provide for the API and Data Push Service .....	8
1.4	Getting Started.....	9
<b>2</b>	<b>ELEXON PORTAL REGISTRATION PROCESS .....</b>	<b>10</b>
2.1	Accessing ELEXON Portal .....	10
2.2	Registration .....	10
<b>3</b>	<b>THE API KEY .....</b>	<b>11</b>
<b>4</b>	<b>DATA AVAILABLE THROUGH APIS.....</b>	<b>12</b>
4.1	API Design and Key Features .....	12
4.2	Summary of Data Available through REST API.....	13
4.2.1	BMRS Transparency & REMIT Data (Phase 1) from RESTful API .....	13
4.2.2	Existing BMRS Data (Phase 2 & 3) from RESTful API .....	16
<b>5</b>	<b>BMRS API DETAILS.....</b>	<b>24</b>
5.1	Transparency Data and REMIT (Phase 1 APIs) .....	24
5.1.1	B1720 –Amount of Balancing Reserves Under Contract.....	24
5.1.2	B1730 – Prices Of Procured Balancing Reserves .....	25
5.1.3	B1740 – Accepted Aggregated Offers .....	27
5.1.4	B1750 – Activated Balancing Energy .....	27
5.1.5	B1760 – Prices Of Activated Balancing Energy .....	28
5.1.6	B1770 – Imbalance Prices .....	30
5.1.7	B1780 – Aggregated Imbalance Volumes .....	30
5.1.8	B1790 – Financial Expenses and Income For Balancing .....	31
5.1.9	B1810 – CrossBorder Balancing Volumes of Exchanged Bids and Offers.....	32
5.1.10	B1820 – CrossBorder Balancing Prices .....	34
5.1.11	B1830 – Crossborder Balancing Energy Activated .....	35
5.1.12	B0610 – Actual Total Load per Bidding Zone .....	35

# BMRS API AND DATA PUSH USER GUIDE

---

5.1.13 B0620 – Day-Ahead Total Load Forecast per Bidding Zone.....	36
5.1.14 B0630 – Week-Ahead Total Load Forecast per Bidding Zone .....	37
5.1.15 B0640 – Month-Ahead Total Load Forecast Per Bidding Zone .....	39
5.1.16 B0650 – Year Ahead Total Load Forecast per Bidding Zone.....	40
5.1.17 B0810 – Year Ahead Forecast Margin .....	41
5.1.18 B1410 – Installed Generation Capacity Aggregated.....	42
5.1.19 B1420 – Installed Generation Capacity per Unit.....	43
5.1.20 B1430 – Day-Ahead Aggregated Generation.....	44
5.1.21 B1440 – Day-Ahead Generation forecasts for Wind and Solar .....	46
5.1.22 B1610 – Actual Generation Output per Generation Unit .....	46
5.1.23 B1620 – Actual Aggregated Generation perType.....	47
5.1.24 B1630 – Actual Or Estimated Wind and Solar Power Generation .....	48
5.1.25 B0910 – Expansion and Dismantling Projects .....	50
5.1.26 B1320 – Congestion Management Measures Countertrading .....	51
5.1.27 B1330 – Congestion Management Measures Costs of Congestion Management .....	52
5.1.28 B0710 – Planned Unavailability of Consumption Units .....	53
5.1.29 B0720 – Changes In Actual Availability Of Consumption Units .....	54
5.1.30 B1010 – Planned Unavailability In The Transmission Grid.....	56
5.1.31 B1020 – Changes In Actual Availability In The Transmission Grid .....	57
5.1.32 B1030 – Changes In Actual Availability of OffShore Grid Infrastructure .....	58
5.1.33 B1510 – Planned Unavailability of Generation Units .....	59
5.1.34 B1520 – Changes In Actual Availability of Generation Units.....	60
5.1.35 B1530 – Planned Unavailability of Production Units.....	62
5.1.36 B1540 – Changes In Actual Availability of Production Units .....	63
5.1.37 REMIT Flow – Message List Retrieval .....	65
5.1.38 REMIT Flow – Message Detail Retrieval .....	67
5.2 Existing BMRS Data (Phase 2 APIs) .....	68
5.2.1 Temperature Data .....	68
5.2.2 Bid Offer Level Data .....	71
5.2.3 Credit Default Notice Data .....	73
5.2.4 System Warnings .....	75
5.2.5 Balancing Services Adjustment Action Data .....	76
5.2.6 Balancing Service Adjustment Data.....	79
5.2.7 Rolling System Frequency .....	81
5.2.8 Market Index Data.....	83

# BMRS API AND DATA PUSH USER GUIDE

---

5.2.9 Daily energy Volume Data.....	84
5.2.10 Non BM STOR Instructed Volume Data .....	86
5.2.11 Applicable Balancing Services Volume Data .....	88
5.2.12 Rolling System Demand .....	89
5.2.13 Peak Wind Generation Forecast.....	91
5.2.14 Wind Generation Forecast and Out-turn Data .....	93
5.2.15 Generation By Fuel Type (Current) .....	94
5.2.16 Generation by Fuel Type (24H Instant Data) .....	97
5.2.17 Half Hourly Outturn Generation by Fuel Type .....	99
5.2.18 Half Hourly Interconnector Outturn Generation .....	101
5.2.19 National Output Useable (2-14 Days Ahead) .....	103
5.2.20 National Output Useable by Fuel Type (2-14 Days Ahead) .....	104
5.2.21 National Output Useable by Fuel Type and BM Unit (2-14 Days Ahead) .....	106
5.2.22 National Output Useable (2- 52 Weeks Ahead).....	107
5.2.23 National Output Useable by Fuel type (2-52 Weeks Ahead).....	109
5.2.24 National Output Useable by Fuel Type and BM Unit (2-52 Weeks Ahead).....	110
5.2.25 National Output Useable Data (1 Year) .....	112
5.2.26 National Output Useable Data (2 Year) .....	114
5.2.27 National Output Useable Data (3 Year) .....	115
5.2.28 National Output Useable Data (4 Year) .....	117
5.2.29 National Output Useable Data (5 Year) .....	118
5.2.30 Zonal Output Useable (2- 14 Days Ahead) .....	120
5.2.31 Zonal Output Useable (2-52 Weeks Ahead).....	121
5.2.32 Zonal Output Useable Data for 1 Year Ahead .....	123
5.2.33 Zonal Output Useable Data for 2 Year Ahead .....	124
5.2.34 Zonal Output Useable Data for 3 Year Ahead .....	126
5.2.35 Zonal Output Useable Data for 4 Year Ahead .....	127
5.2.36 Zonal Output Useable Data for 5 Year Ahead .....	128
5.2.37 Initial Demand Outturn .....	130
5.2.38 Forecast Day and Day Ahead Margin and Imbalance Data.....	131
5.2.39 Forecast Day and Day Ahead Demand Data .....	133
5.2.40 Demand & Surplus Forecast Data (2-14 Days Ahead) .....	135
5.2.41 Demand & Surplus Forecast Data (2-52 Weeks Ahead).....	137
5.2.42 SO-SO Prices (SO-SO) .....	139
5.2.43 SO SO Trades .....	141

# BMRS API AND DATA PUSH USER GUIDE

---

5.3	Existing BMRS Data (Phase 3 APIs) .....	143
5.3.1	Peak Demand – Yesterday/Today/Tomorrow .....	143
5.3.2	Indicative Peak Demand Information (Using Operational Metering Data) .....	145
5.3.3	System Demand .....	147
5.3.4	Indicative Triad Demand Information (Using Settlement Metering Data) .....	149
5.3.5	Physical Data .....	150
5.3.6	Dynamic Data .....	157
5.3.7	Derived BM Unit Data .....	171
5.3.8	Derived System Wide Data .....	189
5.3.9	Detailed System Prices .....	194
5.3.10	Market Depth Data .....	200
5.3.11	Latest Acceptances .....	201
5.3.12	Historic Acceptances .....	204
5.3.13	System Messages .....	206
5.3.14	BM Unit Search .....	207
5.3.15	System Warning (Today/Tomorrow) .....	208
5.3.16	System Warning (Historic) .....	211
5.3.17	Loss of Load Probability .....	213
5.3.18	Demand Control Instructions .....	215
5.3.19	STOR Availability Window .....	217
<b>6</b>	<b>DATA PUSH SERVICE .....</b>	<b>219</b>
<b>7</b>	<b>CONNECTIVITY .....</b>	<b>219</b>
<b>8</b>	<b>TOPOLOGY .....</b>	<b>219</b>
8.1	Client direct connection .....	220
8.2	Participant hosted broker .....	220
8.3	Push Data XSDs .....	221
8.4	Protocol Connection Strings .....	221
8.5	Data Push Service – Summary Data Set .....	222
8.6	Message types .....	226
<b>9</b>	<b>DATA PUSH AND API CHECKLIST .....</b>	<b>228</b>
9.1	RESTful .....	228
9.2	Push Data Service .....	228
9.3	Other Considerations .....	229
<b>10</b>	<b>APPENDIX A – EXAMPLE SOURCE CODE RESTFUL SERVICE .....</b>	<b>230</b>
10.1	Java .....	230

# BMRS API AND DATA PUSH USER GUIDE

---

10.2	Python.....	232
<b>11</b>	<b>APPENDIX B – EXAMPLE PUSH DATA SERVICE SOURCE CODE.....</b>	<b>235</b>
11.1	Java – onMessage example.....	235
11.2	Java – Looping example .....	241
11.3	Python Example (Stomp) .....	246
<b>12</b>	<b>AMENDMENT HISTORY .....</b>	<b>247</b>

# BMRS API AND DATA PUSH USER GUIDE

---

## 1 Introduction

### 1.1 The BMRS

The [Balancing Mechanism Reporting Service](#) (BMRS) is the primary channel for providing operational data relating to the GB Electricity Balancing and Settlement arrangements. It's used extensively by market participants to help make trading decisions and understanding market dynamics, and acts as a prompt reporting platform as well as a means of accessing historic data. The BMRS has a wider user base both within and outside of the energy industry and includes traders, regulators, industry forecasting teams and academics.

The legacy BMRS lacked useable web services and unless participants subscribed to the **TIBCO service** at additional cost, there were no practical means for machine-to-machine data retrieval. As a result, many market participants resorted to custom **scripting** to access data from the website, which had a negative impact on its overall performance.

### 1.2 New BMRS Project

The BMRS project was set out to deliver the following benefits to ELEXON and market participants:

- Provision of a web service - **Representational State Transfer (REST) Application Programming Interface** (API) for programmatic and timely access to BMRS data;
- A near real time Data Push Service to act as a viable alternative to the TIBCO service;
- A high-performing website, with faster response and download times;
- A flexible and loosely-coupled architecture that enables cheaper and quicker changes; and
- A modern web user interface (UI) to improve navigation and usability of the website.

The project delivery is being carried out in three phases:

**Phase 1:** Building the new architecture and using it to deliver Modifications P291 and P295 (December 2014);

**Phase 2:** Parallel loading of existing National Grid flows to the new architecture and provision of data access (excluding derived data) via the API and Data Push Service (July 2015); and

**Phase 3:** A new website front end, implementation of a calculation engine for derived data and provision of all data via the website UI, API<sup>1</sup> and Data Push Service (September 2016).



---

**Application programming Interfaces (API)**, in context of BMRS, is a set of programming instructions for participants to access BMRS data directly from their systems outside of the firewall

---

**TIBCO** is a third party software and provides the mechanism for automated publication of BMRS data to market participants via a dedicated line.

---

**Scripting** (sometimes referred to as scraping data from the website) is the process by which users run automated programs which simulate interactive access by searching for and downloading data from displayed web pages at a set frequency, sometimes several times a minute. Heavy scripting drastically slows the website which may lead to interactive customers experiencing timeout issues, resulting in the website becoming unusable.

---

---

<sup>1</sup> The Phase 3 APIs have been activated on 17 October 2016

# BMRS API AND DATA PUSH USER GUIDE

## 1.3 Purpose and Scope

### 1.3.1 What is covered in this document?

This document is intended to provide guidance for users into how to use the API and include:

- Registration process and access
- Accessing data API and Uniform Resource Locator (URL)
- API functions such as search parameters
- Structure for API request
- Using and connecting to the Data Push Service

### 1.3.2 Are there any prerequisites?

To use this document, an understanding of software development, Web services and the BMRS user interface and its data is required. By using the API, users agree to the [BMRS Data Terms of Use Policy](#).

### 1.3.3 Which data can I access via the API?

Project Phase	Data examples	Availability	API Details	Availability in Production System
<b>Phase 1 APIs</b>	Transparency Regulation data and REMIT Inside information	Production system	<b>Section 5.1</b>	<b>December 2014</b>
<b>Phase 2 APIs</b>	Generation by Fuel type, Frequency Data, Demand Ahead, Output Useable data	Production system	<b>Section 5.2</b>	<b>July 2015</b>
<b>Phase 3 APIs</b>	Detailed System Prices, Physical Data (FPN, MIL/MEL), Latest Acceptances	Production system	<b>Section 5.3</b>	<b>October 2016</b>

**Section 4.2** provides a full list of all the data available through the different phases of the project.

### 1.3.4 Can I access the data from the API by putting the URL in the web browser?

Yes – In this version of the API you can retrieve information using a web browser.

### 1.3.5 What do I need to the Data Push Service?

Further details on the data push service are available in **Section 6** and a general checklist is included in **Section 9**.

### 1.3.6 What support does ELEXON provide for the API and Data Push Service



# BMRS API AND DATA PUSH USER GUIDE

ELEXON will ensure the API guidance document is updated and this will provide you with details on how to use the API and the process required to access to API.

ELEXON will ensure that the API and Data Push Service are functional and has no obligation to provide support beyond providing the API Key, registration and access. Any technical assistance as a result of the API integration within your business processes will be your responsibility. To help users, ELEXON has provided sample codes for the API/Data Push in the Appendices of this document (Section 10 & Section 11) and will not provide support or additional codes for the API/Data Push.

## 1.4 Getting Started

In summary, there are four steps required in using the API:

1. Register on the ELEXON Portal
2. Retrieve API Key
3. Use API Key to gain access to the API URL
4. Retrieve results from the API

These steps are detailed in the following sections of this document.

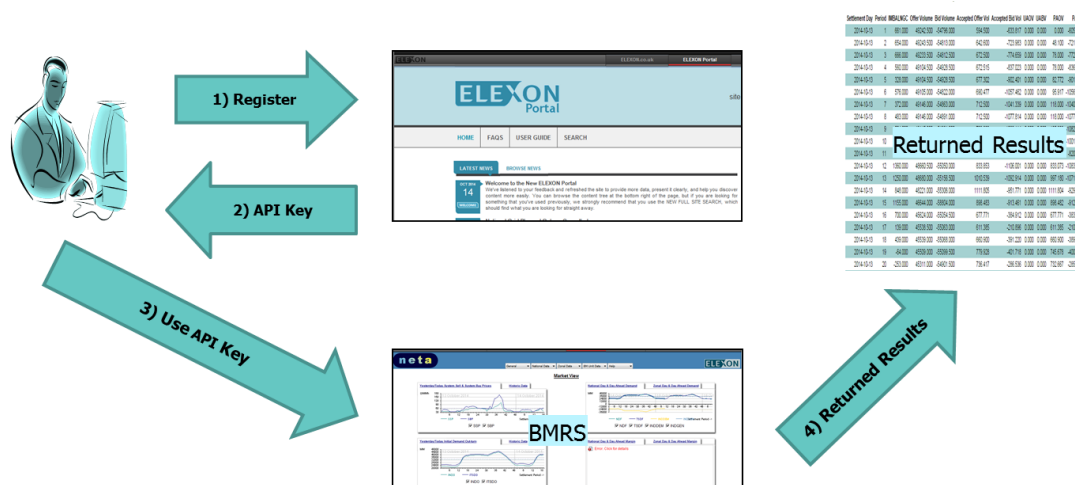


Figure 1: Steps to use API

ANY QUERIES PLEASE CONTACT THE BSC SERVICE DESK: [BSCSERVICEDESK@CGI.COM](mailto:BSCSERVICEDESK@CGI.COM)

# BMRS API AND DATA PUSH USER GUIDE

## REGISTRATION PROCESS

### 2 ELEXON Portal Registration Process

#### 2.1 Accessing ELEXON Portal

The web address for the accessing the portal is <https://www.elexonportal.co.uk/>. You can also access this by clicking on the “ELEXON Portal” button at the top of the BMRS or ELEXON websites.

Once the page has loaded use your log in credentials to access the page or register as shown below.

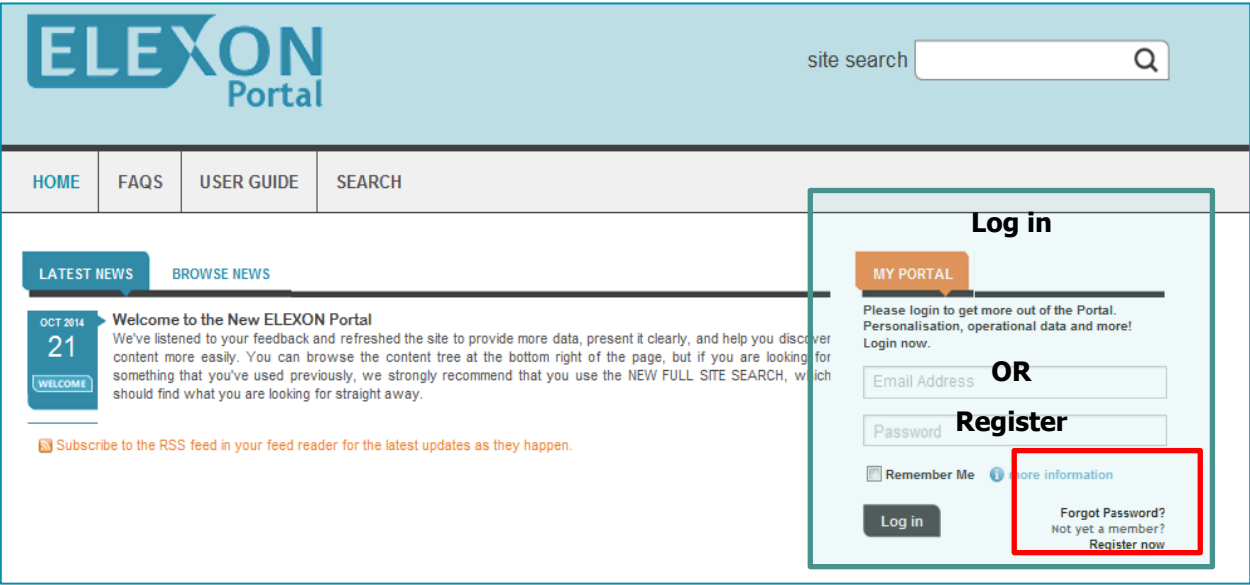


Figure 2: Accessing the ELEXON Portal

#### 2.2 Registration

Follow the instructions on the screen to register.

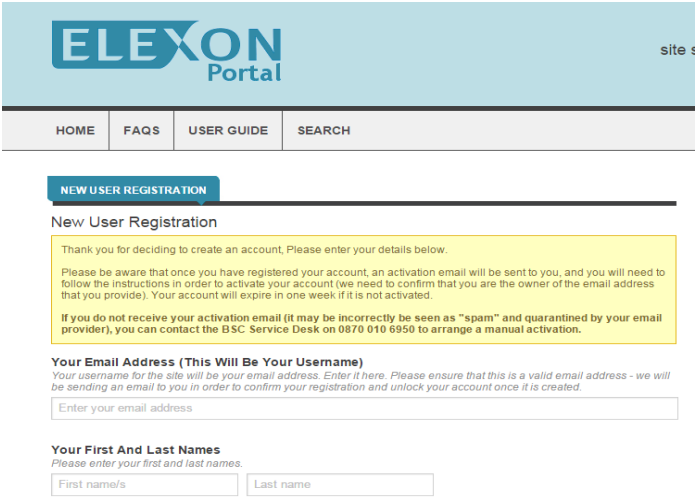


Figure 3: Portal registration screen

Once you have entered all the details, you will be asked to activate the account. A link and an activation code will be sent to the email address you used during the registration process.

# BMRS API AND DATA PUSH USER GUIDE

## 3 The API Key

The API key has three primary functions:

- Identify the program calling the API;
- Serves as authentication code; and
- Monitor and control usage for overall service protection.

Once you have registered, you will have access to a range of content available on the ELEXON Portal. To get your API Key, click on 'my profile' below and you will find the API key under scripting key.

Note: The key shown below is for illustration purposes and is not a valid key.

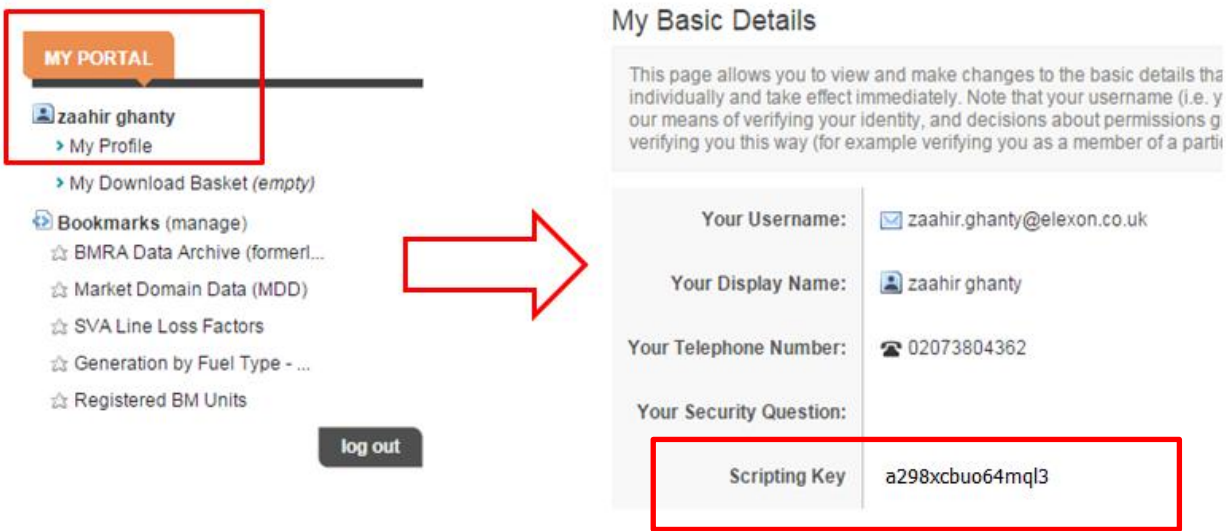


Figure 4: Retrieving API Key

Note: The API Key will also serve as authentication for the Data Push Service

# BMRS API AND DATA PUSH USER GUIDE

## ACCESSING THE API

### 4 Data available through APIs

This section of the document details the API design to enable the user to retrieve data from BMRS. In particular highlights the following:

- API Uniform resource locator (URL)
- The search parameters which will be passed as input parameters in the API URLs
- Expected format for returned results

#### 4.1 API Design and Key Features

A sample URL is shown below. As this document is still in draft stages, the different entities, such as the host address, port number will be subject to change. The final version of this document will provide the definitive view.

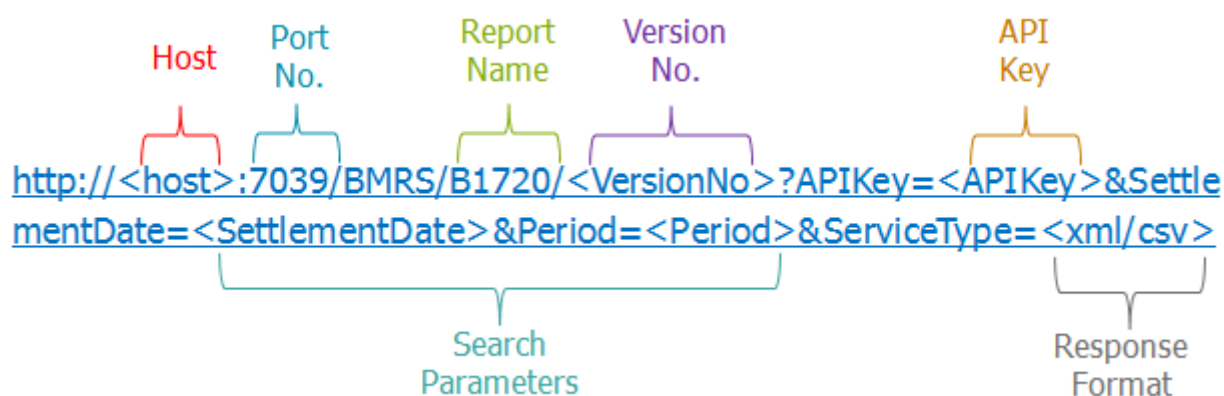


Figure 5: API URL example

- **Host address:** This is the first portion of the URL, and identifies the internet address of the BMRS;
- **Port Number:** The communications endpoint for the API;
- **Report name:** The unique identifier for the report generated by the API;
- **Version number:** The version of the API being called;
- **API Key:** The unique authentication code granted to the users via the [ELEXON Portal](#), giving them rights and permissions to use the API;
- **Search Parameters:** Parameters available to filter the reports, such as Settlement Date and Settlement Period; and
- **Response format:** The file format by which the API will return data, either CSV or XML (with XML being the default).

Once the URL is submitted, the API returns the data in the format requested, ready for use in any further processes.

# BMRS API AND DATA PUSH USER GUIDE

## Details of API components

**For the API, you will use the following:**

- HOST: <https://api.bmreports.com>
- PORT: 443. (Do not need to specify, as this is the default port for HTTPS)
- REPORT NAME: Already included in the API flow details
- VERSION NUMBER: v1 or V1 (case insensitive)
- API Key: Your API Key from ELEXON Portal

**Note:** For BMRS test environment the HOST will be <https://testapi.bmreports.com>

**Service Desk Support:** [bscservicedesk@cgi.com](mailto:bscservicedesk@cgi.com)

## 4.2 Summary of Data Available through REST API

### 4.2.1 BMRS Transparency & REMIT Data (Phase 1) from RESTful API

Through the API, you can retrieve data relating to REMIT (P291) and Transparency Regulations (P295). The list of flows available is listed below and detailed in section 5. All the BMRS Transparency and REMIT data are available in REST API and from July 2015, on the Data Push Service.

P295 - Transparency Data Items from NGC	NGC BRD Ref.	Regulation Ref.	Source	Frequency of Receipt (by BMRS)	Phase (Delivery Date)
Actual Total Load Per Bidding Zone	B0610	A6.1a	NGC - EFS	Half Hourly	Phase 1 (December 2014)
Day-Ahead Total Load Forecast Per Bidding Zone	B0620	A6.1b	NGC - EFS	Daily	Phase 1 (December 2014)
Week-Ahead Total Load Forecast Per Bidding Zone	B0630	A6.1c	NGC - EFS	Weekly	Phase 1 (December 2014)
Month-Ahead Total Load Forecast Per Bidding Zone	B0640	A6.1d	NGC - EFS	Monthly	Phase 1 (December 2014)

## BMRS API AND DATA PUSH USER GUIDE

P295 - Transparency Data Items from NGC	NGC BRD Ref.	Regulation Ref.	Source	Frequency of Receipt (by BMRS)	Phase (Delivery Date)
Year-Ahead Total Load Forecast Per Bidding Zone	B0650	A6.1e	NGC - EFS	Yearly	Phase 1 (December 2014)
Planned Unavailability Of Consumption Units	B0710	A7.1a	NGC - MODIS	Ad-hoc	Phase 1 (December 2014)
Changes In Actual Availability Of Consumption Units	B0720	A7.1b	NGC - MODIS	Ad-hoc	Phase 1 (December 2014)
Year-Ahead Forecast Margin	B0810	A8.1	NGC – MODIS (Manual)	Yearly	Phase 1 (December 2014)
Expansion and Dismantling Projects	B0910	A9.1	NGC – MODIS (Manual)	Yearly	Phase 1 (December 2014)
Planned Unavailability In The Transmission Grid	B1010	A10.1a	NGC – MODIS (Manual)	Ad-hoc	Phase 1 (December 2014)
Changes In Actual Availability In The Transmission Grid	B1020	A10.1b	NGC – MODIS (Manual)	Ad-hoc	Phase 1 (December 2014)
Changes In Actual Availability Of Off-Shore Grid Infrastructure	B1030	A10.1c	NGC – MODIS	Ad-hoc	Phase 1 (December 2014)
Countertrading	B1320	A13.1b	NGC – MODIS	Half Hourly	Phase 1 (December 2014)
Costs Of Congestion Management	B1330	A13.1c	NGC – MODIS	Monthly	Phase 1 (December 2014)
Installed Generation Capacity Aggregated	B1410	A14.1a	NGC – MODIS (Manual)	Yearly	Phase 1 (December 2014)
Day-Ahead Aggregated Generation	B1430	A14.1c	NGC - EFS	Daily	Phase 1 (December 2014)
Day-Ahead Generation forecasts For Wind And Solar	B1440	A14.1d	NGC - EFS	Daily	Phase 1 (December 2014)

## BMRS API AND DATA PUSH USER GUIDE

P295 - Transparency Data Items from NGC	NGC BRD Ref.	Regulation Ref.	Source	Frequency of Receipt (by BMRS)	Phase (Delivery Date)
Actual Aggregated Generation Per Type	B1620	A16.1b	NGC - EFS	Half Hourly	Phase 1 (December 2014)
Actual Or Estimated Wind And Solar Power Generation	B1630	A16.1c	NGC - EFS	Half Hourly	Phase 1 (December 2014)
Planned Unavailability Of Generation Units	B1510	A15.1a	NGC – MODIS	Ad-hoc	Phase 1 (December 2014)
Changes In Actual Availability Of Generation Units	B1520	A15.1b	NGC – MODIS	Ad-hoc	Phase 1 (December 2014)
Planned Unavailability Of Production Units	B1530	A15.1c	NGC – MODIS	Ad-hoc	Phase 1 (December 2014)
Changes In Actual Availability Of Production Units	B1540	A15.1d	NGC – MODIS	Ad-hoc	Phase 1 (December 2014)
Amount Of Balancing Reserves Under Contract	B1720	A17.1b	NGC – MODIS (Manual)	Half Hourly	Phase 1 (December 2014)
Prices Of Procured Balancing Reserves	B1730	A17.1c	NGC – MODIS (Manual)	Half Hourly	Phase 1 (December 2014)
Accepted Aggregated Offers	B1740	A17.1d	NGC – MODIS	Half Hourly	Phase 1 (December 2014)
Activated Balancing Energy	B1750	A17.1e	NGC – MODIS	Half Hourly	Phase 1 (December 2014)
Prices Of Activated Balancing Energy	B1760	A17.1f	NGC – MODIS	Half Hourly	Phase 1 (December 2014)
Financial Expenses And Income For Balancing	B1790	A17.1i	NGC – MODIS (Manual)	Monthly	Phase 1 (December 2014)
Cross Border Balancing – Volumes Of Exchanged Bids and Offers	B1810	A17.1ja	NGC – MODIS	Half Hourly	Phase 1 (December 2014)

## BMRS API AND DATA PUSH USER GUIDE

P295 - Transparency Data Items from NGC	NGC BRD Ref.	Regulation Ref.	Source	Frequency of Receipt (by BMRS)	Phase (Delivery Date)
Cross Border Balancing – Prices	B1820	A17.1jb	NGC – MODIS	Half Hourly	Phase 1 (December 2014)
Cross Border Balancing –Energy Activated	B1830	A17.1jc	NGC – MODIS	Half Hourly	Phase 1 (December 2014)
Configuration Flow	B1930	NA	NGC – MODIS	Ad-hoc	Phase 1 (December 2014)
Actual Generation Output Per Generation Unit	B1610	A16.1a	Legacy BMRS/SAA	Half Hourly	Phase 1 (December 2014)
Imbalance Prices	B1770	A17.1g	Legacy	Half Hourly	Phase 1
Aggregated Imbalance Volumes	B1780	A17.1h	Legacy BMRS/SAA	Half Hourly	Phase 1 (December 2014)
P291 REMIT Urgent Market Messages	NA	NA	ELEXON Portal, NGC	Ad-hoc	Phase 1 (December 2014)

### 4.2.2 Existing BMRS Data (Phase 2 & 3) from RESTful API

From July 2015, you will be able to use the REST API to retrieve data. Below is a table of which of the Existing BMRS data is available via the REST API. The list of data available for the data push can be found in section 6.

RESTful API#	RESTful API Data Set	Data Items Covered	IDD Item Ref (Input) traceability	Phase and Delivery Date
RA-1001	Forecast Day and Day Ahead Demand Data (National & Zonal)	As below	As below	<b>Phase 2 (July 2015)</b>
		National Day and Day-Ahead National Demand Forecast	NDF	
		Day and Day-Ahead Indicated Demand	INDEM	
		Day and Day-Ahead Indicated Generation	INDGEN	
		Day and Day-Ahead Transmission System Demand Forecast	TSDF	



## BMRS API AND DATA PUSH USER GUIDE

RA-1002	Forecast Day and Day Ahead Margin and Imbalance Data	As below	As below	Phase 2 (July 2015)
		Day and Day-Ahead Margin	MELNGC	
		Day and Day-Ahead Imbalance	IMBALNGC	
RA-1003	Demand & Surplus Forecast Data (2-14 days ahead)		As below	
		Demand & Surplus Forecast Data (2-14 days ahead) National Demand	NDFD	Phase 2 (July 2015)
		Demand & Surplus Forecast Data (2-14 days ahead) Surplus	OCNMFD	
		Demand & Surplus Forecast Data (2-14 days ahead) Transmission System Demand	TSDFD	
		Demand & Surplus Forecast Data (2-14 days ahead) Generating Plant Demand Margin	OCNMFD2	
RA-1004	Demand & Surplus Forecast Data (2-52 weeks ahead)	As below	As below	
		Demand & Surplus Forecast Data (2-52 weeks ahead) National Demand	NDFW	Phase 2 (July 2015)
		Demand & Surplus Forecast Data (2-52 weeks ahead) Transmission System Demand	TSDFW	
		Demand & Surplus Forecast Data (2-52 weeks ahead) Surplus	OCNMFW	
		Demand & Surplus Forecast Data (2-52 weeks ahead) Generating Plant Demand Margin	OCNMFW2	
RA-1005	National Output Usable (2-14 days ahead)	National Output Usable (2-14 days ahead)	NOU2T14D	Phase 2 (July 2015)
RA-1006	National Output Usable (2-49 days ahead)	National Output Usable (2-49 days ahead)	NOU2T49D	Not currently received from National Grid
RA-1007	National Output Usable (2-52 weeks ahead)	National Output Usable (2-52 weeks ahead)	NOU2T52W	Phase 2 (July 2015)

## BMRS API AND DATA PUSH USER GUIDE

RA-1008	National Output Usable (1 year ahead)	National Output Usable (1 year ahead)	NOUY1	Phase 2 (July 2015)
RA-1009	National Output Usable (2 year ahead)	National Output Usable (2 year ahead)	NOUY2	Phase 2 (July 2015)
RA-1010	National Output Usable (3 year ahead)	National Output Usable (3 year ahead)	NOUY3	Phase 2 (July 2015)
RA-1011	National Output Usable (4 year ahead)	National Output Usable (4 year ahead)	NOUY4	Phase 2 (July 2015)
RA-1012	National Output Usable (5 year ahead)	National Output Usable (5 year ahead)	NOUY5	Phase 2 (July 2015)
RA-1013	Zonal Output Usable (2-14 days ahead)	Zonal Output Usable (2-14 days ahead)	ZOU2T14D	Phase 2 (July 2015)
RA-1014	Zonal Output Usable (2-49 days ahead)	Zonal Output Usable (2-49 days ahead)	ZOU2T49D	Not currently received from National Grid
RA-1015	Zonal Output Usable (2-52 weeks ahead)	Zonal Output Usable (2-52 weeks ahead)	ZOU2T52W	Phase 2 (July 2015)
RA-1016	Zonal Output Usable (1 year ahead)	Zonal Output Usable (1 year ahead)	ZOUY1	Phase 2 (July 2015)
RA-1017	Zonal Output Usable (2 year ahead)	Zonal Output Usable (2 year ahead)	ZOUY2	Phase 2 (July 2015)
RA-1018	Zonal Output Usable (3 year ahead)	Zonal Output Usable (3 year ahead)	ZOUY3	Phase 2 (July 2015)
RA-1019	Zonal Output Usable (4 year ahead)	Zonal Output Usable (4 year ahead)	ZOUY4	Phase 2 (July 2015)
RA-1020	Zonal Output Usable (5 year ahead)	Zonal Output Usable (5 year ahead)	ZOUY5	Phase 2 (July 2015)
RA-1021	National Output Usable by Fuel Type (2-14 days ahead)	National Output Usable by Fuel Type (2-14 days ahead)	FOU2T14D	Phase 2 (July 2015)

## BMRS API AND DATA PUSH USER GUIDE

RA-1022	National Output Usable by Fuel Type and BM Unit (2-14 days ahead)	National Output Usable by Fuel Type and BM Unit (2-14 days ahead)	UOU2T14D	Phase 2 (July 2015)
RA-1023	National Output Usable by Fuel Type (2-52 weeks ahead)	National Output Usable by Fuel Type (2-52 weeks ahead)	FOU2T52W	Phase 2 (July 2015)
RA-1024	National Output Usable by Fuel Type and BM Unit (2-52 weeks ahead)	National Output Usable by Fuel Type and BM Unit (2-52 weeks ahead)	UOU2T52W	Phase 2 (July 2015)
RA-1025	Initial Demand Outturn	As below	As below	Phase 2 (July 2015)
		Initial Demand Outturn	INDO	
		Initial Transmission System Demand Outturn	ITSDO	
RA-1026	Peak Demand	Peak Demand	TSDF, ITSDO	Phase 3 (October 2016)
RA-1027	Indicative Peak Demand Information(using Operational Metering Data)	Indicative Peak Demand Information(using Operational Metering Data)		Phase 3 (October 2016)
RA-1028	System Demand	System Demand	TSDF, ITSDO	Phase 3 (October 2016)
RA-1029	Indicative Triad Demand Information(using Settlement Metering Data)	Indicative Triad Demand Information(using Settlement Metering Data)	TSDFW/ S0142	Phase 3 (October 2016)
RA-1030	Gate Closure Data / BM Unit Physical Data	As below	As below	Phase 3 (October 2016)
		FPN Data	PN,FPN	
		QPN Data	QPN	
		Maximum Export Level Data	MEL, MELS	
		Maximum Import Level Data	MIL, MILS	

## BMRS API AND DATA PUSH USER GUIDE

		Bid-Offer Acceptance Level Flagged Data (post P217)	BOALF	
RA-1031	Dynamic Data	As below	As below	
		Run Up Rate Export	RURE	
		Run Down Rate Export	RDRE	
		Run Up Rate Import	RURI	
		Run Down Rate Import	RDRI	
		Notice to Deviate from Zero	NDZ	
		Notice to Deliver Bids	NTB	<b>Phase 3 (October 2016)</b>
		Notice to Deliver Offers	NTO	
		Minimum Zero Time	MZT	
		Minimum Non-Zero Time	MNZT	
		Stable Export Limit	SEL	
		Stable Import Limit	SIL	
		Maximum Delivery Volume	MDV	
		Maximum Delivery Period	MDP	
RA-1032	Bid-Offer Level Data	Bid-Offer Level Data	BOD	<b>Phase 2 (July 2015)</b>
RA-1033	Derived BM Unit Data	As below	As below	
		Bid Acceptance Volumes	Phase 3	<b>Phase 3 (October 2016)</b>
		Offer Acceptance Volumes	Phase 3	
		Indicative Period Bid Acceptance Volumes	IQAB	
		Indicative Period Offer Acceptance Volumes	IQAO	

## BMRS API AND DATA PUSH USER GUIDE

		Indicative Period Bid Cashflow	ICB	
		Indicative Period Offer Cashflow	ICO	
RA-1034	Market Imbalance	Market Imbalance	Phase 3	Phase 3 (October 2016)
RA-1035	Derived System-wide Data	System Buy/Sell Prices (yesterday, today, historic)	SBP, SSP	Phase 3 (October 2016)
RA-1036	System Prices – Detailed Reporting	System Prices – Detailed Reporting	various	Phase 3 (October 2016)
RA-1037	Market Depth Data	Market Depth Data (Historic, Current)	various	Phase 3 (October 2016)
RA-1038	Latest Acceptances	Latest Acceptance Data	various	Phase 3 (October 2016)
RA-1039	Historic Acceptances	Historic Acceptance Data	various	Phase 3 (October 2016)
	Balancing Services Adjustment Action Data	As below	As below	Phase 2 (July 2015)
RA-1040a		Balancing Services Adjustment Action Data	NETBSAD	
RA-1040b		Balancing Services Adjustment Action Data	DISBSAD	
RA-1041	Market Index Data	Market Index Data	MID	Phase 2 (July 2015)
RA-1042	Applicable Balancing Services Volume Data	Applicable Balancing Services Volume Data	QAS	
RA-1043	Credit Default Notice Data	Credit Default Notice Data	CDN	Phase 2 (July 2015)
RA-1044	Temperature Data	Temperature Data	TEMP, REFTMP	Phase 2 (July 2015)

## BMRS API AND DATA PUSH USER GUIDE

RA-1045	Wind Generation Forecast and Outturn Data	Wind Generation Forecast and Outturn Data	WINDFOR, FUELHH	Phase 2 (July 2015)
RA-1046	Peak Wind Generation Forecast	Peak Wind Generation Forecast	WINDFOR	Phase 2 (July 2015)
RA-1047	Instantaneous Generation By Fuel Type	Instantaneous Generation By Fuel Type	FUELINST	Phase 2 (July 2015)
RA-1048	Half Hourly Outturn Generation By Fuel Type	Half Hourly Outturn Generation By Fuel Type	FUELHH	Phase 2 (July 2015)
RA-1049	Generation By Fuel Type (Current)	Generation By Fuel Type (Current)	FUELINST, FUELHH	Phase 2 (July 2015)
RA-1050	Rolling System Demands (Current / Historic)	Rolling System Demands (Current / Historic)	FUELINST	Phase 2 (July 2015)
RA-1052	Half Hourly Interconnector Outturn Generation	Half Hourly Interconnector Outturn Generation	FUELHH	Phase 2 (July 2015)
RA-1053	Daily Energy Volume Data	Daily Energy Volume Data	INDOD, DEV Ref	Phase 2 (July 2015)
RA-1054	Non-BM STOR Instructed Volume Data	Non-BM STOR Instructed Volume Data	NONBM	Phase 2 (July 2015)
RA-1055	System Frequency	System Frequency	FREQ	Phase 2 (July 2015)
RA-1056	Indicative System Price Stack Data	As below	ISPSTACK	Phase 3 (October 2016)
	(same as System prices - detailed reporting)	Indicative System Price Bid Stack Data	ISBP	
		Indicative System Price Offer Stack Data	ISSP	
RA-1057	SO-SO Prices	SO-SO Prices (Yesterday / Today / Historic)	SO-SO	Phase 2 (July 2015)
RA-1058	SO-SO Trades	SO-SO Trades		Phase 2 (July 2015)
RA-1059	System Messages	System Messages	SYMSG	Phase 3 (October 2016)

## BMRS API AND DATA PUSH USER GUIDE

---

				2016)
RA-1060	System Warnings	System Warnings	SYSWARN	Phase 2 (July 2015)
RA-1061	BM Unit Information	BM Unit Information	Various	Phase 3 (October 2016)
RA-1062	System Warnings (Electricity summary Page)	(Derivations for Electricity summary Page)	SYSWARN	Phase 3 (October 2016)

# BMRS API AND DATA PUSH USER GUIDE

## 5 BMRS API Details

### 5.1 Transparency Data and REMIT (Phase 1 APIs)

#### 5.1.1 B1720 –Amount of Balancing Reserves Under Contract

API service details for the flow B1720 is as follows

<b>Service Name</b>	AmountOfBalancingReservesUnderContractService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1720/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1720/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

#### API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Market Agreement Type	String		No	NA	Monthly
Power System Resource Type	String		No	NA	Generation
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Quantity	String		No		200
Document Type	String		No		System total load
Doc Status	String		No		Intermediate
Process Type	String		No		Realised
Resolution	String		No		PT30M
Curve Type	String		No		Point
Active Flag	String		No		Y



# BMRS API AND DATA PUSH USER GUIDE

Document Id	String		No		NGET-EMFIP-ATL-401
Document RevNum	String		No		1

## 5.1.2 B1730 – Prices Of Procured Balancing Reserves

**API service details for the flow B1730 is as follows**

<b>Service Name</b>	PricesOfProcuredBalancingReservesService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1730/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1730/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	<p>1. All the fields are Varchar data type at Database; hence we have assumed the field type has String.</p> <p>2. Default sorting will be used by the application to sort the retrieve data.</p> <p>Default Sorting: Time Series ID (Descending)</p>

**API Web service – Request and Response format details:**

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Market Agreement Type	String		No	NA	Monthly
Power System Resource Type	String		No	NA	Generation
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Procurement Price Amount	String		No		661237.297
Price Category	String		No	NA	Excess Balance
Document Type	String		No		System total load
Doc Status	String		No		Intermediate
Process Type	String		No		Realised
Resolution	String		No		PT30M
Curve Type	String		No		Point

## BMRS API AND DATA PUSH USER GUIDE

---

Active Flag	String		No		Y
Document Id	String		No		NGET-EMFIP-ATL-401
Unit Of Currency	String		No		GBP
Document RevNum	String		No		1

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.3 B1740 – Accepted Aggregated Offers

API service details for the flow B1740 is as follows

<b>Service Name</b>	AcceptedAggregatedOffersService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1740/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1740/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes		AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No		csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Power System Resource Type	String		No	NA	Load
Flow Direction	String		No	NA	Up
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Quantity	String		No		50
Secondary Quantity (MAW)	String		No		50
Document Type	String		No		System total load
Doc Status	String		No		Intermediate
Process Type	String		No		Realised
Resolution	String		No		PT30M
Curve Type	String		No		Point
Active Flag	String		No		Y
Document Id	String		No		NGET-EMFIP-ATL-401
Document RevNum	String		No		1

## 5.1.4 B1750 – Activated Balancing Energy

# BMRS API AND DATA PUSH USER GUIDE

API service details for the flow B1750 is as follows

<b>Service Name</b>	ActivatedBalancingEnergyService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1750/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1750/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Power System Resource Type	String		No	NA	Load
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Activation Quantity	String		No		50
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.5 B1760 – Prices Of Activated Balancing Energy

API service details for the flow B1760 is as follows

## BMRS API AND DATA PUSH USER GUIDE

<b>Service Name</b>	PricesOfActivatedBalancingEnergyService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1760/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1760/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Power System Resource Type	String		No	NA	Load
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Activation Price Amount	String		No		661237.297
Price Category	String		No	NA	Excess Balance
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.6 B1770 – Imbalance Prices

API service details for the flow B1770 is as follows

<b>Service Name</b>	ImbalancePricesService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1770/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1770/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	Int		No	*/1-50	1
Imbalance Price Amount	String		No		661237.297
Price Category	String		No	NA	Excess Balance
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.7 B1780 – Aggregated Imbalance Volumes

API service details for the flow B1780 is as follows

<b>Service Name</b>	AggregatedImbalanceVolumesService
---------------------	-----------------------------------

# BMRS API AND DATA PUSH USER GUIDE

<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1780/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1780/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

## API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Balance Energy Deviation
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Imbalance Quantity	String		No		661237.297
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.8 B1790 – Financial Expenses and Income For Balancing

### API service details for the flow B1790 is as follows

<b>Service Name</b>	financialExpensesAndIncomeForBalService
<b>Method</b>	GET
<b>Input URL</b>	<a href="http://&lt;host&gt;:&lt;port&gt;/BMRS/B1790/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">http://&lt;host&gt;:&lt;port&gt;/BMRS/B1790/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV

# BMRS API AND DATA PUSH USER GUIDE

<b>Comments</b>	1. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Month (Descending)
-----------------	----------------------------------------------------------------------------------------------------------------------

API Web service – Request and Response format details:

API Web service – Request					
Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2014
Month	String		Yes	MMM	MAR
ServiceType	String		No	NA	csv/xml/CSV/XML
API Web service – Response					
Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Financial situation
Year	int		No	YYYY	2014
Month	String		No	MMM	MAR
Financial Price Amount	String		No		661237.297
Price Direction	String		No	NA	Expenditure
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Unit Of Currency	String		No	NA	GBP
Document RevNum	String		No	NA	1

## 5.1.9 B1810 – CrossBorder Balancing Volumes of Exchanged Bids and Offers

API service details for the flow B1810 is as follows

<b>Service Name</b>	CrossBorderBalancingVolumesOfExchangedBidsandOffersService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1810/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1810/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV



# BMRS API AND DATA PUSH USER GUIDE

## Comments

1. All the fields are Varchar data type at Database; hence we have assumed the field type has String.
  2. Default sorting will be used by the application to sort the retrieve data.
- Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Acquiring Domain	String		No	NA	A01=EIC Code
Connecting Domain	String		No	NA	A01=EIC Code
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Quantity	String		No		121212.5
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.10 B1820 – CrossBorder Balancing Prices

API service details for the flow B01820 is as follows

<b>Service Name</b>	CrossBorderBalancingPricesService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1820/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1820/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Acquiring Domain	String		No	NA	A01=EIC Code
Connecting Domain	String		No	NA	A01=EIC Code
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Min Price Amount	String		No		1000
Max Price Amount	String		No		999999
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.11 B1830 – Crossborder Balancing Energy Activated

API service details for the flow B01830 is as follows

<b>Service Name</b>	CrossBorderBalancingEnergyActivatedService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1830/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1830/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Control Area	String		No	NA	London
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Business Type	String		No	NA	Frequency Containment Reserve
Acquiring Domain	String		No	NA	A01=EIC Code
Connecting Domain	String		No	NA	A01=EIC Code
Flow Direction	String		No	NA	Stable
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Secondary Quantity	String		No		1012112
Document Type	String		No	NA	System total load
Doc Status	String		No	NA	Intermediate
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.12 B0610 – Actual Total Load per Bidding Zone

# BMRS API AND DATA PUSH USER GUIDE

API service details for the flow B0610 is as follows

<b>Service Name</b>	ActualTotalLoadPerBiddingZoneService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0610/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0610/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	101
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Quantity	String		No		200
Document Type	String		No	NA	System total load
Business Type	String		No	NA	Consumption
Process Type	String		No	NA	Realised
Object Aggregation	String		No	NA	Area
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1
Secondary Quantity (MAW)	String		No		50

## 5.1.13 B0620 – Day-Ahead Total Load Forecast per Bidding Zone

# BMRS API AND DATA PUSH USER GUIDE

API service details for the flow B0620 is as follows

<b>Service Name</b>	DayAheadTotalLoadForecastPerBiddingZoneService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0620/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0620/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Quantity	String		No		200
Document Type	String		No	NA	System total load
Business Type	String		No	NA	Consumption
Process Type	String		No	NA	Realised
Object Aggregation	String		No	NA	Area
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1
Secondary Quantity (MAW)	String		No		50

## 5.1.14 B0630 – Week-Ahead Total Load Forecast per Bidding Zone

API service details for the flow B0630 is as follows

<b>Service Name</b>	WeekAheadTotalLoadForecastPerBiddingZoneService
<b>Method</b>	GET

# BMRS API AND DATA PUSH USER GUIDE

<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0630/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Week=&lt;Week&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0630/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Week=&lt;Week&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending), Date (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2014
Week	String		Yes	ww(01-52)	22
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Consumption
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Date	Date		No	YYYY-MM-DD	07/05/2014
Quantity (MAW)	String		No		200
Week	int		No	NA	13
Secondary Quantity (MAW)	String		No		50
Document Type	String		No	NA	System total load
Year	int		No	NA	2014
Process Type	String		No	NA	Realised
Object Aggregation	String		No	NA	Area
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document RevNum	String		No	NA	2
Document Id	String		No	NA	NGET-EMFIP-ATL-401

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.15 B0640 – Month-Ahead Total Load Forecast Per Bidding Zone

API service details for the flow B0640 is as follows

<b>Service Name</b>	monthAheadTotLoadForecastPerBiddingZoneService
<b>Method</b>	GET
<b>Input URL</b>	<a href="http://&lt;host&gt;:&lt;port&gt;/BMRS/B0640/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">http://&lt;host&gt;:&lt;port&gt;/BMRS/B0640/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Week Commencing (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2014
Month	String		Yes	MMM	MAR
Service Type	String		No	NA	csv/xml/CSV/XML
API Web service – Response					
Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Consumption
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No		200
Secondary Quantity (MAW)	String		No		50
Year	int		No	YYYY	2014
Month	String		No	MMM	MAR
Week Commencing (YYYY-MM-DD)	Date		No	YYYY-MM-DD	2014-01-25
Document Type	String		No	NA	System total load
Document RevNum	String		No	NA	2
Process Type	String		No	NA	Realised
Object Aggregation	String		No	NA	Area
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401

<b>Service Name</b>	MonthAheadTotalLoadForecastPerBiddingZoneService
<b>Method</b>	GET

# BMRS API AND DATA PUSH USER GUIDE

<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0640/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0640/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending), Week Commencing (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2014
Month	String		Yes	MM(01-12)	4
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Consumption
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No		200
Secondary Quantity (MAW)	String		No		50
Year	int		No	YYYY	2014
Month	String		No	MM(01-12)	4
Week Commencing (YYYY-MM-DD)	Date		No	YYYY-MM-DD	2014-01-25
Document Type	String		No	NA	System total load
Document RevNum	String		No	NA	2
Process Type	String		No	NA	Realised
Object Aggregation	String		No	NA	Area
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401

## 5.1.16 B0650 – Year Ahead Total Load Forecast per Bidding Zone

API service details for the flow B0650 is as follows

<b>Service Name</b>	YearAheadTotalLoadForecastPerBiddingZoneService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0650/&lt;VersionNo&gt;? APIKey =&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0650/&lt;VersionNo&gt;? APIKey =&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV



# BMRS API AND DATA PUSH USER GUIDE

<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Week (Descending)
-----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2013
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Consumption
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No	NA	200
Secondary Quantity (MAW)	String		No		50
Year	int		No	YYYY	2013
Week	int		No		52
Document Type	String		No	NA	System total load
Month Name	String		No	NA	
Process Type	String		No	NA	Realised
Object Aggregation	String		No	NA	Area
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.17 B0810 – Year Ahead Forecast Margin

API service details for the flow B0810 is as follows

<b>Service Name</b>	YearAheadForecastMarginService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0810/&lt;VersionNo&gt;? APIKey =&lt; APIKey &gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0810/&lt;VersionNo&gt;? APIKey =&lt; APIKey &gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

# BMRS API AND DATA PUSH USER GUIDE

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2014
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Consumption
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No		200
Secondary Quantity (MAW)	String		No		50
Year	int		No	YYYY	2014
Document Type	String		No	NA	System total load
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Unit of Measure	String		No	NA	Mega watt
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.18 B1410 – Installed Generation Capacity Aggregated

API service details for the flow B1410 is as follows

<b>Service Name</b>	InstalledGenerationCapacityAggregatedService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1410/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1410/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23

# BMRS API AND DATA PUSH USER GUIDE

Year	String		Yes	YYYY	2014
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	double		No		200
Year	int		No	YYYY	2014
Power System Resource Type	String		No	NA	Generation
Document Type	String		No	NA	System total load
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
BusinessType	String		No	NA	Consumption
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.19 B1420 – Installed Generation Capacity per Unit

API service details for the flow B1420 is as follows

<b>Service Name</b>	InstalledGenerationCapacityPerUnitService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1420/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1420/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	2014
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Power System Resource Type	String		No	NA	Generation
Year	int		No	YYYY	2014

## BMRS API AND DATA PUSH USER GUIDE

BM UNIT ID	String		No	NA	100
Registered Resource EIC Code	String		No	NA	10T-AL-GN-000112
Voltage limit	String		No		100
NGC BM UNIT ID	String		No	NA	200
Registered Resource Name	String		No	NA	BAGE-2
Document Type	String		No	NA	System total load
Business Type	String		No	NA	Consumption
Process Type	String		No	NA	Realised
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Nominal	String		No	NA	153.2
Implementation Date	String		No	NA	2014-12-20

### 5.1.20 B1430 – Day-Ahead Aggregated Generation

API service details for the flow B1430 is as follows

<b>Service Name</b>	DayAheadAggregatedGenerationService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1430/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1430/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No		200
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1

## BMRS API AND DATA PUSH USER GUIDE

---

Document Type	String		No	NA	System total load
Business Type	String		No	NA	Consumption
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## BMRS API AND DATA PUSH USER GUIDE

### 5.1.21 B1440 – Day-Ahead Generation forecasts for Wind and Solar

API service details for the flow B1440 is as follows

<b>Service Name</b>	DayAheadGenerationforecastsForWindAndSolarService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1440/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1440/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	double		No		200
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No		1
PSR Type	String		No	NA	Generation
Document Type	String		No	NA	System total load
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

### 5.1.22 B1610 – Actual Generation Output per Generation Unit

API service details for the flow B1610 is as follows

<b>Service Name</b>	ActualGenerationOutputPerGenerationUnitService
<b>Method</b>	GET

# BMRS API AND DATA PUSH USER GUIDE

<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1610/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1610/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No	NA	200
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
PSR Type	String		No	NA	Generation
Registered Resource EIC Code	String		No	NA	EIC2_A0001
Market Generation Unit EIC Code	String		No	NA	NG_Wales-Generation-121
Market Generation BM Unit	String		No	NA	NA
Market Generation NGC BM Unit	String		No	NA	NA
BM Unit ID	String		No	NA	NA
NGC BM Unit ID	String		No	NA	NA
Document Type	String		No	NA	System total load
Business Type	String		No	NA	Consumption
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.23 B1620 – Actual Aggregated Generation perType

API service details for the flow B1620 is as follows

<b>Service Name</b>	ActualAggregatedGenerationPerTypeService
---------------------	------------------------------------------

# BMRS API AND DATA PUSH USER GUIDE

<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1620/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1620/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No		200
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
PSR Type	String		No	NA	Generation
Document Type	String		No	NA	System total load
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

## 5.1.24 B1630 – Actual Or Estimated Wind and Solar Power Generation

API service details for the flow B1630 is as follows

<b>Service Name</b>	ActualOrEstimatedWindAndSolarPowerGenerationService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1630/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1630/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV



# BMRS API AND DATA PUSH USER GUIDE

## Comments

1. All the fields are Varchar data type at Database; hence we have assumed the field type has String.
2. Default sorting will be used by the application to sort the retrieve data.

Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	double		No		200
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
PSR Type	String		No	NA	Generation
Document Type	String		No	NA	System total load
Process Type	String		No	NA	Realised
Resolution	String		No	NA	PT30M
Curve Type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	NGET-EMFIP-ATL-401
Document RevNum	String		No	NA	1

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.25 B0910 – Expansion and Dismantling Projects

API service details for the flow B0910 is as follows

<b>Service Name</b>	ExpansionandDismantlingProjectsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0910/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0910/&lt;VersionNo&gt;? APIKey =&lt; APIKey&gt;&amp;Year=&lt;Year&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	Int	-	Yes	YYYY	2014
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity	String		No		200
Asset Type	String		No	NA	Line
Reason Code	String		No	NA	Complementary Information
Reason Description	String		No	NA	Infrastructure End of Life
Location	String		No	NA	London
End Date	Date		No	NA	2014-12-31
BM UNIT Id	String		No	NA	NA
NGC BM Unit id	String		No	NA	NA
MRID(ASSET_EIC_CDE)	String		No	NA	mRID.12345678
Doc Status	String		No	NA	Intermediate
Document Type	String		No	NA	Interconnection network expansion
Process Type	String		No	NA	Network information
Unit of Measure	String		No	NA	Meega Watt
resolution	String		No	NA	P1Y
Curve type	String		No	NA	Point
Active Flag	String		No	NA	Y
Document Id	String		No	NA	DEVUT-NGET-EMFIP-RST

# BMRS API AND DATA PUSH USER GUIDE

Document Rev Num	String		No	NA	12
Year	int		No	NA	2014

## 5.1.26 B1320 – Congestion Management Measures Countertrading

**API service details for the flow B1320 is as follows**

<b>Service Name</b>	CongestionManagementMeasuresCountertradingService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1320/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1320/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Settlement Date	String		Yes	YYYY-MM-DD	2014-12-31
Period	String		Yes	*/1-50	1
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Quantity(MAW)	String		No		200
Settlement Date	Date		No	YYYY-MM-DD	2014-12-31
Settlement Period	int		No	*/1-50	1
Reason Code	String		No	NA	Complementary Information
Reason Description	String		No	NA	Infrastructure End of Life
Flow Direction	String		No	NA	up
Document Type	String		No	NA	Counter trade notice
Process Type	String		No	NA	Realised
Doc Status	String		No	NA	Intermediate
resolution	String		No	NA	PT30M
Curve type	String		No	NA	Sequential fixed size block
Active Flag	String		No	NA	N
Document Id	String		No	NA	DEVUT-NGET-EMFIP-RST
Document Rev Num	String		No	NA	2

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.27 B1330 – Congestion Management Measures Costs of Congestion Management

API service details for the flow B1330 is as follows

<b>Service Name</b>	CongestionManagementMeasuresCostsOfCongestionManagementService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1330/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1330/&lt;VersionNo&gt;? APIKey=&lt;APIKey&gt;&amp;Year=&lt;Year&gt;&amp;Month=&lt;Month&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Year	String		Yes	YYYY	1905-07-06
Month	String		Yes	MM	11
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Congestion Price(GBP)	String		No		20012
Year	String		No	YYYY	2014
Month	String		No	MM	Mar
Reason Code	String		No	NA	Complementary Information
Reason Description	String		No	NA	Infrastructure End of Life
Document Type	String		No	NA	Congestion costs
Process Type	String		No	NA	Realised
Doc Status	String		No	NA	Intermediate
resolution	String		No	NA	P1M
business type	String		No	NA	Congestion costs
Active Flag	String		No	NA	N
Document Id	String		No	NA	DEVUT-NGET-EMFIP-Testingxx
Document Rev Num	String		No	NA	8

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.28 B0710 – Planned Unavailability of Consumption Units

API service details for the flow B0710 is as follows

<b>Service Name</b>	PlannedUnavailabilityOfConsumptionUnitsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0710/&lt;VersionNo&gt;?StartDate=&lt;StartDate&gt;&amp;EndTime=&lt;EndTime&gt;&amp;StartTime=&lt;StartTime&gt;&amp;APIKey=&lt;APIKey&gt;&amp;EndDate=&lt;EndDate&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0710/&lt;VersionNo&gt;?StartDate=&lt;StartDate&gt;&amp;EndTime=&lt;EndTime&gt;&amp;StartTime=&lt;StartTime&gt;&amp;APIKey=&lt;APIKey&gt;&amp;EndDate=&lt;EndDate&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Quantity	String		No		200
Reason Code	String		No	NA	shutdown
Reason Description	String		No	NA	shut down for Maintenance
Document Type	String		No	NA	Load unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-PUCU-00001
Document Rev Num	String		No	NA	2
BM UNIT Id	String		No	NA	NA

# BMRS API AND DATA PUSH USER GUIDE

AssestEICCode	String		No	NA	registered.12345
NGC BM Unit id	String		No	NA	NA

## 5.1.29 B0720 – Changes In Actual Availability Of Consumption Units

API service details for the flow B0720 is as follows

<b>Service Name</b>	ChangesInActualAvailabilityOfConsumptionUnitsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B0720/&lt;VersionNo&gt;?StartDate=&lt;StartDate&gt;&amp;EndTime=&lt;EndTime&gt;&amp;StartTime=&lt;StartTime&gt;&amp;APIKey=&lt;APIKey&gt;&amp;EndDate=&lt;EndDate&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B0720/&lt;VersionNo&gt;?StartDate=&lt;StartDate&gt;&amp;EndTime=&lt;EndTime&gt;&amp;StartTime=&lt;StartTime&gt;&amp;APIKey=&lt;APIKey&gt;&amp;EndDate=&lt;EndDate&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
End date	String		Yes	YYYY-MM-DD	2014-12-31
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	shutdown
Reason Description	String		No	NA	shut down for Maintenance
Quantity	String		No		200
Document Type	String		No	NA	Load unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	NA
Active Flag	String		No	NA	N

## BMRS API AND DATA PUSH USER GUIDE

---

Document Id	String		No	NA	NGET-PUCU-00001
Document Rev Num	String		No	NA	2
Assest BM UNIT Id	String		No	NA	NA
AssestEICCode	String		No	NA	registered.12345
NGC BM Unit id	String		No	NA	NA

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.30 B1010 – Planned Unavailability In The Transmission Grid

API service details for the flow B1010 is as follows

<b>Service Name</b>	PlannedUnavailabilityInTheTransmissionGridService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1010/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndTime=&lt;EndTime&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndDate=&lt;EndDate&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1010/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndTime=&lt;EndTime&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndDate=&lt;EndDate&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. All the fields are Varchar data type at Database; hence we have assumed the field type has String.</li> <li>2. Default sorting will be used by the application to sort the retrieve data.</li> </ol> Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	shutdown
Reason Description	String		No	NA	shut down for Maintenance
Asset EIC Code	String		No	NA	EIC_A001
BM Unit Id	String		No	NA	NA
NGC BU Unit ID	String		No	NA	NA
Asset Type	String		No	NA	Line
Name	String		No	NA	NG -Wales_Line-L121
location	String		No	NA	London
Quantity	String		No		200
Document Type	String		No	NA	Transmission unavailability
Process Type	String		No	NA	Outage information



## BMRS API AND DATA PUSH USER GUIDE

Doc Status	String		No	NA	NA
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-PUCU-00001
Document Rev Num	String		No	NA	1

### 5.1.31 B1020 – Changes In Actual Availability In The Transmission Grid

API service details for the flow B1020 is as follows

<b>Service Name</b>	ChangesInActualAvailabilityInTheTransmissionGridService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1020/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1020/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	shutdown
Reason Description	String		No	NA	shut down for Maintenance
Quantity	String		No		200
Asset EIC Code	String		No	NA	EIC_A001
BM Unit Id	String		No	NA	NA
NGC BU Unit ID	String		No	NA	NA

# BMRS API AND DATA PUSH USER GUIDE

Asset Type	String		No	NA	Line
Name	String		No	NA	NG -Wales_Line-L121
location	String		No	NA	London
Document Type	String		No	NA	Transmission unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	NA
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-PUCU-00001
Document Rev Num	String		No	NA	1

## 5.1.32 B1030 – Changes In Actual Availability of OffShore Grid Infrastructure

API service details for the flow B1030 is as follows

<b>Service Name</b>	ChangesInActualAvailabilityOfOffShoreGridInfrastructureService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1030/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1030/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	shutdown

# BMRS API AND DATA PUSH USER GUIDE

Reason Description	String		No	NA	shut down for Maintenance
Quantity	String		No		200
Active Power	String		No		50
Asset EIC Code	String		No	NA	EIC_A001
BM Unit Id	String		No	NA	NA
NGC BU Unit ID	String		No	NA	NA
Name	String		No	NA	NG -Wales_Line-L121
location	String		No	NA	London
Document Type	String		No	NA	Generation unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	NA
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-PUCU-00001
Document Rev Num	String		No	NA	1

## 5.1.33 B1510 – Planned Unavailability of Generation Units

API service details for the flow B1510 is as follows

<b>Service Name</b>	PlannedUnavailabilityOfGenerationUnitsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1510/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1510/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002

## BMRS API AND DATA PUSH USER GUIDE

Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	shutdown
Reason Description	String		No	NA	shutdown for Maintenance
Prod Registered Resource Active power	String		No	NA	500
BM Unit Id	String		No	NA	NA
NGC BU Unit ID	String		No	NA	NA
Quantity	String		No		200
Prod Registered Resource EIC CODE	String		No	NA	10T-AL-WS-00015
Prod Registered Resource PSR name	String		No	NA	NG-Wales-Gen-G121
Prod Registered Resource type	String		No	NA	Generation
Prod Registered Resource location	String		No	NA	London
Document Type	String		No	NA	Production unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	Intermediate
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-AAPU-00001t1
Document Rev Num	String		No	NA	2
PSR EIC Code	String		No	NA	BMUnitEIC
PSR NGC BM Unit ID	String		No	NA	T_COTPS-1
PSR BM Unit ID	String		No	NA	COTPS-1
PSR Name	String		No	NA	BMUnitEIC.name

### 5.1.34 B1520 – Changes In Actual Availability of Generation Units

API service details for the flow B1520 is as follows

<b>Service Name</b>	ChangesInActualAvailabilityOfGenerationUnitsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1520/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1520/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

### API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data

## BMRS API AND DATA PUSH USER GUIDE

APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Quantity(MAW)	String		No	dddd	200
Prod Registered Resource EIC Code	String		No	NA	10T-AL-WS-00015
Prod Registered Resource name	String		No	NA	NG-Wales-Gen-G121
Prod Registered Resource location	String		No	NA	London
Reason Code	String		No	NA	Complementary Information
Reason Description	String		No	NA	Infrastructure End of Life
Prod Registered Resource Active	String		No	NA	50
Prod Registered Resource type	String		No	NA	Generation
Prod Registered PSR EIC Code	String		No	NA	BMUnitEIC1234
Document Type	String		No	NA	Generation unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	Intermediate
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-AAGTYU
Document Rev Num	String		No	NA	2

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.35 B1530 – Planned Unavailability of Production Units

API service details for the flow B1530 is as follows

<b>Service Name</b>	postPlannedUnavailabilityOfProductionUnitsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1530/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1530/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	Complementary Information
Reason Description	String		No	NA	Infrastructure End of Life
Quantity(MAW)	String		No		200
Prod Registered Resource EIC Code	String		No	NA	10T-AL-WS-00015
Prod Registered Resource name	String		No	NA	NG-Wales-Gen-G121
Prod Registered Resource location	String		No	NA	London
Active power	String		No		500
Document Type	String		No	NA	Generation unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	Intermediate

## BMRS API AND DATA PUSH USER GUIDE

Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-AAGTYU
Document Rev Num	String		No	NA	2

### 5.1.36 B1540 – Changes In Actual Availability of Production Units

**API service details for the flow B1540 is as follows**

<b>Service Name</b>	ChangesInActualAvailabilityOfProductionUnitsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/B1540/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/B1540/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;StartDate=&lt;StartDate&gt;&amp;EndDate=&lt;EndDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;EndTime=&lt;EndTime&gt;&amp;ServiceType=&lt;xml/csv&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Comments</b>	1. All the fields are Varchar data type at Database; hence we have assumed the field type has String. 2. Default sorting will be used by the application to sort the retrieve data. Default Sorting: Time Series ID (Descending)

API Web service – Request and Response format details:

API Web service – Request					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
APIKey	String		Yes	NA	AP8DA23
Start date	String		Yes	YYYY-MM-DD	2014-12-31
End date	String		Yes	YYYY-MM-DD	2014-12-31
StartTime	String		Yes	mm:hh:ss ZZ	14:00:00 ZZ
EndTime	String		Yes	mm:hh:ss ZZ	15:00:00 ZZ
Service Type	String		No	NA	csv/xml
API Web service – Response					
Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Business Type	String		No	NA	Solar Generation
Time Series ID	String		No	NA	NGET-EMFIP-ATL-0002
Start Date	Date		No	YYYY-MM-DD	2014-12-31
End Date	Date		No	YYYY-MM-DD	2014-12-31
Start Time	Date		No	mm:hh:ss ZZ	14:00:00 ZZ
End Time	Date		No	mm:hh:ss ZZ	15:00:00 ZZ
Reason Code	String		No	NA	Complementary Information
Reason Description	String		No	NA	Infrastructure End of Life
Quantity(MAW)	String		No		200
Prod Registered Resource EIC Code	String		No	NA	10T-AL-WS-00015
Prod Registered Resource name	String		No	NA	NG-Wales-Gen-G121
Prod Registered Resource location	String		No	NA	London
Active power	String		No		500

## BMRS API AND DATA PUSH USER GUIDE

---

Document Type	String		No	NA	Production unavailability
Process Type	String		No	NA	Outage information
Doc Status	String		No	NA	Intermediate
Active Flag	String		No	NA	N
Document Id	String		No	NA	NGET-AAPU-00001t1
Document Rev Num	String		No	NA	2



# BMRS API AND DATA PUSH USER GUIDE

## 5.1.37 REMIT Flow – Message List Retrieval

API service details for REMIT Message List Retrieval is as follows

<b>Service Name</b>	MessageListRetrievalService
<b>Method</b>	GET
<b>Input URL</b>	<ol style="list-style-type: none"> <li>1. <u>URL with event(EventStart and EventEnd) details mentioned with basic filter:</u>  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?EventEnd=&lt;EventEnd&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;EventStart=&lt;EventStart&gt;&amp;APIKey=&lt;APIKey&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?EventEnd=&lt;EventEnd&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;EventStart=&lt;EventStart&gt;&amp;APIKey=&lt;APIKey&gt;</a> </li> <li>2. <u>URL with publication(PublicationFrom and PublicationTo) details mentioned with basic filter:</u>  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?PublicationTo=&lt;PublicationTo&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;APIKey=&lt;APIKey&gt;&amp;PublicationFrom=&lt;PublicationFrom&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?PublicationTo=&lt;PublicationTo&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;APIKey=&lt;APIKey&gt;&amp;PublicationFrom=&lt;PublicationFrom&gt;</a> </li> <li>3. <u>URL with event(EventStart and EventEnd) details mentioned with advance filter option:</u>  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?AffectedUnitID=&lt;AffectedUnitID&gt;&amp;EventEnd=&lt;EventEnd&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;EventStart=&lt;EventStart&gt;&amp;APIKey=&lt;APIKey&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;MessageID=&lt;MessageID&gt;&amp;EventType=&lt;EventType&gt;&amp;FuelType=&lt;FuelType&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?AffectedUnitID=&lt;AffectedUnitID&gt;&amp;EventEnd=&lt;EventEnd&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;EventStart=&lt;EventStart&gt;&amp;APIKey=&lt;APIKey&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;MessageID=&lt;MessageID&gt;&amp;EventType=&lt;EventType&gt;&amp;FuelType=&lt;FuelType&gt;</a> </li> <li>4. <u>URL with publication(PublicationFrom and PublicationTo) details mentioned with advance filter option:</u>  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?AffectedUnitID=&lt;AffectedUnitID&gt;&amp;PublicationTo=&lt;PublicationTo&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;APIKey=&lt;APIKey&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;PublicationFrom=&lt;PublicationFrom&gt;&amp;MessageID=&lt;MessageID&gt;&amp;EventType=&lt;EventType&gt;&amp;FuelType=&lt;FuelType&gt;&amp;AssetID=&lt;AssetID&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageListRetrieval/&lt;VersionNo&gt;?AffectedUnitID=&lt;AffectedUnitID&gt;&amp;PublicationTo=&lt;PublicationTo&gt;&amp;ServiceType=&lt;xml/csv&gt;&amp;APIKey=&lt;APIKey&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;PublicationFrom=&lt;PublicationFrom&gt;&amp;MessageID=&lt;MessageID&gt;&amp;EventType=&lt;EventType&gt;&amp;FuelType=&lt;FuelType&gt;&amp;AssetID=&lt;AssetID&gt;</a> </li> </ol> <p>Note: Different urls are possible for this service by including optional parameters.</p>
<b>Output Format</b>	XML
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. All active records are fetched on the basis of mandatory parameters EventStart and EventEnd or PublicationFrom and PublicationTo along with the optional parameters(AffectedUnitID, ParticipantId, MessageID, FuelType, EventType,AssetId) for which AND condition will be applied.</li> <li>2. ParticipantId is fetched based on complete or Partial value given in request.(Ex: %name%)</li> <li>3. "Events In Progress" will be fetched based on the following conditions: <ul style="list-style-type: none"> <li>o Event Start DateTime is in between "From DateTime" and "To DateTime" OR</li> <li>o Event End DateTime is in between "From DateTime" and "To DateTime" OR</li> <li>o Event Start DateTime is Before "From DateTime" AND Event End Date time is After "To DateTime")</li> </ul> </li> </ol>

API Web service – Request and Response format details:

API Web service - Request				
Field Name	Field Type	Remarks	Mandatory	Sample data
Affected Unit Id	String		No	Asset1234

## BMRS API AND DATA PUSH USER GUIDE

Service Type	String		No	xml/csv
API Key	String		Yes	AP8DA123
Participant Id	String		No	UMM-01-01212
PublicationFrom	String		No	2014-12-31
PublicationTo	String		No	2014-12-31
EventStart*	String		No	2001-12-31
EventEnd*	String		No	2001-12-31
Message Id	String		No	ELXP-RMT-Remit_FinalACK
Event Type	String		No	Planned Outage
Asset Id	String		No	Asset1234
Fuel Type	String		No	CCGT
API Web service - Response				
Field Name	Field Type	Remarks	Mandatory	Sample data
Participant Id	String		No	T_PSEGEN1
Message Id	String		No	101
Message Heading	String		No	EXAMGEN-1
Sequence Id	Int		No	2
Asset Id	String		No	T_PSEGEN6
Asset EIC Code	String		No	10T-AL-WS-000101
Asset Type	String		No	Production
Affected Unit	String		No	G32
Affected Area	String		No	B6
Published DateTime	String		No	2014-03-18 14:00:00Z
Asset Fuel Type	String		No	COAL
Asset Normal Capacity	String		No	30.45
Event Type	String		No	FAILURE
Available Capacity	String		No	10.7
Event Status	String		No	CANCELLED
Duration Uncertainty	String		No	a day extra
Cause	String		No	Active
Related Information	String		No	Successful
Revision Number	String		No	2
Event start	String		No	2001-12-31 12:00:00Z
Event end	String		No	2001-12-31 15:00:00Z
Active Flag	String		No	Y

\* applicable only for Elexon portal

Note: Either Publication details(PublicationFrom and PublicationTo) or Event details(EventStart and EventEnd) should be given in request. If both are not present in request proper message with HTTP code will be sent back as response.

# BMRS API AND DATA PUSH USER GUIDE

## 5.1.38 REMIT Flow – Message Detail Retrieval

API service details for REMIT Message Detail Retrieval is as follows

<b>Service Name</b>	MessageDetailRetrievalService
<b>Method</b>	GET
<b>Input URL</b>	<p>1.URL with message id and participant id mentioned  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageDetailRetrieval/&lt;VersionNo&gt;?ServiceType=&lt;ServiceType&gt;&amp;APIKey=&lt;APIKey&gt;&amp;MessageId=&lt;MessageId&gt;&amp;ParticipantId=&lt;ParticipantId&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageDetailRetrieval/&lt;VersionNo&gt;?ServiceType=&lt;ServiceType&gt;&amp;APIKey=&lt;APIKey&gt;&amp;MessageId=&lt;MessageId&gt;&amp;ParticipantId=&lt;ParticipantId&gt;</a></p> <p>2.URL with message id ,participant id,active flag mentioned  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageDetailRetrieval/&lt;VersionNo&gt;?ServiceType=&lt;ServiceType&gt;&amp;APIKey=&lt;APIKey&gt;&amp;MessageId=&lt;MessageId&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;ActiveFlag=&lt;ActiveFlag&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageDetailRetrieval/&lt;VersionNo&gt;?ServiceType=&lt;ServiceType&gt;&amp;APIKey=&lt;APIKey&gt;&amp;MessageId=&lt;MessageId&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;ActiveFlag=&lt;ActiveFlag&gt;</a></p> <p>3.URL with message id, sequence id, Participant id mentioned  <a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageDetailRetrieval/&lt;VersionNo&gt;?ServiceType=&lt;ServiceType&gt;&amp;APIKey=&lt;APIKey&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;SequenceId=&lt;SequenceId&gt;&amp;MessageId=&lt;MessageId&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MessageDetailRetrieval/&lt;VersionNo&gt;?ServiceType=&lt;ServiceType&gt;&amp;APIKey=&lt;APIKey&gt;&amp;ParticipantId=&lt;ParticipantId&gt;&amp;SequenceId=&lt;SequenceId&gt;&amp;MessageId=&lt;MessageId&gt;</a></p>
<b>Output Format</b>	XML

API Web service – Request and Response format details:

API Web service - Request				
Field Name	Field Type	Remarks	Mandatory	Sample data
APIKey	String		Yes	AP8DA23
Service Type	String		No	xml/csv
Participant Id	String		Yes	UMM-01-01212
Sequence Id	String		No	2
Message Id	String		Yes	101
Active Flag	String		No	Y
API Web service - Response				
Field Name	Field Type	Remarks	Mandatory	Sample data
Participant Id	String		No	UMM-01-01212
Asset Id	String		No	T_PSEGEN1
Sequence Id	Int		No	2
Message Id	String		No	101
Message Heading	String		No	EXAMGEN-1
Published DateTime	String		No	2014-03-18 14:00:00Z
Event Type	String		No	FAILURE
Asset EIC Code	String		No	10T-AL-WS-000101

# BMRS API AND DATA PUSH USER GUIDE

Asset Id	String		No	Asset1234
Asset Type	String		No	Production
Affected Unit	String		No	G32
Affected Area	String		No	B6
Asset Fuel Type	String		No	COAL
Asset Normal Capacity	String		No	30.45
Event Status	String		No	CANCELLED
Event Start	String		No	2014-03-20 13:00:00Z
Event End	String		No	2014-03-20 13:30:00Z
Available Capacity	String		No	4.56
Duration Uncertainty	String		No	a day extra
Cause	String		No	Planned Outage
Active Flag	String		No	Y
Related Information	String		No	Planned outage for routine maintenance
Revision Number	String		No	001

## 5.2 Existing BMRS Data (Phase 2 APIs)

### 5.2.1 Temperature Data

API service details for the flow is as follows

<b>Service Name</b>	temperatureDataService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/TEMP/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/TEMP/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Spot Time (Ascending) Input data flow : TEMP, REFTMP
<b>Comments</b>	Default Value (if non specified): From Date = Current System Date – 3 months (configurable) ,To Date = Current System Date (i.e. Today)

### API Web service – Request and Response format details:

API Webservice – Request - Temperature Data

Logical Field Name	Field Type	Mandatory	Format	Sample data
ApiKey	String	Yes	-	AP8DA23
From Date	String	No	YYYY-MM-DD	2014-12-31
To Date	String	No	YYYY-MM-DD	2014-12-31
Service Type	String	No	-	csv/CSV/xml/XML

# BMRS API AND DATA PUSH USER GUIDE

## API Webservice – Response - Temperature Data

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "TEMPERATURE DATA"

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample values
Record Type	String	-	No	TEMP	Fixed string value "TEMP"
Spot (Date)Time	Date	-	No	YYYY-MM-DD	2014-10-13
Temperature Out-Turn	Double	-	No	-	9.5
Normal Reference Temperature	Double	-	No	-	9.6
Low Reference Temperature	Double	-	No	-	12.5
High Reference Temperature	Double	-	No	-	12.5
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample values
Record Type	String	-	No	TEMP	Fixed string value "TEMP"
Spot (Date)Time	Date	-	No	YYYYMMDD	20141013
Temperature Out-Turn	Double	-	No	-	9.5
Normal Reference Temperature	Double	-	No	-	9.6
Low Reference Temperature	Double	-	No	-	12.5

## BMRS API AND DATA PUSH USER GUIDE

---

High Reference Temperature	Double	-	No	-	12.5
----------------------------	--------	---	----	---	------

**NOTE :**

- **Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.**
- **FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.**

**Example File:**

HDR,TEMPERATURE DATA

TEMP,20081011,18.3,17.2,12.3,22.4

FTR,1

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.2 Bid Offer Level Data

API service details for the flow is as follows

<b>Service Name</b>	bidOfferLevelDataService
<b>Operation Name</b>	bidOfferLevelDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/BOD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/BOD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: BM Unit Id (Ascending), BM Offer Pair Number (Descending), From Time (Ascending)</li> <li>Input data flow : BOD</li> </ol> <p>For other common description refer section 3.2</p>
<b>Comments</b>	<ol style="list-style-type: none"> <li>Default Value (if none specified): Settlement Date = {as per NRT condition}, Settlement Period = {as per NRT condition}, BM Unit Id = *, BM Unit Type = *, Lead Party Name = *, NGC BM Unit Name = *, (* implies all values)</li> <li>NRT condition: Settlement Date and Settlement Period corresponding to <b>current SP + 2</b></li> </ol>

### API Web service – Request and Response format details:

#### API Webservice – Request – Bid Offer Level Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	String	-	No	1 to 50 or *	12
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Service Type	String	-	No	-	csv/xml/CSV/XML

#### API Webservice – Response - Bid Offer Level Data

##### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "BID OFFER LEVEL DATA"

## BMRS API AND DATA PUSH USER GUIDE

Settlement Date	From input parameter
Settlement Period	From input parameter

### Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	"BOD"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	Date	-	No	YYYY-MM-DD	2000-10-16
Settlement Period	Integer	-	No	-	1
BM Offer Pair Number	Integer	-	No	-	1, -1, etc.
From Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
From Level	Integer	-	No	-	0
To Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
To Level	Integer	-	No	-	0
Bid Price	Double	-	No	-	0
Offer Price	Double	-	No	-	0
Active Flag	String	-	No	-	Y

### CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	"BOD"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited



# BMRS API AND DATA PUSH USER GUIDE

NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	Date	-	No	YYYYMMDD	20001016
Settlement Period	Integer	-	No	-	1
BM Offer Pair Number	Integer	-	No	-	1, -1, etc.
From Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
From Level	Integer	-	No	-	0
To Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
To Level	Integer	-	No	-	0
Bid Price	Double	-	No	-	0
Offer Price	Double	-	No	-	0

## Example File:

```
HDR,BID OFFER LEVEL DATA,20001016,*
BOD,T_GENSET176, 20001016,1,-2,20001016173000,-10.000,20001016180000,-10.000,10.00000,15.00000
BOD,T_GENSET176, 20001016,2,-1,20001016173000,-10.000,20001016180000,-10.000,20.00000,25.00000
BOD,T_GENSET176, 20001016,3,1,20001016173000,10.000,20001016180000,10.000,30.00000,35.00000
BOD,T_GENSET176, 20001016,4,2,20001016173000,10.000,20001016180000,10.000,40.00000,45.00000
BOD,T_GENSET176, 20001016,5,3,20001016173000,10.000,20001016180000,10.000,50.00000,55.00000
FTR,5
```

## 5.2.3 Credit Default Notice Data

### API service details for the flow is as follows

<b>Service Name</b>	creditDefaultNoticeDataService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/CDN/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromClearedDate=&lt;FromClearedDate&gt;&amp;ToClearedDate=&lt;ToClearedDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/CDN/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromClearedDate=&lt;FromClearedDate&gt;&amp;ToClearedDate=&lt;ToClearedDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Participant ID (ascending),</li> <li>2. Entries with a null Cleared Date and Cleared Period (ie. Parties that are still in default) are displayed above entries with non-null Cleared Date and Cleared Period.</li> <li>3. Input data flow : CDN</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Value (if none specified): From Cleared Date = Current System Date (i.e. Today) – 30 (configurable) To Cleared Date = NULL</li> </ol>

### API Web service – Request and Response format details:

# BMRS API AND DATA PUSH USER GUIDE

## API Webservice – Request - Credit Default Notices

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Cleared Date	String	DateTime	No	YYYY-DD-MM	2014-12-12
To Cleared Date	String	DateTime	No	YYYY-DD-MM	2014-12-12
Service Type	String	-	No	-	xml/XML/csv/CSV

## API Webservice – Response - Credit Default Notices

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "CREDIT DEFAULT NOTICE DATA"

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "CDN"
Participant ID	String	-	No	-	NEEB
Credit Default Level	Integer	-	No	-	1
Entered Default Settlement Date	Date	-	No	YYYY-MM-DD	2003-02-24
Energy Default Settlement Period	Integer	-	No	-	2
Cleared Default Settlement Date	Date	-	No	YYYY-MM-DD	2003-02-24
Cleared Default Settlement Period	Integer	-	No	-	21
Cleared Default Text	String	-	No	-	Credit Cover Percentage <= 75% of credit limit(level default)
Active Flag	String	-	No	-	Y

### CSV download service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "CDN"
Participant ID	String	-	No	-	NEEB
Credit Default Level	Integer	-	No	1.1.1.1 -	1
Entered Default Settlement Date	Date	-	No	1.1.1.2 YYYY MMDD	20030224
Energy Default Settlement Period	Integer	-	No	1.1.1.3 -	2
Cleared Default Settlement Date	Date	-	No	1.1.1.4 YYYY MMDD	20030224
Cleared Default	Integer	-	No	-	21

# BMRS API AND DATA PUSH USER GUIDE

Settlement Period					
Cleared Default Text	String	-	No	-	Credit Cover Percentage <= 75% of credit limit(level default)

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File:

HDR,CREDIT DEFAULT NOTICE DATA

CDN,MANW,2,20130714,4,20141212,41,Credit Cover Percentage <= 90% of Credit Limit (Level 2 Default)

CDN,MANW,2,20130714,4,20141123,41,Credit Cover Percentage <= 90% of Credit Limit (Level 2 Default)

CDN,MANW,2,20130714,4,20141124,41,Credit Cover Percentage <= 90% of Credit Limit (Level 2 Default)

FTR,3

## 5.2.4 System Warnings

API service details for the flow is as follows

<b>Service Name</b>	systemWarningsService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSWARN/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSWARN/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Warning Date/Time (Ascending) 2. Input data flow : System Messages
<b>Comments</b>	Default Value (if none specified): From Date= Current System Date – 1 (configurable) To Date= Current System Date

## API Web service – Request and Response format details:

API Webservice – Request- SystemWarning

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2014-12-31
To Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response- SystemWarning

## Header Record:

<b>Report Output Field Mapping</b>	<b>Condition</b>
------------------------------------	------------------

# BMRS API AND DATA PUSH USER GUIDE

Record Type	HDR
File Type	SYSTEM WARNING

## Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
RecordType	String	-	No	-	SYSWARN
Warning Date/Time	Date	-	No	1.1.1.5 YYYY-MM-DD HH:MM	2014-10-26 22:23
Warning Text	String	-	No	-	Text Data
Active Flag	String	-	No	-	Y

## CSV Download Service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
RecordType	String	-	No	-	SYSWARN
Warning Date/Time	Date	-	No	1.1.1.6 YYYYMMDDHHMM	201410262223
Warning Text	String	-	No	-	Text Data

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File

HDR,SYSTEM WARNINGS  
SYSWARN,20141222130000,From : Power System Manager - National Grid Electricity Control Centre  
NOTIFICATION CANCELLATION of GB TRANSMISSION SYSTEM WARNING  
The GB Transmission System Warning NOTIFICATION OF INADEQUATE SYSTEM MARGIN issued for the period from 09:00 hrs to 23:30 hrs on Wednesday 20/12/2014 has been cancelled  
The following GB Transmission System Warnings remain in force  
none  
Notification Issued at 13:15 hrs on 20/12/2014  
Issued by John Hughes National Grid Electricity Control Centre  
25753732 CANC 20/12/14 20/12/14 20/12/14  
FTR,1

## 5.2.5 Balancing Services Adjustment Action Data

### API service details for the flow is as follows

Service Name	balancingServicesAdjustmentActionDataService
Method	GET

# BMRS API AND DATA PUSH USER GUIDE

<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DISBSAD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DISBSAD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending)</li> <li>2. Input data flow : DISBSAD</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Value : Settlement Date= Current System Date (i.e. Today), Settlement Period = *.</li> </ol>

## API Web service – Request and Response format details:

API Webservice – Request - BalancingServicesAdjustmentActionData

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2041-08-15
Settlement Period	String	-	No	-	1 to 50
Service Type	String	-	No	-	xml/XML/csv/CSV

API Webservice – Response - BalancingServicesAdjustmentActionData

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string "BALANCING SERVICES ADJUSTMENT DATA"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	DISAG
Settlement Date	Date	-	No	YYYY-MM-DD	2014-10-18
Settlement Period	Integer	-	No	-	1
Action Identifier	Integer	-	No	-	6
SO-Flag	String	-	No	-	T
Balancing Services Adjustment Action STOR Provider Flag	String	-	No	-	
Action Cost	Double	-	No	-	1031.53
Action Volume	Double	-	No	-	150.25
Active Flag	String	-	No	-	Y

# BMRS API AND DATA PUSH USER GUIDE

## CSV Download Service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	DISAG
Settlement Date	Date	-	No	YYYYMMDD	20141018
Settlement Period	Integer	-	No	-	1
Action Identifier	Integer	-	No	-	6
SO-Flag	String	-	No	-	T
Balancing Services Adjustment Action STOR Provider Flag	String	-	No	-	
Action Cost	Double	-	No	-	1031.53
Action Volume	Double	-	No	-	150.25

## Example File

HDR,BALANCING SERVICES ADJUSTMENT DATA

DISAG,20140906,1,1001,T,0.0,28.0

DISAG,20140906,1,1002,F,0.0,10.0

FTR,2

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.6 Balancing Service Adjustment Data

API service details for the flow is as follows

<b>Service Name</b>	balancingServiceAdjustmentDataService
<b>Method</b>	GET
<b>Input URL</b>	<a href="http://&lt;host&gt;:&lt;port&gt;/BMRS/NETBSAD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;IsTwoDayWindow=&lt;IsTwoDayWindow&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">http://&lt;host&gt;:&lt;port&gt;/BMRS/NETBSAD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;IsTwoDayWindow=&lt;IsTwoDayWindow&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"><li>1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending)</li><li>2. Input data flow : NETBSAD</li></ol> <p>For other common description refer section 3.2</p>
<b>Comments</b>	<ol style="list-style-type: none"><li>1. Default Value (if none specified) Settlement Date= Current System Date (i.e. Today), Settlement Period = *, isTwoDayWindow=false</li></ol>

### API Web service – Request and Response format details:

API Webservice – Request - BalancingServiceAdjustmentData

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2016-02-04
Settlement Period	String	-	No	-	1
isTwoDayWindow	String	-	No	-	false
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - BalancingServiceAdjustmentData

#### Header Record:

Report Output Field Mapping	Condition
Record Type	HDR
File Type	BALANCING SERVICE ADJUSTMENT DATA

#### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	BSAD
Settlement Date	Date	-	No	YYYY-MM-DD	2014-10-18
Settlement Period	Integer	-	No	-	1
Net Energy Sell-Price Cost Adjustment – (ESCA) £	Double	-	No	-	60.23
Net Energy Sell-Price Volume Adjustment – (ESVA) MWh	Double	-	No	-	1031.53

## BMRS API AND DATA PUSH USER GUIDE

Net System Sell-Price Volume Adjustment – (SSVA) MWh	Double	-	No	-	150.25
Sell-Price Price Adjust – (SPA) £/MWh	Double	-	No	-	12.00
Net Energy Buy-Price Cost Adjustment – (EBCA) £	Double	-	No	-	0.0
Net Energy Buy-Price Volume Adjustment – (EBVA) MWh	Double	-	No	-	0.000
Net System Buy-Price Volume Adjustment – (SBVA) MWh	Double	-	No	-	0.000
Buy-Price Price Adjust (BPA) £/MWh	Double	-	No	-	0.00
Active Flag	String	-	No	-	Y

### CSV Download service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	BSAD
Settlement Date	Date	-	No	YYYYMMDD	20141018
Settlement Period	Integer	-	No	-	1
Net Energy Sell-Price Cost Adjustment – (ESCA) £	Double	-	No	-	60.23
Net Energy Sell-Price Volume Adjustment – (ESVA) MWh	Double	-	No	-	1031.53
Net System Sell-Price Volume Adjustment – (SSVA) MWh	Double	-	No	-	150.25
Sell-Price Price Adjust – (SPA) £/MWh	Double	-	No	-	12.00
Net Energy Buy-Price Cost Adjustment – (EBCA) £	Double	-	No	-	0.0
Net Energy Buy-Price Volume Adjustment – (EBVA) MWh	Double	-	No	-	0.000



## BMRS API AND DATA PUSH USER GUIDE

Net System Buy-Price Volume Adjustment – (SBVA) MWh	Double	-	No	-	0.000
Buy-Price Price Adjust (BPA) £/MWh	Double	-	No	-	0.00

### NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

### Example File

HDR,BALANCING SERVICES ADJUSTMENT DATA  
 BSAD,20140418,1,0.0,0.0,0.0,0.0,0.0,0.0,0.0  
 BSAD,20140418,2,0.0,0.0,0.0,0.0,0.0,0.0,0.0  
 BSAD,20140418,3,0.0,0.0,0.0,0.0,0.0,0.0,0.0  
 FTR,3

### 5.2.7 Rolling System Frequency

API service details for the flow is as follows

<b>Service Name</b>	rollingSystemFrequencyService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/FREQ/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDateTime=&lt;FromDateTime&gt;&amp;ToDateTime=&lt;ToDateTime&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/FREQ/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDateTime=&lt;FromDateTime&gt;&amp;ToDateTime=&lt;ToDateTime&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Date (Ascending), SpotTime (Ascending)</li> <li>2. Input data flow : FREQ</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Value (if none specified): From DateTime = Current System DateTime – 48 Hr (configurable) To DateTime = Current System DateTime</li> </ol>

### API Web service – Request and Response format details:

API Webservice – Request - Rolling System Frequency

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From DateTime	String	-	No	YYYY-MM-DD HH:MM:SS	2014-10-10 10:10:10
To DateTime	String	-	No	YYYY-MM-DD HH:MM:SS	2014-10-10 10:10:10

# BMRS API AND DATA PUSH USER GUIDE

Service Type	String	-	No	-	xml/XML/csv/CSV
--------------	--------	---	----	---	-----------------

API Webservice – Response - Rolling System Frequency

## Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "SYSTEM FREQUENCY DATA"

## Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	VD	VD
Date	Date	-	No	YYYY-MM-DD	2014-10-10
Spot Time	Date	-	No	1.1.1.7 HH:MM:SS	10:42:55
Frequency(Hz )	Double	-	No	Derived data = Sum of demand across all the Fuel type (N0509)	50000.09
Active Flag	String	-	No	-	Y

## CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	VD	VD
DateTime	Date	-	No	1.1.1.8 YYYYMMDDHHMMSS	20141010101010
Frequency(Hz)	Double	-	No	Derived data = Sum of demand across all the Fuel type (N0509)	50000.00

## NOTE :

- Also note that, even in cases where 'From Date Time' and 'To Date Time' are defined as optional with default values, either both should be absent or both have to be present.
- FromDateTime should not be greater than ToDateTime. If so exception is thrown with appropriate Message.

## Example File:

```
HDR, SYSTEM FREQUENCY DATA
FREQ,20080428170500,49.101
FREQ,20080428171000,49.393
FREQ,20080428171500,49.573
FREQ,20080428172000,49.032
```

# BMRS API AND DATA PUSH USER GUIDE

FREQ,20080428172500,49.432

FTR,5

## 5.2.8 Market Index Data

API service details for the flow is as follows

<b>Service Name</b>	marketIndexDataService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MID/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MID/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;Period=&lt;Period&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"><li>1. Default Sorting: Data Provider (Alphabetic Ascending), Settlement Date (Ascending), Settlement Period (Ascending)</li><li>2. Input data flow : MID</li></ol>
<b>Comments</b>	<ol style="list-style-type: none"><li>1. Default Value (if none specified): From Settlement Date= Current System Date – 1 (i.e. Yesterday), To Settlement Date= Current System Date (i.e. Today) ,Settlement Period = *</li><li>2. Data available only for Settlement Periods before the Current Settlement Period.</li></ol>

### API Web service – Request and Response format details:

API Webservice Request - Market Index Data

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
From Settlement Date	String	-	No	YYYY-MM-DD	2014-08-10
To Settlement Date	String	-	No	YYYY-MM-DD	2014-08-11
Period	String	-	No	-	1 to 50 or *
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/XML/xml

API Webservice Response - Market Index Data

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "MARKET INDEX DATA"

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	MID
Data Provider	String	-	No	-	APXMIDP
Settlement Date	Date	-	No	YYYY-MM-DD	2014-08-11

## BMRS API AND DATA PUSH USER GUIDE

Settlement Period	Integer	-	No	-	1 to 50
Price	Double	-	No	-	24.09
Volume	Double	-	No	-	434.4
Active Flag	String	-	No	-	Y

### CSV Download service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	MID
Data Provider	String	-	No	-	APXMIDP
Settlement Date	Date	-	No	YYYYMMDD	20140811
Settlement Period	Integer	-	No	-	50
Price	Double	-	No	-	24.09
Volume	Double	-	No	-	434.400

### NOTE :

- Also note that, even in cases where 'FromSettlementDate' and 'ToSettlementDate' are defined as optional with default values, either both should be absent or both have to be present.
- FromSettlementDate should not be greater than ToSettlementDate . If so exception is thrown with appropriate Message.

### Example File:

```
HDR,MARKET INDEX DATA
MID,NNCUK,20001018,33,10.000,40.000
MID,NNCUK,20001018,36,20.000,50.000
MID,NNCUK,20001018,37,10.000,30.000
FTR,3
```

### 5.2.9 Daily energy Volume Data

#### API service details for the flow is as follows

Service Name	dailyEnergyVolumeDataService
Method	GET
Input URL	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DEVINDOD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DEVINDOD/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
Output Format	XML/CSV

# BMRS API AND DATA PUSH USER GUIDE

<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Settlement Day (Ascending)</li> <li>2. Input data flow : INDOD</li> </ol>
<b>Comments</b>	1. Default Value (if none specified): From Date= Current System date-90 days To Date= Current System Date

## API Web service – Request and Response format details:

API Webservice – Request – DailyEnergyVolumeData

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2013-10-24
To Date	String	-	No	YYYY-MM-DD	2013-10-24
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response – DailyEnergyVolumeData

### Header Record

Report Output Field Mapping	Condition
Record Type	HDR
File Type	DAILY ENERGY VOLUME DATA

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	INDOD
Settlement Day	Date	-	No	YYYY-MM-DD	2014-07-27
Daily Energy Volume Outturn	Integer	-	No	-	628909
Daily Energy Volume Normal Reference	Integer	-	No	-	594930
Daily Energy Volume Low Reference	Integer	-	No	-	542739
Daily Energy Volume High Reference	Integer	-	No	-	631710
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	INDOD
Settlement Day	Date	-	No	YYYYMMDD	20140727

# BMRS API AND DATA PUSH USER GUIDE

Daily Energy Volume Outturn	Integer	-	No	-	628909
Daily Energy Volume Normal Reference	Integer	-	No	-	594930
Daily Energy Volume Low Reference	Integer	-	No	-	542739
Daily Energy Volume High Reference	Integer	-	No	-	631710

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File

HDR,DAILY ENERGY VOLUME DATA  
INDOD,20081016,43323,40121,38124,47634  
FTR,1

### 5.2.10 Non BM STOR Instructed Volume Data

API service details for the flow is as follows

<b>Service Name</b>	nonBMStorInstructedVolumeDataService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NONBM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NONBM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Settlement Date(Ascending), Settlement Period (Ascending)</li> <li>2. Input data flow : NONBM</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Value (if none specified): From Date = Current System Date – 1, To Date = Current System Date</li> </ol>

## API Web service – Request and Response format details:

API Webservice – Request - Non - BM Stor Instructed Volumes

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
From Date	String	-	No	YYYY-MM-DD	2014-08-11
To Date	String	-	No	YYYY-MM-DD	2014-08-12
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/XML/xml

# BMRS API AND DATA PUSH USER GUIDE

API Webservice – Response - Non - BM Stor Instructed Volumes

## Header Record :

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NON-BM STOR INSTRUCTED VOLUME DATA"

## Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	NONBM
Settlement Date	Date	-	No	1.1.1.9 YYYY-MM-DD	2014-08-11
Settlement Period	Integer	-	No	1.1.1.10 -	1 to 50
SystemZone	String	-	No	-	Always N
NONBM Publish Time	Date	-	No	1.1.1.11 YYYY-MM-DD HH:MM:SS	2014-08-10 15:22:00
Instructed Volume (MWh)	Integer	-	No	-	12345
Active Flag	String	-	No	-	Y

## CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	NONBM
Settlement Date	Date	-	No	1.1.1.12 YYYYMMDD	20140811
Settlement Period	Integer	-	No	1.1.1.13 -	1 to 50
SystemZone	String	-	No	-	Always N
NONBM Publish Time	Date	-	No	1.1.1.14 YYYYMMDDHH MMSS	20140810152200
Instructed Volume (MWh)	Integer	-	No	-	12345

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

# BMRS API AND DATA PUSH USER GUIDE

## Example File:

HDR, NON-BM STOR INSTRUCTED VOLUME DATA  
NONBM, 20141109, 1, N, 20141109003000, 12345  
NONBM, 20141109, 2, N, 20141109010000, 12345  
NONBM, 20141109, 3, N, 20141109013000, 12345  
FTR, 3

## 5.2.11 Applicable Balancing Services Volume Data

API service details for the flow is as follows

<b>Service Name</b>	applicableBalancingServiceVoulmeDataService
<b>Operation Name</b>	applicableBalancingServiceVoulmeDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="http://&lt;host&gt;:&lt;port&gt;/BMRS/QAS/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BmUnitId=&lt;BmUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NgcBmUnitName=&lt;NgcBmUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">http://&lt;host&gt;:&lt;port&gt;/BMRS/QAS/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BmUnitId=&lt;BmUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NgcBmUnitName=&lt;NgcBmUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Settlement Period (Ascending) 2. Input data flow : QAS For other common description refer section 3.2
<b>Comments</b>	1. Default Value (if none specified): Settlement Date = Current Date-1, Settlement Period = *, One of BM Unit ID / NGC BM Unit ID is mandatory. (* implies all values)

## API Web service – Request and Response format details:

API Webservice – Request - Applicable Balancing Services Volume

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD HH:MM:SS	2013-10-24 05:52:45
Settlement Period	String	-	No	1 to 50 or *	12
BM Unit ID	String	-	No	-	-
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	-
Service Type	String	-	No	-	csv/CSV/xml/XML

**NOTE: At least one of BM Unit ID or NGC BM Unit Name is mandatory**



# BMRS API AND DATA PUSH USER GUIDE

API Webservice – Response - Applicable Balancing Services Volume

## Header Record:

Report Output Field Mapping		Condition			
Record Type		Fixed string value "HDR"			
File Type		Fixed string value "APPLICABLE BALANCING SERVICES VOLUME"			
Body Record :Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	QAS
BM Unit Id	String	-	No	-	-
BM Unit Type	String	-	No	-	-
Lead Party Name	String	-	No	-	-
NGC BM Unit Name	String	-	No	-	BAGE-1
Settlement Date	Date	-	No	YYYY-MM-DD	2014-07-27
Settlement Period	Integer	-	No	-	12
Balancing Service Volume	Double	-	No	-	-
Active Flag	String	-	No	-	Y

## CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	QAS
BM Unit Id	String	-	No	-	-
BM Unit Type	String	-	No	-	-
Lead Party Name	String	-	No	-	-
NGC BM Unit Name	String	-	No	-	BAGE-1
Settlement Date	Date	-	No	YYYYMMDD	20140727
Settlement Period	Integer	-	No	-	12
Balancing Service Volume	Double	-	No	-	-

## Example File:

HDR,APPLICABLE BALANCING SERVICES VOLUME,20001016,1  
QAS,T\_GENERATE,1,38889.000  
QAS,E\_EMBED,1,39066.000  
FTR,2

### 5.2.12 Rolling System Demand

API service details for the flow is as follows

Service Name	rollingSystemDemandService
--------------	----------------------------

# BMRS API AND DATA PUSH USER GUIDE

<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ROLSYSDM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ROLSYSDM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Date (Ascending),Time (Ascending)</li> <li>2. Input data flow : FUELINST</li> </ol>
<b>Comments</b>	Default Value (if none specified): From Date = Current Date – 2 days, To Date = Current Date

## API Web service – Request and Response format details:

### API Webservice – Request - Rolling System Demand

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2013-10-24
To Date	String	-	No	YYYY-MM-DD	2013-10-24
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

### API Webservice – Response - Rolling System Demand

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "ROLLING SYSTEM DEMAND"

#### Body records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	VD	VD
Date	Date	-	No	YYYY-MM-DD	2013-10-24
Time	Date	-	No	HH:MM:SS	10:42:55
Demand(MW)	Integer	-	No	Derived data = Sum of demand across all the Fuel type (N0509)	50000
Active Flag	String	-	No	-	Y

#### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	VD	VD

# BMRS API AND DATA PUSH USER GUIDE

Date	String	-	No	YYYYMMDDHHMMSS	20131024101010
Demand(MW)	Integer	-	No	Derived data = Sum of demand across all the Fuel type (N0509)	50000

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.
- For CSV output Date and Time fields are concatenated and displayed

## Example File:

HDR,SYSTEM DEMAND DATA  
 VD,20141102055500,22500  
 VD,20141102055500,22671  
 VD,20141102055500,22944  
 FTR,3

## 5.2.13 Peak Wind Generation Forecast

API service details for the flow is as follows

<b>Service Name</b>	peakWindGenerationForecastService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/WINDFORPK/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/WINDFORPK/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Date (Ascending)</li> <li>2. Input data flow : WINDFOR</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Value (if non specified): From Date = Current System Date (i.e. Today) To Date = Current System Date + 1 (i.e Tomorrow)</li> </ol>

## API Web service – Request and Response format details:

API Webservice – Request - Peak Wind Generation Forecast

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2014-10-10
To Date	String	-	No	YYYY-MM-DD	2014-10-10
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - Peak Wind Generation Forecast

# BMRS API AND DATA PUSH USER GUIDE

## Header Record

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "PEAK WIND GENERATION FORECAST"

## Body Record

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
RecordType	String	-	No	-	WINDFORPK
Day & Date	Date	-	No	1.1.1.15 YYYY-MM-DD	2014-10-10
Time of Maximum Wind Generation	Date	-	No	1.1.1.16 HH:MM	14:00
Peak (Max) MW	Integer	-	No	-	123
Total Metered Capacity (MW)	Integer	-	No	-	456
Data Last updated	Date	-	No	1.1.1.17 YYYY-MM-DD HH:MM	2014-10-1010:10
Active Flag	String	-	No	-	Y

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
RecordType	String	-	No	-	WINDFORPK
Day & Date	Date	-	No	1.1.1.18 YYYYMMDD	20141212
Time of Maximum Wind Generation	Date	-	No	1.1.1.19 HHMM	1400
Peak (Max) MW	Integer	-	No	1.1.1.20 -	123
Total Metered Capacity (MW)	Integer	-	No	1.1.1.21 -	456
Data Last updated	Date	-	No	1.1.1.22 YYYYMMDDHHMM	201410101010

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File:

HDR, PEAK WIND GENERATION FORECAST

WINDFORPK,20140726,2100,697,1333,201407260430

FTR,1

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.14 Wind Generation Forecast and Out-turn Data

API service details for the flow is as follows

<b>Service Name</b>	windForecastOutTurnService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/WINDFORFUELHH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/WINDFORFUELHH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Date (Ascending), Settlement Period (Ascending) 2. Input data flow : WINDFOR, FUELHH
<b>Comments</b>	1. If data for a column not available for a row, it is displayed as "NULL" 2. Default Value (if none specified): From Date = Current System Date - 1 , To Date = Current System Date +1

### API Web service – Request and Response format details:

API Webservice – Request -Wind Forecast Out-turn

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2014-12-31
To Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - Wind Forecast Out-turn

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "WIND GENERATION FORECAST AND OUTTURN DATA"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed String "WIND"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-07-29
Settlement Period	Integer	-	No	-	1
Publication Time (Initial Forecast)	String	-	No	YYYY-MM-DD HH:MM:SS	2008-04-27 17:00:00
Initial forecast Generation (MW)	String	-	No	-	-
Publication Time (Latest Forecast)	String	-	No	YYYY-MM-DD HH:MM:SS	2008-04-27 17:00:00
Latest forecast Generation (MW)	String	-	No	-	-

# BMRS API AND DATA PUSH USER GUIDE

Publication Time (Out-turn)	String	-	No	YYYY-MM-DD HH:MM:SS	2008-04-27 17:00:00
Outturn Generation (MW)	String	-	No	-	-
Active Flag	String	-	No	-	Y

## CSV Download Service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed String "WIND"
Settlement Date	Date	-	No	YYYYMMDD	20140729
Settlement Period	Integer	-	No	-	1
Publication Time (Initial Forecast)	String	-	No	YYYYMMDDHHMMSS	20080427170000
Initial forecast Generation (MW)	String	-	No	-	-
Publication Time (Latest Forecast)	String	-	No	YYYYMMDDHHMMSS	20080427170000
Final forecast Generation (MW)	String	-	No	-	-
Publication Time (Out-turn)	String	-	No	YYYYMMDDHHMMSS	20080427170000
Outturn Generation (MW)	String	-	No	-	-

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File:

HDR,WIND GENERATION FORECAST AND OUTTURN DATA

WIND,20080429,1,20080427170000,1001,20080428170000,1011,20080429003500,1221

WIND,20080429,11,20080427170000,1147,20080428170000,1157,20080429053500,1221

WIND,20080429,17,20080427170000,1205,20080428170000,1200,20080429083500,1221

FTR,3

## 5.2.15 Generation By Fuel Type (Current)

### API service details for the flow is as follows:

<b>Service Name</b>	generationByFuelTypeCurrentService
<b>Method</b>	GET
<b>Input URL</b>	https://<host>:<port>/BMRS/FUELINSTHHCUR/<VersionNo>?APIKey=<APIKey>&FuelType=<FuelType>&ServiceType=<xml/XML/csv/CSV>
<b>Output Format</b>	XML/CSV

# BMRS API AND DATA PUSH USER GUIDE

<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: GB Generating Plant (Ascending)</li> <li>2. Input data flow : FUELINST , FUELHH</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. If no value is specified for fuel type then it will imply all Fuel Types</li> <li>2. Any value from "Fuel Type Set" (Ref: IDD Valid Sets)</li> <li>3. All negative values are capped to zero.</li> <li>4. INT which implies interconnectors (INTFR OR INTIRL OR INTNED OR INTEW)</li> </ol>

## API Web service – Request and Response format details:

API Webservice – Request - Generation By Fuel Type (Current)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
FuelType	String	-	No	-	COAL
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Request - Generation By Fuel Type (Current)

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "GENERATION BY FUEL TYPE (CURRENT)"

API Webservice – Request - Generation By Fuel Type (Current)

## Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
RecordType	String	-	No	-	FUELINSTHHCUR
GB Generating Plant	String	-	No	-	CCGT
Current MW	Integer	-	No	-	12472
Current %age	Double	-	No	-	39.2
Current Total MW	Integer	-	No	-	31854
Current Total %	Double	-	No	1.1.1.23 -	100
Last Half Hour	Date	-	No	1.1.1.24 YYYY-MM-DD HH:MM:SS	2014-07-29 13:00:00
Last Half Hour MW	Integer	-	No	1.1.1.25 -	12522
Last Half Hour %age	Double	-	No	1.1.1.26 -	39.3
Last Half Hour Total MW	Integer	-	No	-	31825

## BMRS API AND DATA PUSH USER GUIDE

Last Half Hour Total %	Double	-	No	1.1.1.27 -	100
Last 24 Hours	Date	-	No	1.1.1.28 YYYY-MM-DD HH:MM:SS	2014-07-29 13:00:00
Last 24 Hours MW	Integer	-	No	1.1.1.29 -	273320
Last 24 Hours %age	Double	-	No	1.1.1.30 -	37.3
Last 24 Hours Total MW	Integer	-	No	1.1.1.31 -	733475
Last 24 Hours Total %	Double	-	No	1.1.1.32 -	100
Data Last Updated	Date	-	No	1.1.1.33 YYYY-MM-DD HH:MM:SS	2014-07-29 13:00:00
Active Flag	String	-	No	-	Y

### CSV Download Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
RecordType	String	-	No	-	FUELINSTHHCUR
GB Generating Plant	String	-	No	-	CCGT
Current MW	Integer	-	No	-	12472
Current %age	Decimal	-	No	-	39.2
Current Total MW	Integer	-	No	-	31854
Current Total %	Decimal	-	No	-	100
Last Half Hour	Date	-	No	1.1.1.34 YYYYMMDD DHHMMSS	20140729130000
Last Half Hour MW	Integer	-	No	1.1.1.35 -	12522
Last Half Hour %age	Decimal	-	No	1.1.1.36 -	39.3
Last Half Hour Total MW	Integer	-	No	1.1.1.37 -	31825
Last Half Hour Total %	Decimal	-	No	1.1.1.38 -	100
Last 24 Hours	Date	-	No	1.1.1.39 YYYYMMDD DHHMMSS	20140729130000
Last 24 Hours MW	Integer	-	No	1.1.1.40 -	273320
Last 24 Hours %age	Decimal	-	No	1.1.1.41 -	37.3
Last 24 Hours Total MW	Integer	-	No	1.1.1.42 -	733475
Last 24 Hours Total %	Decimal	-	No	1.1.1.43 -	100
Data Last Updated	Date	-	No	1.1.1.44 YYYYMMDD DHHMMSS	20140729130010



# BMRS API AND DATA PUSH USER GUIDE

## Example File:

HDR,GENERATION BY FUEL TYPE CURRENT

FUELINSTHHCUR,CCGT,1523,96.9,153,100.0,20141202131502,145,93.9,786,100.0,20141212140002,486,17.9,475,100.0,Y,20141214150000

FUELINSTHHCUR,COAL,78954,78.6,954,100.0,20141102131502,354,96.3,516,100.0,20141112140002,954,82.7,127,100.0Y,20141216150000

FTR,2

## 5.2.16 Generation by Fuel Type (24H Instant Data)

### API service details for the flow is as follows

<b>Service Name</b>	generationByFuelType24HInstantDataService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/FUELINST/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDateTime=&lt;FromDateTime&gt;&amp;ToDateTime=&lt;ToDateTime&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/FUELINST/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDateTime=&lt;FromDateTime&gt;&amp;ToDateTime=&lt;ToDateTime&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending) 2. Input data flow : FUELINST
<b>Comments</b>	1. Default Value (if non specified): From DateTime = Current System DateTime – 24 Hr (configurable), To DateTime = Current System DateTime

### API Web service – Request and Response format details:

#### API Webservice – Request - Generation By Fuel Type (24H Instant Data)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From DateTime	String	-	No	YYYY-MM-DD HH:MM:SS	2014-07-29 13:00:00
To DateTime	String	-	No	YYYY-MM-DD HH:MM:SS	2014-07-29 13:00:00
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

#### API Webservice – Response - Generation By Fuel Type (24H Instant Data)

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "INSTANTANEOUS GENERATION BY FUEL TYPE DATA"

### Body Record :

## BMRS API AND DATA PUSH USER GUIDE

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "FUELINST"
Settlement Date	Date	-	No	1.1.1.45 YYYY-MM-DD	2014-12-12
Settlement Period	Integer	-	No	1.1.1.46 -	43
Spot Time	Date	-	No	1.1.1.47 YYYY-MM-DD HH:MM:SS	2008-04-28 17:05:03
CCGT	Integer	-	No	1.1.1.48 -	12032
OIL	Integer	-	No	-	12032
COAL	Integer	-	No	-	12032
NUCLEAR	Integer	-	No	-	12032
WIND	Integer	-	No	-	12032
PS	Integer	-	No	-	12032
NPSHYD	Integer	-	No	-	12032
OCGT	Integer	-	No	-	12032
OTHER	Integer	-	No	-	12032
INTFR	Integer	-	No	-	12032
INTIRL	Integer	-	No	-	12032
INTNED	Integer	-	No	-	12032
INTEW	Integer	-	No	-	12032
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "FUELINST"
Settlement Date	Date	-	No	1.1.1.49 YYYYMMDD	20080428
Settlement Period	Integer	-	No	1.1.1.50 -	43
Spot Time	Date	-	No	1.1.1.51 YYYYMMDDHHMMSS	20080428170503
CCGT	Integer	-	No	-	12032
OIL	Integer	-	No	-	12032
COAL	Integer	-	No	-	12032
NUCLEAR	Integer	-	No	-	12032
WIND	Integer	-	No	-	12032
PS	Integer	-	No	-	12032
NPSHYD	Integer	-	No	-	12032
OCGT	Integer	-	No	-	12032

# BMRS API AND DATA PUSH USER GUIDE

OTHER	Integer	-	No	-	12032
INTFR	Integer	-	No	-	12032
INTIRL	Integer	-	No	-	12032
INTNED	Integer	-	No	-	12032
INTEW	Integer	-	No	-	12032

**Note:**

- Also note that, even in cases where 'FromDateTime' and 'ToDateTime' are defined as optional with default values, either both should be absent or both have to be present.
- FromDateTime should not be greater than ToDateTime. If so exception is thrown with appropriate Message.

**Example File:**

HDR, INSTANTANEOUS GENERATION BY FUEL TYPE DATA

FUELINST,20080428,37,20080428170503,18137,1850,0,15315,7308,189,15,15,0,55,152,21,22

FUELINST,20080428,37,20080428171007,18134,1849,0,15312,7307,181,16,14,0,52,150,13,17

FTR,2

## 5.2.17 Half Hourly Outturn Generation by Fuel Type

API service details for the flow is as follows

<b>Service Name</b>	halfHourlyOutTurnGenerationByFuelTypeService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/FUELHH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/FUELHH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending) 2. Input data flow : FUELHH
<b>Comments</b>	Default Value (if none specified): From Date = Current System Date – 1 (i.e. Yesterday), To Date = Current System Date (i.e. Today)

## API Web service – Request and Response format details:

API Webservice – Request - Half Hourly Outturn Generation By Fuel Type Data

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2014-12-31
To Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

# BMRS API AND DATA PUSH USER GUIDE

## API Webservice – Response - Half Hourly Outturn Generation By Fuel Type Data

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "HALF HOURLY OUTTURN GENERATION BY FUEL TYPE DATA"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "FUELHH"
Settlement Date	Date	-	No	1.1.1.52 YYYY-MM-DD	2014-12-12
Settlement Period	Integer	-	No	-	43
CCGT	Integer	-	No	-	12032
OIL	Integer	-	No	-	12032
COAL	Integer	-	No	-	12032
NUCLEAR	Integer	-	No	-	12032
WIND	Integer	-	No	-	12032
PS	Integer	-	No	-	12032
NPSHYD	Integer	-	No	-	12032
OCGT	Integer	-	No	-	12032
OTHER	Integer	-	No	-	12032
INTFR	Integer	-	No	-	12032
INTIRL	Integer	-	No	-	12032
INTNED	Integer	-	No	-	12032
INTEW	Integer	-	No	-	12032
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	NO	-	Fixed string value "FUELHH"
Settlement Date	Date	-	NO	1.1.1.53 YYYYMMDD	20080428
Settlement Period	Integer	-	NO	-	43
CCGT	Integer	-	NO	-	12032
OIL	Integer	-	NO	-	12032
COAL	Integer	-	NO	-	12032
NUCLEAR	Integer	-	NO	-	12032
WIND	Integer	-	NO	-	12032
PS	Integer	-	NO	-	12032
NPSHYD	Integer	-	NO	-	12032

# BMRS API AND DATA PUSH USER GUIDE

OCGT	Integer	-	NO	-	12032
OTHER	Integer	-	NO	-	12032
INTFR	Integer	-	NO	-	12032
INTIRL	Integer	-	NO	-	12032
INTNED	Integer	-	NO	-	12032
INTEW	Integer	-	NO	-	12032

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File:

HDR, HALF HOURLY OUTTURN GENERATION BY FUEL TYPE DATA

FUELHH,20080428,1,18137,1850,0,15315,7308,189,15,15,0,55,152,12,16

FUELHH,20080428,2,18134,1849,0,15312,7307,181,16,14,0,52,150,22,16

FTR,2

## 5.2.18 Half Hourly Interconnector Outturn Generation

API service details for the flow is as follows

<b>Service Name</b>	halfHourlyInterConnectorOutturnGenerationService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/INTERFUELHH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/INTERFUELHH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: Date (Ascending), Settlement Period (Ascending)</li> <li>Input data flow : FUELHH</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>Default Value (if none specified): From Date= Current System date - 1 To Date= Current System Date</li> </ol>

## API Web service – Request and Response format details:

API Webservice – Request – HalfHourlyInterConnectorOutturnGeneration

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML
From Date	String	-	No	YYYY-MM-DD	2014-12-31
To Date	String	-	No	YYYY-MM-DD	2014-12-31

API Webservice – Response-HalfHourlyInterConnectorOutturnGeneration

# BMRS API AND DATA PUSH USER GUIDE

## Header Record :

Report Output Field Mapping	Condition
Record Type	HDR
File Type	HALF HOURLY INTERCONNECTOR OUTTURN GENERATION

## Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	INTOUTHH
Settlement Date	Date	-	No	1.1.1.54 YYYY-MM-DD	2014-10-26
Settlement Period	Integer	-	No	-	1
INTFR - External Interconnector flows with France	Integer	-	No	-	1704
INTIRL - External Interconnector flows with Ireland	Integer	-	No	-	202
INTNED - External Interconnector flows with the Netherlands	Integer	-	No	-	852
INTEW - External Interconnector flows with Ireland (East-West)	Integer	-	No	-	278
Active Flag	String	-	No	-	Y

## CSV Download Service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	INTOUTHH
Settlement Date	Date	-	No	1.1.1.55 YYYYMMDD	20141026
Settlement Period	Integer	-	No	-	1
INTFR - External Interconnector flows with France	Integer	-	No	-	1704
INTIRL - External Interconnector flows with Ireland	Integer	-	No	-	202
INTNED - External Interconnector flows	Integer	-	No	-	852

# BMRS API AND DATA PUSH USER GUIDE

with the Netherlands					
INTEW - External Interconnector flows with Ireland (East-West)	Integer	-	No	-	278

## Example File

HDR,HALF HOURLY INTERCONNECTOR OUTTURN GENERATION  
INTOUTH,20080428,1,55,152,23,32  
INTOUTH,20080428,2,52,150,22,21  
FTR,2

## NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

### 5.2.19 National Output Useable (2-14 Days Ahead)

API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsable2T14DaysAheadService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Settlement Date (Ascending) 2. Input data flow : NOU2T14D
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 days) to (Currentdate + 14 days). Note that in legacy (existing) BMRS this data is available in CSV or XML. The header and footer labels in the snapshot are for that. These are not explicitly listed for Restful API.

## API Web service – Request and Response format details:

API Webservice – Request : National Output Usable Data for 2 to 14 days (NOU2T14D)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response : National Output Usable Data for 2 to 14 days (NOU2T14D)

## Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON"

# BMRS API AND DATA PUSH USER GUIDE

OC2 (2-14 DAYS) DATA

## Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOU2T14D"
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-11-03 14:45:00
System Zone	String	-	No	-	N
Settlement Date	Date	-	No	YYYY-MM-DD	2014-07-27
Output Usable	Integer	-	No	-	10045
Active Flag	String	-	No	-	Y

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOU2T14D"
Publication Time	Date	-	No	YYYYMMDDHHM MSS	20141103144500
System Zone	String	-	No	-	N
Settlement Date	Date	-	No	YYYYMMDD	20140727
Output Usable	Integer	-	No	-	10045

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS)DATA  
NOU2T14D,20141031151700,N,20141106,63825  
NOU2T14D,20141031151700,N,20141107,62977  
FTR,

## 5.2.20 National Output Useable by Fuel Type (2-14 Days Ahead)

### API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableByFuelType2T14DaysService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/FOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/FOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Fuel Type (Ascending), Settlement Date (Ascending) 2. Input data flow : FOU2T14D
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 days) to (Currentdate + 14 days)



# BMRS API AND DATA PUSH USER GUIDE

## API Web service – Request and Response format details:

API Webservice – Request - NationalOutputUsableByFuelType2T14DaysService

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - NationalOutputUsableByFuelType2T14DaysService

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS) DATA – BY FUEL TYPE"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	FOU2T14D
FuelType	String	-	No	-	COAL
Publication (Date)Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2010-01-02 15:50:00
System Zone	String	-	No	-	Must be 'N'
Settlement Date	Date	-	No	YYYY-MM-DD	2014-07-29
Output Usable	Integer	-	No	-	100
Active Flag	String	-	No	-	Y

### CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	FOU2T14D
FuelType	String	-	No	-	COAL
Publication (Date)Time	Date	-	No	YYYYMMDDHHMMSS	20100102155000
System Zone	String	-	No	-	Must be 'N'
Settlement Date	Date	-	No	YYYYMMDD	20140729
Output Usable	Integer	-	No	-	100

### Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS)DATA –  
BY FUEL TYPE  
FOU2T14D,CCGT,201001021550,N,20100204,1500  
FOU2T14D,OIL,201001021550,N,20100204,1500  
FOU2T14D,COAL,201001021550,N,20100204,1500  
FOU2T14D,NUCLEAR,201001021550,N,20100204,1500  
FTR,4

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.21 National Output Useable by Fuel Type and BM Unit (2-14 Days Ahead)

API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableByBMUnitAndFuelType2T14DaysService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/UOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/UOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: BM Unit Id (Ascending),Fuel Type (Ascending) 2. Input data flow : UOU2T14D
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 days) to (Currentdate + 14 days)

### API Web service – Request and Response format details:

API Webservice - Request - NationalOutputUsableByBMUnitAndFuelType

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice - Response - NationalOutputUsableByBMUnitAndFuelType

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS) DATA – BY BM UNIT/INTERCONNECTOR & FUELTYPE"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	UOU2T14D
BM Unit ID	String	-	No	-	BMUNIT01
FuelType	String	-	No	-	CCGT
Publication(Date) Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2010-01-02 15:50:00
System Zone	String	-	No	-	Must be 'N'
Settlement Date	Date	-	No	YYYY-MM-DD	2014-07-29
Output Usable	Integer	-	No	-	10000
Active Flag	String	-	No	-	Y

# BMRS API AND DATA PUSH USER GUIDE

## CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	UOU2T14D
BM Unit ID	String	-	No	-	BMUNIT01
FuelType	String	-	No	-	CCGT
Publication(Date) Time	Date	-	No	YYYYMMDD HHMMSS	20100102155000
System Zone	String	-	No	-	Must be 'N'
Settlement Date	Date	-	No	YYYYMMDD	20140729
Output Usable	Integer	-	No	-	10000

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS)DATA – BY

BM UNIT/INTERCONNECTOR & FUEL TYPE

UOU2T14D,BMUNIT01,CCGT,201001021550,N,20100204,150

UOU2T14D,BMUNIT02,COAL, 201001021550,N,20100204,150

UOU2T14D,BMUNIT03,OIL, 201001021550,N,20100204,150

UOU2T14D,INTFR, INTFR, 201001021550,N,20100204,150

FTR,4

## 5.2.22 National Output Useable (2- 52 Weeks Ahead)

### API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsable2T52WeeksService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Calendar Year (Ascending), Calendar Week Number (Ascending) 2. Input data flow : NOU2T52W
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 weeks) to (Currentdate + 52 weeks) Note: The First day of week is considered as 'Monday'.

## API Web service – Request and Response format details:

API Webservice – Request - NationalOutputUsable2T52Weeks

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

# BMRS API AND DATA PUSH USER GUIDE

API Webservice – Response - NationalOutputUsable2T52Weeks

## Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS)DATA"

## Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	NOU2T52W
Publication Time	Date	-	No	1.1.1.56 YYYY-MM-DD HH: MM:SS	2014-07-08 10:59:00
System Zone	String	-	No	1.1.1.57 -	N
Calendar Week Number	Integer	-	No	1.1.1.58 -	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163
Active Flag	String	-	No	-	Y

## CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	NOU2T52W
Publication Time	Date	-	No	1.1.1.59 YYYYMMDDHHMMSS	20140708105900
System Zone	String	-	No	1.1.1.60 -	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS)DATA  
NOU2T52W,201004231113,N,18,2010,59588  
NOU2T52W,201004231113,N,19,2010,60966  
FTR,2

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.23 National Output Useable by Fuel type (2-52 Weeks Ahead)

API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableByFuelType2T52WeeksService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/FOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/FOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"><li>1. Default Sorting: Calendar Year (Ascending), Calendar Week (Ascending), Fuel Type (Ascending)</li><li>2. Input data flow : FOU2T52W</li></ol>
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 weeks) to (Currentdate + 52 weeks). The First day of week is considered as 'Monday'.

### API Web service – Request and Response format details:

API Webservice – Request - National Output Usable Data for 2- 52 Weeks

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response - National Output Usable Data for 2- 52 Weeks

#### Header Record:

Report Output Field Mapping	Condition
Record Type	HDR
File Type	NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS) DATA –FUEL TYPE

#### Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	FOU2T52W
Fuel Type	String	-	No	-	COAL
Publishing Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-10-16 13:45:00
System Zone	String	-	No	NA	Always 'N'
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017

## BMRS API AND DATA PUSH USER GUIDE

Output Usable	Integer	-	No	-	100
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	FOU2T52W
Fuel Type	String	-	No	-	COAL
Publishing Time	Date	-	No	YYYYMMDDHHMMSS	20141016134500
System Zone	String	-	No	NA	N
Calendar Week Number	Integer	1.1.1.61 -	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	100

### Example File

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS)DATA –

BY FUEL TYPE

FOU2T52W,CCGT,201001021550,N,3,2010,1500

FOU2T52W,COAL,201001021550,N,3,2010,1500

FTR,2

### 5.2.24 National Output Useable by Fuel Type and BM Unit (2-52 Weeks Ahead)

#### API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableByFuelType&BMUnit2T52WeeksService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/UOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/UOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: BM Unit Id (Ascending),Fuel Type (Ascending), Calendar Year (Ascending), Calendar Week Number (Ascending) 2. Input data flow : UOU2T52W
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 weeks) to (Currentdate + 52 weeks). The First day of week is considered as 'Monday'.

# BMRS API AND DATA PUSH USER GUIDE

## API Web service – Request and Response format details:

API Webservice - Request - NationalOutputUsableByFuelType&BMUnit2T52Weeks

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice - Response - NationalOutputUsableByFuelType&BMUnit2T52Weeks

### Header Record:

Report Output Field Mapping	Condition
Record Type	HDR
File Type	NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS) DATA – BY BM UNIT/INTERCONNECTOR & FUEL TYPE

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	UOU2T52W
BM Unit ID	String	-	No	-	BMUNIT01
FuelType	String	-	No	-	COAL
Publishing Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2010-01-02 15:50:00
System Zone	String	-	No	-	Always 'N'
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	100
Active Flag	String	-	No	-	Y

### CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	UOU2T52W
BM Unit ID	String	-	No	-	BMUNIT01
FuelType	String	-	No	-	COAL
Publishing Time	Date	-	No	1.1.1.62 YYYYMMDDHHMMSS	20100102155012
System Zone	String	-	No	-	Always 'N'
Calendar Week Number	Integer	-	No	-	1

# BMRS API AND DATA PUSH USER GUIDE

Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	100

## Example File

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS)DATA –  
BY BM UNIT/INTERCONNECTOR & FUEL TYPE  
UOU2T52W,BMUNIT01,CCGT,201001021550,N,12,2010,1000  
UOU2T52W,BMUNIT02,COAL,201001021550,N,12,2010,1000  
UOU2T52W,BMUNIT03,OIL,201001021550,N,12,2010,1000  
UOU2T52W,INTFR,INTFR,201001021550,N,12,2010,2500  
FTR,4

## 5.2.25 National Output Useable Data (1 Year)

### API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableDataforOneYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY1/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY1/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Calendar Week Number (Ascending) 2. Input data flow : NOUY1
<b>Comments</b>	Records are retrieved for (systemyear + 1) ,if no data is available for (systemyear + 1) then records are retrieved for previous year(systemyear) .

### API Web service – Request and Response format details:

API Webservice – Request - National Output Usable Data for 1 Year

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - National Output Usable Data for 1 Year

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 1) DATA"



## BMRS API AND DATA PUSH USER GUIDE

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY1"
Publication Time	Date	-	No	1.1.1.63 YYYY-MM-DD HH:MM:SS	2014-07-08 10:59:00
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY1"
Publication Time	Date	-	No	YYYYMMDDHHMMSS	20140708105900
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163

### Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 1)DATA

NOUY1,201004231113,N,1,2011,75907

NOUY1,201004231113,N,2,2011,74731

FTR,2

## BMRS API AND DATA PUSH USER GUIDE

### 5.2.26 National Output Useable Data (2 Year)

An API service detail for the flow is as follows

<b>Service Name</b>	nationalOutputUsableDataforTwoYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY2/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY2/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Calendar Week Number (Ascending) 2. Input data flow : NOUY2
<b>Comments</b>	Records are retrieved for (systemyear + 2) ,if no data is available for (systemyear + 2) then records are retrieved for previous year(systemyear + 1)

#### API Web service – Request and Response format details:

API Webservice – Request - National Output Usable Data for 2 Year

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - National Output Usable Data for 2 Year

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 2) DATA"

#### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY2"
Publication Time	Date	-	No	1.1.1.64 YYYY-MM-DD HH:MM:SS	2014-07-08 10:59:00
System Zone	String	-	No	N	N
Calendar Week	Integer	-	No	-	1

# BMRS API AND DATA PUSH USER GUIDE

Number					
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163
Active Flag	String	-	No	-	Y

## CSV Download Service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY2"
Publication Time	Date	-	No	1.1.1.65 YYYYMMDDHHMMSS	20140708105900
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163

### Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 2)DATA

NOUY2,201004231113,N,1,2012,75907

NOUY2,201004231113,N,2,2012,74731

FTR,2

## 5.2.27 National Output Useable Data (3 Year)

### API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableDataforThreeYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY3/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY3/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Calendar Week Number (Ascending)</li> <li>2. Input data flow : NOUY3</li> </ol>
<b>Comments</b>	Records are retrieved for (systemyear + 3) ,if no data is available for (systemyear + 3) then records are retrieved for previous year(systemyear + 2)

# BMRS API AND DATA PUSH USER GUIDE

## API Web service – Request and Response format details:

API Webservice – Request - National Output Usable Data for 3 Year

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - National Output Usable Data for 3 Year

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 3) DATA"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY3"
Publication Time	Date	-	No	1.1.1.66 YYYY-MM-DD HH:MM:SS	2014-07-08 10:59:00
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY3"
Publication Time	Date	-	No	1.1.1.67 YYYYMMDDHHMMSS	20140708105900
System Zone	String	-	No	N	N

# BMRS API AND DATA PUSH USER GUIDE

Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 3)DATA

NOUY3,201004231113,N,1,2013,75907

NOUY3,201004231113,N,2,2013,74731

FTR,2

## 5.2.28 National Output Useable Data (4 Year)

### API service details for the flow is as follows

<b>Service Name</b>	nationalOutputUsableDataforFourYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY4/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY4/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: Calendar Week Number (Ascending)</li> <li>Input data flow : NOUY4</li> </ol>
<b>Comments</b>	Records are retrieved for (systemyear + 4) ,if no data is available for (systemyear + 4) then records are retrieved for previous year(systemyear + 3)

### API Web service – Request and Response format details:

#### API Webservice – Request - National Output Usable Data for 4 Year

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

#### API Webservice – Response - National Output Usable Data for 4 Year

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 4) DATA"

# BMRS API AND DATA PUSH USER GUIDE

## Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY4"
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-07-08 10:59:00
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163
Active Flag	String	-	No	-	Y

## CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY4"
Publication Time	Date	-	No	1.1.1.68 YYYYMMDDHHMMSS	20140708105900
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 4)DATA

NOUY4,201004231113,N,1,2014,75907

NOUY4,201004231113,N,2,2014,74731

FTR,2

## 5.2.29 National Output Useable Data (5 Year)

### API service details for the flow is as follows

Service Name	nationalOutputUsableDataforFiveYearService
Method	GET
Input URL	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY5/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/NOUY5/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
Output Format	XML/CSV

# BMRS API AND DATA PUSH USER GUIDE

<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Calendar Week Number (Ascending)</li> <li>2. Input data flow : NOUY5</li> </ol>
<b>Comments</b>	Records are retrieved for (systemyear + 5) ,if no data is available for (systemyear + 5) then records are retrieved for previous year(systemyear + 4)

## API Web service – Request and Response format details:

API Webservice – Request - National Output Usable Data for 5 Year

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/xml/XML/CSV

API Webservice – Response - National Output Usable Data for 5 Year

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 5) DATA"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY5"
Publication Time	Date	-	No	1.1.1.69 YYYY-MM-DD HH:MM:SS	2014-07-08 10:59:00
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163
Active Flag	String	-	No	-	Y

### CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NOUY5"
Publication Time	Date	-	No	1.1.1.70 YYYYMMDD	20140708105900

# BMRS API AND DATA PUSH USER GUIDE

				DHHMMSS	
System Zone	String	-	No	N	N
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	YYYY	2017
Output Usable	Integer	-	No	-	69163

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 5)DATA  
 NOUY5,201004231113,N,1,2015,75907  
 NOUY5,201004231113,N,2,2015,74731  
 FTR,2

## 5.2.30 Zonal Output Useable (2- 14 Days Ahead)

API service details for the flow is as follows

<b>Service Name</b>	zoneOutputUsable2T14DaysService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOU2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: Settlement Date (Ascending), System Zone (Ascending)</li> <li>Input data flow : ZOU2T14D</li> </ol>
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 days) to (Currentdate + 14 days)

## API Web service – Request and Response format details:

API Webservice – Request - ZoneOutputUsable2T14Days

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - ZoneOutputUsable2T14Days

## Header Record:

Report Output Field Mapping	Condition
Record Type	HDR



# BMRS API AND DATA PUSH USER GUIDE

File Type	SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS) DATA
-----------	------------------------------------------------------------

## Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOU2T14D
Settlement Date	Date	-	No	YYYY-MM-DD	2014-10-18
Publishing Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2010-01-02 15:50:00
System Zone	String	-	No	B17	B1
Output Usable	Integer	-	No	-	100
Active Flag	String	-	No	-	Y

## CSV Download service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	ZOU2T14D
Publishing Time	Date	-	No	YYYYMMDDHHMMSS	20100102155000
System Zone	String	-	No	B1 TO B17	B1
Settlement Date	Date	-	No	YYYYMMDD	20141018
Output Usable	Integer	-	No	-	100

## Example File

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-14 DAYS)DATA  
 ZOU2T14D,201004231113,B1,20100423,13389  
 ZOU2T14D,201004231113,B2,20100423,13151  
 FTR,2

## 5.2.31 Zonal Output Useable (2-52 Weeks Ahead)

### API service details for the flow is as follows

<b>Service Name</b>	zoneOutputUsable2T52WeeksService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOU2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: Calendar year (Ascending), : Calendar Weeks (Ascending), System Zone (Ascending)</li> <li>Input data flow : ZOU2T52W</li> </ol>
<b>Comments</b>	<p>Records are retrieved for date ranges between (Currentdate + 2 weeks) to (Currentdate + 52 weeks).</p> <p>The First day of week is considered as 'Monday'.</p>

## API Web service – Request and Response format details:

API Webservice – Request -ZoneOutputUsable2T14Days

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes		AP8DA23

# BMRS API AND DATA PUSH USER GUIDE

Service Type	String	-	No		<a href="#">xml/XML/csv/CSV</a>
--------------	--------	---	----	--	---------------------------------

API Webservice – Response - ZoneOutputUsable2T14Days

## Header Record:

Report Output Field Mapping	Condition
Record Type	HDR
File Type	SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS) DATA

## Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOU2T52W
Publishing Period Date	Date	-	No	YYYY-MM-DD HH:MM:SS	2010-01-02 15:50:00
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2015
Output Usable	Integer	-	No	-	100
Active Flag	String	-	No	-	Y

## CSV Download service :

Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	ZOU2T52W
Publishing Period Date	Date	-	No	1.1.1.71 YYYYMMDDHHMMSS	20100102155000
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2015
Output Usable	Integer	-	No	-	100

## Example File:

HDR,NATIONAL OUTPUT USABLE MW BASED ON OC2 (2-52 WEEKS)DATA  
 ZOU2T52W,201004231113,B1,18,2010,11083  
 ZOU2T52W,201004231113,B1,19,2010,11793  
 FTR,2

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.32 Zonal Output Useable Data for 1 Year Ahead

API service details for the flow is as follows

<b>Service Name</b>	zonalOutputUsableDataOneYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY1/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY1/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Calendar Week Number (Ascending), Zone (Ascending) 2. Input data flow : ZOUY1
<b>Comments</b>	Records are retrieved for (systemyear + 1) ,if no data is available for (systemyear + 1) then records are retrieved for previous year(systemyear)

### API Web service – Request and Response format details:

API Webservice – Request - ZonalOutputUsableDataOneYearService

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response - ZONAL OUTPUT USABLE DATA FOR 1 YEAR

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String "SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 ( YEAR 1) DATA"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOUY1
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-09-17 08:39:00
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

# BMRS API AND DATA PUSH USER GUIDE

Active Flag	String	-	No	-	Y
-------------	--------	---	----	---	---

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	ZOUY1
Publication Time	Date	-	No	YYYYMMDDHHMMSS	20141016134500
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

Example File

HDR,ZONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 1)DATA

ZOUY1,201004231113,B1,1,2011,14120

ZOUY1,201004231113,B1,2,2011,13390

FTR,2

## 5.2.33 Zonal Output Useable Data for 2 Year Ahead

API service details for the flow is as follows

<b>Service Name</b>	zonalOutputUsableDataTwoYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY2/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY2/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: Calendar Week Number (Ascending), Zone (Ascending)</li> <li>Input data flow : ZOUY2</li> </ol>
<b>Comments</b>	Records are retrieved for (systemyear + 2) ,if no data is available for (systemyear + 2) then records are retrieved for previous year(systemyear + 1)

## API Web service – Request and Response format details:

API Webservice – Request – ZonalOutputUsableDataTwoYearService

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

# BMRS API AND DATA PUSH USER GUIDE

API Webservice – Response - ZonalOutputUsableDataTwoYearService

## Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String "SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 (YEAR 2) DATA"

## Body Records

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOUY2
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-09-17 08:39:00
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120
Active Flag	String	-	No	-	Y

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	ZOUY2
Publication Time	Date	-	No	YYYYMMDDHHMMSS	20141016134500
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

## Example File

HDR, ZONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 2)DATA  
ZOUY2,201004231113,B1,1,2012,14120  
ZOUY2,201004231113,B1,2,2012,13390  
FTR,2

# BMRS API AND DATA PUSH USER GUIDE

## 5.2.34 Zonal Output Useable Data for 3 Year Ahead

API service details for the flow is as follows

<b>Service Name</b>	zonalOutputUsableDataThreeYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY3/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY3/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Calendar Week Number (Ascending), Zone (Ascending) 2. Input data flow : ZOUY3
<b>Comments</b>	Records are retrieved for (systemyear + 3) ,if no data is available for (systemyear + 3) then records are retrieved for previous year(systemyear + 2)

### API Web service – Request and Response format details:

API Webservice – Request – ZonalOutputUsableDataThreeYearService

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response - ZonalOutputUsableDataThreeYearService

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String "SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 (YEAR 3) DATA"

### Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOUY3
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-09-17 08:39:00
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

# BMRS API AND DATA PUSH USER GUIDE

Active Flag	String	-	No	-	Y
-------------	--------	---	----	---	---

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	ZOUY3
Publication Time	Date	-	No	YYYYMMDDHHMMSS	20141016134500
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

## Example File

HDR, ZONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 3)DATA  
 ZOUY3,201004231113,B1,1,2013,14120  
 ZOUY3,201004231113,B1,2,2013,13390  
 FTR,2

## 5.2.35 Zonal Output Useable Data for 4 Year Ahead

### API service details for the flow is as follows

<b>Service Name</b>	zonalOutputUsableDataFourYearService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY4/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY4/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: Calendar Week Number (Ascending), Zone (Ascending)</li> <li>Input data flow : ZOUY4</li> </ol>
<b>Comments</b>	Records are retrieved for (systemyear + 4) ,if no data is available for (systemyear + 4) then records are retrieved for previous year(systemyear + 3)

### API Web service – Request and Response format details:

API Webservice – Request – ZonalOutputUsableDataFourYearService

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

# BMRS API AND DATA PUSH USER GUIDE

API Webservice – Response - ZonalOutputUsableDataFourYearService

## Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String "SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 (YEAR 4) DATA"

## Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOUY4
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-09-17 08:39:00
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120
Active Flag	String	-	No	-	Y

## CSV Download Service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	ZOUY4
Publication Time	Date	-	No	YYYYMMDDHHMMSS	20141016134500
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

## Example File

HDR, ZONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 4)DATA  
ZOUY4,201004231113,B1,1,2014,14120  
ZOUY4,201004231113,B1,2,2014,13390  
FTR,2

## 5.2.36 Zonal Output Useable Data for 5 Year Ahead

API service details for the flow is as follows

Service Name	zonalOutputUsableDataFiveYearService
--------------	--------------------------------------



# BMRS API AND DATA PUSH USER GUIDE

<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY5/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/ZOUY5/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Calendar Week Number (Ascending), Zone (Ascending)</li> <li>2. Input data flow : ZOUY5</li> </ol>
<b>Comments</b>	Records are retrieved for (systemyear + 5) ,if no data is available for (systemyear + 5) then records are retrieved for previous year(systemyear + 4)

## API Web service – Request and Response format details:

API Webservice – Request – ZonalOutputUsableDataFiveYearService

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response - ZonalOutputUsableDataFiveYearService

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String "SYSTEM ZONE OUTPUT USABLE MW BASED ON OC2 (YEAR 5) DATA"

### Body Records :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	ZOUY5
Publication Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2014-09-17 08:39:00
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
--------------------	------------	---------	-----------	------------	-------------

# BMRS API AND DATA PUSH USER GUIDE

Record Type	String	-	No	-	ZOUY5
Publication Time	Date	-	No	YYYYMMDDHHMMSS	20141016134500
System Zone	String	-	No	One of B1-B17	B1
Calendar Week Number	Integer	-	No	-	1
Calendar Year	Integer	-	No	-	2011
Output Usable	Integer	-	No	-	14120

## Example File

HDR, ZONAL OUTPUT USABLE MW BASED ON OC2 (YEAR 5)DATA

ZOUY5,201004231113,B1,1,2015,14120

ZOUY5,201004231113,B1,2,2015,13390

FTR,2

### 5.2.37 Initial Demand Outturn

API service details for the flow is as follows

<b>Service Name</b>	initialDemandOutturnService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/INDOITSDO/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/INDOITSDO/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending) 2. Input data flow: INDO, ITSDO.
<b>Comments</b>	1. Default Value (if none specified): From Date= Current System date - 1 To Date= Current System Date

## API Web service – Request and Response format details:

API Webservice – Request – InitialDemandOutturn

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2014-12-31
To Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response-InitialDemandOutturn

## Header Record:

Report Output Field Mapping	Condition
Record Type	HDR
File Type	INITIAL DEMAND OUTTURN

# BMRS API AND DATA PUSH USER GUIDE

## Body record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Settlement Date	Date	-	No	1.1.1.72 YYYY-MM-DD	2014-10-26
Settlement Period	Integer	-	No	1.1.1.73 -	1
SystemZone	String	-	No	-	N
Record Type	String	-	No	1.1.1.74 -	INDO
Publish Time	Date	-	No	1.1.1.75 YYYY-MM-DD HH:MM:SS	2014-10-25 23:30:00
Demand	Integer	-	No	1.1.1.76 -	23039
Active Flag	String	-	No	-	Y

## CSV Download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	INDO/ITSDO
Settlement Date	Date	-	No	YYYYMMDD	20141026
Settlement Period	Integer	-	No	1.1.1.77 -	1
SystemZone	String	-	No	-	N
Publish Time	Date	-	No	1.1.1.78 YYYYMMDDHHMMSS	20141025233000
Demand	Integer	-	No	1.1.1.79 -	23039

### NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

## Example File

```
HDR,INITIAL DEMAND OUTTURN
INDO,20141109,1,N,20141109003000,27901
INDO,20141109,2,N,20141109010000,27745
INDO,20141109,3,N,20141109013000,27168
FTR,3
```

## 5.2.38 Forecast Day and Day Ahead Margin and Imbalance Data

API service details for the flow is as follows

Service Name	forecastDayAndDayAheadMarginAndImbalanceService
Method	GET
Input URL	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MELIMBALNGC/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ZoneIdentifier=&lt;ZoneIdentifier&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MELIMBALNGC/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ZoneIdentifier=&lt;ZoneIdentifier&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
Output Format	XML/CSV

## BMRS API AND DATA PUSH USER GUIDE

<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending)</li> <li>2. Input data flow : IMBALNGC, MELNGC</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Values (if none specified): Zone Identifier = N, From Date = Current System Date, To Date = Current System Date + 2</li> </ol>

### API Web service – Request and Response format details:

API Webservice – Request – ForecastDayAndDayAheadMarginAndImbalance

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Zone Identifier	String	-	No	-	Default data N
From Date	String	-	No	YYYY-MM-DD	2014-08-11
To Date	String	-	No	YYYY-MM-DD	2014-08-12
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - ForecastDayAndDayAheadMarginAndImbalance

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "FORECAST DAY AND DAY AHEAD MARGIN AND IMBALANCE DATA"

### Body Record :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Zone ID	String	-	No	-	B1 to B14
Settlement Date	Date	-	No	-	2014-08-11
Settlement Period	Integer	-	No	-	1 to 50
Record Type	String	-	No	1.1.1.80 -	Fixed string value -"DAM" or "DAI"
Publish Time	Date	-	No	1.1.1.81 YYY Y-MM-DD HH:MM:SS	2014-08-10 14:22:00

## BMRS API AND DATA PUSH USER GUIDE

Margin/ImbalanceValue	Integer	Margin value or Imbalance Value will be present for corresponding record type.	No	1.1.1.82 -	26223
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Zone ID	String	-	No	-	B1 to B14
Settlement Date	Date	-	No	-	20140811
Settlement Period	Integer	-	No	-	1 to 50
Record Type	String	-	No	1.1.1.83 -	Fixed string value -"DAM" or "DAI"
Publish Time	Date	-	No	1.1.1.84 YYYY MMDD HHMMSS	20140810142200
Margin/ ImbalanceValue	Integer	Margin value or Imbalance Value will be present for corresponding record type.	No	-	26223

### NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

### Example File:

HDR,FORECAST DAY AND DAY AHEAD MARGIN AND IMBALANCE DATA

DAM,20001017,1,B1,20001016220000,2623

DAM,20001017,2,B1,20001016220000,2574

DAI,20001017,1,B1,20001016220000,2602

DAI,20001017,2,B1,20001016220000,2556

FTR,4

### 5.2.39 Forecast Day and Day Ahead Demand Data

API service details for the flow is as follows

<b>Service Name</b>	forecastDayAndDayAheadDemandDataService
<b>Method</b>	GET

# BMRS API AND DATA PUSH USER GUIDE

<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/FORDAYDEM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ZoneIdentifier=&lt;ZoneIdentifier&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/FORDAYDEM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ZoneIdentifier=&lt;ZoneIdentifier&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending)</li> <li>2. Input data flow : NDF, TSDF, INDDEM, INDGEN</li> </ol>
<b>Comments</b>	<ol style="list-style-type: none"> <li>1. Default Value (if none specified): Zone Identifier = N, From Date = Current system Date ,To Date = Current System Date + 2</li> </ol>

## API Web service – Request and Response format details:

API Webservice – Request - Forecast day and day ahead demand data

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
Zone Identifier	String	-	No	-	Default Zone Identifier = N
From Date	String	-	No	YYYY-MM-DD	2014-08-11
To Date	String	-	No	YYYY-MM-DD	2014-08-12
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/XML/xml

API Webservice – Response - Forecast day and day ahead demand data

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "FORECAST DAY AND DAY AHEAD DEMAND DATA"

### Body Record

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Zone (Boundary ID)	String	-	No	Always N	N
Settlement Date	Date	-	No	YYYY-MM-DD	2000-10-10
Settlement Period (S/P)	Integer	-	No	-	10
Record Type	String	-	No	-	DANF
Publish Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 22:00:00
Demand/SPNDemand/SP	Integer	-	No	-	9861

# BMRS API AND DATA PUSH USER GUIDE

NGeneration					
Active Flag	String	-	No	-	Y

## CSV download Service :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	DANF
Settlement Date	Date	-	No	YYYYMMDD	20141010
Settlement Period (S/P)	Integer	-	No	-	10
Zone (Boundary ID)	String	-	No	Always N	N
Publish Time	Date	-	No	YYYYMMDDHHMMSS	20001016220000
Demand/SPNDemand/SP NGeneration	Integer	-	No	-	9861

## Example File:

HDR,FORECAST DAY AND DAY AHEAD DEMAND DATA

DANF,20001017,1,N,20001016220000,9861

DANF,20001017,2,N,20001016220000,8783

DATF,20001017,1,N,20001016220000,9661

DATF,20001017,2,N,20001016220000,8583

DAID,20001017,1,N,20001016220000,9560

DAID,20001017,2,N,20001016220000,8484

DAIG,20001017,1,N,20001016220000,9699

DAIG,20001017,2,N,20001016220000,8612

FTR,8

## 5.2.40 Demand & Surplus Forecast Data (2-14 Days Ahead)

### API service details for the flow is as follows

<b>Service Name</b>	demandAndSurplusForecastData2T14DaysService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DEMMF2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DEMMF2T14D/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending)</li> <li>2. Input data flow : NDFD, TSDFD, OCNMFD, OCNMFD2.</li> </ol>
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 days) to (Currentdate + 14 days)

### API Web service – Request and Response format details:

# BMRS API AND DATA PUSH USER GUIDE

## API Webservice – Request -DemandAndSurplusForecastData2T14Days

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

## API Webservice – Response- DemandAndSurplusForecastData2T14Days

### Header Record:

Report Output Field Mapping	Condition
Record Type	HDR
File Type	FORECAST 2 TO 14 DAYS AHEAD DEMAND AND MARGIN DATA

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Settlement Date	Date	-	No	1.1.1.85 YYYY-MM-DD	2014-10-29
Settlement Period	Integer	-	No	1.1.1.86 -	1
Boundary ID	String	-	No	1.1.1.87 -	Always is "N"
Record Type	String	-	No	1.1.1.88 -	DSN (for NDFD)or DST (for TSDFD)or DSM (for OCNMFD)or OCNMFD2 (for OCNMFD2)
Publication Time	Date	-	No	1.1.1.89 YYYY-MM-DD HH:MM:SS	2014-10-26 14:45:00
demand/margin	Integer	If Record Type is DSN,DST we will have demand value, or DSM,OCNMFD2 we will have margin value	No	-	45300
Active Flag	String	-	No	-	Y

### CSV Download Service:

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Settlement Date	Date	-	No	1.1.1.90 YYYYMM MDD	20141029
Settlement Period	Integer	-	No	1.1.1.91 -	1
Boundary ID	String	-	No	1.1.1.92 -	Always is "N"
Record Type	String	-	No	1.1.1.93 -	DSN (for NDFD)or DST (for TSDFD)or DSM (for OCNMFD)or OCNMFD2 (for



# BMRS API AND DATA PUSH USER GUIDE

					OCNMF2)
Publication Time	Date	-	No	1.1.1.94 YYYYMM MDDHHMMSS	20141026144500
demand/margin	Integer	If Record Type is DSN,DST we will have demand value, or DSM,OCNMF2 we will have margin value	No		45300

## Example File

HDR,FORECAST 2 TO 14 DAYS AHEAD DEMAND AND MARGIN DATA  
 DSN,20001019,9,N,20001016150000,41000  
 DSN,20001020,11,N,20001016150000,42000  
 OCNMF2,20001010,9,N,20001016150000,17330  
 OCNMF2,20001010,11,N,20001016150000,14288  
 FTR,4

## 5.2.41 Demand & Surplus Forecast Data (2-52 Weeks Ahead)

### API service details for the flow is as follows

<b>Service Name</b>	demandAndSurplusForecastData2T52WeeksService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DEMMF2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DEMMF2T52W/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>1. Default Sorting: Record Type,</li> <li>2. Week Number - Records ordered incrementing by this field (wraps from 53 to 1 when new year starts)Input data flow: NDFW, TSDFW, OCNMFW, and OCNMFW2.</li> </ol>
<b>Comments</b>	Records are retrieved for date ranges between (Currentdate + 2 weeks) to (Currentdate + 52 weeks). The First day of week is considered as 'Monday'.

### API Web service – Request and Response format details:

API Webservice – Request DemandAndSurplusForecastData2T52Weeks

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response -DemandAndSurplusForecastData2T52Weeks

### Header Record

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "FORECAST 2 TO 52 WEEKS AHEAD DEMAND AND MARGIN DATA"

## BMRS API AND DATA PUSH USER GUIDE

### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample values
Week Number	Integer	-	No	-	46
Boundary ID	String	-	No	-	Always is "N"
Record Type	String	-	No	-	"WN"(for NDFW) or "WT" (for TSDFW) or "WM" (for OCNMFW) or "OCNMFW2" (for OCNMFW2)
Publication Time	Date	-	No	1.1.1.95 YYYY-MM-DD HH:MM:SS	2014-10-16 13:45:00
demand/margin	Integer	Depending upon Record type If it is WN,WT we will get Demand value else if it is WM,OCNMFW 2 we will get Margin value.	No	1.1.1.96 -	49500
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample values
Week Number	Integer	-	No	-	46
Boundary ID	String	-		-	Always is "N"
Record Type	String	-	No	-	"WN"(for NDFW) or "WT" (for TSDFW) or "WM" (for OCNMFW) or "OCNMFW2" (for OCNMFW2)
Publication Time	Date	-	No	1.1.1.97 YYYYMMDDHHMMSS	20141016134500
demand/margin	Integer	Depending upon Record type If it is WN,WT we will get Demand value else if it is	No	1.1.1.98 -	49500

# BMRS API AND DATA PUSH USER GUIDE

		WM,OCNMF2 we will get Margin value.			
--	--	-------------------------------------	--	--	--

## Example File

HDR,FORECAST 2 TO 52 WEEKS AHEAD DEMAND AND MARGIN DATA  
 WN,44,N,20001013170000,36000  
 WN,45,N,20001013170000,37000  
 OCNMF2,44,N,20001013170000,17830  
 OCNMF2,45,N,20001013170000,18610  
 FTR,4

## 5.2.42 SO-SO Prices (SO-SO)

API service details for the flow is as follows

<b>Service Name</b>	sosoPricesService
<b>Operation Name</b>	sosoPricesImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/SOSOP/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;TradeType=&lt;TradeType&gt;&amp;IsTwoDayWindow=&lt;IsTwoDayWindow&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/SOSOP/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;StartTime=&lt;StartTime&gt;&amp;TradeType=&lt;TradeType&gt;&amp;IsTwoDayWindow=&lt;IsTwoDayWindow&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Start Time (Ascending) 2. Input data flow : SOSO For other common description refer section 3.2
<b>Comments</b>	Default Value (if none specified): Settlement Date = Current System Date , Start Time = *, Trade Type = ALL, isTwoDayWindow=false

## API Web service – Request and Response format details:

API Webservice – Request - SO-SO Prices (SO-SO)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML
Settlement Date	String	-	No	YYYY-MM-DD	2014-12-31
Start time	String	-	No	HH:MM	-
Trade Type	String	-	No	-	ALL, BALIT_NG, BALIT_RTE, BritNed_NG, BritNed_TN, EWIC_EG, EWIC_NG, MOYLE_NG, MOYLE_SN
isTwoDayWindow	String	-	No	-	false

API Webservice – Response – SO-SO Prices (SO-SO)

# BMRS API AND DATA PUSH USER GUIDE

## Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String value "SO-SO PRICES"

## Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample values
Record Type	String	-	No	-	SOSO
Trade Type	String	-	No	-	BALIT_NG
Start Time	Date	-	No	HH:MM:SS	23:00:00
Date	Date	-	No	YYYY-MM-DD	2014-09-08
Trade Direction	String	-	No	A01, A02	A01
Contract Identification	String	-	No	-	NG_20140908_2300_20
Trade Quantity	Integer	-	No	MW	55
Trade Price	Double	-	No	Currency/MWh	57.07
Active Flag	String	-	No	-	Y

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample values
Record Type	String	-	No	-	SOSO
Trade Type	String	-	No	-	BALIT_NG
Start Time	Date	-	No	YYYYMMDDHHMMSS	20100422170000
Trade Direction	String	-	No	A01, A02	A01
Contract Identification	String	-	No	-	NG_20140908_2300_20
Trade Quantity	Integer	-	No	MW	55
Trade Price	Double	-	No	Currency/MWh	57.07

## Example File

HDR,SO-SO PRICES  
SOSO,BALIT\_NG,20100422170000,A01,RTE\_20101225\_1000\_3,12584,24.25  
SOSO,BALIT\_NG,20100422180000,A02,RTE\_20101225\_1000\_27,10524,30.16  
FTR,2

# BMRS API AND DATA PUSH USER GUIDE

Note: If "isTwoDayWindow" input parameter values is "true" then fetching yesterday and today's data if it is "false" then fetching only today's data.

## 5.2.43 SO SO Trades

**API service details for the flow is as follows**

<b>Service Name</b>	sosoTradesService
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/SOSOT/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/SOSOT/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	1. Default Sorting: Warning Date/Time (Ascending) 2. Input data flow : SYS_WARN
<b>Comments</b>	-

**API Web service – Request and Response format details:**

API Webservice – Request - SO-SO Trades

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	csv/CSV/xml/XML

API Webservice – Response – SO-SO Trades

**Header Record:**

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed String value "SO-SO TRADES"

**Body Record:**

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample values
RecordType	String	-	No	-	SOSOT
Warning Date/Time	Date	-	No	1.1.1.99 YYYY-MM-DD HH:MM	2014-12-31 13:31
Message Text	String	-	No	-	National Grid Notification
Active Flag	String	-	No	-	Y

## BMRS API AND DATA PUSH USER GUIDE

---

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample values
RecordType	String	-	No	-	SOSOT
Warning Date/Time	Date	-	No	1.1.1.100 YYYYMMDDHHMM	201412311331
Message Text	String	-	No	-	National Grid Notification

# BMRS API AND DATA PUSH USER GUIDE

## 5.3 Existing BMRS Data (Phase 3 APIs)

### 5.3.1 Peak Demand – Yesterday/Today/Tomorrow

API service details for the flow is as follows

Service Name	peakDemandService
Operation Name	peakDemandImpl
Method	GET
Input URL	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/PKDEMYESTTDYTOM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/PKDEMYESTTDYTOM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
Output Format	XML/CSV
Description	Default Sorting: Date (Ascending) Input data flow : TSDF , ITSDO For other common description refer section 2.3
Comments	-

#### API Web service – Request and Response format details:

API Webservice – Request - Peak Demand

Logical Field Name	Field Type	Mandatory	Format	Sample data
ApiKey	String	Yes	-	AP8DA23
Service Type	String	No	-	csv/CSV/xml/XML

API Webservice – Response - Peak Demand

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "PEAK DEMAND DATA – YESTERDAY, TODAY, TOMORROW"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample values
Record Type	String	-	No	PKDEM	Fixed string value "PKDEM"

## BMRS API AND DATA PUSH USER GUIDE

Date	Date	-	No	YYYY-MM-DD	2014-10-13
Forecast Demand Peak (MW)	Integer	-	No	-	154236
Forecast Peak Demand Time (local time)	Date	-	No	HH:mm	10:10
Actual Demand Peak (MW)	Integer	-	No	-	154236
Actual Peak Demand Time (local time)	Date	-	No	HH:mm	10:10
Last Updated (GMT time of Forecast, or Actual if Actual showing)	Date	-	No	YYYY-MM-DD HH:mm	2014-10-10 11:10
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample values
Record Type	String	-	No	PKDEM	Fixed string value "PKDEM"
Date	Date	-	No	YYYYMMDD	20141013
Forecast Demand Peak (MW)	Integer	-	No	-	154236
Forecast Peak Demand Time (local time)	Date	-	No	HHmm	10:10
Actual Demand Peak (MW)	Integer	-	No	-	154236
Actual Peak Demand Time (local time)	Date	-	No	HHmm	10:10
Last Updated (GMT time of Forecast, or Actual if Actual showing)	Date	-	No	YYYYMMDDHHmm	201410101110



# BMRS API AND DATA PUSH USER GUIDE

Active Flag	String	-	No	-	Y
-------------	--------	---	----	---	---

## 5.3.2 Indicative Peak Demand Information (Using Operational Metering Data)

### API service details for the flow is as follows

<b>Service Name</b>	indicativePeakDemandInformationService
<b>Operation Name</b>	indicativePeakDemandInformationImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/INDPKDEMINFO/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/INDPKDEMINFO/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Data Set 1 : Date (Ascending) Data Set 2: Week Number (Ascending)  Input data flow : ITSDO,TSDFW
<b>Source</b>	MySQL
<b>Comments</b>	-

### API Web service – Request and Response format details:

API Webservice – Request – Indicative Peak Demand Information (Using Operational Metering Data)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - Indicative Peak Demand Information (Using Operational Metering Data)

### Header Record

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "INDICATIVE PEAK DEMAND INFORMATION (USING OPERATIONAL METERING DATA)"

Body Record : Data Set 1					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "3HIGHDEMSOFAR"
Date	Date	-	No	YYYY-MM-DD	2014-10-10

## BMRS API AND DATA PUSH USER GUIDE

GB Demand (MW)	Integer	-	No	-	12888
Time of peak	Date	-	No	HH:MM	14:00
Active Flag	String	-	No	-	Y

Body Record : Data Set 2					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "3HIGHFORDEM"
Week Number	Integer	-	No	-	5
GB Demand (MW)	Integer	-	No	-	12866
Active Flag	String	-	No	-	Y

### CSV Download service

Data Set 1					
Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "3HIGHDEMISO FAR"
Date	Date	-	No	YYYYMMDD	20141010
GB Demand (MW)	Integer	-	No	-	12888
Time of peak	Date	-	No	HHMM	1400
Active Flag	String	-	No	-	Y

Data Set 2					
Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "3HIGHFORDEM"
Week Number	Integer	-	No	-	5
GB Demand (MW)	Integer	-	No	-	12866
Active Flag	String	-	No	-	Y

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.3 System Demand

API service details for the flow is as follows

<b>Service Name</b>	systemDemandService
<b>Operation Name</b>	systemDemandImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSDM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSDM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromDate=&lt;FromDate&gt;&amp;ToDate=&lt;ToDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Settlement Date (Ascending),Settlement Period (Ascending) Input data flow : ITSDO,TSDf For other common description refer section 2.3
<b>Source</b>	MySQL
<b>Comments</b>	Default Value (if none specified): From Date = Current System Date - 1 To Date = Current System Date +1

### API Web service – Request and Response format details:

API Webservice – Request –System Demand

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Date	String	-	No	YYYY-MM-DD	2014-12-31
To Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response – System Demand

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "SYSTEM DEMAND"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Settlement Date	Date	-	No	YYYY-MM-DD	2014-07-29
Settlement Period	Integer	-	No	-	25
Record Type	String	-	No	-	Fixed string value "ITSDO"
GB Demand (MW)	Integer	-	No	-	14565

## BMRS API AND DATA PUSH USER GUIDE

Record Type	String	-	No	-	Fixed string value "TSDF"
GB Demand (MW)	Integer	-	No	-	35469
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Settlement Date	Date	-	No	YYYYMMDD	20140729
Settlement Period	Integer	-	No	-	25
Record Type	String	-	No	-	Fixed string value "ITSDO"
GB Demand (MW)	Integer	-	No	-	14565
Record Type	String	-	No	-	Fixed string value "TSDF"
GB Demand (MW)	Integer	-	No	-	35469
Active Flag	String	-	No	-	Y

#### NOTE :

- Also note that, even in cases where 'From Date' and 'To Date' are defined as optional with default values, either both should be absent or both have to be present.
- FromDate should not be greater than ToDate. If so exception is thrown with appropriate Message.

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.4 Indicative Triad Demand Information (Using Settlement Metering Data)

API service details for the flow is as follows

<b>Service Name</b>	indicativeTriadDemandInfoService
<b>Operation Name</b>	indicativeTriadDemandInfoImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/INDTRIADDEMINFO/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/INDTRIADDEMINFO/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Date (Ascending) Input data flow : NA For other common description refer section 2.3
<b>Comments</b>	Note that there may not always be sufficient temporal separation to provide 3 peaks in which case it is shown as NULL

### API Web service – Request and Response format details:

API Webservice – Request - Peak Demand

Logical Field Name	Field Type	Mandatory	Format	Sample data
ApiKey	String	Yes	-	AP8DA23
Service Type	String	No	-	csv/CSV/xml/XML

API Webservice – Response - Peak Demand

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "INDICATIVE TRIAD DEMAND INFORMATION (USING SETTLEMENT METERING DATA)"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "TRIADSETTDATA"
Date	Date	-	No	YYYY-MM-DD	2014-07-29
GB Demand (MW)	Integer	-	No	-	14565
Time Of Peak	String	-	No	-	Fixed string value "TSDF"
Data Last Updated	Date	-	No	YYYY-MM-DD HH:mm	2014-07-29 14:10

# BMRS API AND DATA PUSH USER GUIDE

Active Flag	String	-	No	-	Y
-------------	--------	---	----	---	---

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "TRIADSETTDATA"
Date	Date	-	No	YYYYMMDD	20140729
GB Demand (MW)	Integer	-	No	-	14565
Time Of Peak	String	-	No	-	Fixed string value "TSDF"
Data Last Updated	Date	-	No	YYYYMMDDHHmm	201407291410
Active Flag	String	-	No	-	Y

## 5.3.5 Physical Data

API service details for the flow is as follows

<b>Service Name</b>	physicalBMDataService
<b>Operation Name</b>	physicalBMDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/PHYBMADATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/PHYBMADATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	<ol style="list-style-type: none"> <li>Default Sorting: BM Unit Id (Ascending), Settlement Period (Ascending ) (From Body) , Bid Offer Acceptance ID (Ascending) (applicable only for BOALF body), From Time (Ascending)</li> <li>Input data flow: FPN, QPN, MELS, MILS, BOALF.</li> </ol>
<b>Comments</b>	Default Value (if none specified): Settlement Date = {as per NRT criteria}, Settlement Period = {as per NRT criteria}, BM Unit Id = *, BM Unit Type = *, Lead Party Name = *, NGC BM Unit Name = * (* implies all values)

## API Web service – Request and Response format details:

### API Webservice – Request – Physical BM Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	String	-	No	1 to 50 or *	12
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01

# BMRS API AND DATA PUSH USER GUIDE

BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Service Type	String	-	No	-	csv/xml/CSV/XML

## API Webservice – Response – Physical BM Data

### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "PHYSICAL BM DATA"
Settlement Date	From input parameter
Settlement Period	From input parameter

### Body Records:

#### FPN Data :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	"PN"
BM Unit Id	String	-	No	-	2_AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
To Level	Double	-	No	-	0.000
Active Flag	String	-	No	-	Y

#### QPN Data :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
--------------------	------------	---------	-----------	------------	-------------

## BMRS API AND DATA PUSH USER GUIDE

Record Type	String	-	No	-	"QPN"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
To Level	Double	-	No	-	0.000
Active Flag	String	-	No	-	Y

### MEL Data :

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	"MEL"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
To Level	Double	-	No	-	0.000
Active Flag	String	-	No	-	Y



## BMRS API AND DATA PUSH USER GUIDE

MIL Data :					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	"MIL"
BM Unit Id	String	-	No	-	2_AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
To Level	Double	-	No	-	0.000
Active Flag	String	-	No	-	Y

BOALF Data :					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	"BOALF"
BM Unit Id	String	-	No	-	2_AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Bid Offer Acceptance ID	Integer	-	No	-	2564812568
Acceptance Time	Date	-	No	-	2000-10-16 17:30:00
Deemed Flag	String	-	No	-	N

## BMRS API AND DATA PUSH USER GUIDE

SO-Flag	String	-	No	-	F
STOR Provider Flag	String	-	No	-	
From Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYY-MM-DD HH:MM:SS	2000-10-16 17:30:00
To Level	Double	-	No	-	0.000
Active Flag	String	-	No	-	Y

### CSV Download service

#### FPN Data :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	"PN"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
To Level	Double	-	No	-	0.000

#### QPN data :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	"QPN"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited

## BMRS API AND DATA PUSH USER GUIDE

NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
To Level	Double	-	No	-	0.000

### MEL Data :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	"MEL"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
To Level	Double	-	No	-	0.000

### MIL Data :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	"MIL"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000

## BMRS API AND DATA PUSH USER GUIDE

Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
From Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
To Level	Double	-	No	-	0.000

### BOALF Data :

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	"BOALF"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Bid Offer Acceptance ID	Integer	-	No	-	2564812568
Acceptance Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
Deemed Flag	String	-	No	-	N
SO-Flag	String	-	No	-	F
STOR Provider Flag	String	-	No	-	
From Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
From Level	Double	-	No	-	0.000
To Time	Date	-	No	YYYYMMDDHHMMSS	20001016173000
To Level	Double	-	No	-	0.000

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.6 Dynamic Data

API service details for the flow is as follows

<b>Service Name</b>	dynamicDataService
<b>Operation Name</b>	dynamicDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DYNBMDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DYNBMDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: BM Unit ID Settlement Period (ascending) (from body) Time (ascending) Input data flow : RURE,RDRE,RURI,NDZ,NTB,NTD,MZT,MNZT,SEL,SIL
<b>Comments</b>	Default Value (if none specified): Settlement Date = {as per NRT criteria} Settlement Period = {as per NRT criteria} BM Unit Id = * BM Unit Type = * Lead Party Name = * NGC BM Unit Name = * (* implies all values)

### API Web service – Request and Response format details:

API Webservice – Request –Dynamic Data					
Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	String	-	No	1 to 50 or *	12
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

### API Webservice – Response - Dynamic Data

#### Header Record

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "Dynamic Data"

# BMRS API AND DATA PUSH USER GUIDE

Settlement Date	From input parameter
Settlement Period	From input parameter

## Body Record:

RURE Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "RURE"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-02-03 14:00
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6
Active Flag	String	-	No	-	Y

RDRE Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "RDRE"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01

## BMRS API AND DATA PUSH USER GUIDE

Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-02-03 14:00
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6
Active Flag	String	-	No	-	Y

RURI Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "RURI"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-02-03 14:00
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6
Active Flag	String	-	No	-	Y

RURE Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "RURE"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc

## BMRS API AND DATA PUSH USER GUIDE

Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-02-03 14:00
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6
Active Flag	String	-	No	-	Y

NDZ Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NDZ"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Notice	Double	-	No	-	2.000
Active Flag	String	-	No	-	Y

NDB Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NDB"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01



## BMRS API AND DATA PUSH USER GUIDE

BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Notice	Double	-	No	-	2.000
Active Flag	String	-	No	-	Y

NDO Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "NDO"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Notice	Double	-	No	-	2.000
Active Flag	String	-	No	-	Y

MZT Data					
Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "MZT"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited

## BMRS API AND DATA PUSH USER GUIDE

NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Period	Double	-	No	-	240.000
Active Flag	String	-	No	-	Y

### MNZZ Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "MNZZ"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Period	Double	-	No	-	240.000
Active Flag	String	-	No	-	Y

### SEL Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "SEL"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000

## BMRS API AND DATA PUSH USER GUIDE

Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Level	Double	-	No	-	240.000
Active Flag	String	-	No	-	Y

### SIL Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "SIL"
BM Unit Id	String	-	No	-	2_AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Level	Double	-	No	-	240.000
Active Flag	String	-	No	-	Y

### MDV Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "MDV"
BM Unit Id	String	-	No	-	2_AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD	2014-03-03 13:00

## BMRS API AND DATA PUSH USER GUIDE

				HH:MM	
Level	Double	-	No	-	240.000
Active Flag	String	-	No	-	Y

### MDP Data

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "MDP"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYY-MM-DD HH:MM	2014-03-03 13:00
Period	Double	-	No	-	240.000
Active Flag	String	-	No	-	Y

### CSV Download service

### RURE Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "RURE"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHMM	20140303130025

## BMRS API AND DATA PUSH USER GUIDE

				MSS	
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6

### RDRE Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "RDRE"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6

### RURI Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "RURI"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G,

## BMRS API AND DATA PUSH USER GUIDE

					2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6

### RURE Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "RURE"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Rate 1	Double	-	No	-	254.2
Elbow 2	Integer	-	No	-	2541
Rate 2	Double	-	No	-	245.0
Elbow 3	Integer	-	No	-	2456
Rate 3	Double	-	No	-	256.6

### NDZ Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NDZ"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc

## BMRS API AND DATA PUSH USER GUIDE

Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHMSS	20140303130025
Notice	Double	-	No	-	2.000

### NDB Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NDB"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHMSS	20140303130025
Notice	Double	-	No	-	2.000

### NDO Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "NDO"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01

## BMRS API AND DATA PUSH USER GUIDE

Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Notice	Double	-	No	-	2.000

### MZT Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "MZT"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Period	Double	-	No	-	240.000

MNZT Data					
Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "MNZT"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Period	Double	-	No	-	240.000



# BMRS API AND DATA PUSH USER GUIDE

## SEL Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "SEL"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Level	Double	-	No	-	240.000

## SIL Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "SIL"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHM MSS	20140303130025
Level	Double	-	No	-	240.000

## MDV Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "MDV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy

## BMRS API AND DATA PUSH USER GUIDE

					Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDDHHMSS	20140303130025
Level	Double	-	No	-	240.000

### MDP Data

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "MDP"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Time	Date	-	No	YYYYMMDD HHMMSS	20140303130025
Period	Double	-	No	-	240.000

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.7 Derived BM Unit Data

API service details for the flow is as follows

<b>Service Name</b>	derivedBMUnitDataService
<b>Operation Name</b>	derivedBMUnitDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DERBMDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DERBMDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;BMUnitId=&lt;BMUnitId&gt;&amp;BMUnitType=&lt;BMUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NGCBMUnitName=&lt;NGCBMUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: BM Unit ID Settlement Period (ascending) (from body) Acceptance ID (applicable only to Body Record Bid Acceptance Volumes and Body Record Offer Acceptance Volumes) Input data flow : BOALF
<b>Comments</b>	Default Value (if none specified): Settlement Date = {as per NRT criteria} Settlement Period = {as per NRT criteria} BM Unit Id = * BM Unit Type = * Lead Party Name = * NGC BM Unit Name = * (* implies all values)

### API Web service – Request and Response format details:

API Webservice – Request –Derived BM Unit Data

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	String	-	No	1 to 50 or *	12
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - Derived BM Unit Data

#### Header Record

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"

## BMRS API AND DATA PUSH USER GUIDE

File Type	Fixed string value "DERIVED DATA"
Settlement Date	From input parameter
Settlement Period	From input parameter

### Body Records:

#### Bid Acceptance Volume

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "BAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Acceptance ID	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
Short Acceptance Flag	String	-	No	-	G, S, E, I, T, etc
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

### Offer Acceptance Volume

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "BAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Acceptance ID	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
Short Acceptance Flag (a.k.a. Acceptance Duration)	String	-	No	-	G, S, E, I, T, etc
Volume Accepted for	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Bid-Offer Pair -6					
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

## BMRS API AND DATA PUSH USER GUIDE

### Indicative Period Bid Acceptance Volumes

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPBAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

### Indicative Period Offer Acceptance Volumes

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPOAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000



## BMRS API AND DATA PUSH USER GUIDE

Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

### Indicative Period Bid Cashflow

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPBC"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON

## BMRS API AND DATA PUSH USER GUIDE

					Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Cashflow for Bid-Offer Pair -5	String	-	No	-	-
Cashflow for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Cashflow for Bid-Offer Pair -3	String	-	No	-	-
Cashflow for Bid-Offer Pair -2	String	-	No	-	-
Cashflow for Bid-Offer Pair -1	String	-	No	-	-
Cashflow for Bid-Offer Pair 1	String	-	No	-	-
Cashflow for Bid-Offer Pair 2	String	-	No	-	-
Cashflow for Bid-Offer Pair 3	String	-	No	-	-
Cashflow for Bid-Offer Pair 4	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Cashflow for Bid-Offer Pair 5	String	-	No	-	-
Cashflow for Bid-Offer Pair 6	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

### Indicative Period Offer Cashflow

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPOC"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Cashflow for Bid-Offer Pair -5	String	-	No	-	-
Cashflow for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Cashflow for Bid-Offer Pair -3	String	-	No	-	-
Cashflow for Bid-Offer Pair -2	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Cashflow for Bid-Offer Pair -1	String	-	No	-	-
Cashflow for Bid-Offer Pair 1	String	-	No	-	-
Cashflow for Bid-Offer Pair 2	String	-	No	-	-
Cashflow for Bid-Offer Pair 3	String	-	No	-	-
Cashflow for Bid-Offer Pair 4	String	-	No	-	-
Cashflow for Bid-Offer Pair 5	String	-	No	-	-
Cashflow for Bid-Offer Pair 6	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

### CSV Download service

#### Bid Acceptance Volume

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "BAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000

## BMRS API AND DATA PUSH USER GUIDE

Settlement Date	String	-	No	YYYYMMDD	20140201
Settlement Period	Integer	-	No	-	9
Acceptance ID	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
Short Acceptance Flag	String	-	No	-	G, S, E, I, T, etc
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Total	String	-	No	-	-
-------	--------	---	----	---	---

### Offer Acceptance Volume

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "BAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYYM MDD	20140201
Settlement Period	Integer	-	No	-	9
Acceptance ID	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
Short Acceptance Flag (a.k.a. Acceptance Duration)	String	-	No	-	G, S, E, I, T, etc
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Total	String	-	No	-	-

### Indicative Period Bid Acceptance Volumes

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPBAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYYM MDD	20140201
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Volume Accepted for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-
Active Flag	String	-	No	-	Y

### Indicative Period Offer Acceptance Volumes



## BMRS API AND DATA PUSH USER GUIDE

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPOAV"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYYM MDD	20140201
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Volume Accepted for Bid-Offer Pair -3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -2	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 1	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 2	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Volume Accepted for Bid-Offer Pair 3	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 4	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 5	String	-	No	-	-
Volume Accepted for Bid-Offer Pair 6	String	-	No	-	-
Volume Accepted for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-

### Indicative Period Bid Cashflow

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPBC"
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Settlement Date	String	-	No	YYYYM MDD	20140201
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Cashflow for Bid-Offer Pair -5	String	-	No	-	-
Cashflow for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000

## BMRS API AND DATA PUSH USER GUIDE

Cashflow for Bid-Offer Pair -3	String	-	No	-	-
Cashflow for Bid-Offer Pair -2	String	-	No	-	-
Cashflow for Bid-Offer Pair -1	String	-	No	-	-
Cashflow for Bid-Offer Pair 1	String	-	No	-	-
Cashflow for Bid-Offer Pair 2	String	-	No	-	-
Cashflow for Bid-Offer Pair 3	String	-	No	-	-
Cashflow for Bid-Offer Pair 4	String	-	No	-	-
Cashflow for Bid-Offer Pair 5	String	-	No	-	-
Cashflow for Bid-Offer Pair 6	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-

### Indicative Period Offer Cashflow

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "IPOC"
BM Unit Id	String	-	No	-	2_AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01

## BMRS API AND DATA PUSH USER GUIDE

BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Settlement Date	String	-	No	YYYYM MDD	20140201
Settlement Period	Integer	-	No	-	9
Data Type	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Cashflow for Bid-Offer Pair -5	String	-	No	-	-
Cashflow for Bid-Offer Pair -4	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2_AAEPD000
Cashflow for Bid-Offer Pair -3	String	-	No	-	-
Cashflow for Bid-Offer Pair -2	String	-	No	-	-
Cashflow for Bid-Offer Pair -1	String	-	No	-	-
Cashflow for Bid-Offer Pair 1	String	-	No	-	-
Cashflow for Bid-Offer Pair 2	String	-	No	-	-
Cashflow for Bid-Offer Pair 3	String	-	No	-	-
Cashflow for Bid-Offer Pair 4	String	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

Cashflow for Bid-Offer Pair 5	String	-	No	-	-
Cashflow for Bid-Offer Pair 6	String	-	No	-	-
Cashflow for Bid-Offer Pair -6	String	-	No	-	-
Total	String	-	No	-	-

### 5.3.8 Derived System Wide Data

API service details for the flow is as follows

<b>Service Name</b>	derivedSystemWideDataService
<b>Operation Name</b>	derivedSystemWideDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DERSYSDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DERSYSDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Settlement Date (Ascending) Settlement Period (Ascending) Input data flow : Derived
<b>Comments</b>	Default Value (if none specified): From Settlement Date = Current System Date -1(i.e. Yesterday) To Date = Current System Date (i.e Today) Settlement Period = * (* implies all values)

### API Web service – Request and Response format details:

API Webservice – Request – Derived System-wide Data					
Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Settlement Date	String	-	No	YYYY-MM-DD	2014-02-01
To Settlement Date	String	-	No	YYYY-MM-DD	2014-03-01
Settlement Period	String	-	No	1 to 50 or *	12
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response - Derived System-wide Data

# BMRS API AND DATA PUSH USER GUIDE

## Header Record

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "SYSTEM BUY SELL DATA"

## Body Record

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "SSB"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	1 to 50 or *	1
System Sell Price (SSP in £/MWh)	Double	-	No	-	31.60000
System Buy Price (SBP in £/MWh)	Double	-	No	-	38.66000
BSAD Default	String	-	No	-	F
Price Derivation Code (PDC)	String	-	No	-	F
Reserve Scarcity Price	Double	-	No	-	15.03210
Indicative Net Imbalance Volume (NIV)	Double	-	No	-	294.983
Sell-Price Price Adjustment (SPA)	Double	-	No	-	0.00
Buy-Price Price Adjustment (BPA)	Double	-	No	-	5.50
Replacement Price (RP in £/MWh )	Double	-	No	-	294.983

## BMRS API AND DATA PUSH USER GUIDE

Replacement Price Calculation Volume (RPRV in MWh)	Double	-	No	-	294.983
Total System Accepted Offer Volume	Double	-	No	-	294.983
Total System Accepted Bid Volume	Double	-	No	-	294.983
Total System Tagged Accepted Offer Volume	Double	-	No	-	294.983
Total System Tagged Accepted Bid Volume	Double	-	No	-	294.983
System Total Priced Accepted Offer Volume	Double	-	No	-	294.983
System Total Priced Accepted Bid Volume	Double	-	No	-	294.983
Total System Adjustment Sell Volume	Double	-	No	-	294.983
Total System Adjustment Buy Volume	Double	-	No	-	294.983
Total System Tagged Adjustment Sell Volume	Double	-	No	-	294.983
Total System Tagged Adjustment Buy Volume	Double	-	No	-	294.983

# BMRS API AND DATA PUSH USER GUIDE

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "SSB"
Settlement Date	Date	-	No	YYYYMMDD	20140201
Settlement Period	Integer	-	No	1 to 50 or *	1
System Sell Price (SSP in £/MWh)	Double	-	No	-	31.60000
System Buy Price (SBP in £/MWh)	Double	-	No	-	38.66000
BSAD Default	String	-	No	-	F
Price Derivation Code (PDC)	String	-	No	-	F
Reserve Scarcity Price	Double	-	No	-	15.03210
Indicative Net Imbalance Volume (NIV)	Double	-	No	-	294.983
Replacement Price (RP in £/MWh )	Double	-	No	-	294.983
Replacement Price Calculation Volume (RPRV in MWh)	Double	-	No	-	294.983
Total System Accepted Offer Volume	Double	-	No	-	294.983
Total System Accepted Bid Volume	Double	-	No	-	294.983



## BMRS API AND DATA PUSH USER GUIDE

Total System Tagged Accepted Offer Volume	Double	-	No	-	294.983
Total System Tagged Accepted Bid Volume	Double	-	No	-	294.983
System Total Priced Accepted Offer Volume	Double	-	No	-	294.983
System Total Priced Accepted Bid Volume	Double	-	No	-	294.983
Total System Adjustment Sell Volume	Double	-	No	-	294.983
Total System Adjustment Buy Volume	Double	-	No	-	294.983
Total System Tagged Adjustment Sell Volume	Double	-	No	-	294.983
Total System Tagged Adjustment Buy Volume	Double	-	No	-	294.983

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.9 Detailed System Prices

API service details for the flow is as follows

<b>Service Name</b>	detailedSystemPricesService
<b>Operation Name</b>	detailedSystemPricesImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DETSYSPRICES/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DETSYSPRICES/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Settlement Date (Ascending), Settlement Period (Ascending), Index (Ascending), and Component Identifier (Alphabetically sorted). Input data flow : Derived
<b>Comments</b>	Default Value (if none specified): From Settlement Date = Current System Date Settlement Period = Current Settlement Period Note that NO wildcard (*) allowed for Settlement Period.

### API Web service – Request and Response format details:

#### API Webservice – Request –Detailed System Prices

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	<a href="#">2014-02-01</a>
Settlement Period	String	-	No	-	<a href="#">2</a>
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

#### API Webservice – Response – Detailed System Prices

##### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "INDICATIVE SYSTEM PRICE STACK DATA"

##### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
<b>System Price Calculation Summary</b>					
Record Type	String	-	No	-	Fixed as "MAIN PRICE SUMMARY"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	2
Cost	Double	-	No	-	1555.66

## BMRS API AND DATA PUSH USER GUIDE

Volume	Double	-	No	-	39.097
Adjuster	Double	-	No	-	0.00
Value	Double	-	No	-	39.78979
Type	String	-	No	-	SBP
Record Type	String	-	No	-	Fixed as "MARKET PRICE SUMMARY"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	2
Cost	Double	-	No	-	1555.66
Volume	Double	-	No	-	39.097
Value	Double	-	No	-	39.78979
Type	String	-	No	-	SBP
Price Derivation Code	String	-	No	-	B
<b>Indicative System Price Offer Stack Data</b>					
Record Type	String	-	No	-	Fixed String "OFFER"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	2
Index (Sequence number)	Integer	-	No	-	12
ID (Component Identifier)	String	-	No	-	T_DINO-5
Acceptance ID	String	-	No	-	58932
Bid Offer Pair ID	String	-	No	-	11
CADL Flag	String	-	No	-	T
SO Flag	String	-	No	-	F
STOR Provider Flag	String	-	No	-	F
Repriced Indicator	String	-	No	-	F
Bid Offer Original Price	Double	-	No	-	160.00000
Reserve Scarcity Price	Double	-	No	-	120.25
OfferVolume (Stack Item Original Volume)	Double	-	No	-	30.000
DMAT Adjusted Volume	Double	-	No	-	30.000
Arbitrage Adjusted Volume	Double	-	No	-	30.000
NIV Adjusted Volume	Double	-	No	-	0.000
PAR Adjusted Volume	Double	-	No	-	0.000
(Stack Item) Final	Double	-	No	-	0.00000

## BMRS API AND DATA PUSH USER GUIDE

Price					
Transmission Loss Multiplier (TLM)	Double	-	No	-	0.0000000
TLM Adjusted Volume (QAPO * TLM)	Double	-	No	-	0.000
TLM Adjusted Cost (QAPO * PO * TLM)	Double	-	No	-	0.00
<b>Totals</b>					
TOTAL of TLM Adjusted Volume	Double	-	No	-	39.097
TOTAL of TLM Adjusted Cost	Double	-	No	-	1555.66
<b>Indicative System Price Bid Stack Data</b>					
Record Type	String	-	No	-	Fixed String "BID"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-02-01
Settlement Period	Integer	-	No	-	2
Index (Sequence number)	Integer	-	No	-	8
ID (Component Identifier)	String	-	No	-	T_RUGPS-6
Acceptance ID	String	-	No	-	109766
Bid Offer Pair ID	String	-	No	-	-1
CADL Flag	String	-	No	-	F
SO Flag	String	-	No	-	F
STOR Provider Flag	String	-	No	-	F
Repriced Indicator	String	-	No	-	F
Bid Price (Stack Item Original Price)	Double	-	No	-	30.01000
Reserve Scarcity Price	Double	-	No	-	120.25
Bid Volume (Stack Item Original Volume)	Double	-	No	-	-4.083
DMAT Adjusted Volume	Double	-	No	-	-4.083
Arbitrage Adjusted Volume	Double	-	No	-	-4.083
NIV Adjusted Volume	Double	-	No	-	0.000
PAR Adjusted Volume	Double	-	No	-	0.000
(Stack Item) Final Price	Double	-	No	-	0.00000
Transmission Loss Multiplier (TLM)	Double	-	No	-	0.0000000
TLM Adjusted Volume (QAPB * TLM)	Double	-	No	-	0.000

## BMRS API AND DATA PUSH USER GUIDE

TLM Adjusted Cost (QAPB * PB * TLM)	Double	-	No	-	0.00
<b>Totals</b>					
TOTAL of TLM Adjusted Volume	Double	-	No	-	39.097
TOTAL of TLM Adjusted Cost	Double	-	No	-	1555.66

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
<b>System Price Calculation Summary</b>					
Record Type	String	-	No	-	Fixed as "MAIN PRICE SUMMARY"
Settlement Date	Date	-	No	YYYYMMDD	20150210
Settlement Period	Integer	-	No	-	2
Cost	Double	-	No	-	1555.66
Volume	Double	-	No	-	39.097
Adjuster	Double	-	No	-	0.00
Value	Double	-	No	-	39.78979
Type	String	-	No	-	SBP
Record Type	String	-	No	-	Fixed as "MARKET PRICE SUMMARY"
Settlement Date	Date	-	No	YYYYMMDD	20150210
Settlement Period	Integer	-	No	-	2
Cost	Double	-	No	-	1555.66
Volume	Double	-	No	-	39.097
Adjuster	Double	-	No	-	0.00
Value	Double	-	No	-	39.78979
Type	String	-	No	-	SBP
Price Derivation Code	String	-	No	-	B
<b>Indicative System Price Offer Stack Data</b>					
Record Type	String	-	No	-	Fixed String "OFFER"
Settlement Date	Date	-	No	YYYYMMDD	20150210
Settlement Period	Integer	-	No	-	2
Index (Sequence number)	Integer	-	No	-	12
ID (Component Identifier)	String	-	No	-	T_DINO-5
Acceptance ID	String	-	No	-	58932

## BMRS API AND DATA PUSH USER GUIDE

Bid Offer Pair ID	String	-	No	-	11
CADL Flag	String	-	No	-	T
SO Flag	String	-	No	-	F
STOR Provider Flag	String	-	No	-	F
Repriced Indicator	String	-	No	-	F
Bid Offer Original Price	Double	-	No	-	160.00000
Reserve Scarcity Price	Double	-	No	-	120.25
OfferVolume (Stack Item Original Volume)	Double	-	No	-	30.000
DMAT Adjusted Volume	Double	-	No	-	30.000
Arbitrage Adjusted Volume	Double	-	No	-	30.000
NIV Adjusted Volume	Double	-	No	-	0.000
PAR Adjusted Volume	Double	-	No	-	0.000
(Stack Item) Final Price	Double	-	No	-	0.00000
Transmission Loss Multiplier (TLM)	Double	-	No	-	0.0000000
TLM Adjusted Volume (QAPO * TLM)	Double	-	No	-	0.000
TLM Adjusted Cost (QAPO * PO * TLM)	Double	-	No	-	0.00
<b>Totals</b>					
TOTAL of TLM Adjusted Volume	Double	-	No	-	39.097
TOTAL of TLM Adjusted Cost	Double	-	No	-	1555.66
<b>Indicative System Price Bid Stack Data</b>					
Record Type	String	-	No	-	Fixed String "BID"
Settlement Date	Date	-	No	YYYYMMDD	20150210
Settlement Period	Integer	-	No	-	2
Index (Sequence number)	Integer	-	No	-	8
ID (Component Identifier)	String	-	No	-	T_RUGPS-6
Acceptance ID	String	-	No	-	109766
Bid Offer Pair ID	String	-	No	-	-1
CADL Flag	String	-	No	-	F
SO Flag	String	-	No	-	F
STOR Provider Flag	String	-	No	-	F
Repriced Indicator	String	-	No	-	F

## BMRS API AND DATA PUSH USER GUIDE

Bid Price (Stack Item Original Price)	Double	-	No	-	30.01000
Reserve Scarcity Price	Double	-	No	-	120.25
Bid Volume (Stack Item Original Volume)	Double	-	No	-	-4.083
DMAT Adjusted Volume	Double	-	No	-	-4.083
Arbitrage Adjusted Volume	Double	-	No	-	-4.083
NIV Adjusted Volume	Double	-	No	-	0.000
PAR Adjusted Volume	Double	-	No	-	0.000
(Stack Item) Final Price	Double	-	No	-	0.00000
Transmission Loss Multiplier (TLM)	Double	-	No	-	0.0000000
TLM Adjusted Volume (QAPB * TLM)	Double	-	No	-	0.000
TLM Adjusted Cost (QAPB * PB * TLM)	Double	-	No	-	0.00
<b>Totals</b>					
TOTAL of TLM Adjusted Volume	Double	-	No	-	39.097
TOTAL of TLM Adjusted Cost	Double	-	No	-	1555.66

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.10 Market Depth Data

API service details for the flow is as follows

<b>Service Name</b>	marketDepthDataService
<b>Operation Name</b>	marketDepthDataImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/MKTDEPTHDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/MKTDEPTHDATA/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Settlement Date (ascending) Settlement Period (ascending) Input data flow : IMBALNGC
<b>Comments</b>	Default Value (if none specified): Return all rows From Settlement Date = Current System Date -1(i.e. Yesterday)

### API Web service – Request and Response format details:

API Webservice – Request –Market Depth Data

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	<a href="#">2014-02-01</a>
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response – Market Depth Data

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "MARKET DEPTH DATA"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "MDD"
Settlement Date	Date	-	No	YYYY-MM-DD	2015-01-26
Settlement Period	Integer	-	No	-	2
IMBALNGC	Double	-	No	-	80.000
Total Offer Volume	Double	-	No	-	48515.000
Total Bid Volume	Double	-	No	-	-57826.000
Total Accepted	Double	-	No	-	1079.542



## BMRS API AND DATA PUSH USER GUIDE

Offer Volume					
Total Accepted Bid Volume	Double	-	No	-	-1028.994
Total Unpriced Accepted Offer Volume	Double	-	No	-	0.000
Total Unpriced Accepted Bid Volume	Double	-	No	-	0.000
Total Priced Accepted Offer Volume	Double	-	No	-	815.462
Total Priced Accepted Bid Volume	Double	-	No	-	-1062.853
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "MDD"
Settlement Date	Date	-	No	YYYYMMDD	20150126
Settlement Period	Integer	-	No	-	2
IMBALNGC	Double	-	No	-	80.000
Total Offer Volume	Double	-	No	-	48515.000
Total Bid Volume	Double	-	No	-	-57826.000
Total Accepted Offer Volume	Double	-	No	-	1079.542
Total Accepted Bid Volume	Double	-	No	-	-1028.994
Total Unpriced Accepted Offer Volume	Double	-	No	-	0.000
Total Unpriced Accepted Bid Volume	Double	-	No	-	0.000
Total Priced Accepted Offer Volume	Double	-	No	-	815.462
Total Priced Accepted Bid Volume	Double	-	No	-	-1062.853

### 5.3.11 Latest Acceptances

API service details for the flow is as follows

Service Name	latestAcceptancesService
--------------	--------------------------

# BMRS API AND DATA PUSH USER GUIDE

<b>Operation Name</b>	latestAcceptancesImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/LATESTACCEPTS/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/LATESTACCEPTS/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Acceptance Time (descending) From Time (ascending) Input data flow : BOALF
<b>Comments</b>	-

## API Web service – Request and Response format details:

### API Webservice – Request –Latest Acceptances

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

### API Webservice – Response – Latest Acceptances

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "LATEST ACCEPTANCE DATA"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "LAD"
BM Unit Id	String	-	No	-	T_FFES-4
Acceptance Number	Integer	-	No	-	2558965231
Acceptance Time	Date	-	No	YYYY-MM-DD HH:MM	2015-01-26 00:47
From Time	Date	-	No	YYYY-MM-DD HH:MM	2015-01-26 23:47
Active Flag	String	-	No	-	Y

## CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "LAD"

## BMRS API AND DATA PUSH USER GUIDE

---

BM Unit Id	String	-	No	-	T_STAY-2
Acceptance Number	Integer	-	No	-	2558965231
Acceptance Time	Date	-	No	YYYYMMDDHHMMSS	20150126004700
From Time	Date	-	No	YYYYMMDDHHMMSS	20150126004700

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.12 Historic Acceptances

API service details for the flow is as follows

<b>Service Name</b>	historicAcceptancesService
<b>Operation Name</b>	historicAcceptancesImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/HISTACCEPTS/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/HISTACCEPTS/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;SettlementDate=&lt;SettlementDate&gt;&amp;SettlementPeriod=&lt;SettlementPeriod&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Acceptance Time (ascending) Input data flow : BOALF
<b>Comments</b>	Default Value (if none specified): From Settlement Date = Current System Date Settlement Period = Current Settlement Period

### API Web service – Request and Response format details:

API Webservice – Request –Historic Acceptances

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Settlement Date	String	-	No	YYYY-MM-DD	2014-12-31
Settlement Period	String	-	No	1 to 50	2
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response – Historic Acceptances

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "ACCEPTANCE DATA"
Settlement Date	From input parameter
Settlement Period	number between 1 and 50 or * if selecting a full day's data (from input parameter)

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "HAD"
BM Unit Id	String	-	No	-	T_STAY-2
Acceptance Number	Integer	-	No	-	2558965231
Acceptance Time	Date	-	No	YYYY-MM-DD HH:MM	2015-01-26 00:47

## BMRS API AND DATA PUSH USER GUIDE

---

Offer Price	Double	-	No	-	58.00000
Bid Price	Double	-	No	-	35.00000
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "HAD"
BM Unit Id	String	-	No	-	T_STAY-2
Acceptance Number	Integer	-	No	-	2558965231
Acceptance Time	Date	-	No	YYYYMMDDHHMMSS	20150126004700
Offer Price	Double	-	No	-	58.00000
Bid Price	Double	-	No	-	35.00000

### NOTE:

- Note that **NO** wildcard (\*) allowed for Settlement Period.

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.13 System Messages

API service details for the flow is as follows

<b>Service Name</b>	systemMessagesService
<b>Operation Name</b>	systemMessagesImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSMSG/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSMSG/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Acceptance Time (descending) Input data flow : NA
<b>Source</b>	MySQL
<b>Destination</b>	Third party software
<b>Data Source</b>	Reporting Database
<b>Database Table Name</b>	T_BMRS_SYS_MSGS
<b>Comments</b>	-

### API Web service – Request and Response format details:

#### API Webservice – Request –System Messages

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

#### API Webservice – Response – System Messages

##### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "SYSTEM MESSAGES"

##### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "SYSMSG"
Message Date Time	Date	-	No	YYYY-MM-DD HH:MM	2015-02-25 07:21
Message Type	String	-	No	-	MIDNP

## BMRS API AND DATA PUSH USER GUIDE

Message Text	String	-	No	-	Market Index Data for Settlement Day 20150225 period 14 from Automated Power Exchange (UK) (APXMIDP) was not received. Price and volume defaulted to 0.
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "SYMSG"
Message Date Time	Date	-	No	YYYYMMDDHHMMSS	20150126004700
Message Type	String	-	No	-	MIDNP
Message Text	String	-	No	-	Market Index Data for Settlement Day 20150225 period 14 from Automated Power Exchange (UK) (APXMIDP) was not received. Price and volume defaulted to 0.

### 5.3.14 BM Unit Search

#### API service details for the flow is as follows

<b>Service Name</b>	bmUnitSearchService
<b>Operation Name</b>	bmUnitSearchImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/BMUNITSEARCH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;BmUnitId=&lt;BmUnitId&gt;&amp;BmUnitType=&lt;BmUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NgcBmUnitName=&lt;NgcBmUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/BMUNITSEARCH/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;BmUnitId=&lt;BmUnitId&gt;&amp;BmUnitType=&lt;BmUnitType&gt;&amp;LeadPartyName=&lt;LeadPartyName&gt;&amp;NgcBmUnitName=&lt;NgcBmUnitName&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: BM Unit ID
<b>Source</b>	MySQL
<b>Destination</b>	Third party software
<b>Data Source</b>	Reporting Database
<b>Database Table Name</b>	T_BMRS_BM_UNT_SRCH
<b>Comments</b>	Default Value (if none specified): BM Unit Id = * BM Unit Type = * Lead Party Name = * NGC BM Unit Name = * (* implies all values)

# BMRS API AND DATA PUSH USER GUIDE

## API Web service – Request and Response format details:

### API Webservice – Request –BM Unit Search

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
BM Unit Id	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

### API Webservice – Response –BM Unit Search

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "BM UNIT DATA"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "BMUD"
BM Unit ID	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000
Active Flag	String	-	No	-	Y

#### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "BMUD"
BM Unit ID	String	-	No	-	2__AEENG000, G, E.ON Energy Solutions Limited, EAS-EST01
BM Unit Type	String	-	No	-	G, S, E, I, T, etc
Lead Party Name	String	-	No	-	AES New Energy Limited
NGC BM Unit Name	String	-	No	-	EAS-ASP01, AES New Energy Limited, G, 2__AAEPD000

#### 5.3.15 System Warning (Today/Tomorrow)



# BMRS API AND DATA PUSH USER GUIDE

## API service details for the flow is as follows

<b>Service Name</b>	systemWarningTodayTomorrowService
<b>Operation Name</b>	systemWarningTodayTomorrowImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSWARNTDYTOM&lt;VersionNo&gt;?APIKey=&lt;APIKey&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/SYSWARNTDYTOM&lt;VersionNo&gt;?APIKey=&lt;APIKey&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting: Times applicable (descending); separately for TODAY and TOMORROW Input data flow : System Warning flow from NGC
<b>Source</b>	MySQL
<b>Comments</b>	-

## API Web service – Request and Response format details:

### API Webservice – Request –System Warning (Today/Tomorrow)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

### API Webservice – Response – System Warning (Today/Tomorrow)

#### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "SYSTEM WARNINGS IN FORCE"

#### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
System warnings in force TODAY					
Record Type	String	-	No	-	Fixed string value "SYSWARNTDY "
Today	Date	-	No	YYYY-MM-DD	2008-07-02
Warning in Force	String	-	No	-	TDY
Times applicable	String	-	No	-	NONE
Active Flag	String	-	No	-	Y
System warnings in force TOMORROW					
Record Type	String	-	No	-	Fixed string value "SYSWARNTOM"

## BMRS API AND DATA PUSH USER GUIDE

Today	Date	-	No	YYYY-MM-DD	2008-07-02
Warning in Force	String	-	No	-	TDY
Times applicable	String	-	No	-	NONE
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
System warnings in force TODAY					
Record Type	String	-	No	-	Fixed string value "SYSWARNTDY "
Today	Date	-	No	YYYYMMDD	20080702
Warning in Force	String	-	No	-	TDY
Times applicable	String	-	No	-	NONE
System warnings in force TOMORROW					
Record Type	String	-	No	-	Fixed string value "SYSWARNTOM"
Today	Date	-	No	YYYYMMDD	20080702
Warning in Force	String	-	No	-	TOM
Times applicable	String	-	No	-	NONE

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.16 System Warning (Historic)

API service details for the flow is as follows

<b>Service Name</b>	systemWarningHistoricService
<b>Operation Name</b>	systemWarningHistoricImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/HISTSYSWARN/&lt;VersionNo&gt;?APIKey=&lt;APIKey&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/HISTSYSWARN/&lt;VersionNo&gt;?APIKey=&lt;APIKey&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting : Times applicable (descending) Warning Date Time; Input data flow : System Warning flow from NGC
<b>Source</b>	MySQL
<b>Comments</b>	-

API Web service – Request and Response format details:

API Webservice – Request –System Warning (Historic)

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
Service Type	String	-	No	-	<a href="#">xml/XML/csv/CSV</a>

API Webservice – Response – System Warning (Historic)

Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "SYSTEM WARNING - HISTORIC"

Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "SYSWARNHIST"
Warning Type	String	-	No	-	-
Effective From	Date	-	No	-	-
Time Effective From	Date	-	No	-	-
Shortfall (MW)	Double	-	No	-	-
Date Warning Cancelled	Date	-	No	-	-
Time Warning Cancelled	Date	-	No	-	-

## BMRS API AND DATA PUSH USER GUIDE

---

Active Flag	String	-	No	-	Y
-------------	--------	---	----	---	---

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "SYSWARNHIST"
Warning Type	String	-	No	-	-
Effective From	Date	-	No	-	-
Time Effective From	Date	-	No	-	-
Time Effective To	Date	-	No	-	-
Shortfall (MW)	Double	-	No	-	-
Date Warning Cancelled	Date	-	No	-	-
Time Warning Cancelled	Date	-	No	-	-
Active Flag	String	-	No	-	Y

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.17 Loss of Load Probability

API service details for the flow is as follows

<b>Service Name</b>	lossOfLoadProbabilityService
<b>Operation Name</b>	lossOfLoadProbabilityImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/LOLPDRM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/LOLPDRM/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting : 1. Settlement Date (ascending) 2. Settlement Period (ascending)
<b>Source</b>	MySQL
<b>Comments</b>	Default Value (if none specified; this is the today/tomorrow web page case): From Settlement Date = Current System Date To Settlement Date = Current System Date + 2

### API Web service – Request and Response format details:

#### API Webservice – Request – Loss of Load Probability

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Settlement Date	String	-	No	YYYY-MM-DD	2014-12-30
To Settlement Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	<a href="#">Xml/XML/csv/CSV</a>

#### API Webservice – Response – Loss of Load Probability

##### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "LOLP"

##### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "LOLPDRM"
Settlement Date	Date	-	No	YYYY-MM-DD	2014-12-31
Settlement Period	Integer	-	No	-	2
LOLP_1200	Double	-	No	-	0.977100
DRM_1200	Double	-	No	-	0.10000

## BMRS API AND DATA PUSH USER GUIDE

LOLP_8h	Double	-	No	-	0.978500
DRM_8h	Double	-	No	-	0.24000
LOLP_4h	Double	-	No	-	0.981600
DRM_4h	Double	-	No	-	0.18000
LOLP_2h	Double	-	No	-	0.981200
DRM_2h	Double	-	No	-	0.14000
LOLP_1h	Double	-	No	-	0.981000
DRM_1h	Double	-	No	-	0.12000
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "LOLPDRM"
Settlement Date	Date	-	No	YYYYMMDD	20141231
Settlement Period	Integer	-	No	-	2
LOLP_1200	Double	-	No	-	0.977100
DRM_1200	Double	-	No	-	0.10000
LOLP_8h	Double	-	No	-	0.978500
DRM_8h	Double	-	No	-	0.24000
LOLP_4h	Double	-	No	-	0.981600
DRM_4h	Double	-	No	-	0.18000
LOLP_2h	Double	-	No	-	0.981200
DRM_2h	Double	-	No	-	0.14000
LOLP_1h	Double	-	No	-	0.981000
DRM_1h	Double	-	No	-	0.12000

# BMRS API AND DATA PUSH USER GUIDE

## 5.3.18 Demand Control Instructions

API service details for the flow is as follows

<b>Service Name</b>	demandControlInstructionService
<b>Operation Name</b>	demandControlInstructionImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/DEMCI/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/DEMCI/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;FromSettlementDate&gt;&amp;ToSettlementDate=&lt;ToSettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting : 1. Demand Control ID (ascending) 2. Instruction Sequence (ascending)
<b>Source</b>	MySQL
<b>Comments</b>	Default Value (if none specified; this is the today/tomorrow web page case): From Settlement Date = Current System Date To Settlement Date = Current System Date + 1

### API Web service – Request and Response format details:

#### API Webservice – Request – Demand Control Instruction

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
From Settlement Date	String	-	No	YYYY-MM-DD	2014-12-30
To Settlement Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	<a href="#">Xml/XML/csv/CSV</a>

#### API Webservice – Response – Demand Control Instruction

##### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "DCONTROL"

##### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "DEMCI"
Demand Control ID	String	-	No	-	DCID1
Affected DSO	Integer	-	No	-	1
Instruction Sequence	String	-	No	-	SPOW

## BMRS API AND DATA PUSH USER GUIDE

Demand Control Event Flag	String	-	No	-	L
Time From	Date	-	No	YYYY-MM-DD HH:MM	2014-12-31 10:00
Time To	Date	-	No	YYYY-MM-DD HH:MM	2014-12-31 10:00
Demand Control Level	Double	-	No	-	10.00000
SO-Flag	String	-	No	-	F
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "DEMCI"
Demand Control ID	String	-	No	-	DCID1
Affected DSO	Integer	-	No	-	1
Instruction Sequence	String	-	No	-	SPOW
Demand Control Event Flag	String	-	No	-	L
Time From	Date	-	No	YYYYMMDDHHMM	201412311000
Time To	Date	-	No	YYYYMMDDHHMM	201412311000
Demand Control Level	Double	-	No	-	10.00000
SO-Flag	String	-	No	-	F



# BMRS API AND DATA PUSH USER GUIDE

## 5.3.19 STOR Availability Window

API service details for the flow is as follows

<b>Service Name</b>	storAvailabilityWindowService
<b>Operation Name</b>	storAvailabilityWindowImpl
<b>Method</b>	GET
<b>Input URL</b>	<a href="https://&lt;host&gt;:&lt;port&gt;/BMRS/STORAW/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;SettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;">https://&lt;host&gt;:&lt;port&gt;/BMRS/STORAW/&lt;VersionNo&gt;?APIKey=&lt;APIKey&gt;&amp;FromSettlementDate=&lt;SettlementDate&gt;&amp;ServiceType=&lt;xml/XML/csv/CSV&gt;</a>
<b>Output Format</b>	XML/CSV
<b>Description</b>	Default Sorting : 1. STOR Availability From Date (ascending)
<b>Source</b>	MySQL
<b>Comments</b>	Default Value (if none specified; this is the current web page case): From Settlement Date = Current System Date

### API Web service – Request and Response format details:

#### API Webservice – Request – STOR Availability Window

Logical Field Name	Field Type	Remarks	Mandatory	Format	Sample data
ApiKey	String	-	Yes	-	AP8DA23
FromSettlement Date	String	-	No	YYYY-MM-DD	2014-12-31
Service Type	String	-	No	-	<a href="#">Xml/XML/csv/CSV</a>

#### API Webservice – Response – STOR Availability Window

##### Header Record:

Report Output Field Mapping	Condition
Record Type	Fixed string value "HDR"
File Type	Fixed string value "STORAW DATA"

##### Body Record:

Logical Field Name	Field Type	Remarks	Mandatory	XML Format	Sample data
Record Type	String	-	No	-	Fixed string value "STORAW"
Document ID	Integer	-	No	-	67
Season Year	Date	-	No	YYYY-MM-DD	2014-12-31
Season Number	Integer	-	No	-	2
STOR Availability From Date	Date	-	No	YYYY-MM-DD HH:MM	2014-12-31 10:00

## BMRS API AND DATA PUSH USER GUIDE

STOR Availability To Date	Date	-	No	YYYY-MM-DD HH:MM	2014-12-31 10:00
Weekday Start Time	Date	-	No	HH:MM	10:00
Weekday End Time	Date	-	No	HH:MM	10:00
Non-weekday Start Time	Date	-	No	HH:MM	10:00
Non-weekday End Time	Date	-	No	HH:MM	10:00
Active Flag	String	-	No	-	Y

### CSV Download service

Logical Field Name	Field Type	Remarks	Mandatory	CSV Format	Sample data
Record Type	String	-	No	-	Fixed string value "STORAW"
Document ID	Integer	-	No	-	67
Season Year	Date	-	No	YYYYMMDD	20141231
Season Number	Integer	-	No	-	2
STOR Availability From Date	Date	-	No	YYYYMMDDHHMM	201412311000
STOR Availability To Date	Date	-	No	YYYYMMDDHHMM	201412311000
Weekday Start Time	Date	-	No	HHMM	10:00
Weekday End Time	Date	-	No	HHMM	10:00
Non-weekday Start Time	Date	-	No	HHMM	10:00
Non-weekday End Time	Date	-	No	HHMM	10:00

# BMRS API AND DATA PUSH USER GUIDE

## DATA PUSH SERVICE

### 6 Data Push Service

BMRS contains a new capability that allows the near real-time publishing of information from the BMRS system to industry participants. This document will describe how participant's can connect to this service and will describe what information is available from the service.

### 7 Connectivity

The BMRS Data Push Service supports a variety of Cross Language Clients and Protocols from Java, C, C++, C#, Ruby, Perl, Python, PHP to name a few. We also support several protocols for communication to the BMRS Data Push Service. These are as follows:

Protocol	Brief description
<b>OpenWire</b>	OpenWire is the default cross language wire protocol that is supported by the BMRS Data Push Service.
<b>Stomp</b>	The BMRS Data Push Service implements version 1.1 of the STOMP wire protocol. STOMP is the Simple (or Streaming) Text Orientated Messaging Protocol. STOMP provides an interoperable wire format so that STOMP clients can communicate with any STOMP message broker to provide easy and widespread messaging interoperability among many languages, platforms and brokers.
<b>AMQP</b>	The BMRS Data Push Service implements version 1.0 of the OASIS AMQP TC protocol. The OASIS AMQP TC advances a vendor-neutral and platform-agnostic protocol that offers organizations an easier; more secure approach to passing real-time data streams and business transactions. The goal of AMQP is to ensure information is safely and efficiently transported between applications, among organizations, across distributed cloud computing environments, and within mobile infrastructures. AMQP avoids proprietary technologies, offering the potential to lower the cost of enterprise middleware software integrations through open interoperability. By enabling a commoditized, multi-vendor ecosystem, AMQP seeks to create opportunities for transforming the way business is done in the Cloud and over the Internet.

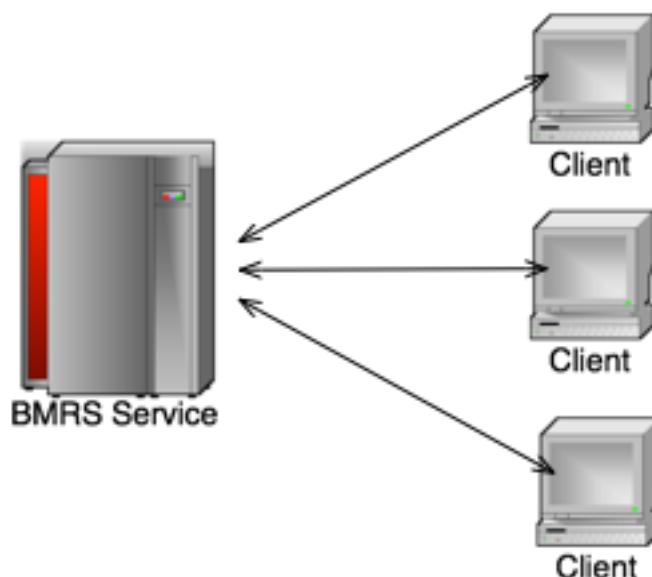
### 8 Topology

The BMRS Data Push Service allows two different approaches for the receipt of the messages. Depending upon the number of client's that require the receipt of these messages within a participant's organisation would determine the approach to use.

# BMRS API AND DATA PUSH USER GUIDE

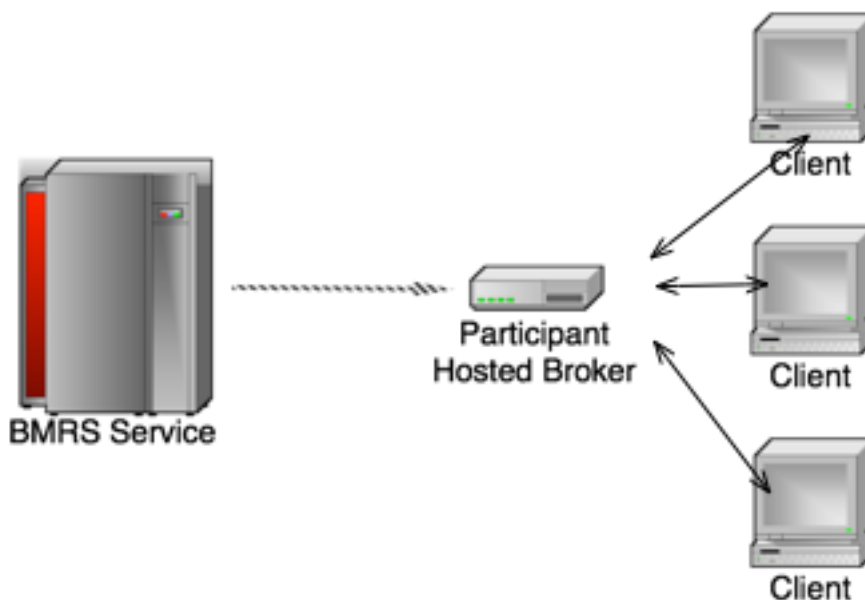
---

## 8.1 Client direct connection



In this mode, each client will connect to the BMRS Data Push service and receive messages as they are published. This approach is advised if the participant wishes to connect only one or two clients to the BMRS Data Push Service due to the amount of traffic replicated over the Internet to each client. Due to the nature of the messages being delivered there may be a slight delay between each client receiving the message.

## 8.2 Participant hosted broker



If a participant wishes to connect several clients to the BMRS Data Push Service it is the recommendation for that participant to host their own broker. This would mean that only one instance of the message is transmitted over the Internet to the participant's network thus reducing traffic or latency.

# BMRS API AND DATA PUSH USER GUIDE

The participant's clients would then connect over the participant's local LAN to the participant's broker to receive the messages. This approach provides the participant with the quickest approach for messages to be delivered to multiple clients.

## 8.3 Push Data XSDs

The XSDs for the push data service can be found on the ELEXON Portal in the "[BMRS API & Data Push](#)" Folder as shown below.

The screenshot shows the ELEXON Portal interface. At the top is the ELEXON Portal logo and a site search bar. Below the logo is a navigation bar with links: HOME, FAQs, USER GUIDE, SEARCH, and FEEDBACK. A breadcrumb trail indicates 'YOU ARE HERE > Content > BMRS API & Data Push'. The main content area is titled 'BMRS API & Data Push' and contains a description: 'This area of the portal contains documentation and support materials related to the use of the BMRS API and the BMRA Data Push Service.' Below this is a table with two columns: 'Title' and 'Last Modified'. The first row in the table is 'Data Push Service XML Schema Definitions' with a last modified date of '16/06/2015'. This row is circled in red. To the right of the table is a 'MY PORTAL' sidebar with a user profile for 'zaahir ghanty' and a list of bookmarks including 'BMRA Data Archive (formerl...', 'Market Domain Data (MDD)', 'Registered BM Units', 'Generation by Fuel Type - ...', and 'SVA Line Loss Factors'. A 'log out' button is at the bottom right of the sidebar.

The Data Push Service data content is based on the TIBCO Service.and for further guidance on the data items please refer to the [NETA Interface Definition and Design \(IDD\): Part 1](#).

## 8.4 Protocol Connection Strings

Here are some examples of protocol connection strings for connectivity to the data push service

Protocol	Sample URL
OpenWire over TCP	ssl://<host>:61616
OpenWire over HTTPS	https://<host>:61617
Stomp	stomp+ssl://<host>:61613
AMQP	amqp+ssl://<host>:5672

# BMRS API AND DATA PUSH USER GUIDE

## 8.5 Data Push Service – Summary Data Set

The list of data available via the data push service is listed in the table below.

**Please note:** the data set from Phase 1 (Transparency and REMIT) from table 4.2.1 will also be available via the Data Push Service from July 2015.

Interface ID	Data flow type	Data Items	Date set IDD ref	Phase & Delivery Date
BMRA-I004	Balancing Mechanism Data	Bid-Offer Acceptance Level Flagged Data	BOALF	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Bid-Offer Data	BOD	<b>Phase 2 (July 2015)</b>
BMRA-I004	Balancing Mechanism Data	Maximum Delivery Period	MDP	<b>Phase 2 (July 2015)</b>
BMRA-I004	Balancing Mechanism Data	Maximum Delivery Volume	MDV	<b>Phase 2 (July 2015)</b>
BMRA-I004	Balancing Mechanism Data	Maximum Export Limit	MEL, MELS	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Maximum Import Limit	MIL, MILS	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Minimum Non-Zero Time	MNZT	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Minimum Zero Time	MZT	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Notice to Deviate from Zero	NDZ	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Notice to Deliver Bids	NTB	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Notice to Deliver Offers	NTO	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Point FPN Data	PN, FPN	<b>Phase 2 (July 2015)</b>
BMRA-I004	Balancing Mechanism Data	Applicable Balancing Services Volume Data	QAS	<b>Phase 2 (July 2015)</b>
BMRA-I004	Balancing Mechanism Data	Point Quiescent FPN Data	QPN	<b>Phase 2 (July 2015)</b>
BMRA-I004	Balancing Mechanism Data	Run Down Rates Export	RDRE	<b>Phase 3 (October 2016)</b>

## BMRS API AND DATA PUSH USER GUIDE

BMRA-I004	Balancing Mechanism Data	Run Down Rates Import	RDRI	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Run Up Rates Export	RURE	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Run Up Rates Import	RURI	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Stable Export Limit	SEL	<b>Phase 3 (October 2016)</b>
BMRA-I004	Balancing Mechanism Data	Stable Import Limit	SIL	<b>Phase 3 (October 2016)</b>
BMRA-I005	System Related Data	Balancing Services Adjustment Action ID (unique for Settlement Period), Balancing Services Adjustment Action Cost (£), Balancing Services Adjustment Action Volume (MWh), Balancing Services Adjustment Action SO-Flag (T/F)	DISBSAD	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	National Output Usable by Fuel Type, 2-14 Day	FOU2T14D	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	National Output Usable by Fuel Type, 2-52 Week	FOU2T52W	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Realtime Transmission System Frequency Data	FREQ	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Half Hourly Generation By Fuel Type	FUELHH	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Instantaneous Generation By Fuel Type	FUELINST	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Indicated Imbalance	IMBALNGC	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Sum of PN Demand (MW), (Indicated Demand)	INDDEM	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Sum of PN Generation (MW), (Indicated Generation)	INDGEN	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Initial National Demand Out-Turn	INDO	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Outturn Volume (MWh), Normal Volume (MWh), High Volume (MWh), Low Volume (MWh)	INDOD	<b>Phase 2 (July 2015)</b>
BMRA-I005	System Related Data	Initial Transmission System Demand Out-Turn	ITSDO	<b>Phase 2 (July 2015)</b>

## BMRS API AND DATA PUSH USER GUIDE

BMRA-I005	System Related Data	Indicated Margin	MELNGC	Phase 2 (July 2015)
BMRA-I005	System Related Data	Market Index Price, Market Index Volume	MID	Phase 2 (July 2015)
BMRA-I005	System Related Data	Missing Market Index Data Messages	Missing MID	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Demand Forecast	NDF	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Demand Forecast Day, 2-14 Day	NDFD	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Demand Forecast Week, 2-52 Week	NDFW	Phase 2 (July 2015)
BMRA-I005	System Related Data	Net Energy Buy Price Cost Adjustment (EBCA) (£), Net Energy Buy Price Volume Adjustment (EBVA) (MWh), Net System Buy Price Volume Adjustment (SBVA) (MWh), Buy Price Price Adjustment (BPA) (£/MWh), Net Energy Sell Price Cost Adjustment (ESCA) (£), Net Energy Sell Price Volume Adjustment (ESVA) (MWh), Net System Sell Price Volume Adjustment (SSVA) (MWh), Sell Price Price Adjustment (SPA) (£/MWh)	NETBSAD	Phase 2 (July 2015)
BMRA-I005	System Related Data	Non-BM STOR Out-Turn	NONBM	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Surplus Forecast, 2-14 Day	OCNMFD	Phase 2 (July 2015)
BMRA-I005	System Related Data	Generating Plant Demand Margin, 2-14 Days	OCNMFD2	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Surplus Forecast, 2-52 Week	OCNMFV	Phase 2 (July 2015)
BMRA-I005	System Related Data	Generating Plant Demand Margin, 2-52 Weeks	OCNMFV2	Phase 2 (July 2015)
BMRA-I005	System Related Data	SO-SO Prices	SO-SO	Phase 2 (July 2015)
BMRA-I005	System Related Data	System Message	SYSMSG	Phase 3 (October 2016)
BMRA-I005	System Related Data	System Zone Map	System Zone Map	Phase 3 (October 2016)
BMRA-I005	System Related Data	System Warnings	SYSWARN	Phase 2 (July 2015)



## BMRS API AND DATA PUSH USER GUIDE

BMRA-I005	System Related Data	Outturn Temperature, Low Reference Temperature, Normal Reference Temperature, High Reference Temperature (all degrees Celsius)	TEMP, REFTEMP	Phase 2 (July 2015)
BMRA-I005	System Related Data	Transmission System Demand Forecast	TSDF	Phase 2 (July 2015)
BMRA-I005	System Related Data	Transmission System Demand Forecast Day, 2-14 Day	TSDFD	Phase 2 (July 2015)
BMRA-I005	System Related Data	Transmission System Demand Forecast Week, 2-52 Week	TSDFW	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Output Usable by Fuel Type and BM Unit, 2-14 Day	UOU2T14D	Phase 2 (July 2015)
BMRA-I005	System Related Data	National Output Usable by Fuel Type and BM Unit, 2-52 Week	UOU2T52W	Phase 2 (July 2015)
BMRA-I005	System Related Data	Generation Forecast (MW), Total Registered Capacity (MW)	WINDFOR	Phase 2 (July 2015)
BMRA-I006	Derived Data	Period Bid and Offer Acceptance Volumes (QAB, QAO and CADL Flag)	BOAV	Phase 3 (October 2016)
BMRA-I006	Derived Data	Estimated Period BM Unit Total Accepted Bid and Offer Volume (QAB and QAO), Estimated Period BM Unit Tagged Accepted Bid and Offer Volume (QTAB and QTAO), Estimated Period BM Unit Repriced Accepted Bid and Offer Volume (QRAB and QRAO), Estimated Period BM Unit Originally-Priced Accepted Bid and Offer Volume (QOAB and QOAO)	DISPTAV	Phase 3 (October 2016)
BMRA-I006	Derived Data	Estimated Bid Offer Cash flows	EBOCF	Phase 3 (October 2016)
BMRA-I006	Derived Data	Index, Component Identifier, Acceptance Number, Bid-Offer Pair Number, CADL Flag (T/F), SO-Flag (T/F), Repriced Indicator (T/F), Volume (MWh), DMAT Adjusted Volume (MWh), Arbitrage Adjusted Volume (MWh), NIV Adjusted Volume (MWh), PAR Adjusted Volume (MWh), Final Price (£/MWh), Transmission Loss Multiplier, TLM Adjusted Volume (MWh), TLM Adjusted Cost (£)	ISPSTACK	Phase 3 (October 2016)

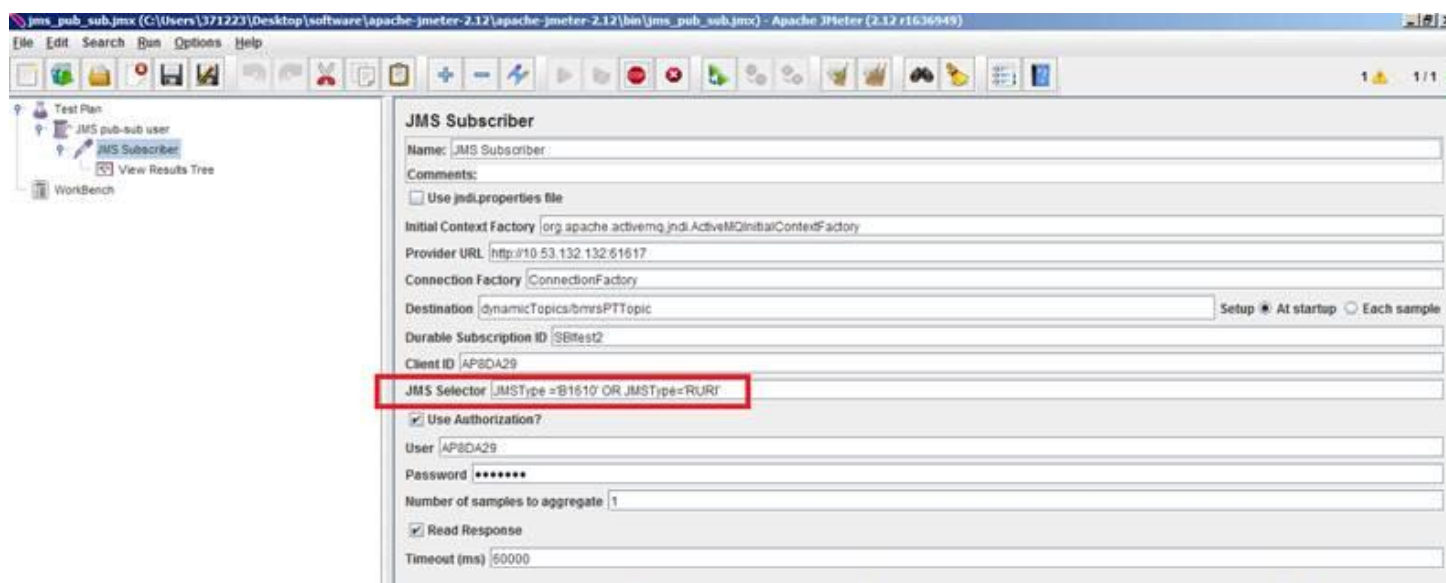
# BMRS API AND DATA PUSH USER GUIDE

BMRA-I006	Derived Data	Estimated Period Balancing Mechanism Bid and Offer Cashflows (CB and CO)	PTAV	Phase 3 (October 2016)
BMRA-I006	Derived Data	Disaggregated Estimated Buy and Sell Price	DISEBSP	Phase 3 (October 2016)
BMRA-I006	Derived Data	Total Bid Volume and Total Offer Volume	TBOD	Phase 3 (October 2016)
BMRA-I019	Credit Default Notices	Credit Default Notices	CDN	Phase 2 (July 2015)

## 8.6 Message types

The Data Push Service allows you to filter by message type. JMS selectors can be used to filter the received messages based on a given data item. The different flows have been assigned a unique JMSType (see the table below) and hence to filter on specific flows please use this field. The implementation of the filter depends on the participant side message consumer technology, however the syntax will be standards based as follows <https://docs.oracle.com/cd/E19798-01/821-1841/bncr/index.html>

Examples of the implementing a filter using the apache JMeter client are as follows:



Message Types (JMSType)		
Phase1	Phase2	Phase3
B0610	FOU2T14D	MNZT
B0620	FOU2T52W	MZT

## BMRS API AND DATA PUSH USER GUIDE

---

B0630	INDOD	NDZ
B0640	ITSDO	NTB
B0650	INDO	NTO
B0810	FUELHH	SEL
B1410	FUELINST	SIL
B1420	FREQ	RDRE
B1430	UOU2T14D	RDRI
B1440	UOU2T52W	RURE
B1610	NONBM	RURI
B1620	WINDFOR	MELS
B1630	DISBSAD	MILS
B1720	QAS	BOALF
B1730	IMBALNGC	BOAV
B1740	NETBSAD	EBOCF
B1750	SYS_WARN	TBOD
B1760	SOSO	SYMSG
B1770	BOD	DISPTAV
B1780	OCNMF2	ISPSTACK
B1790	OCNMF	DISEBSP
B1810	QPN	LOLPDM
B1820	PN	MID
B1830	TSDFD	
B0910	MDV	

# BMRS API AND DATA PUSH USER GUIDE

---

B1320	MDP	
B1330	NDFW	
B0710	TSDFW	
B0720	OCNMFD2	
B1010	OCNMFD	
B1020	TSDF	
B1030	NDFD	
B1510	CDN	
B1520	INDDM	
B1530	INDGEN	
B1540	MELNGC	
B1930	NDF	
B2010	TEMP	

## 9 Data Push and API checklist

Below are the major points of information you will need to be able to use either the RESTful or the Push Data service.

### 9.1 RESTful

**URL:** This is the address of the RESTful service you are accessing. The default for the ELEXON live service is <https://api.bmreports.co.uk/BMRS>.

**APIKey:** This is provided through the ELEXON portal. You need to register with the portal prior to the use of the API services.

**Client:** This can be a web browser or a custom piece of code.

### 9.2 Push Data Service

**URL:** This is the address of the RESTful service you are accessing. The default for the ELEXON live service is [https://api.bmreports.co.uk:<PROTOCOL\\_PORT>](https://api.bmreports.co.uk:<PROTOCOL_PORT>).

**APIKey:** This is provided through the ELEXON portal. You need to register with the portal prior to the use of the API services.

# BMRS API AND DATA PUSH USER GUIDE

---

**Protocol and API:** A protocol is the language that is spoken between the push data service and your client. The ELEXON Push Data Service supports several protocols documented earlier in this guide. You will need to select a protocol and the supporting library (ELEXON do not provide these) for your environment.

**Client:** You will need a client that receives the information through your chosen protocol and library. This client will most likely be a custom piece of code for your environment that will receive the message from the ELEXON push data service and then process it for your organisation.

## 9.3 Other Considerations

The broker is ActiveMQ 5.10.0

- The broker address is api.bmreports.com (for production), testapi.bmreports.com (for testing)
- The port varies depending on the chosen protocol – see section 8.4
- The method of establishing a durable connection varies depending on the protocol – see the ActiveMQ website for details
- Regardless of chosen protocol, your scripting key should be passed as both username and password – see your profile page of the ELEXON Portal
- The topic is /topic/bmrsTopic
- No particular approach is recommended, but Java examples are provided in the Appendix of this document

## APPENDICES

---

### 10 Appendix A – Example Source Code RESTful Service

#### 10.1 Java

The following code demonstrates calling the RESTful service using standard Java API.

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.net.HttpURLConnection;
import java.net.MalformedURLException;
import java.net.URL;

/**
 *
 * @author stephen
 */
public class BMRSGet {

    private static final String ELEXON_PORTAL_KEY = "YOUR API KEY HERE";

    public static void main(String[] args) {

        try {
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
URL url = new URL("https://testapi.bmreports.com/BMRS/MessageListRetrieval/V1?ServiceType=XML&APIKey=" + ELEXON_PORTAL_KEY + "&EventStart=2014-01-01&EventEnd=2014-01-02");

URLConnection conn = (URLConnection) url.openConnection();

conn.setRequestMethod("GET");

conn.setRequestProperty("Accept", "application/xml");


if (conn.getResponseCode() != 200) {
    throw new RuntimeException("Failed : HTTP error code : "
        + conn.getResponseCode());
}


BufferedReader br = new BufferedReader(new InputStreamReader(
    (conn.getInputStream())));

String output;

System.out.println("Output from Server .... \n");

while ((output = br.readLine()) != null) {
    System.out.println(output);
}


conn.disconnect();
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
    } catch (MalformedURLException e) {

        e.printStackTrace();

    } catch (IOException e) {

        e.printStackTrace();

    }

}

}
```

### 10.2 Python

The following code is written in python and demonstrates calling the Elexon RESTful API. Please note that you need to replace the **YOUR\_API\_KEY\_HERE** with the key from the Elexon portal.

```
#!/usr/bin/env python

import httplib2

# These aren't needed, just for this example
```



## BMRS API AND DATA PUSH USER GUIDE

---

```
from pprint import pprint

def post_elexon(url):
    http_obj = http_lib2.Http()
    resp, content = http_obj.request(
        uri=url,
        method='GET',
        headers={'Content-Type': 'application/xml; charset=UTF-8'},
    )
    print '===Response==='
    pprint(resp)

    print '===Content==='
    pprint(content)

    print '===Finished==='

def main():

    post_elexon(
        url='https://api.bmreports.com/BMRS/B1770/v1?APIKey=YOUR_API_KEY_HERE&SettlementDate=2015-03-01&Period=1&ServiceType=xml',
    )
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
if __name__ == "__main__":  
    main()
```

# BMRS API AND DATA PUSH USER GUIDE

---

## 11 Appendix B – Example Push Data Service Source Code

### 11.1 Java – onMessage example

```
import java.io.FileWriter;
import java.io.PrintWriter;
import javax.jms.Connection;
import javax.jms.ConnectionFactory;
import javax.jms.JMSException;
import javax.jms.MessageConsumer;
import javax.jms.MessageListener;
import javax.jms.Session;
import javax.jms.Topic;

import org.apache.activemq.ActiveMQConnectionFactory;
import org.apache.activemq.command.ActiveMQTextMessage;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;

/**
 *
 * @author stephen
 */
public class Subscriber {
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
// --- Start of connection details

private static final String URL = "ssl://api.bmreports.com:61616"; // This is the connection string to the ELEXON servers

private static final String APIKEY = "<YOUR API KEY GOES HERE>"; // This is your API key from the portal

private static final String CLIENTID = "<YOUR CLIENT ID GOES HERE>"; // This is a client name that needs to be unique (this you create)

private static final String TOPICNAME = "bmrsTopic"; // This is the topic name

private static final String SUBSCRIPTIONID = "<YOUR SUBSCRIPTION ID GOES HERE>"; // Each durable subscription needs an ID that is unique (this you create)

// --- End of connection details


private static final Logger LOGGER = LoggerFactory
    .getLogger(Subscriber.class);


private Connection connection;

private Session session;

private MessageConsumer messageConsumer;

private static Subscriber subscriberPublishSubscribe;


/**
 * Generic start point.
 *
 * @param args the command line arguments
 * @throws java.lang.Exception
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
*/  
  
public static void main(String[] args) throws Exception {  
    try {  
        // Setup and connect to the queue  
        subscriberPublishSubscribe = new Subscriber();  
        subscriberPublishSubscribe.create(URL, APIKEY, CLIENTID, TOPICNAME, SUBSCRIPTIONID);  
  
    } catch (Exception ex) {  
  
        LOGGER.error(ex.getLocalizedMessage());  
  
        if (subscriberPublishSubscribe != null) {  
            subscriberPublishSubscribe.closeConnection();  
        }  
    }  
}  
  
/**  
 * This is the method that initiates the connection and sets up the  
 * JMSListener  
 */
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
* @param url - The server and connection protocol
* @param apikey - the api key to connect with
* @param clientId - Unique id for this client
* @param topicName - The topic to listen to
* @throws JMSEException
*/

public void create(String url, String apikey, String clientId, String topicName, String subId) throws JMSEException {

    // create a Connection Factory
    ConnectionFactory factory = new ActiveMQConnectionFactory(apikey, apikey, url);

    try {
        // create a Connection
        LOGGER.debug("Creating a connection");
        connection = factory.createConnection();
        connection.setClientID(clientId);

        // create a Session
        LOGGER.debug("Creating a session");
        session = connection.createSession(false, Session.AUTO_ACKNOWLEDGE);

        // create the Topic from which messages will be received
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
LOGGER.debug("Creating the topic connection: " + topicName);

Topic topic = session.createTopic(topicName);


// Set up the message consumer
LOGGER.debug("Creating the consumer for: " + topicName);
//messageConsumer = session.createConsumer(topic);
messageConsumer = session.createDurableSubscriber(topic, subId);


// Create the listener.
LOGGER.debug("Setting up the listener");
JMSMessageListener listener = new JMSMessageListener();
messageConsumer.setMessageListener(listener);


// start the connection in order to receive messages
LOGGER.debug("Starting the connection");
connection.start();

} catch (JMSEException exp) {
    throw exp;
}

}

public void closeConnection() throws JMSEException {
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
        LOGGER.debug("Closing the connection");
        connection.close();
    }

    /**
     * This class implements a message listener for the ActiveMQ
     */
    class JMSMessageListener implements MessageListener {

        @Override
        public void onMessage(javax.jms.Message msg) {
            try {
                LOGGER.info(msg.toString());

                ActiveMQTextMessage txtMessage = (ActiveMQTextMessage) msg;

                LOGGER.info(txtMessage.getText());

                try (PrintWriter out = new PrintWriter(new FileWriter(txtMessage.getJMSMessageID()))) {
                    out.print(txtMessage.getText());
                }
            }
        }
    }
}
```



## BMRS API AND DATA PUSH USER GUIDE

---

```
        } catch (Exception ex) {  
            LOGGER.error(ex.getLocalizedMessage());  
        }  
    }  
}
```

### 11.2 Java – Looping example

```
import javax.jms.Connection;  
import javax.jms.ConnectionFactory;  
import javax.jms.JMSException;  
import javax.jms.Message;  
import javax.jms.MessageConsumer;  
import javax.jms.Session;  
import javax.jms.TextMessage;  
import javax.jms.Topic;  
import javax.naming.NamingException;  
import org.apache.activemq.ActiveMQConnectionFactory;  
import org.slf4j.Logger;  
import org.slf4j.LoggerFactory;  
  
/**
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
*  
* @author stephen  
*/  
public class SubscriberRetry {  
  
    // --- Start of connection details  
  
    private static final String URL = "ssl://api.bmreports.com:61616"; // This is the connection string to the ELEXON servers  
    private static final String APIKEY = "<YOUR API KEY GOES HERE>"; // This is your API key from the portal  
    private static final String CLIENTID = "<YOUR CLIENT ID GOES HERE>"; // This is a client name that needs to be unique (this you create)  
    private static final String TOPICNAME = "bmrsTopic"; // This is the topic name  
    private static final String SUBSCRIPTIONID = "<YOUR SUBSCRIPTION ID GOES HERE>"; // Each durable subscription needs an ID that is unique (this you create)  
  
    // --- End of connection details  
  
    private static final Logger LOGGER = LoggerFactory  
        .getLogger(SubscriberRetry.class);  
  
    private static SubscriberRetry consumer;  
    private Connection connection;  
    private Session session;  
    private MessageConsumer messageConsumer;  
  
    private boolean transacted;
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
private boolean isRunning = false;

/**
 * @param args the command line arguments
 * @throws java.lang.InterruptedException
 */
public static void main(String[] args) throws InterruptedException {

    int retryCount = 20000;
    int count = 0;
    consumer = new SubscriberRetry();

    // This runs forever
    while (count < retryCount) {
        LOGGER.debug("Attempting connection. Count = " + count);
        try {
            consumer.run();
        } catch (NamingException | JMSEException ex) {
            LOGGER.error(ex.getLocalizedMessage());
            count++;
        } finally {
            LOGGER.debug("Shutting down");
        }
    }
}
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
    }  
    Thread.sleep(1000);  
}  
}  
  
public void run() throws NamingException, JMSEException {  
    isRunning = true;  
  
    // create a Connection Factory  
    ConnectionFactory factory = new ActiveMQConnectionFactory(APIKEY, APIKEY, URL);  
  
    // create a Connection  
    LOGGER.debug("Creating a connection");  
    connection = factory.createConnection();  
    connection.setClientID(CLIENTID);  
  
    // create a Session  
    LOGGER.debug("Creating a session");  
    session = connection.createSession(transacted, Session.AUTO_ACKNOWLEDGE);  
  
    // create the Topic from which messages will be received  
    LOGGER.debug("Creating the topic connection: " + TOPICNAME);
```

## BMRS API AND DATA PUSH USER GUIDE

---

```
Topic topic = session.createTopic(TOPICNAME);

// Set up the message consumer
LOGGER.debug("Creating the consumer for: " + TOPICNAME);
messageConsumer = session.createDurableSubscriber(topic, SUBSCRIPTIONID);

// start the connection in order to receive messages
LOGGER.debug("Starting the connection");
connection.start();

while (isRunning) {
    LOGGER.debug("Waiting for message...");
    Message message = messageConsumer.receive(1000);
    if (message != null && message instanceof TextMessage) {
        TextMessage txtMsg = (TextMessage) message;
        LOGGER.debug("Received: " + txtMsg.getText());
    }
}

LOGGER.debug("Closing connection");
messageConsumer.close();
session.close();
connection.close();
```

## BMRS API AND DATA PUSH USER GUIDE

---

### 11.3 Python Example (Stomp)

The following example uses the stomp.py library – see <https://github.com/jasonrbriggs/stomp.py>

```
import stomp
import time

class MyListener(stomp.ConnectionListener):
    def on_error(self, headers, message):
        print('received an error "%s"' % message)
    def on_message(self, headers, message):
        for k,v in headers.iteritems():
            print('header: key %s , value %s' %(k,v))
        print('received a message "%s"' % message)
        with open("messages.log", "a") as logfile:
            logfile.write(message)

conn = stomp.Connection12(host_and_ports=[('api.bmreports.com', 61613)], use_ssl=True)
conn.set_listener('', MyListener())
conn.start()
conn.connect('YOUR API KEY HERE', 'YOUR API KEY HERE', True)
conn.subscribe(destination='/topic/bmrsTopic', ack='auto', id='CLIENT ID OF YOUR CHOICE HERE')
while conn.is_connected():
    time.sleep(1)
```

## 12 Amendment History

Version	Date	Author	Reason
Version 0.1	12 November 2014	Zaahir Ghanty	First Draft for peer review
Version 0.2	12 December 2014	Stephen J. Thompson	Brought into alignment with 0.6 of the API specification
Version 0.3	12 December 2014	Zaahir Ghanty	Update following review
Version 0.4	28 April 2015	Zaahir Ghanty/Stephen J. Thompson	Update to include REST API for Phase 2 & Data Push Service
Version 0.5	18 May 2015	Zaahir Ghanty	Update following user feedback
Version 0.6	14 July 2015	Stephen J. Thompson	Update of API request method from POST to GET
Version 0.7	24 July 2015	Zaahir Ghanty/Stephen J. Thompson	Update of API URLs and Java examples for Data Push
Version 0.8	31 August 2015	Stephen J. Thompson	Updated the RESTful examples to use the GET verb. Added a checklist for users
Version 0.9	22 January 2016	Zaahir Ghanty	Updated to include REST API for Phase 3 and P305 Data
Version 0.10	22 April 2016	Zaahir Ghanty	Updated following user feedback  Added message types for Data Push Service
Version 0.11	14 July 2016	Zaahir Ghanty	Housekeeping updates
Version 0.12	17 October 2016	Zaahir Ghanty	Housekeeping updates & Python working example for Data Push