**Technical Guide**

**Metering Notice and Statement**

October 20th 2023



|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Référence** | | GuideTechnique-BM-EN | | | | **Classement** | | |  | | | |
|  |  | | | | | | | | | | | |
| **Accessibilité** | | | *Accès réservé* |  | *Restreint* | |  | *Interne* | |  | *Libre (à préciser)* | **X** |
|  |  | | | | | | | | | | | |
| **Résumé** | | | | | | | | | | | | |
| This document describes the exchange format for the Metering Statement and Metering Notice. | | | | | | | | | | | | |

# Versions list

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Auteur(s)** | **Description** |
| V0.1 | 25/01/2022 | A Soudé | First Version |
| V0.2 | 10/10/2023 | A Soudé | URL API Information §6 |
| V0.3 | 20/10/2023 | A Soudé | AM file example |

# File definition

Metering Statements or Metering Notices are files dedicated to publish the metering data to our clients.

* The Metering Notice (AM) contains the data for a single gasday : daily and hourly measures for the previous gasday
* The Within Day Metering Notice (AMJ) contains all the hourly measures for the current gasday

Metering Statements containts data for a whole month.

* Provisional Metering Statements (BMP) contains the daily and hourly measures for the current month (for the 1st of the month to D-1)
* Definitive Metering Statements (BMD) contains the daily and hourly measures for the last month
* Rectified Metering Statements (BMR) contains the daily and hourly measures for months older than the last one (for M-2 to M-18)

These files contains the following data :

* The energy, volume and GCV for the gasday and each hour of the gasday
* The gas quality details

# Where to find the files

The files are provided by GRTgaz for the shippers (for each transmission contract) and for the industrial customers (for each connection contract). They are made available the following ways :

* **Proactively :** 
  + A CSV file is available and can be downloaded on our ingrid website
  + The same CSV file is also available on our sFTP server (the Technical Guide for the sFTP connection is available at grtgaz.com)
  + An EDIG@S METRED v5.1 file is also available
* **Via API :** Dedicated APIs are available to request the metering data. Daily and hourly data are shown in separate API. The interface contract for the API is described in §6. You can contact your usual operational contact to gain access to our API.

# File name and format

The files are published in the CSV format, with :

* A semicolon as a list separator
* A comma as a decimal mark

The files will be named according to the following rule :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **N°** | **Designation** | **Type** | **Length** | **Format** |
| **1** | Document type | Alphanumeric | 3 | AMJ/ AM/ BMP/ BMD/ BMR |
| **2** | Contrat code | Alphanumeric | 30 |  |
| **3** | Gasday (AM / AMJ)  Gas month (BMP, BMP, BMR) | Date | 8  6 | YYYYMMDD  YYYYMM |
| **4** | Date | Date | 17 | DDMMYYYYhhmmssSSS |
| **5** | Extension | Alphanumérique | 4 | .csv |
| **6** | Separators |  | 3 | « \_ » |

Therefore, the file names are:

AMJ\_CONTRACTCODE\_YYYYMMDD\_DDMMYYYYhhmmssSSS.csv

AM\_CONTRACTCODE\_YYYYMMDD\_DDMMYYYYhhmmssSSS.csv

BMP\_CONTRACTCODE\_YYYYMM\_DDMMYYYYhhmmssSSS.csv

BMD\_CONTRACTCODE\_YYYYMM\_DDMMYYYYhhmmssSSS.csv

BMR\_CONTRACTCODE\_YYYYMM\_DDMMYYYYhhmmssSSS.csv

# File description

The files contain 3 sections, each section separated by a line break :

* Header
* Daily data
* Hourly data

The following table describes the sections relevant to each specific file :

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Header** | **Daily data** | **Hourly data** |
| **AMJ** | X |  | X |
| **AM** | X | X | X |
| **BMP** | X | X | X |
| **BMD** | X | X | X |
| **BMR** | X | X | X |

Section 1 - Header  :

The header lists information about the publication time and the gasdays included in the file.

This section contains the following data :

* An ID :
  + For the AMJ :
    - Mesures intra-journalières / Within-Day Metering Notice
      * Example : AMJ-XXXXX
  + For the AM :
    - Avis de Mesure / Metering Notice :
      * Example : AM-XXXXX
  + For the BMP :
    - Bordereaux de mesure provisoire / Provisionnal Metering Statement
      * Example : BMP-XXXXX
  + For the BMD :
    - Bordereaux de mesure définitif / Definitive Metering Statement
      * Example : BMD-XXXXX
  + For the BMR :
    - Bordereaux de mesure redressé / Rectified Metering Statement
      * Example : BMR-XXXXX
* Réseau / Network :
  + Constant value = GRTgaz
* Période / Period :
  + Example : 01/12/2022 06:00 – 02/12/2022 06 :00
  + The period represents the first and last gasdays included in the file
* ID contrat/ ID contract:
  + Example : GFXXXX01
* ID expéditeur/ ID shipper :
  + In case of a transmission contract :
    - The shipper ID is made with the contract ID without the last 2 digits
    - Example : GFXXXX
  + In case of a connection contract or a holding  :
    - The shipper ID is made with « SOC » followed by 4 or 5 digits.
    - Example : SOCXXXXX
* Nom de l’expéditeur / Name of the shipper :
  + Example : XXXX
  + Company name
* Date de mise à jour / Last update
  + Example : 02/12/2021 01:16:25
  + Publication time

**Sections 2 and 3 – Daily and Hourly data:**

**Daily table:**

This table is not included in AMJ files.

The table (with semicolon list separators) includes :

- A header line with the name of each columns

- The daily data with a different line per (PCE / Gasday/ Type of metering)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **N° Column** | **Column label** | **Type** | **Format** | **Mandatory** | **Description** | **Example of possibles values** |
| **1** | Code PCE / Metering point code | Text |  | Y | PCE code | ACI50170 |
| **2** | Libellé PCE / Metering point label | Text |  | Y | PCE label | BANEUIL POLYREY |
| **3** | Journée gazière / Gasday | Date | DD/MM/YYYY | Y | Gasday | 25/01/2023 |
| **4** | Type de mesure / Metering type | Text |  | N | Type of metering | VOLUME  ENERGIE  PCS  DENSITE  MASSE  TX\_CO2  TX\_N2  TX\_CH4  INDICE\_WOB  TX\_C2H6  TX\_C3H8  TX\_C4H10\_ISOB  TX\_C4H10\_NBU  TX\_C5H12\_NEOP  TX\_C5H12\_ISOP  TX\_C5H12\_NPE  TX\_C6P  TX\_HYD |
| **5** | Unité / Unit | Text |  | N | Unit | m3(n)  kWh à 0°C  kWh à 0°C/m3(n)  Sans unité  kg/m3(n)  Pourcentage |
| 6 | Date et heure de mise à jour / Update date and time | Horodate | YYYY-MM-DDTHH:MM:SSZ | N | Update time | 2023-01-25T17:30:00Z |
| **7** | Valeur/ Value | Numeric |  | N | Metering value | 11,435 |
| **8** | Qualité / Quality | Text |  | N | Metering quality | A : Acquis  AF: Fiable  AD:  Douteux  RI : Remodulé à partir d’un index  RF : Remodulé suite à un forçage  EM : Estimé manuellement  EA : Estimé automatiquement  AA : Acquis en alarme  F3 : forçage type 3  Bp : forçage bipasse  FJ : forçage journalier  D : Douteux  M : Manquant  -: Non connu  B : Backup |

**Hourly table :**

The table (with semicolon list separators) includes :

- A header line with the name of each columns

- The hourly data with a different line per (PCE / Gasday/ Type of metering/hour)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **N° Column** | **Column label** | **Type** | **Format** | **Mandatory** | **Description** | **Example of possible values** |
| **1** | Code PCE /Metering point code | Text |  | Y | PCE code | ACI50170 |
| **2** | Libellé PCE / Metering point label | Text |  | Y | PCE label | BANEUIL POLYREY |
| **3** | Journée gazière / Gasday | Date | DD/MM/YYYY | Y | Gasday | 25/01/2023 |
| **4** | Type de mesure / Metering type | Text |  | N | Type of Metering | VOLUME  ENERGIE  PCS  DENSITE  MASSE  TX\_CO2  TX\_N2  TX\_CH4  INDICE\_WOB  TX\_C2H6  TX\_C3H8  TX\_C4H10\_ISOB  TX\_C4H10\_NBU  TX\_C5H12\_NEOP  TX\_C5H12\_ISOP  TX\_C5H12\_NPE  TX\_C6P  TX\_HYD |
| **5** | Unité / Unit | Text |  | N | Unit | m3(n)  kWh à 0°C  kWh à 0°C/m3(n)  Sans unité  kg/m3(n)  Pourcentage |
| 6 | Date et heure de mise à jour / Update date and time | Horodate | YYYY-MM-DDTHH:MM:SSZ | N | Update time | 2023-01-25T17:30:00Z |
| **7** | Valeur / Value | Numeric |  | N | Value | 100 000 |
| **8** | Qualité / Quality | Text |  | N | Quallity | A : Acquis  AF: Fiable  AD:  Douteux  RI : Remodulé à partir d’un index  RF : Remodulé suite à un forçage  EM : Estimé manuellement  EA : Estimé automatiquement  AA : Acquis en alarme  F3 : forçage type 3  Bp : forçage bipasse  FJ : forçage journalier  D : Douteux  M : Manquant  -: Non connu  B : Backup |
| **9** | Heure / Hour | Hour | HH :MM | Y | Hour | 06:00 |

**File examples :**

AMJ  Example:



AM Exemple:



BMP/BMD/BMR  Example:



# API interface contract

The format of the API (yaml) is available in the below url:

For the production environment:

[https://api.ingrid.grtgaz.com/publication/realisations/v3/api-docs.yaml](https://api.ingrid.grtgaz.com/publication/realisations/v3/api-docs.yaml%20)

For the staging environment

[https://api.ingrid-stg.grtgaz.com/publication/realisations/v3/api-docs.yaml](https://api.ingrid-stg.grtgaz.com/publication/realisations/v3/api-docs.yaml%20)

The access to this API requires an authentication (client and secret). They need to be asked to your operational contact.

The API connection technical guide explain the way to use these API. It can be found in the following link:

<https://www.grtgaz.com/sites/default/files/2023-03/guide-technique-ingrid-api.pdf>