

## Gas Metering Code

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## 1. INTRODUCTION

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### 1.1 Title

1.1.1 This code is the Gas Metering Code.

### 1.2 Authority

1.2.1 The Gas Metering Code is made in accordance with Law 102/2015 “On the Natural Gas Sector”, as amended and as a separate part of *Natural Gas Transmission Code*.

### 1.3 Definitions and interpretation

1.3.1 Words appearing in bold **like this** are defined in clause 6 of this Gas Metering Code.

1.3.2 This Code shall be interpreted in accordance with the Rules set out in Clause 6 of this *Gas Metering Code*.

### 1.4 Application

1.4.1 This *Gas Metering Code* regulates the technical requirements for the meters and metering installations **at customer transmission and/or distribution points**.

1.4.2 The persons connected with this Code **are retail and or wholesale traders as well as TSO, DSO and/or Combined Operator**.

### 1.5 Obtaining a copy of this Gas Metering Code

1.5.1 **A TSO, DSO and/or Combined Operator** shall, when asked by a **customer**, send to that **customer** within 10 **business days** a copy of this Gas Metering Code (and any amendments from time to time which materially affect a customer’s rights, entitlements or obligations), free of charge for the first request by that **customer**.

## 2. PROVISION OF METERING INSTALLATIONS

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### 2.1 Obligation to install meters

- 2.1.1 **TSO, DSO and/or Combined Operator** shall ensure the installation of the metering interval at the transmission or distribution points for which the annual level of gas consumption is bigger than Kwh/year, or Nm<sup>3</sup>/year, and is expected to be bigger than Kwh/year, or Nm<sup>3</sup>/year.
- 2.1.2 **TSO, DSO and/or the Combined Operator** shall not unreasonably withhold its consent to the request of a retailer to install a metering installation that is different from that already installed, or different from that type of meter that shall be installed by the **TSO, DSO and/or Combined Operator** on the condition that the metering installation satisfies any applicable technical requirements (including those reasonably required **by the TSO, DSO, and/or Combined Operator**).
- 2.1.3 The incremental cost of providing and installing a **new metering installation** under clause 2.1.2 shall, to the extent permitted by an applicable regulatory instrument, be paid by the party that initiates the **change**.

### 2.2 Non-Reversion

- 2.2.1 **The TSO, DSO and or Combined Operator** shall ensure that an interval metering installation is not replaced by a basic metering installation prior to the end of its economic life unless the transmitter and distributor had determined that the gas consumption at the transmission and/or distribution point will be reduced under Kwh/year, or Nm<sup>3</sup>/year, due to the important amendments to the use of the equipment's.
- 2.2.2 The **TSO, DSO, and/or Combined Operator** shall report to ERE during the approval period of the investments, of all cases where it has replaced an interval metering with a basic metering installation pursuant to the determination of the **TSO, DSO, and/or Combined Operator** under clause 2.2.1.

### 2.3 Provision of metering installations

2.3.1 A metering installation must contain an index register that:

- (a) has a visible and accessible display of **metering data**;
- (b) allows the **metering data** to be accessed and read at the same time by portable computer or other equipment of a type or specification reasonably acceptable to all persons who are entitled to have access to that **metering data**.

## 2.4 Installation

2.4.1 **The TSO, DSO and/or Combined Operator** shall install metering installations as near as practicable to the **delivery point**

2.4.2 **The distributor, TSO, DSO and/or Combined Operator** shall install metering in a position which allows safe and unimpeded access to any person whose obligation it is to test, adjust, maintain, repair, or replace the **metering installation**, or collect metering data from the **metering installation**.

## 2.5 Installation database

2.5.1 The TSO, DSO *and/or* Combined Operator shall maintain an installation database in respect of each metering installation.

2.5.2 **The installation database** shall contain at least the following information:

- (a) the Metering Installation Registration Number (**MIRN**);
- (b) The location of each installed **meter, corrector and data logger**;
- (c) The brand, model and manufacturing year for each **meter, corrector and data logger**;
- (d) For each **meter, corrector and data logger** that is installed, the address of the customer and the date of installation;
- (e) Scheduled date for testing or replacement of all devices used to measure the quantity of **gas**;
- (f) Data on performance of each device used to measure the quantity of gas (where relevant);
- (g) Calibration records of all devices used to measure the quantity of **gas**;
- (h) Testing records of all devices used to measure the quantity **of gas**;
- (i) Date and details of all seals and labels applied to **meters and correctors**;
- (j) The date of, and details of, the most recent maintenance of all devices used to measure the quantity of **gas**; and
- (k) The next scheduled date for maintenance of all devices used to measure the quantity of **gas**.

2.5.3 **The TSO, DSO, and/or Combined Operator** shall maintain the information contained in the **installation database**:

- (a) In an accessible format for a minimum period of 16 months from the date of inclusion of information in the database; and
- (b) In archive for 7 years from the date of inclusion of the information in the database, or for twelve months after the life of the relevant **metering installation**, whichever is longer.

2.5.4 **The TSO, DSO and/or the Combined Operator** shall provide, upon the request in **writing**, access to an affected party to information in **the installation database** relevant to that person:

- (a) within two **business days**, where the information is in an accessible format as required by clause 2.5.3(a); and
- (b) otherwise within thirty **business days**, from the date of receipt of the request.

## 2.6 Minimum Standards of Accuracy

- 2.6.1 The minimum standards of accuracy for **metering installations** are within a margin of accuracy of plus or minus 2% of the net volume of **gas** delivered to that **delivery point**.
- 2.6.2 The **TSO, DSO and/or Combined Operator** shall ensure that the operation of the metering installation does not show systematic effect within the allowable margin of accuracy.
- 2.6.3 The **TSO, DSO, and/or Combined Operator** shall ensure that each of its metering installations containing pressure regulators are able to provide sufficient flow at the minimum regulator inlet pressure, and where a fixed pressure factor is applied, is able to reliably control the outlet pressure to meet the distribution system pressure requirements in the **applicable regulatory instruments**.
- 2.6.4 A person bound by this code shall not intervene with or calibrate a meter with the purpose of introducing bias in the **meter**.

## 2.7 Security

- 2.7.1 **The TSO, DSO, and/or Combined Operator** shall make **best endeavours** to ensure that the metering installation is protected from unauthorised interference or damage.
- 2.7.2 **The TSO, DSO, and/or Combined Operator** shall in respect of new metering installations, provide seals or other appropriate devices to enable the evidence of any interference at the meter.
- 2.7.3 Following notification that a seal has been broken, the **TSO, DSO and/or Combined Operator** shall replace a broken seal on the earlier of:
  - (a) when the **metering installation** is visited for the first time to take a reading; or

2.7.4 The costs of replacing seals which are broken are borne as follows:

- (a) if the seal was broken by the *customer*, by the *customer*; or
- (b) if the seal is broken by the **retail and/ or the wholesale trader**, shall be paid by the **retail and/ or wholesale trader**, or
- (c) otherwise by the **TSO, DSO and /or Combined Operator**

2.7.5 If as a result of or regarding the break or damage of a seal, the relevant metering installation may no longer meet the relevant minimum standards of accuracy, the **TSO, DSO and /or Combined Operator shall:**

- (a) test the *metering installation* in accordance with clause 3, within 15 *business days*; or
- (b) replace the *metering installation* in accordance with clause 3.6.

## 3. METERING INSTALLATION TESTING

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### 3.1 Accreditation and Certification

3.1.1 **The TSO, DSO and /or the Combined Operator** shall ensure that purchased *meters and correctors* have the approval of the model of the General Directorate of Standards and Metering from an accredited laboratory recognized under the International Certification Scheme in accordance with the specifications or instructions specified by the Directorate of Standards and Metering.

3.1.2 Where the approval of the model of the General Directorate of Standards and Metering is not required to be obtained from another Institution, the **TSO, DSO and/or Combined Operator** shall conduct tests, or shall cause tests to be conducted, in respect of the setting, scaling or certifying the accuracy of *meters* and *correctors*, by persons, or in a facility, accredited by **GDSM** to conduct such tests.

3.1.3 The **TSO, DSO and /or Combined Operator** shall ensure that calibrating equipment used in connection with the calibration of *their metering installations* are certified by a verification authority authorized to issue certificates in accordance with GDSM Regulation.

### 3.2 Acceptance Testing and Type Testing of Metering Installations

3.2.1 **TSO, DSO and/or Combined Operator** shall conduct, or cause to be conducted, acceptance tests on *meters, correctors and data loggers* that are components of *metering installations* in the following circumstances:

- (a) before a new *meter, corrector* or *data logger* is placed in service;
- (b) before a *meter, corrector* or *data logger* that has been removed from service is placed back into service; and
- (c) after any repairs, maintenance or recalibration performed on a *meter, corrector or data logger* have been completed.

3.2.2 **The TSO, DSO and/or Combined Operator** shall approve only a new type of *metering installation*.



3.2.3 **The TSO, DSO and /or Combined Operator** shall require to the users of their systems, copies of the relevant type test **certificates** in its possession in relation to a **meter** on request.

3.2.4 **The Transmitter and /or Distributor** must keep records of **type testing** under clause 3.2.2 while **meters** of that type remain in service, or for a minimum of 7 years, whichever is the longer.

3.2.5 **The TSO, DSO and /or Combined Operator** shall ensure that any **metering installations** that have been modified shall be assessed to determine whether the modified design continues to meet the minimum standards prescribed by this Metering Code and that **the metering installations** do not differ from their type test to the extent that any difference would affect the performance of the **metering installations**.

3.2.6 If there exist reasonable grounds for concluding that modifications to a **metering installation** affect its measuring capability or its initial type testing, then the **TSO, DSO and /or Combined Operator** shall ensure that the **metering installation** is submitted for **type testing**.

### 3.3 Obligation to test metering installations

3.3.1 **The TSO, DSO and/or Combined Operator** may at any time, and must **within 15 business days** of a request from a **retail or wholesale trader**, test a **metering installation** to ascertain whether or not that **metering installation** is damaged.

3.3.2 **The TSO, DSO and/or Combined Operator** must give the **retail or wholesale** trader who requests a test, at least **5 business days** notice (or agree such other mutually convenient time) of when the requested test is proposed to be performed.

3.3.3 If as a result of the test required from the **retail and/or wholesale trader** according to point 3.3.1, **the metering installation** results to be:

- (a) **defective**, the TSO, DSO **and /or Combined Operator** shall cover the expenses during the performance of the testing; or
- (b) **not defective**, **the transmitter or distributor** may require to recover the cost incurred in conducting the test.

3.3.4 **The TSO, DSO and /or Combined Operator** shall publish the charges for testing the **metering installations**. The charges shall be fair and reasonable.

3.3.5 **The TSO, DSO and /or the Combined Operator**, upon request, shall provide to the wholesale and /or retail trader **the results of the performed test according to point 3.3.1** within **5 working days**.

3.3.6 **The TSO, DSO and/or Combined Operator** shall keep the register of the tests according to point 2.6.

### 3.4 Meter Classes

3.4.1 The initial in-service period of a **meter class** is a period approved by GDSM commencing on the day a **meter** in that **meter class** was first used in the supply of **gas** to a **customer**.

3.4.2 If a **transmitter and /or distributor intends** to keep **the meters** in a **meter class after** the end of the initial service period for that **meter class**, **the TSO, DSO and/or the Combined Operator** shall in addition to

the other **meter** testing in this code, shall establish and maintain a testing and sampling plan approved by **GDSM**.

3.4.3 The testing and sampling plan must provide that **meters** shall be tested at both 20% and 100% of the nominal capacity of the **meters**.

3.4.4 The minimum test requirements shall be in accordance with GDSM Standards.

3.4.5 **The TSO, DSO and /or the Combined Operator** shall be required to provide the results of the evidences for both 20% and 100% capacities for that **meter class**.

3.4.6 If the test results do not satisfy:

- (a) the maximum allowable error limits for nominal capacity **of the meters** at 20% and at 100% as set out in clause 2.6, with an **uncertainty limit** of not more than 1%; and
- (b) such other requirements of the testing and sampling plan approved by the **GDSM**, then the TSO, DSO, and **/or Combined Operator** shall replace or recalibrate all metering installations in that **meter class**.

### 3.5 Provisions of test results

3.5.1 **The TSO, DSO and/or Combined Operator** shall, upon request by **GDSM**, provide **ERE** the results of any test conducted in accordance with this metering code.

### 3.6 Non-compliant meters

3.6.1 If the accuracy of a **metering installation** does not comply with the requirements of this metering code, or if the **transmitter and/or distributor** becomes aware of any matter which may affect the integrity of the **metering data, the TSO, DSO and/or Combined Operator** shall cover with the cost of the **TSO, DSO and/or the Combined Operator**:

- (a) notify the **affected parties** as soon as practicable;
- (b) arrange that the accuracy of the metering installation to be restored so that it meets the **minimum accuracy standards**, or that the **metering installation** shall be replaced, within 10 business days when the consumption at the **transmission and /or distribution point** is less than 10 TJ per annum and 5 **working days** when the consumption at the **transmission and the distribution point** is 10 TJ per annum or more, or a longer period that may be approved by **ERE**; and
- (c) to the restoration or replacement of the metering **installation** in accordance with clause 3.6.1(b) use substitute readings.

3.6.2 When there exist a measurement error and **TSO, DSO and/or the Combined Operator** proposes to substitute previous **meter readings, TSO, DSO and/or the Combined Operator** shall limit the substitute of the **meter** readings to:

- (a) the period where the measurement error was greater than 1.5 times the **minimum standards** of accuracy; and
- (b) the period where the measurement error exists, but no earlier than 12 months prior to when the measurement error was known if the measurement error resulted in **the customer** being undercharged.

### 3.7 Corrections

3.7.1 In undertaking a meter reading of the **meter** at a **metering installation** the TSO, DSO and/or Combined Operator shall adjust the **meter** reading for pressure, temperature or permitted over-pressure, or a combination of these factors, through applying the correction factors or using a corrector when:

- (a) the error arising from these effects exceeds the requirements of the **minimum standards**; or
- (b) the operating condition varies during the day affecting the pressure, temperature or over-pressure;  
or
- (c) where required to do so by **ERE**.

3.7.2 A TSO, DSO, and/or Combined Operator may conduct an adjustment for **meter** error using a **corrector** or a **correction factor** when:

- (a) the **corrector** and **meter** for the specified correction is uniquely identified;
- (b) the accuracy of the **meter** and/or **corrector** is within the minimum standards;
- (c) the method of adjustment by the corrector can be varied; and
- (d) the **affected parties** are advised of the compensation device and the settings used.

### 3.8 Sealing and labeling

3.8.1 A **TSO, DSO and/or Combined Operator** must set a label on any **meter and corrector** that has been subject to an **acceptance test** and found to pass the test. The label must include a distinguishing mark and the year of test attached to indicate that it has passed the test.

3.8.2. If a **meter or corrector** has not been tested or has been found not to pass an **acceptance test**, the **TSO, DSO, and/or Combined Operator** shall ensure that it is not labelled.

## 4. METERING READING AND DATA

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### 4.1 Gas heating value

4.1.1 **Gas** is to be metered by quantity and converted to units of energy for billing purposes using the heating value calculated by the **TSO, DSO, and/or Combined Operator** in accordance with a methodology approved by ERE.

### 4.2 L Meter reading for customer transfer

4.2.1 On the request by a **retail/wholesale saler, the TSO, DSO, and/or Combined Operator** shall use best endeavours to carry out an actual **meter** reading to enable the transfer of a **customer** to that **retail/wholesale trader** within a reasonable time of the request.

4.2.2 Aty ku është instaluar një **matës bazë**, leximi përfundimtar i **matësit** para se një **klient** të transferohet në një shitës të ri pakice ose shumice, qoftë një lexim i planifikuar i **matësit** apo një lexim i veçantë i tij, duhet të dërgohet nga **OST, OSSH dhe/ose Operatori i Kombinuar të shitesi i ri me pakicë dhe/ose shumice** në përputhje përkatësisht me klauzolën 4.7.4 ose klauzolën 4.7.5.

Where a **basic meter** is installed, the final **meter** reading prior to a **customer** transferring to a new retail or wholesale seller, whether a scheduled **meter reading** or a special meter reading, shall be send by the **TSO, DSO, and/or Combined Operator** of the new retail and/or wholesale seller in accordance with clause 4.7.4 or clause 4.7.5, respectively.

### 4.3 Collection of metering data

4.3.1 Subject to clauses 4.3.2 and 4.3.3, a customer may arrange with the **retail and/or wholesale seller** in a way in which the stored data in a **metering** installation provided to the **customer** shall be collected by the **TSO, DSO, and/or the Combined Operator**:

4.3.2 A **customer** may request that the data stored in the metering installations shall be collected by the **TSO, DSO and/or Combined Operator**:

- (a) by inspecting the metering installation; or
- (b) where the metering installation is capable of providing data by electronic means, by electronic means; or
- (c) where the metering installation is capable of providing data by any other means, by any other means.

4.3.3 The **TSO, DSO, and/or Combined Operator** may charge a **retail and/or wholesale seller** to collect the **metering data** under this clause 4.3.2 to the extent that its costs of collection are higher than they would otherwise be.

4.3.4 Where the **metering data** held in the metering installation are protected from direct or remote access by suitable password and security controls, such passwords and security controls shall be used.

4.3.5 Passwords shall be handled as confidential information in accordance with clause 4.8.

4.3.6 If there is any discrepancy between:

- (a) the data stored in a **metering installation**; and
- (b) the **metering data** regarding that metering installation, the data stored in the metering installation shall be prima facie evidence of the quantity of **gas** or energy, if applicable, supplied to the relevant **customer**.

#### 4.4 Validation and substitution of metering data

4.4.1 **The TSO, DSO, and/or Combined Operator** shall ensure that **metering data** collected from an interval metering installation under clause 4.3:

- (a) is validated in accordance with schedule 1, clause 1 of this Metering Code; and
- (b) where necessary, is substituted in accordance with Schedule 1, clauses 2 and 4, of this industry code.

4.4.2 **The TSO, DSO, and/or Combined Operator** must ensure that **metering data** collected from a basic metering installation under clause 4.3:

- (a) is validated in accordance with Schedule 2, clause 1 of this Metering Code; and
- (b) where necessary, is substituted in accordance with Schedule 2, clauses 2 and 4 of this Metering Code.

4.4.3 Where tests under clause 4.4.1(a) or 4.4.2(a) demonstrate that there has been a failure of the metering installation or that a measurement error exists, the metering **data** must be substituted in accordance with clause 4.4.1(b) or 4.4.2(b) and the TSO, DSO and/or Combined Operator shall provide the substituted metering data of the **retail and/or wholesale seller** so that the **retailer** can meet its billing obligations.

4.4.4 If a substitution is made to metering data, the TSO, DSO and/or the Combined Operator, shall inform the trader accordingly to the circumstances to ensure that an issued invoice to the **relevant customer** informs that **customer** that a substitution has been made.

4.4.5 Where the **metering data** in respect of a **customer** has been substituted and is required to be transferred to **ERE**, the substituted data must be provided to **ERE** by the TSO, DSO and/or Combined Operator.

4.4.6 **The TSO, DSO and/or the Combined Operator** shall maintain a separate record of the substitution made under clauses 4.4.1 and 4.4.2 for 7 years and provide access to the record at reasonable times for the **retail and/or wholesale trader of the relevant customer**.

#### 4.5 Estimation of metering data

4.5.1 Depending on clauses 4.3.2 and 4.3.3, the **customer** may regulate with the **retail and/or wholesale trader** the way on which the metering data in a **metering installation** provided for the **customer** shall be collected by the **TSO, DSO and/or the Combined Operator**.

## 4.6 Storage of metering data

4.6.1 The **TSO, DSO, and/or the Combined Operator** shall store **the metering data** in respect of separate metering installations, in the form in which it was collected under clause 4.3:

- (a) in an accessible form for a minimum period of 16 months from the date of the meter **reading**; and
- (b) in archive for 7 years from the date of the **meter reading**.

## 4.7 Access to metering data

4.7.1 The **TSO, DSO and/or Combined Operator** shall give to the **retail and/or wholesale seller customer** access to data stored in a **metering** installation used to measure and record the amount of gas supplied to its delivery point, either by inspecting the metering installation or, where available, by electronic access to the metering installation.

4.7.2 Where data are available by electronic means, the TSO, DSO, and/or the Combined Operator shall, on written request from the customer's retail and/or wholesale trader customer, provide facilities to enable **the customer** to access data stored in a **metering installation** where it is available by electronic means.

4.7.3 Where the **TSO, DSO and/or the Combined Operator** has provided facilities to enable the **customer** of the **retail and/or wholesale trader** to access data stored in a **metering installation** by remote electronic means, if remote electronic access to the metering installation is unavailable for a period of 5 consecutive business days due to the actions within the control of the **TSO, DSO and/or Combined Operator**, shall, if requested by the **customer of the retail and/or wholesale trader**, shall obtain data locally from the metering installation and provide that data to the customer data of the trader on the cost of the **TSO, DSO, and/or the Combined Operator**.

4.7.4 The **TSO, DSO and/or Combined Operator** shall ensure that access is provided for the **retail and/or wholesale trader** to **metering data** (whether actual, substituted under clause 4.4 or estimated under clause 4.5), at the frequency agreed, by 5.00 pm on the first business day after that metering data has been collected.

4.7.5 The **TSO, DSO and/or the Combined Operator** shall ensure that access is provided for the retail and/or wholesale trader to **metering data** from special **meter** reads and final **meter** reads, by 5.00 pm or the first business day after that metering data has been collected.

4.7.6 Where access is provided for the **retail and/or wholesale trader** to **metering data** under clauses 4.7.4 and 4.7.5, the **TSO, DSO and/or Combined Operator** shall ensure that any additional data required by the **retail and or wholesale trader** to meet its obligations under the Law 102/2015 "On the Natural Gas Sector".

## 4.8 Confidentiality

4.8.1 The TSO, DSO and/or the Combined Operator and the wholesale and/or retail trader shall keep **metering data** confidential and use best endeavours to protect and preserve the confidential nature of the **metering data** and must comply with any applicable regulatory instrument.

4.8.2 *The TSO, DSO, and/or Combined Operator and the retail and/or wholesale trader:*

- (a) shall not disclose metering data for *a customer* to any person except as permitted by this Metering Code, *the Law 102/2015 "On the Natural Gas Sector"*, the National Gas Rules, or the retail market procedures;
- (b) shall only use or reproduce **metering data** for a **customer** for the purpose for which it was collected under this code or another purpose provided by the natural gas transmission and distribution code, or the retail and wholesale market procedures;
- (c) shall not permit unauthorised persons to have access to **metering data** for a **customer**;
- (d) shall not disclose metering data for a **customer** to any person without the explicit informed consent of the **customer**; and
- (e) shall ensure that the **metering data** and other information obtained from a **customer** is handled in accordance with the **explicit informed consent** of the **customer** and in accordance with any applicable **regulatory instrument**.

4.8.3 This clause 4.8 does not prevent:

- (a) the disclosure, use or reproduction of **metering data** if the **metering data** at that time were available in general and publically otherwise from the result of violating the trust by the **TSO, DSO, and/or Combined Operator** or a **retail and/or wholesale trader** or its disclosure;
  - i. its employees or the employees of its related bodies corporate subject to any **applicable regulatory instrument**;
  - ii. or its legal or other professional advisor, auditor or other consultant, requiring the **metering data** for the purposes of this metering code or any other transmission or distribution code or for the purpose of for the retail or wholesale seller;
- (b) the disclosure, use or reproduction of **metering data** with the explicit informed consent of the relevant **customer**;
- (c) the disclosure, use or reproduction of **metering data** to the extent required by law or by lawful requirement of:
  - i. any state institution or governmental body, authority or agency having jurisdiction over the **TSO, DSO, and/or Combined Operator** or a **retail and/or wholesale trader** or its related bodies corporate;
  - ii. any stock exchange (owner) having jurisdiction over the **TSO, DSO, and/or Combined Operator** or a **retail and/or wholesale trader** or of the related bodies corporate; or
  - iii. **ERE**;
- (d) The disclosure, use or reproduction of **metering data** required in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanism under this industry code

or any other industry code, **Law 102/2015 “On Natural Gas Sector”, the Gas Rules, or the retail and wholesale market rules;**

- (e) the disclosure use or reproduction of **metering data** which is trivial in nature;
- (f) the disclosure, use or reproduction of **metering data** required to protect the safety of personnel or equipment; or
- (g) the disclosure, use or reproduction of the **metering data** by or on behalf submitted by **the TSO, DSO and/or Combined Operator** on the measure required in a reasonable way regarding the financial arrangements of the **TSO, DSO and/or Combined Operator** or **the retail and/or wholesale trader**, investments in distribution and transmission **of the transmitter and/or distributor** or **retail and/or wholesale trader**.

4.8.4 In the case of a disclosure under clauses 4.8.3(b) and 4.8.3(h), the TSO, DSO, and/or Combined Operator or retail and/or wholesale trader making the disclosure shall inform the relevant disclose of the confidentiality of the **metering data** and use the **best endeavours** to ensure the confidentiality of the **metering data**.

## 4.9 Ownership of metering data

4.9.1 The owner of the **meter** is the owner of all **metering data** produced or recorded by that **meter**. Each other person entitled to use that **metering data** under this metering code has the right to a non-exclusive licence to use that **metering data** for the purposes of its business, subject to the provisions of the **Regulator Act**.

## 5. GAS MEASUREMENT MANAGEMENT PLAN

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5.1.1 **The TSO, DSO, and/or Combined Operator** shall, within six months after the issue of its transmission or distribution licence or the commencement of this metering code, whichever is the later, prepare and submit **to ERE**, a Gas Measurement Management Plan.

5.1.2 The Gas Measurement Management Plan shall summarise the procedures of **the TSO, DSO, and/or Combined Operator** for:

- (a) installation and ownership of **metering installations;**
- (b) **minimum standards** for **metering installations** and the maintenance of that accuracy, including the testing and sampling plan referred to in clause 3.4;
- (c) collection of **metering data;**
- (d) on site and maintenance testing of **metering installations;**
- (e) resolution of metering disputes;
- (f) **metering data** obligations;
- (g) management and exchange of metering information; and
- (h) measurement and calculation of heating value for the purpose of billing.

5.1.3 **The TSO, DSO and/or Combined Operator** shall review annually and, if necessary, update the plan to ensure its efficient operation, and submit the updated plan to the ERE for approval.

5.1.4 **The TSO, DSO, and/or Combined Operator** shall comply with the plan prepared in accordance with clause 5.1.1 and as updated from time to time in accordance with clause 5.1.3.



5.1.5 The **TSO, DSO, and/or Combined Operator** shall not amend the plan without the approval of **the ERE**.

## 6. DEFINITIONS AND INTERPRETATION

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### Definitions

In this metering code:

**“Acceptance testing”** shall mean the testing and setting of a **meter, corrector or a metering installation** by a manufacturer or installer, to establish the initial calibration of the **meter, corrector or metering installation**;

**“Access Arrangement”** shall mean the arrangement for third party access to a transmission or distribution pipeline submitted by the TSO, DSO and/or Combined Operator in conformity with Gas Legislation and **Gas Regulations** and which has been approved by the relevant regulator;

**“Act”** shall mean the By-legal acts issued for Gas

**“Albgaz”** shall mean the transmission and distribution system operator

**“ERE”** shall mean Energy Regulator Authority

**“Actual meter reading”** shall mean the physical collection of metering data by **scheduled meter reading** or a **special meter reading**. An **actual meter read** may be **metering data** which has been substituted in accordance with clause 4.4.1(b) for an interval meter or clause 4.4.2(b) for a **basic meter**, but does not include **metering data** which has been estimated;

**“Affected party”** shall mean a party that may be affected by the possible inaccuracy of a **metering installation** or **metering data** from that **metering installation**;

**“Applicable regulatory instruments”** shall mean any Act or regulatory instrument made under a Law, or a regulatory instrument issued by **ERE**, which applies to a transmitter and/or distributor or a retail and/or wholesale trader;

**“Basic meter”** shall mean a **meter** without a **data logger**;

**“Basic metering installation”** shall mean a metering installation with a basic meter;

**“Best endeavours”** shall mean to act in good faith and use all reasonable efforts, skill and resources;

**“Corrector”** means a device which adjusts uncorrected quantity of gas from actual to standard conditions for billing and other purposes;

**“Customer”** shall mean the entity that purchases from wholesale or the natural gas end-use customer as well as any entity that purchases natural gas.

**“Wholesale customer”** shall mean a natural or legal person other than the TSO or DSO that purchases natural gas for the purpose of resale inside or outside the system to which is connected.

**“Data logger”** means a device that collects and stores data relating to the quantity, temperature and pressure of gas and is capable of either:

- (a) transferring recorded data to a portable reading device; or
- (b) being accessed electronically through a data collection system;

**"Defect"** shall mean:

- (a) in relation to a **new metering installation**, that it is not meeting the **minimum standards**;  
and
- (b) in relation to an **existing meter installation**, that it is not meeting the **minimum standards** of accuracy that it was designed to meet;

**"Transmission and/or distribution point"** shall mean a point on a distribution system at which **gas** is withdrawn from the distribution system for delivery to a **customer** and which is normally located at:

- (a) the inlet of a **gas installation** of a **customer**; or
- (b) the outlet of a meter;

**"Demand Delivery Point"** shall have the meaning given in **the Standard Agreement**;

**"Transmission and/or distribution system"** shall have the meaning given to this term on **natural gas legislation**;

**"Transmission and/or distribution pipeline"** shall have the meaning given to this term on Natural gas legislation;

**"Transmitter and/or Distributor"** shall mean a person holding a license according to the **law** to operate a **transmission and/or distribution system**;

**"Estimated read"** shall mean an estimate instead of a **meter reading**;

**"Gas"** shall have the meaning given to that term on the **Law**;

**"Guideline"** shall mean a guideline published by **ERE**;

**"Installation database"** shall mean a database of calibration data which a **transmitter and/or distributor** is required to keep in respect of its **metering installations** pursuant to this metering code;

**"Interval meter"** shall mean a **meter** with a **data logger**;

**"Interval metering installation"** shall mean **a metering installation with an interval meter**;

**"In writing"** shall mean communication made by letter, facsimile or electronic media;

**"Meter"** shall mean an instrument that measures the quantity of **gas** passing through it and includes associated equipment attached to the instrument to filter, control or regulate **the gas** flow;

**"Meter class"** means a group of **meters** in which:

- (a) all the **meters** have been made to the same specifications by the same manufacturer;
- (b) there are no significant differences in components or materials between the **meters**;  
and
- (c) all the **meters** have been sealed with the same date code;

**"Metering data"** shall mean the measure of quantity of **gas** flow obtained from a **metering installation**;

**"Metering installation"** shall mean the meter and associated equipment and installations, which may include **correctors**, regulators, filters, **data loggers** and **telemetry** relating to a **delivery point**;

**"Minimum standards"** shall mean, in respect of new **meters**, the minimum standards referred in GDSM

**"Gas Law"** shall have the meaning given in Law 102/2015, "On the Natural Gas Sector";

**"Quarterly"** shall mean a period of thirteen weeks (13) nominally, but not exceeding a period of fourteen (14) weeks;

**"Retail and wholesale market Rules"** shall mean the rules managed and published for the retail and wholesale market;

**"Retail and/or wholesale trader"** shall mean the person holding a license according to **Law 102/2015** or an authorization of the **retail and/or wholesale trader** issued from ERE for the sale and supply of **gas**;

**"Scheduled meter reading"** shall mean an **actual meter reading** on a cycle that is based on the **customer's** invoicing cycle, usually monthly or **quarterly**;

**"Special meter reading"** means an actual meter reading performed outside of the usual reading cycle for the meter;

**"Supply address"** means:

- (a) the address for which a **customer** purchases **gas** from a **retail and/or wholesale trader** where there is only one **delivery point** at that address; or
- (b) where there is more than one **delivery point** at the address, each delivery point through which the **customer** purchases **gas** from the same retail and/or wholesale trader;

**"Telemetry"** shall mean the communication equipment used for data transmission collected from a metering installation to a central data management system and typically encompasses modems, telecom landline (which may be dedicated or part of a PSTN network) or radio receivers (which may or may not be in the form of a dedicated radio network, GSM, GPRS, CDMA, 3G, satellite telephony or any other comparable network).

**"Type testing"** shall mean the testing conducted to establish the ability for purpose of a **new metering installation** type;

**"Uncertainty limit"** shall mean the range within which the test results shall be replicated when a test is repeated.

## Interpretation

On this metering code, unless the context otherwise requires:

- (a) headings and footnotes are for convenience or information only and do not affect the interpretation of this metering code or of any term or condition set out in this metering code;
- (b) words importing the singular include the plural and vice versa;
- (c) një shprehje që importon një person fizik përfshin çdo kompani, partneritet, besim, ndërmarrje të përbashkët, shoqatë, korporatë ose organ tjetër korporatë dhe çdo agjenci qeveritare dhe anasjelltas;
- (d) an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any governmental agency and vice versa;
- (e) a reference to a clause or appendix is to a clause or appendix of this industry code;
- (f) a reference to any statute includes all statutes varying, consolidating, re-enacting, extending or replacing them and a reference to a statute includes all regulations, proclamations, ordinances, by-laws and determinations issued under that statute;
- (g) a reference to a document or a provision of a document includes an amendment or supplement to, or replacement of or novation of, that document or that provision of that document;
- (h) a reference to a person including that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns;
- (i) other parts of speech and grammatical forms of a word or phrase defined in this industry code have a corresponding meaning;
- (j) a period of time:
  - i. which dates from a given day or the day of an act or event is to be calculated exclusive of that day; and
  - ii. which commences on a given day or the day of an act or event is to be calculated including that day.
- (k) a reference to:
  - i. time is a reference to Standard Time within the meaning of the Daylight-Saving Act 1971 ) and not Summer Time within the meaning of that Act;
  - (ii) a day is a reference to a period commencing immediately after midnight and ending the following midnight; and
  - ii. a month is a reference to a calendar month.
- (l) an event, which is required under any term or condition set out in this industry code to occur on or by a stipulated day, which is not **a business day**, may occur on or by the **next business day**.

## 7. GENERAL PROVISIONS

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7.1 The metering code shall enter into force within 15 days from the publication in the Official Gazette.

### Annex 1 – Validation, Substitution and Estimation – Interval Metering Installation

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#### 1. Requirement to validate meter readings

**Actual meter readings** shall be required to be validated in accordance with clause 4.4.1 (a) of this metering code. The validation rules that may be applied to the **metering data** from the meter of an **interval metering installation** are:

- (a) Consumption **metering data** for the **meter** read period = sum of interval **metering data** for the meter read period;
- (b) Accumulated **meter** read value is numeric and  $\geq 0$ ;
- (c) Accumulated **meter** read value is  $\geq$  previous accumulated meter read value;
- (d) Accumulated **meter** read value passes high/low test;
- (e) **Meter** read date/time > previous meter read date/time;
- (f) Maximum value (to ensure that no peaks are created);
- (g) Null checks;
- (h) Dial capacity and decimal point check; and
- (i) Metering data is consistent with the correct **meter** type for that **delivery point**.

#### 2. Requirement to produce substituted metering data

In accordance with clause 4.4.1(b) of this industry code, **metering data** for an **interval metering installation** will be required to be substituted where:

- (a) The **actual meter reading** fails to the validation tests;
- (b) There is a failure of the **metering installation**; or
- (c) An inspection or test on the **metering installation** establishes that a measurement error exists.

#### 3. Requirement to produce estimated metering data

In accordance with clause 4.5 of this industry code, **metering data** for an interval **metering installation** shall be required to be estimated where the **metering data** cannot be obtained in the timeframe required for settlement of the market.

#### 4. Obligations of the transmitter or distributor

- (a) **The TSO, DSO, and/or Combined Operator** may use the techniques of Type 1, 2, 3, 4, 5, 6, 7 or 8 in accordance with clause 5 of this Schedule 1, when the **metering data** is required to be substituted.

- (b) **The TSO, DSO and/or Combined Operator** may use techniques of Types 1, 2, or 3 in accordance with clause 5 of this Schedule 1, when the **metering data** is required to be estimated.
- (c) **The Transmitter or Distributor** may use Type 2 except where the **first actual meter reading** has not been undertaken.
- (d) **The TSO, DSO and/or Combined Operator** may use Type 3, except where:
  - i. **the first actual meter reading** has not been undertaken; or
  - ii. the **scheduled meter reading** frequency is less frequent than monthly and the data from the same, or similar, **meter** reading period in the previous year is available.
- (e) **TSO, DSO, and/or the Combined Operator** may use Types 4, 5, 6 and 7 in the circumstances described in clauses 5.4, 5.5, 5.6 and 5.7 of this Schedule 1, respectively.
- (f) **TSO, DSO, and/or the Combined Operator** may use Type 7 prior to the **first actual meter reading** being undertaken.
- (g) **TSO, DSO, and/or the Combined Operator** may use Type 8 where there is an error in the meter pressure and/or **gas** temperature.
- (h) **TSO, DSO, and/or the Combined Operator** shall notify the retail and/or wholesale trader where substituted or estimated **metering data** is used.
- (i) **TSO, DSO, and/or the Combined Operator** shall ensure that for all Types, except Type 5, substituted or estimated **metering data** are based on **an actual meter reading**, and are not based on **metering data** that has previously been estimated or substituted.

#### 4. Substitution and Estimation Types

The techniques for substituting and estimating metering data for **interval metering installations** are provided in this clause.

##### 5.1 Type 1

When there is another **interval metering installation** for the same measurement point for the same interval data periods as that being substituted for, the TSO, DSO, and/or Combined Operator shall substitute or estimate the **metering data** using metering data from that interval metering installation.

##### 5.2 Type 2

The Transmitter or Distributor may replace or access the **metering data** using the data from the “Nearest Equivalent Day” or “Like Day” from the same, or similar, **meter** reading period on the previous year. The “Nearest Equivalent Day” or “Like Day” is determined from the table below.

Day	“Nearest Equivalent Day” or “Like Day” (in order of availability)
Monday	Monday ❖❖ Monday ❖
Tuesday	Wednesday ❖❖ Tuesday ❖ Wednesday ❖ Wednesday ❖❖ Tuesday ❖❖
Wednesday	Thursday ❖❖ Wednesday ❖ Thursday ❖ Tuesday ❖ Thursday ❖❖ Wednesday ❖❖
Thursday	Tuesday ❖❖ Thursday ❖ Wednesday ❖ Tuesday ❖ Tuesday ❖❖ Friday ❖
Friday	Saturday❖❖ Saturday ❖
Saturday	Sunday ❖❖ Sunday ❖
Sunday	
<p>Substitution or estimation for ‘Like Day’ to be detailed as follows, except if:</p> <ul style="list-style-type: none"> <li>◆ No readings are available on the first listed day, then the next listed preferred day is to be used.</li> <li>◆ The day was a public holiday, in which case the most recent Sunday is to be used.</li> <li>◆ The day was not a public holiday and the ‘Like Day’ is a public holiday, in which case the ‘Like Day’ to be used must be the most recent day that is not a public holiday, Saturday or Sunday.</li> </ul> <p>❖❖ Occurring in the same week as the day in the previous year.</p> <p>❖ Occurring in the week preceding that in which the substitution day occurs in the previous year.</p>	

### 5.3 Type 3

The TSO, DSO, and/or Combined Operator may substitute or estimate the **metering data** using the data from the “Nearest Equivalent Day” or “Like Day” from **previous meter readings**. The “Nearest Equivalent Day” or “Like Day” is determined from the table below.

Day	“Nearest Equivalent Day” or “Like Day” (in order of availability)
Monday	Monday ❖❖
Tuesday	Wednesday ❖❖ Thursday ❖❖
Wednesday	Wednesday ❖❖ Tuesday ❖ Thursday ❖❖ Tuesday ❖❖
Thursday	Thursday ❖❖ Wednesday ❖ Tuesday ❖ Wednesday ❖❖ Tuesday ❖❖
Friday	Friday ❖❖
Saturday	Saturday ❖❖
Sunday	Sunday ❖❖

Substitutions or estimations for 'Like Day' to be as detailed above, unless:

- ◆ No readings are available on the first listed day, then the next listed preferred day is to be used.
- ◆ The day was a public holiday, in which case the most recent Sunday is to be used.
- ◆ The day was not a public holiday but the preferred day is a public holiday, in which case the 'Like Day' to be used must be the most recent preferred day that is not a public holiday.
- ❖❖ Occurring in the week preceding that in which the estimation day occurs.
- ❖❖ Occurring in the same week as the estimation day.

#### 5.4 Type 4

Previously used substituted **metering data** can be changed, prior to the **actual meter** reading, where the **trader** has agreed, on the basis of site- or **customer**-specific information, that the **original substituted metering** data is in error and a correction is required.

#### 5.5 Type 5

Substituted **metering data** can be created using simple linear interpolation where the **retail trader** has agreed.

#### 5.6 Type 6

- (a) **The retail and/or wholesale trader** may agree to use another method of substitution (which may be a modification of an existing Type) where none of the existing Types is applicable.
- (b) The specifics of this Type may involve a globally applied method or a site-specific method.

#### 5.7 Type 7

Prior to the **first actual meter reading**, the **metering data** may be substituted using a method agreed between the **retail and/or wholesale trader** and **the TSO, DSO, and/or the Combined Operator**.

#### 5.8 Type 8

Where the measurement error has arisen from errors in the **gas** temperature and/or meter pressure, the metering data may be substituted using the **meter** reading and the estimates for the **gas** temperature and/or **meter** pressure.



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## Schedule 2 – Validation, Substitution and Estimation – Basic Metering Installation

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### 1. Requirement to validate meter readings

**Actual meter readings** will be required to be validated in accordance with clause 4.4.2(a) of this industry code. The validation rules that may be applied to the **metering data** from the **meter** of **a basic metering installation** are:

- (a) **Meter** read value is numeric and  $\geq$  0;
- (b) **Meter** read value is  $\geq$  previous **meter** read value;
- (c) **Meter** read value passes high/low test;
- (d) **Meter** read date  $>$  previous **meter** read date;
- (e) Null checks;
- (f) Dial capacity and decimal point check;  
and
- (g) **Metering data** are in conformity with the correct **meter** type for that **transmission and/or delivery point**.

### 2. Requirement to produce substituted metering data

In accordance with clause 4.4.2(b) of this metering code, **metering data** for a **basic metering installation** will be required to be substituted where:

- (a) **the actual meter reading** fails the validation tests;
- (b) there is a failure of the **metering installation**;
- (c) an inspection or test on the **metering installation** establishes that a measurement error exists; or
- (d) an **estimated read** is permitted under Energy Customer Transfer and the Approved Code and is required to transfer a customer to a new retail and/or wholesale trader.

### 3. Requirements to produce estimated metering data

In accordance with clause 4.5 of this metering code, **metering data** for a **basic metering installation** will be required to be estimated where the **metering data** cannot be obtained in the timeframe required for settlement of the market.

### 4. Distributor Obligations

- (a) **The TSO, DSO, and/or Combined Operator** may use the techniques types 1, 2, 3, 4, 5 or 6, techniques in accordance with clause 5 of this schedule 2, when the **metering data** is required to be substituted.
- (b) **The TSO, DSO, and/or the Combined Operator** may use techniques of type 1, 2, or 3 in accordance with clause 5 of this Schedule 2, when the **metering data** are required to be estimated.
- (c) **The TSO, DSO and/or Combined Operator** may use Type 6 where there is an error in the **meter** pressure and/or **gas** temperature.
- (d) **The TSO, DSO, and/or the Combined Operator** shall inform the **wholesale and/or retail trader** where are used the substituted or estimated **metering data**.
  - (i) **The Transmitter and/or Distributor** shall ensure that for all Types, substituted or estimated **metering data** is based on an actual meter reading, and is not based on **metering data** that has previously been substituted or estimated.

### 5. Substitution and Estimation Types

The techniques for substituting and estimating **metering data** for **basic metering installations** are provided in this clause.

#### 5.1 Type 1

Substitution or estimation

- = Average daily consumption from same, or similar, **meter** read  
period last year,
- \* Number of days required to be substituted or estimated.

#### 5.2 Type 2

Substitution or estimation

= Average daily consumption from previous *meter* read period

\* Number of days required to be substituted or estimated.

**Note:** Where the scheduled *meter* reading frequency is less frequent than monthly, Type 2 is to be used only when the consumption from the same, or similar, meter read period last year is not available.

### 5.3 Type 3

Substitution or estimation

= Average daily consumption for this same *customer* class with the same type of usage

\* Number of days required to be substituted or estimated.

**Note:** Type 3 shall be used only when the consumption from the same or similar reading period of the previous year and the consumption from the meter reading period from the previous meter reading period is not available.

### 5.4 Type 4

- (a) **Wholesale and/or retail trader and the TSO, DSO and/or the Combined Operator** may agree to use another substitution method (which may be a modification of the existing Type) where any of the existing Types is not applicable.
- (c) Specifications of this Type may include a method globally implemented or a specific method according to the location.

### 5.5 Type 5

Previously used substituted *metering data* can be changed, prior to the **actual meter reading** where the retail trader and/or the TSO, DSO, and/or the Combined Operator have agreed, according to the specific information for the location or the customer, that the **original substituted metering data** are in error and a correction is required.

### 5.6 Type 6

Where the measurement error has arisen from errors made in **gas** temperature measurement and/or *meter* pressure, the *metering data* may be substituted using the meter reading and the estimates for the gas temperature and/or *meter* pressure.