**Technical Guide**

**Maintenance Schedule**

December 1st 2023



|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Reference** | | GuideTechnique-PTCTLT-EN | | | | **Rating** | | |  | | | |
|  |  | | | | | | | | | | | |
| **Accessibility** | | | *Accès réservé* |  | *Restreint* | |  | *Interne* | |  | *Libre (à préciser)* | **X** |
|  |  | | | | | | | | | | | |
| **Summary** | | | | | | | | | | | | |
| This document describes the format for exchanging data relating to the Short and Long term Maintenance Schedule (PTCT and PTLT) | | | | | | | | | | | | |

# Version tracking

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Autor(s)** | **Description** |
| V1.0 | 20/05/2022 | M LE GAOUYAT | Initial Version |
| V1.1 | 26/09/2022 | M LE GAOUYAT | Modifications (API §3 & §6 ; §5.2 & PTLT File) |
| V1.2 | 10/10/2022 | C FLORESTANO | To clarify API Acess |
| V1.3 | 01/12/2023 | C FLORESTANO | Add mapping API |

# Description

The Maintenance Schedule is a common document, which shows the restriction data on the upstream network of GRTgaz. It is divided into 2 documents : short term (from D to D+1) and long term (from D+2 to D+n).

# Available method of publication

PT CT & LT documents are published by the following method :

* **Proactive** :
  + **PT CT**: a minima one publication per day before 14h for D and D+1 Gas Day in csv format. The file will be published by sFTP and downloadable from Ingrid.
  + **PT LT**: one publication for all the modifications from D+2 until the end. It’s real time update. The file will be published by sFTP and downloadable from Ingrid. The document concerns all the pcr/direction/GD of the perimeter (not only the modification).
* **By API**: An API is available to get the data related to the Maintenance Schedule Program (LT & CT) publication in JSON format. Credentials are required for the connection : please refer to your GRTGAZ commercial GRTGAZ contact.

# Document name and format

The file will be published on csv format.

The name of the file will comply with the following rules:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **N°** | **Label** | **Type** | **Length** | **Format** |
| **1** | Type of the document | Alphanumeric | 4 | PTCT, PTLT |
| **2** | Generation Date | Date | 17 | DDMMYYYYhhmmssSSS |
| **3** | Extension | Alphanumeric | 4 | .csv |
| **4** | Separators |  | 1 | « \_ » |

As a result, the document will have for instance the following name:

PTCT\_JJMMAAAAhhmmssSSS.csv

PTLT\_JJMMAAAAhhmmssSSS.csv

# Description of document for each format

The file will be published on csv format.

# Maintenance Schedule Short Terme (PTCT)

Header :

The header contains the following data:

* Programme Travaux / Maintenance Schedule :
  + Example : PTC\_CT-XXXXX
  + The reference is built with the following rules :
    - 5 letters PTC\_CT
    - A sequence
* Réseau / Network :
  + Example : GRTgaz
* Période / Period :
  + Example : 01/12/2022 06 : 00 – 03/12/2022 06 :00
  + The period is calculated with the gas day inside the PT CT (min and max)
* Date de mise à jour / Last update
  + Example : 01/12/2022 13 :45 : 25
  + Update of PT CT

**Data table**

The tables presented in this part contain the following columns:

* Col No: number of the column in the row
* Name: description of the content of the field
* Type: field type
* Format: data format
* Mandatory: determines whether the field is mandatory or not;
* Description: additional precision
* Example: range of values that the data can take or examples of values.
* Mapping API : to define mapping csv data with api data

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **N° Col** | **Nom** | **Type** | **Format** | **Oblig.** | **Description** | **Exemple** | **Mapping API** consolidated-maintenance-programs |
| **1** | PCR / Service Point | Texte |  | O | Code of Contractual point | IR0006, IR0010, etc. | contractualPointCode |
| **2** | Libellé / Label | Texte |  | O | Name of Contractual point | Virtualys, Oltingue, … | contractualPointLabel |
| **3** | Sens / Direction | Texte |  | O | Direction of Contractual point | Rec, Del | direction |
| **4** | Journée gazière / Gas Day | Date | jj/mm/aaaa | O | Gas Day | 01/01/2022 | gasDay |
| **5** | TRf | Numérique |  | N | Firm restriction rate | 0,1234 | firmRestrictionRate |
| **6** | TRi | Numérique |  | N | Interruptible restriction rate | 0,1234 | interruptibleRestrictionRate |
| **7** | TRi A | Numérique |  | N | Annual Interruptible restriction rate | 0,1234 | annualInterruptibleRestrictionRate |
| **8** | TRi T | Numérique |  | N | Quarterly Interruptible restriction rate | 0,1234 | quarterlyInterruptibleRestrictionRate |
| **9** | TRi M | Numérique |  | N | Monthly Interruptible restriction rate | 0,1234 | monthlyInterruptibleRestrictionRate |
| **10** | TRi Q | Numérique |  | N | Daily Interruptible restriction rate | 0,1234 | dailyInterruptibleRestrictionRate |
| **11** | CTE | Numérique |  | O | Effective Technical Capacity | 100,000000  (en GWh/J 25°C) | availableTechnicalCapacity |
| **12** | CTM | Numérique |  | N | Mutual Technical Capacity (PITS only) | 100,000000  (en GWh/J 25°C) | minimalTechnicalCapacity |
| **13** | ∑COSf | Numérique |  | N | Sum of firm subscribed operational capacities | 100,000000  (en GWh/J 25°C) | firmAggregatedCos |
| **14** | ∑COSi | Numérique |  | N | Sum of interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | interruptibleAggregatedCos |
| **15** | ∑COSi A | Numérique |  | N | Sum of annual interruptible subscrided operational capacities | 100,000000  (en GWh/J 25°C) | annualInterruptibleAggregatedCos |
| **16** | ∑COSi T | Numérique |  | N | Sum of quaterly interuptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | quarterlyInterruptibleAggregatedCos |
| **17** | ∑COSi M | Numérique |  | N | Sum of monthly interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | monthlyInterruptibleAggregatedCos |
| **18** | ∑COSi Q | Numérique |  | N | Sum of daily interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | dailyInterruptibleAggregatedCos |
| **19** | CTNf | Numérique |  | N | Firm nominal technical capacity | 100,000000  (en GWh/J 25°C) | firmNominalTechnicalCapacity |
| **20** | Travaux Petits Impacts / Low Impact Maintenance | Booléen |  | O | Low Impact Maintenance |  | lowImpactMaintenance |
| **21** | Date et Heure de Mise à jour / Update date and time | Date/Heure | aaaa-mm-jjThh:mm:ssZ | O |  |  | updateDateTime |

**File example :**



# Maintenance Schedule Long Terme (PTLT)

Header :

The header contains the following data:

* Programme Travaux / Maintenance Schedule :
  + Example : PTC\_LT-XXXXX
  + The reference is built with the following rules :
    - 5 letters PTC\_LT
    - A sequence
* Réseau / Network :
  + Example : GRTgaz
* Période / Period :
  + Example : 01/12/2022 06 : 00 – 01/03/2023 06 :00
  + The period is calculated with the gas day inside the PT LT (min and max)
* Date de mise à jour / Last update
  + Example : 25/11/2022 09 :06 : 25
  + Update of PT LT

**Data table**

The tables presented in this part contain the following columns:

* Col No: number of the column in the row
* Name: description of the content of the field
* Type: field type
* Format: data format
* Mandatory: determines whether the field is mandatory or not
* Description: additional precision
* Example: range of values that the data can take or examples of values.
* Mapping API : to define mapping csv data with api data

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **N° Col** | **Nom** | **Type** | **Format** | **Oblig.** | **Description** | **Exemple** | **Mapping API** consolidated-maintenance-programs |
| **1** | PCR / Service Point | Texte |  | O | Code of Contractual point | IR0006, IR0010, etc. | contractualPointCode |
| **2** | Libellé / Label | Texte |  | O | Name of Contractual point | Virtualys, Oltingue, … | contractualPointLabel |
| **3** | Sens / Direction | Texte |  | O | Direction of Contractual point | Rec, Del | direction |
| **4** | Journée gazière / Gas Day | Date | jj/mm/aaaa | O | Gas Day | 01/01/2022 | gasDay |
| **5** | TRf Max | Numérique |  | N | Maximum restriction rate on the subscrided capacity | 0,1234 | maxFirmRestrictionRate |
| **6** | TRf Probable | Numérique |  | N | Probable restriction rate on the subscrided capacity | 0,1234 | probableFirmRestrictionRate |
| **7** | TRf Max Nominal | Numérique |  | N | Maximum restriction rate on the marketable capacity | 0,1234 | maxNominalFirmRestrictionRate |
| **8** | TRf Probable Nominal | Numérique |  | N | Probable restriction rate on the marketable capacity | 0,1234 | probableNominalFirmRestrictionRate |
| **9** | CPRTi | Numérique |  | N | Probable capacity during maintenance taking into account the interruptible | 100,000000  (en GWh/J 25°C) | interruptibleProbableTechnicalCapacity |
| **10** | CMNTt | Numérique |  | N | Minimum available capacity during maintenance | 100,000000  (en GWh/J 25°C) | totalMinimalTechnicalCapacity |
| **11** | CPRTt | Numérique |  | N | Probable capacity during maintenance | 100,000000  (en GWh/J 25°C) | totalProbableTechnicalCapacity |
| **12** | ∑COSf | Numérique |  | N | Sum of firm subscribed operational capacities | 100,000000  (en GWh/J 25°C) | firmAggregatedCos |
| **13** | ∑COSi | Numérique |  | N | Sum of interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | interruptibleAggregatedCos |
| **14** | ∑COSi A | Numérique |  | N | Sum of annual interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | annualInterruptibleAggregatedCos |
| **15** | ∑COSi T | Numérique |  | N | Sum of quarterly interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | quarterlyInterruptibleAggregatedCos |
| **16** | ∑COSi M | Numérique |  | N | Sum of monthly interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | monthlyInterruptibleAggregatedCos |
| **17** | ∑COSi Q | Numérique |  | N | Sum of daily interruptible subscribed operational capacities | 100,000000  (en GWh/J 25°C) | dailyInterruptibleAggregatedCos |
| **18** | CTNf | Numérique |  | N | Firm nominal technical capacity | 100,000000  (en GWh/J 25°C) | firmNominalTechnicalCapacity |
| **19** | Travaux Petits Impacts / Low Impact Maintenance | Booléen |  | O | Low Impact Maintenance | 100,000000  (en GWh/J 25°C) | lowImpactMaintenance |
| **20** | Date et Heure de Mise à jour / Update date and time | Date/Heure | aaaa-mm-jjThh:mm:ssZ | O |  | 100,000000  (en GWh/J 25°C) | updateDateTime |

**File example :**



# API interface

API signature (yaml format) are available at url below :

Production environment :

<https://api.ingrid.grtgaz.com/publication/operations/v3/api-docs.yaml>

Staging environment :

<https://api.ingrid-stg.grtgaz.com/publication/operations/v3/api-docs.yaml>

Please get from your commercial contract client and secret required for connection.

Document Technical guide connection API provides further details for using APIs.