

## Deliberation of the French Energy Regulatory Commission of 28 February 2012 forming a decision on the equalised tariff for use of GrDF public natural gas distribution networks

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The current equalised tariff for use of GrDF natural gas distribution networks, known as the "ATRD3 tariff" (ATRD meaning third party access to distribution networks), came into force on 1 July 2008, by virtue of the administrative order of 2 June 2008 approving the tariff proposal from the French Energy Regulatory Commission (CRE) of 28 February 2008. It was intended to apply for a period of four years.

In a letter dated 28 July 2011, GrDF asked the CRE to establish a new tariff for use of its natural gas distribution networks. The operator is requesting, besides clearing the balance of the expenses and revenues clawback account [Compte de Régularisation des Charges et des Produits – CRCP] for the year 2011, use of an unchanged regulatory framework and maintenance of the rate of return on capital at 6.75% in real terms before tax, an increase of 16.2% on the 1 July 2012. Clearing the clawback account for 2011 results in an 18.4% increase in its tariff. Forecast figures for changes in costs, number of customers connected and volumes of gas supplied as submitted by GrDF for the years 2013 to 2015 result in an annual change to the scale of tariffs from 2013 using a percentage change equal to "inflation + 0.4%".

The French Energy Code, which came into force on 1 June 2011, establishes a new statutory framework altering the CRE's remit regarding setting tariffs for use of natural gas infrastructure.

Articles L.452-2 and L.452-3 of the French Energy Code determine the CRE's remit over tariffs. Article L.452-2 stipulates that the CRE sets the methods used to establish the tariffs for use of natural gas networks. Furthermore, Article L.452-3 stipulates that "*The Energy Regulatory Commission considers tariff changes [...] with, as appropriate, amendments to the level and structure of tariffs that it believes justified in light particularly of an analysis of operators' accounts and foreseeable changes in operating and investment costs. [...] The Energy Regulatory Commission submits to the Ministers with responsibility for energy and the economy its decisions, and the reasoning behind them, regarding changes to the level and structure of tariffs for use of natural gas transmission and distribution networks and for use of liquefied natural gas facilities, [...] together with the tariff rules and their date of entry into force. Such deliberations are published in the official gazette (Journal officiel) of the French Republic.*"

In accordance with the abovementioned Articles from the French Energy Code, the CRE has established a new equalised tariff for use of GrDF public natural gas distribution networks, known as the "ATRD4 tariff", intended to apply for a period of approximately four years from 1 July 2012.

To establish this tariff, the CRE organised a public consultation from 11 October to 4 November 2011, and held a hearing for natural gas suppliers on the GrDF network.

The French Higher Energy Council [Conseil Supérieur de l'Énergie – CSE], consulted by the CRE on the tariff decision draft, has issued a statement on 21 February 2012.

The CRE conducted an in-depth analysis of the projected costs presented by GrDF and also heard several submissions from GrDF. It produced a comparative report on supply tariffs on natural gas distribution networks in Europe, and commissioned:

- an audit of GrDF's operating expenses for the financial years 2008 to 2016, and an international comparison of GrDF's operating expenses with other comparable operators in Europe;
- a report on the weighted average cost of capital for electricity and gas infrastructure in Europe;
- a comparative report on existing incentive-based regulatory mechanisms in Europe.

On the basis of this information, the CRE is retaining, with some changes and additions, the existing regulatory framework encouraging the operator to improve efficiency, from the viewpoint both of controlling its costs, and of the quality of service provided to the users of its systems:

- a tariff period of approximately four years, with a tariff trajectory set in advance, changing on 1 July annually;
- a mechanism to correct variances between forecast and actual figures for certain expense items, changes in which are difficult for GrDF to predict;
- a quality of service monitoring mechanism, modified by the establishment of financial incentives for indicators more linked to the quality of service provided to end consumers and a reduction in the total number of indicators;
- the introduction of a mechanism encouraging GrDF to control the costs of its investment programmes, excluding investment in safety and system mapping;
- the introduction of a two-year review clause making it possible, under certain conditions, to adjust GrDF's net operating expenses trajectory upwards or downwards for the years 2014 and 2015.

This regulatory framework gives a clearer picture of the trajectory of tariff changes and helps to reduce the risk borne by GrDF.

The ATRD4 tariff established by the CRE is intended to come into force on 1 July 2012. It stipulates an increase on that date of 8.0% at current prices over the current tariff, or approximately 6% at constant prices. The differences between this tariff and GrDF's requested 18.4% relate mainly to the following factors:

- the weighted average cost of capital set at 6% in real terms before taxes;
- revised estimates adopted as regards certain expense items (head office costs in the main);
- retention of the weather-correction model and the climate baseline used for the tariff in force;
- retention of the tariff calculation model used for the tariff in force.

The CRE has accepted all of GrDF's requests relating to staff and safety costs, investments, and expenses related to promoting gas use.

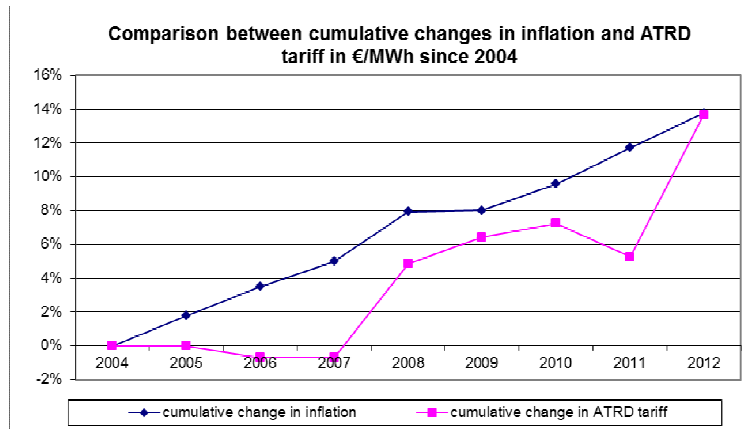
The 8.0% increase in GrDF's tariff from 1 July 2012 is mainly due to the following factors:

- lower volumes of gas supplied (contributing 6% to the increase) related to energy efficiency efforts, competition from other energy supplies (contributing 4%) and an unusually warm 2011 (2%). The network costs borne by GrDF being essentially fixed, any reduction in volumes distributed or the number of customers connected results in a tariff increase;
- additional spending on safety imposed by the regulations, including the new regulations on working in the vicinity of utility structures, known as the utilities damage prevention plan – “plan anti-endommagement” in French – (contributing 3% to the increase);
- an increase in tax and employers' social security contributions, including a rise in the rate of health insurance contributions and the broadening of the basis on which they and the FNAL [Fonds National d'Aide au Logement] tax contributions are calculated (contributing 1% to the increase);
- changes to inflation between 2011 and 2012 (contributing 2% to the increase);

- a revised rate of return on assets and certain costs (reducing the increase by 4%).

Over the period 2013 to 2015, the CRE has adopted an annual change in GrDF's schedule of tariffs on the basis of a percentage change equal to "inflation + 0.2%". This change equates to a productivity target of 1.3% annually for the operator's net operating expenses over the period. In consideration of the productivity efforts requested of it, any additional gains that might be achieved will be retained in their entirety by the operator.

The cumulative change in GrDF's tariff between 2004 and 2012 – including the 8.0% increase on 1 July 2012 – is broadly in line with the cumulative change in inflation. Despite the decrease in volumes supplied over GrDF's network and huge efforts towards safety, the change in tariff will follow a path close to that for inflation between 2013 and 2015, excluding clearing the CRCP.



As unit consumption is falling, the network access cost for an average heating customer is rising slower than inflation.

Given the proportion of the final natural gas retail price that the tariff for supply over distribution networks represents, this increase would result, all other things being equal, in a 2% increase on 1 July 2012 in the regulated tariff for end-consumers, for an average domestic customer using gas for heating (customer on the B1 tariff in the Paris area).

As regards the tariff structure, the principles already in force are retained, with the exception of the billing of customers with no individual meter, in order to apply the provisions of Article 2 of the administrative order of 2 July 2007 on bills for the supply of electricity or natural gas stipulating that a natural gas bill is to be produced "at least once a year on the basis of the energy actually consumed", along with the recommendations from France's national energy ombudsman [Médiateur National de l'Énergie – MNE] regarding the baseline consumption used for fixed-rate annual billing.

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5/50 (translated from the French: only the original in French is authentic)

## METHODOLOGY

### A. Regulatory framework

Article L.452-3 of the French Energy Code stipulates that the CRE deliberations ruling on tariffs for use of natural gas distribution networks "[...] may make provision for a tariff review framework covering several years together with appropriate short- or long-term incentives to encourage operators to improve their performance particularly as regards the quality of service provided [...] and finding productivity improvements".

Pursuant to this Article of the French Energy Code, this tariff ruling stipulates the retention of the existing principles governing the regulatory framework encouraging GrDF to improve its efficiency, from the viewpoint both of controlling its costs, and of the quality of service provided to the users of its networks. Nonetheless, the existing framework is changing on the basis of experience from applying the current tariff and a European report on incentive-based regulation of electricity and gas infrastructure, which external consultants were appointed to produce.

This new regulatory framework is based on the following principles:

- a multi-year tariff intended to apply for a period of approximately four years from 1 July 2012, revised on the 1 July of each year mentioned in the schedule of tariffs, on the basis of predefined rules;
- an expenses and revenues clawback account (CRCP), used to correct, for certain accounts items identified in advance, variances between actual expenses and revenues figures and the forecast expenses and revenues figures used to establish the GrDF tariff;
- a two-year review clause, after two years of the tariff being applied, to examine any consequences that may arise from legislative or regulatory changes or court rulings that might have significant effects on the operator's operating expenses in the years 2014 and 2015;
- cost control incentives involving, firstly, the operator's operating expenses and secondly the costs of investment programmes, excluding investment in safety and system mapping;
- incentives related to quality of service improvements.

This regulatory framework will give all market stakeholders good visibility over changes in GrDF's tariff between 2012 and 2015. It protects GrDF from the risks to which it is exposed in relation to inflation and variable weather patterns affecting the volumes of gas distributed, together with any consequences that may arise from regulatory changes over the two final years of the tariff period.

#### 1. Incentive-based regulation of operating expenses and investment programme costs

In preparation for this tariff, the CRE analysed possible areas for improvement in the regulatory framework, so as to better encourage GrDF to control its costs and complete its investments.

In support of this analysis, an external consultant was appointed to produce a report on incentive-based regulatory mechanisms for electricity and natural gas system operators in Europe. The report focused in particular on regulation of operating expenses and investment costs

##### 1.1. Operating expenses

In order to keep the incentive to control operating expenses introduced by the ATRD3 tariff and the visibility over tariff changes, the current mechanism used is retained.

Consequently, the operator's net operating expenses trajectory is defined over the period 2012-2015. The trajectory equates to an annual adjustment in these expenses from the level adopted for 2012 that is in line with inflation and an annual productivity target appropriate to GrDF's new expenses trajectory.

Additional productivity gains that might be achieved by GrDF over and above the annual productivity target will be retained in their entirety by the operator, whereas only 40% of such gains were kept under the ATRD3 tariff. Likewise, any extra costs that may be incurred will be entirely borne by the operator. The CRE thus intends to strengthen the incentive for GrDF to control its costs.

### **1.2. Investment programme costs**

In producing this tariff ruling, the CRE accepted GrDF's investment forecasts in full. In addition, a cost control incentive mechanism for GrDF's investment programmes has been introduced, to optimise management and investment costs without compromising the installation of the facilities necessary for the development, operation and safety of its network.

This mechanism relates to all GrDF investments, excluding investments in safety and system mapping. It is applied every year to the variance between the forecast trajectory of investment spending excluding safety and mapping adopted for the tariff, and GrDF's actual spending. It causes an increase or a reduction in the calculated capital expenditure figure, in the event that actual investment spending is under or over the forecast trajectory respectively. The amount of these bonuses or penalties is capped at €2m annually and is taken into account through the CRCP mechanism.

Quantitative investment spending monitoring indicators are put in place to check that GrDF's investment programme cost controls are not having an adverse effect on carrying out the necessary investments. These indicators involve the areas of network development, customer delivery points and low-flow meters.

The CRE may, if appropriate, decide to adjust the baseline forecast trajectories during the tariff period. Such an adjustment would, in particular, make it possible to take account of regulatory changes entailing substantial new investment, or a reassessment of the investment trajectory if the actual investment spending figures prove to be way below forecasts.

## **2. Expenses and revenues clawback account (CRCP)**

Tariffs are calculated on the basis of estimates made for the tariff validity period regarding expenditure, volumes of gas supplied, and the number of end consumers served. A mechanism for subsequent corrections, the CRCP, was introduced by the ATRD3 tariff to take account of variances between the actual expense and revenue figures recorded and the forecast expense and revenue figures for certain somewhat unpredictable accounts items identified in advance.

The CRCP is funded at regular intervals by all or some of the variances in expenses or revenues recorded against these predefined accounts items. The clearing of the CRCP balance occurs automatically on the 1 July every year by means of a reduction or increase in the income to be recovered through the tariffs, limited to an absolute value of 2%. To ensure the financial neutrality of the mechanism, an interest rate is applied to the account balance.

The CRE has decided to retain the existing CRCP mechanism, while altering the expense and revenue accounts items it covers. The CRCP items are as follows:

- income received by GrDF from tariff charges proportional to the volumes of gas supplied over the distribution network, 100% covered;
- capital expenditure borne by GrDF, 100% covered. The capital expenditure estimates included in the income recovered by the tariff from 2013 will be corrected for the actual inflation recorded when clearing the accounts item. Moreover, this item will include the financial incentives generated by the investment programme cost control incentive mechanism (see section A.1.2);



- the cost of gas purchases borne by GrDF to cover losses and various discrepancies, together with supplier (payables) variance accounts and inter-operator accounts between GrDF and transmission system operators (TSOs), 80% covered. In the event of variation over 5% in the market price of gas to cover losses and various discrepancies, the benchmark figure adopted for gas purchase costs will be reviewed;
- penalties received by GrDF for exceeding contracted capacities from clients under options T4 and TP, 100% paid back in, so as to ensure that the penalty system is financially neutral for GrDF;
- financial incentives generated by the incentive-based quality of service regulation mechanism, for all relevant indicators, except the indicator relating to keeping customer appointments, to make possible the paying of penalties to network users in the event the set quality of service level is not achieved, or the payment to GrDF of bonuses when targets are exceeded;
- changes to GrDF's costs resulting from revised cost allocations for common service costs shared between ERDF and GrDF, which are 100% covered, conditional upon a full, simultaneous setoff reversing this revised cost allocation in the tariff for use of ERDF's electricity distribution network;
- income received by GrDF for catalogue services in the event that changes in the price of services over the tariff period are different from those resulting from the indexing formulae stated in the service catalogue, 100% covered.

Where appropriate, use of the CRCP will be combined with effective and careful inspection of the costs incurred. Such inspections may in particular focus on the investments undertaken by GrDF and gas purchasing costs.

Furthermore, the financial consequences of audits conducted by the CRE will be included in the CRCP.

### **3. Two-year review clause**

This tariff ruling introduces a review clause which can be triggered two years after the tariff comes into force, i.e. for the tariff revision on 1 July 2014.

This review clause stipulates that the consequences that may arise from legislative or regulatory changes or court rulings can be examined if the level of net operating expenses adopted when calculating the GrDF tariff comes to be altered by at least 1%. The net operating expenses trajectory to be covered by the ATRD4 tariff may be amended after such an examination, with the financial consequences resulting from changes in such external factors only being incorporated in respect of the period subsequent to the application of this review clause.

### **4. Incentive-based regulation of quality of service**

To maintain and improve the level of quality of service offered by GrDF, an incentive-based quality of service regulation mechanism was established by the ATRD3 tariff.

This tariff ruling retains the current GrDF quality of service monitoring mechanism, while making some adjustments intended both to simplify the mechanism and to extend the financial incentives to indicators relating to the quality of service provided to end consumers.



These adjustments are based on feedback from the mechanism that came into force on 1 July 2008 and revised on 1 July each year, on work carried out within the Gas Working Group [Groupe de Travail Gaz – GTG] that made it possible to identify new areas for improving GrDF processes, important for correct operation of the market, and lastly on the conclusions of the audit of GrDF quality of service monitoring conducted in late 2010 by external consultants on behalf of the CRE. The changes are as follows:

- implementation of financial incentives for five indicators from 1 July 2012 for monitoring the proportion of service start-ups, shut-downs and connections that are completed within agreed deadlines, for monitoring the proportion of half-yearly meter readings over actual figures and, from 1 July 2013, for monitoring the level of corrected figures;
- removal of eleven indicators not used for financial incentives, deemed to be either no longer relevant or made redundant by other existing or newly-introduced indicators. The indicators removed are as follows:
  - the monitoring of completion times and the proportion of service start-ups, shut-downs and connections completed within the catalogue deadline;
  - the amount of compensation or penalties generated by the indicators measuring the time taken to handle complaints from suppliers or customers and by the indicator monitoring the number of appointments missed through GrDF's own actions;
  - indicators relating to appointments missed by end-customers, plus the indicator relating to atmospheric emissions of greenhouse gases, made redundant by another metric;
- four existing indicators are altered in order to better monitor the quality of service provided by the operator in the associated areas:
  - automated detection by GrDF of appointments missed by its own actions, commencing 1 July 2013, on main service calls at minimum;
  - the monitoring of the proportion of corrected meter figures, which replaces the indicator measuring the number of meter data checks carried out that culminate in a correction to the actual figure;
  - the monitoring of the average time taken to switch supplier, which replaces the indicator measuring [cumulative] supplier changeover times;
  - the monitoring of the proportion of supplier changeovers completed within the time requested, which replaces the indicator measuring the proportion of supplier changeovers completed within the catalogue deadline;
- revision of the value of financial incentives and the target levels currently applying on the basis of the results achieved for past indicators.

In addition, the CRE believes that some requests for changes to the quality of service mechanism expressed by contributors to the public consultation on the ATRD4 tariff need to be examined as part of the work of the GTG before being implemented within the tariff. This is thus the case as regards monitoring the quality of responses provided by GrDF following complaints and monitoring the time taken to disconnect supplies for non-payment.

Over the course of the ATRD4 tariff period, the CRE may decide on changes to the quality of service regulation mechanism on the basis of adequate feedback, in particular in order to make the following adjustments:

- implement new indicators or drop existing indicators;
- set targets for indicators currently without targets, on the basis of sufficient historical data;
- implement incentives (penalties and/or bonuses) for indicators currently without them should this prove necessary, and revise the value of existing financial incentives.

## 5. Regulatory framework for the smart metering project

The ATRD4 tariff covers the costs relating to GrDF's smart metering project, in accordance with the guidelines laid down in the CRE's 21 July 2011 deliberation proposing approval of the launch of the construction phase of GrDF's project:

- fixed assets under construction in this construction phase generate a return equal to the cost of borrowing;
- operating expenses from 1 July 2011 are included;
- should smart meters ultimately not be rolled out and if this decision is not attributable to GrDF, stranded costs from the construction phase will be covered by the GrDF tariff up to their net book value.

If a widespread roll-out is decided on during the tariff period, the CRE will pass an amending tariff deliberation to take account of the project's forecast costs and earnings from the date of such a decision, and define a special regulatory framework for the GrDF smart metering project.

In accordance with the guidelines given by the deliberation of 21 July 2011, this regulatory framework will encourage GrDF to:

- exercise long-term control over investment costs and expected operational benefits;
- guarantee the expected performance level of the overall system along the entire meter-reading process;
- meet the roll-out schedule.

## 6. Summary

This tariff ruling, applicable from 1 July 2012, establishes a tariff for GrDF intended to apply for a period of approximately four years.

The schedule of tariffs changes on 1 July every year, commencing 1 July 2013, by applying the following percentage change to the tariff in force:

$$Z = \text{CPI} - X + k$$

Where:

- CPI is the annual average change recorded over the previous calendar year in the consumer price index excluding tobacco as calculated by French national statistics office, INSEE, for all households in the whole of France (INSEE reference 641194);
- X is the annual change in the schedule of tariffs as a percentage;
- k is the change in the schedule of tariffs, as a percentage, arising from clearing the balance of the CRCP.

The term k cannot by itself result in an increase or reduction of over 2% in the schedule of tariffs in force. The annual change in GrDF's schedule of tariffs will therefore be in the range (CPI – X – 2%) to (CPI – X + 2%).

## B. Level of costs to be covered

### 1. Operating expenses

Article L.452-1 of the French Energy Code stipulates that "*tariffs for use of natural gas transmission and distribution networks and liquefied natural gas facilities, [...], are established in a transparent and non-discriminatory way in order to cover all the costs borne by these operators, insofar as such costs correspond to those of an efficient facilities or system operator. [...]. Such costs in particular include the operating and research and development expenses necessary for system safety and control over the quality of natural gas injected or extracted plus that portion of the cost of network extensions for which distributors remain responsible.*"

Pursuant to this Article of the French Energy Code, the operating expenses to be covered have been determined by the CRE on the basis of all costs necessary to run the distribution system, as submitted by GrDF to the CRE and as they appear in the operator's accounts.

The CRE based its setting of the level of these costs in particular on:

- data from GrDF's accounts for the years 2008, 2009 and 2010;
- assumptions regarding changes to costs for the years 2011 to 2015 as submitted by GrDF;
- the outcome of an audit of GrDF's operating expenses for the financial years 2008 to 2015, and an international comparison with other comparable operators.

The CRE has analysed in detail all the expense items presented by GrDF for the period 2012-2015 to ensure that they equate to those for an efficient operator. It has taken account of all GrDF's requests as regards staff and safety costs, and costs relating to the promotion of gas usage, as the analysis showed that these costs did indeed equate to those for an efficient system operator. The CRE revised the assumptions made regarding certain other accounts items.

### **1.1. Changes in operating expenses**

The main changes in the scope of operating expenses to be covered by the GrDF tariff, along with the main revisions to GrDF's requests decided upon by the CRE, concern the accounts items described below.

#### **a) Spending related to the "anti-endommagement" plan**

Following the accidents in Bondy in 2007 and Lyon in 2008, the government introduced reforms to improve safety on building sites close to gas networks. The purpose of the new regulations on engineering work in the vicinity of utilities facilities, the "anti-endommagement" plan, is to reduce the number and impact of accidents that may occur during underground engineering work by:

- setting up a one-stop service enabling each engineering works applicant to determine the network operators affected by its plans and then submit the notice of planned work and notice of intent to start work (France's DT-DICT forms);
- more stringent safety measures for engineering and building work in the vicinity of utilities networks: improved mapping of networks, better safety-related skills in engineering and building companies' staff, and clarification of the responsibilities between the project owner, contractors and network operators;
- the implementation of new rules for intervention after damage to utilities facilities, consolidating the synergy between network operators and emergency services.

GrDF estimates the cost of these measures at:

- €145m in operating expenses over the period 2012-2015, in the main equating to staff costs (primarily in respect of improved safety measures for work in the vicinity of utilities networks);
- €280m of investment over the period 2012-2015.

After analysis, the CRE considers that these new costs presented by GrDF are in response to regulatory changes and has fully incorporated GrDF's request within the ATRD4 tariff.

#### **b) Spending on promoting gas use**

The ATRD3 tariff made provision for covering GrDF's spending on intensifying its network (known as "promoting gas use") totalling €27m per year. These measures (financial help towards expansion aimed at property developers and house builders, measures to boost the gas industry), by encouraging the acquisition of new customers on existing distribution systems, contribute to reducing the average cost of supply for all consumers.

GrDF spent the entire annual €27m budget stipulated by the ATRD3 tariff, and indeed exceeded it in some years.

The CRE considers that the measures taken to promote gas use since 2008 have had decisive results. The majority of such measures involved the residential market, and new build housing estates in particular, for which the market share taken by natural gas in new builds has increased substantially since 2009. Results have been less significant in other sectors (general residential, tertiary and industry) where fewer measures were undertaken by the operator.

During the public consultation on the ATRD4 tariff conducted by CRE in late 2011, a majority of suppliers said they were in favour of GrDF continuing with these measures, provided that more accurate monitoring of the results obtained was put in place, and that the planned measures were conducted in a non-discriminatory way that included all suppliers.

As a consequence, this tariff ruling makes provision for further GrDF measures relating to promoting gas use totalling €45m annually. This budget increase should in particular make it possible to direct more effort towards the general residential, tertiary and industrial sectors.

The inclusion of such spending is combined with the implementation of a regulation mechanism encouraging the operator to achieve the results expected from measures promoting gas use (see also section C2).

GrDF will present a progress report on the action plan undertaken in this area together with an assessment of past measures to market stakeholders every year as part of the GTG.

### **c) Overheads**

Overheads (or central costs) comprise charges in relation to the special status of France's electricity and gas industry employees, and head office charges (or management fees).

The employers' status-related charges equate to staff-related expenses (1% CCAS [energy sector central fund for social activities] contribution and the public-sector employees' tariff). For the 2012-2015 period, the CRE has adopted GrDF's estimated figures for 2011 (€117m) and adjusted them for inflation.

As regards management fees, the CRE excluded costs relating to communication and strategy, and the Chairman's costs, and it also excluded any margin. The CRE reiterates that there must be some consideration for management fees in the form of services rendered by the parent company to its subsidiary, and it accordingly also reviewed the level of certain accounts items comprising the management fees. The CRE has consequently adopted a figure of €28m in 2012, whereas GrDF was asking for €53m.

The CRE considers that, by virtue of the principle of system operators' independence, GrDF must organise matters to provide services which today are still invoiced as management fees by the Group to which it belongs. The CRE is consequently planning further gradual reductions in management fees compared with the figure adopted for 2012, of €5m in 2012, €10m in 2014 and €15m in 2015.

### **d) Changes in staff costs**

GrDF has identified a certain number of tax and social security changes likely to cause it significant additional costs from 2012. At this stage, the main changes identified by the operator are as follows:

- the increase in the rate of health insurance contributions and the broadening of the basis on which they are calculated;
- the broadening of the basis on which the FNAL tax contributions are calculated;
- the introduction of a profit-sharing bonus;
- the change in the Supplementary Pension Plan [Régime Supplémentaire de Retraite – RSR] rate from 1% to 2% on 1 January 2012.

At this stage, GrDF's best estimate of the total additional impact on its operating expenses that might arise from these changes amounts to approximately €25m per year from 2012. The CRE has accepted GrDF's forecasts for staff costs including these changes, with the exception of the profit sharing bonus, estimated at €6m 2012, which is a discretionary decision by the parent company.

#### **e) Spending on IT services**

GrDF has made significant efforts to set up its own information system, independent from that of GDF Suez Group, which was finally achieved in mid-2011. Quality of service indicators show that the GrDF information system is currently running satisfactorily.

However, the audit of operating expenses conducted in 2011 concluded that the operator's forecast IT spending figures for the period 2012-2015 could be improved. In particular, GrDF meets part of its need for IT services by using GDF Suez Group, whose prices are higher than market rates. The audit recommends a reduction in this spending of approximately €29m in total over the period 2012-2015, out of total IT and telecoms expenditure of €512.8m.

In accordance with this recommendation, the CRE has reassessed the trajectory of GrDF's IT services costs over the period from 2013, and has consequently stipulated a reduction of €8m for 2013, €9.2m for 2014 and €11.6m for 2015. This reduction is a gradual one to enable the operator to organise matters to improve its efficiency.

#### **f) Immobilised production**

In-house GrDF resources allocated to investments mainly concern members of staff and equipment purchases. This immobilised production totals approximately €845m over the period 2012-2015. Over this period, the trajectory adopted by GrDF is the result firstly, of its projected investment programme, and secondly, of assumptions regarding the cost allocation rate used to allocate GrDF staff to its investments.

The audit of operating expenses conducted in 2011 culminated, on the basis of the levels recorded over the ATRD3 tariff period, in a revision of the assumed cost allocation rates adopted by GrDF within its trajectory for the labour component over the period 2012-2015 such that these estimates were consistent with the changes in these costs seen in the past.

In accordance with this recommendation, the CRE has reassessed the trajectory for GrDF's immobilised production accounts item (this item being deducted from the gross operating expenses) over the 2012-2015 period, with a reduction of €0.8m for 2012, then increases of €3.2m for 2013, €7.7m for 2014 and €8.2m for 2015.

#### **g) Income and expenditure related to biomethane injection**

GrDF's projections are for an estimated 3 to 9 TWh per year of biomethane injections into the distribution network by 2020. GrDF is currently looking at 255 projects, representing approximately 3.8 TWh per year. GrDF estimates that some 110 projects could come to fruition over the period 2012-2015, representing 1.7 TWh annually.

In its deliberation of 15 December 2011 ruling on changes to catalogues of associated services for natural gas distribution system operators, the CRE included the services necessary for biomethane injection into distribution systems (feasibility, connection, biomethane quality testing) in GrDF's service catalogue valid from 1 January 2012.

GrDF plans to invest €26.3m in total in biomethane between 2012 and 2015. GrDF estimates the income from such services to be approximately €0.5m in 2012 and €8.3m in 2015.

#### **h) Purchases to cover losses and various discrepancies**

Losses and various discrepancies equate to the difference between the quantities delivered by transmission systems entering the distribution system and the quantities actually delivered to system customers. These arise from:

- technical losses related to leaks, filling new networks, purging facilities before servicing or repair work and damage caused to facilities in service during engineering work;

- the margin of inaccuracy in gas metering at transmission stations on the interface with the distribution system and customer delivery points, together with further inaccuracies related in particular to the conversion of the volumes read on meters into energy;
- non-technical losses such as fraud, discrepancies between the meter figures recorded when one customer leaves premises and a new customer arrives, reporting errors, errors in billing files, etc.

Since 1 July 2008, GrDF has purchased the gas necessary to cover losses and various discrepancies on the market, after a competitive tendering procedure. Following analyses carried out on the volumes of the operator's losses and on changes in the distribution variance accounts, especially during the GTG, GrDF reviewed its estimate of the volume of its losses and various discrepancies to approximately 0.73% of the volumes supplied, or some 2.4 TWh per year. These quantities will be purchased following a pattern matching the seasonal nature of losses, in accordance with the work conducted by the GTG.

After analysis, the CRE has accepted GrDF's proposed figures.

## 1.2. Projected trajectory of net operating expenses over the period 2012-2015

Article L.452-3 of the French Energy Code stipulates that CRE rulings on tariffs for use of natural gas distribution networks "[...] may make provision for a tariff review framework covering several years together with appropriate short- or long-term incentives to encourage operators to improve their performance particularly as regards [...] finding productivity improvements".

The CRE analysed the trajectory of changes in net operating expenses for the years 2013 in 2015 in detail. It has decided to revise this trajectory by including an extra productivity effort representing a cumulative total of €12m over these three years, involving a range of costs excluding spending on staff and safety.

Given these factors, the net operating expenses trajectory adopted for the GrDF ATRD4 tariff equates to a change in net operating expenses at an annual percentage equal to the CPI minus 1.3% starting from the level adopted for 2012, i.e. €1,452.4m.

In current €m	2012	2013	2014	2015
<b>Net operating expenses adopted for the tariff</b>	1,452.4	CPI – 1.3%		

GrDF will retain all additional productivity gains that might be achieved, instead of the 40% stipulated in the ATRD3 tariff (see section A.1.1).

## 2. Standard capital expenditure

Standard capital expenditure comprises firstly depreciation and secondly the financial return on capitalised assets. These two components are calculated from the value, and changes in the value, of assets operated by GrDF, i.e. its Regulated Asset Base (RAB).

In producing this tariff ruling, the CRE accepted GrDF's investment forecasts in full.

It has retained the principles for calculating capital expenditure adopted when setting previous tariffs. The CRE has however amended its assessment of the weighted average cost of capital for the natural gas distribution industry used in calculating the financial return.

### 2.1. Valuing and updating the regulated asset base (RAB)

The valuation of the assets used by the operator to provide the natural gas distribution service includes both historic assets and investment forecasts submitted by the operator.

The treatment of assets when determining the RAB varies depending on whether the assets became operational before or after 1 January 2003.



**a) Initial RAB value on 31 December 2002**

Assets employed before 31 December 2002 are valued by means of adjusting the historical cost for inflation, using the following method:

- historic gross asset values are restated for the revaluation variances permitted in 1976, subsidies received in respect of carrying out these investments, and contributions received from the beneficiaries of these investments;
- these restated gross values are adjusted as at 31 December 2002 by applying the "market-sector GDP" price index;
- these adjusted gross values are then depreciated using the straight-line method on the basis of the economic lifespan of the various asset categories (see table below). Assets are deemed to have become operational on 1 July of the relevant year.

<b>Asset category</b>	<b>Standard lifespan in years</b>
Gas pipes and connections	50
Depressurisation stations	40
Compression / metering	20
Other technical equipment	10
Buildings	30

Some asset categories receive special treatment:

- vehicles, fittings, micro-computing hardware, minor equipment, etc. are included on the basis of their net book value;
- land is included using its non-depreciated adjusted historic value.

**b) Updating the RAB value**

Assets becoming operational between 1 January 2003 and 31 December 2011 are included in the RAB at their gross value. Planned investment from 1 January 2012 is included at its gross forecast value as submitted by GrDF.

For all assets, financial contributions from third parties are treated as they are in the accounts:

- when third-party contributions are recorded as liabilities by the operator, balancing the value of facilities recorded as assets, they are deducted from the value of assets included within the RAB;
- when third-party contributions are recorded as operating income by the operator, the assets are included within the RAB at their total value, and the third-party contributions are deducted from the operating expenses to be covered by the tariff.

The nominal date on which assets enter the inventory has been set at 1 July each year, and they are removed on 30 June. Only assets in operational use are included within the RAB.

Once assets are included within the RAB, their value is updated using the following method:

- assets are re-valued on 1 January each year using the rate of inflation for the period July to July. The index used to update values is the INSEE (French national statistics office) index 641194 for consumer prices excluding tobacco for the whole of France;
- assets are depreciated using the straight-line method on the basis of their economic lifespan. The lifespans used for asset depreciation after 31 December 2002 are identical to those used to adjust the value of assets brought into operational use prior to that date, with the exception of gas pipes and



connections, for which a lifespan of 45 years has been adopted to allow for the uncertainty surrounding the lifespan of polyethylene pipes, experience of which is limited.

Assets scrapped before the end of their economic lifespan are removed from the RAB and no depreciation or financial return is included for them.

On 1 January 2012, the value of GrDF's RAB was estimated at €14,112m.

## 2.2. Rate of return on the RAB

The method adopted to evaluate the rate of return on assets is based on the weighted average cost of capital (WACC), for a standard financial structure. The operator's return should, in fact, firstly enable it to service the interest payments on its borrowing, and secondly generate a yield on shareholders' equity comparable to that which it could obtain from investments elsewhere entailing a comparable level of risk. This cost of capital is estimated using the methodology known as the capital asset pricing model (CAPM).

As it does for each tariff ruling, the CRE re-examined the various parameters used to calculate the WACC. It also commissioned a report from an external provider (Frontier Economics) regarding the cost of capital for electricity and gas infrastructure. The purpose of this report was to present a comparative analysis of the rates used by regulators in Europe and to propose a range of values for each of the components comprising the WACC.

For this tariff ruling, the CRE took the value of 6% (real rate before tax) as the weighted average cost of capital to provide a return on GrDF's regulated asset base, using ranges of values for each of the parameters included in the WACC formula. The estimates for each of these parameters are shown in the table below:

Real risk-free rate*	2.20%
Debt spread	0.60%
Asset beta	0.46
Equity beta	0.76
Market premium	5.00%
Gearing (debt / debt + equity)	50.00%
Corporation tax rate	34.43%
Cost of debt**	2.8%
Cost of equity**	9.2%
<b>Real WACC before corporation tax</b>	<b>6.0%</b>

\*i.e. assumed nominal risk-free rate of 4.2%

\*\*real before corporation tax

Compared with the values used to set the current distribution tariff (ATRD3), the main changes are:

- the reduced asset beta. This reduction reflects CRE's reassessment of the level of risk involved in the gas distribution business compared with the market as a whole. Gas distribution in fact remains a low-risk business with predictable cash flows and is essentially disconnected from the stock market, whereas the financial crisis has seriously demonstrated the risk involved in businesses that are mainly non-regulated, representative of the market as a whole. This change is consistent with the reduced risk profile of the gas distribution business given the expansion in the accounts items eligible for inclusion in the CRCP and the introduction of a two-year review clause;
- a real risk-free rate of 2.2%, consistent with retaining the assumed nominal risk-free rate used for the ATRD3 tariff (4.2%);
- increased debt spread and market risk premium;

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- an assumed gearing (debt / (debt + equity)) in line with European practices.

### 2.3. Investment programme

The following history of investments carried out in 2008 and 2010 and forecast investments for the period 2011-2016 have been adopted in calculating capital expenditure:

In current €m	Actual			Estimat ed	Forecast				
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Investments	659.0	726.9	632.7	672.3	677.4	704.2	711.7	756.5	752.8

Over the period 2011-2016, the investment planned by GrDF is increasing by an average 2.3% annually in current euros. Investment in gas pipes accounts for 73% of all investment.

The CRE has accepted GrDF's investment forecasts in full. As capital expenditure is included in the CRCP, a return will only arise on investment that is actually carried out.

## 3. Total costs to be covered

### 3.1. Net operating expenses

The net operating expenses to be covered by the ATRD4 tariff are obtained by deducting the forecast ancillary income received independently of the tariff for use of distribution networks and the forecast stocked and immobilised production from GrDF's gross operating expenses.

Net operating expenses adopted for 2012 are as follows:

In current €m	2012
Gross operating expenses (1)	1,982.5
Operating income to be deducted (2)	530.1
<b>Net operating expenses (3)= (1) – (2)</b>	<b>1,452.4</b>

The projected trajectory of net operating expenses adopted by the CRE is based on a revision to the annual percentage rate equal to the CPI – 1.3% commencing 2013, from the value selected for 2012, i.e. €1,452.4m.

### 3.2. Standard capital expenditure

The projections for GrDF's RAB are as follows:

In current €m	2012	2013	2014	2015	2016
RAB at 1/1/yyyy	14,112.2	14,366.3	14,628.3	14,873.3	15,141.0
Net investments	677.4	704.2	711.7	756.5	752.8
Depreciation	-686.8	-710.1	-739.2	-766.1	-791.4
Re-evaluation	263.5	267.9	272.4	277.3	282.1
<b>RAB at 31/12/yyyy</b>	<b>14,366.3</b>	<b>14,628.3</b>	<b>14,873.3</b>	<b>15,141.0</b>	<b>15,384.6</b>

The projections for GrDF's standard capital expenditure are as follows:

In current €m	2012	2013	2014	2015	2016
Return on the RAB	867.1*	883.5*	898.5	914.5	930.4
Depreciation	686.8	710.1	739.2	766.1	791.4
<b>Total</b>	<b>1,553.9</b>	<b>1,593.5</b>	<b>1,637.6</b>	<b>1,680.5</b>	<b>1,721.7</b>

\*: including a return at the cost of borrowing for assets under construction relating to investment for GrDF's smart metering project's construction phase.

### 3.3. Inclusion of the ATRD3 tariff CRCP balance

The estimated total balance of GrDF's equalisation account for 2011 for inclusion in the calculation of authorised income is +€214.7m<sub>2011</sub>, breaking down as follows:

Component of CRCP for ATRD3 tariff	Amount (€m <sub>2011</sub> )
CRCP balance 2011:	+€267.9m
• Capital expenditure (100% covered)	+€9.1m
• Income received from tariff charges proportional to volumes of gas supplied (100% covered)	+€265.3m
• Cost of gas purchases to cover losses and various discrepancies, and variance accounts (90% covered)	-€3.3m
• Penalties received by GrDF for exceeding contracted capacities for clients under options T4 and TP (100% covered)	-€5.4m
• Financial incentives generated by the incentive-based regulation mechanism for quality of service (100% covered)	+€2.2m
Remainder of the 2010 balance not cleared as at 1 July 2011	-€53.2m
<b>Total balance</b>	<b>+€214.7 million</b>

The main contribution to the CRCP for 2011 is the item for income related to the volumes of gas distributed. As 2011 was unusually warm, volumes supplied amounted to 286.2 TWh (provisional figure) whereas the tariff trajectory had forecast 338.0 TWh. The outcome is an income variance of €265.3m.

The CRCP balance for 2011, i.e. €214.7m, will be cleared over a four-year period, in equal instalments. Pursuant to the administrative order of 2 June 2008 approving the CRE's tariff proposal of 28 February 2008, an interest rate equal to 4.2% is applied annually to ATRD3 tariff CRCP balances.

This leads to an increase in the costs to be recovered by GrDF's future tariff of €60.7m per year.

### 3.4. Authorised income for 2012

The authorised income for the year 2012 equals the sum of the net operating expenses plus the standard capital expenditure plus the instalment for the ATRD3 tariff CRCP balance for 2011 to be cleared, as calculated using the principles described above. It breaks down as follows:

In current €m	2012
Net operating expenses	1,452.4
Standard capital expenditure	1,553.9
Instalment to clear 2011 equalisation account balance	60.7
<b>Authorised income</b>	<b>3,067.0</b>

## C. Estimated volumes distributed and number of customers supplied

### 1. Trajectories adopted for the ATRD4 tariff

Unit tariffs vary depending on the volumes of gas distributed and the number of end customers connected to the distribution network.

The ATRD3 tariff in force forecast, for the period 2008-2012, an average increase in volumes distributed of 0.7% annually assuming average weather conditions, and an average increase in the number of end customers connected to the distribution network of 0.6% annually.

The weather-corrected volumes actually distributed and the number of end customers actually connected both proved lower than forecast. Over the period 2008-2010, the weather-corrected volumes of natural gas actually supplied and the number of end customers actually connected dropped by an average 0.8% and 0.2% annually respectively. Ultimately in 2010, the variance between the tariff forecasts and the actual figures for weather-corrected volumes of natural gas supplied and the number of end customers connected were -2.4% and -1.5% respectively.

The decline in consumption observed is mainly attributable to improved energy efficiency in the residential sector and the drop in the number of customers connected to gas. The drop in the number of customers is the outcome in particular of competition from other means of heating and cooking, and of gas suppliers more frequently resorting to disconnection for non-payment.

The prospect of these circumstances remaining unchanged, combined with more stringent energy regulations than previously in terms of controlling demand for energy, led GrDF to propose slightly lower estimates for the ATRD4 tariff period as regards volumes distributed (-0.5% annually) and the number of customers connected (-0.3% annually). These estimates incorporate the results of measures promoting gas use, which, despite the expected benefits (as already seen especially on the "new build housing estates" market since 2009), will not entirely compensate for these effects.

The CRE has adopted the estimates proposed by GrDF. In contrast, the CRE has rejected GrDF's request to reduce the figures in the weather-correction model (-7.8 TWh) and the climate baseline (-6.8 TWh). This tariff ruling is therefore based on the same weather-correction model and the same climate baseline as those used for the ATRD3 tariff.

In view of the estimates detailed above, the forecast weather-corrected volume of natural gas distributed for 2012 is approximately 15.2 TWh lower than the forecast used for the ATRD3 tariff.

The estimated volumes distributed and number of customers supplied adopted by the CRE are as follows:

	Actual 2010	Estimated 2011	ATRD3 forecast 2012	ATRD4 forecast 2012	Forecast growth rate over previous year			
					2013	2014	2015	2016
Average number of customers over the year	11,190,757	11,133,006	11,370,213	11,082,226	-0.47%	-0.39%	-0.29%	-0.22%
Weather-corrected consumption (in TWh)	348.2 <sup>1</sup>	286.2 <sup>1</sup>	342.1	326.9	-0.84%	-0.52%	-0.50%	-0.07%

### 2. Incentives to achieve objectives for measures promoting gas use

In order to ensure that the increased spending in connection with measures promoting gas use compared to the budget covered by the ATRD3 tariff ultimately results in a reduction (or lower rise) in GrDF's tariff, the CRE is establishing a mechanism financially encouraging GrDF to achieve the results expected from these measures.

<sup>1</sup> Actual, not weather-corrected, consumption

A very large majority of suppliers reported being in favour of the introduction of such a mechanism during the public consultation on the ATRD4 tariff conducted by the CRE in late 2011.

This incentive-based regulation mechanism comprises two indicators which are to show GrDF's capacity, through the promotional activities it will undertake, to connect new customers to the gas distribution network in each of the markets concerned. The indicators are as follows:

- cumulative new housing units heated by gas, for the "residential" market;
- cumulative new customers, for the "tertiary and industrial" markets.

On the residential market, the inclusion of an indicator for cumulative new housing units rather than cumulative delivery points comes from the fact that new connected customers are frequently using communal heating.

In the event of failure to achieve the forecast trajectories stipulated under this tariff for either of these two indicators at the end of the tariff period, the penalty incurred by the operator may range up to €30m (i.e. half of the additional budget granted by the CRE within the ATRD4 tariff compared to the actual 2010 figures).

#### **D. GrDF tariff trajectory**

The trajectory of revisions to GrDF's schedule of tariffs is deduced from the forecast trajectory of the operator's authorised income and the estimates for volumes distributed and number of customers supplied. This trajectory is as follows:

- an 8.0% increase in GrDF's tariff on 1 July 2012;
- a revision to GrDF's schedule of tariffs on 1 July every year, commencing 1 July 2013, by applying the following percentage change to the tariff in force:

$$Z = \text{CPI} - X + k$$

Where:

- CPI is the annual average change recorded over the previous calendar year in the consumer price index excluding tobacco as calculated by French national statistics office, INSEE, for all households in the whole of France (INSEE reference 641194);
- X is the annual percentage change in the schedule of tariffs equal to - 0.2%;
- k is the change in the schedule of tariffs, as a percentage, arising from clearing the CRCP balance.

The term k cannot by itself result in an increase or reduction of over 2% in the schedule of tariffs in force. The annual change in GrDF's schedule of tariffs will therefore be in the range (CPI – 1.8%) to (CPI + 2.2%).

#### **E. Tariff structure**

##### **1. Continuity of the existing tariff structure**

Tariffs for use of natural gas distribution networks apply to over 11 million end customers. To enable genuine opening up of the gas market in France, these tariffs must be straightforward and clear. To remain consistent with the ATRD3 tariff, the CRE has adopted the following general principles for this tariff:

- geographical equalisation for each DSO (this principle now applies only to concessions other than those granted by virtue of the provisions of Article L.432-6 of the French Energy Code);
- a tariff structure comprising four main tariff options corresponding to the following customer segments:
  - two-part option T1: annual consumption from 0 to 6,000 kWh;
  - two-part option T2: annual consumption from 6,000 to 300,000 kWh;
  - two-part option T3: annual consumption from 300,000 to 5,000,000 kWh;

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- three-part option T4: annual consumption over 5,000,000 kWh.

The above thresholds have been established taking account of the tariff-based supply levy ("*contribution tarifaire d'acheminement*" – CTA) which applies to the tariff's set charges and for a modulation of 160 days for option T4;

- a special tariff option, known as the "proximity tariff" (three-part TP option), reserved for end customers having a statutory entitlement to connect to the natural gas transmission network;
- the shipper chooses the tariff option for a given delivery point. The tariff is applied per delivery point;
- a penalties mechanism for exceeding contracted capacities for tariff options T4 and TP.

Within the public consultation on the ATRD4 tariff, the CRE proposed reducing the threshold between tariff options T1 and T2 from 6 to 4 MWh, which would have the benefit of continuing to automatically associate tariff option T1 with profile P011<sup>2</sup> and tariff option T2 with profile P012<sup>3</sup>.

The CRE ultimately opted not to reduce the threshold between options T1 and T2, as this would have resulted in a significant increase in gas bills (possibly up to 10%) for approximately 500,000 customers, without, however, reflecting the costs caused by these customers.

The CRE nonetheless considers that it is possible to amend the P011 and P012 profiles, if the GTG so decides.

## 2. Billing arrangements for customers with no individual meter

Article 2 of the administrative order of 2 July 2007 on bills for the supply of electricity or natural gas stipulates that a natural gas bill is to be produced "*at least once a year on the basis of the energy actually consumed*".

In 2010, approximately 150,000 housing units had no meter and were therefore billed at a fixed rate (5,000 housing units at the individual fixed rate and 145,000 at the communal fixed rate for the apartment block as a whole). Owing to these customers' low gas consumption, the full cost of installing a meter including engineering works, of the order of €500-600 per meter, does not permit meters to be installed in every such housing unit. To comply with the provisions of the abovementioned administrative order, GrDF has decided to install meters at the foot of gas riser pipes for all apartment blocks concerned, making approximately 7,000 meters for the 145,000 communal housing units (flats), by the 1 July 2012.

In addition, the annual consumption of 1,163 kWh used to set the current fixed rate was reduced to 660 kWh, in accordance with the recommendation from France's national energy ombudsman (MNE).

To take these developments into account, the billing arrangements for customers with no individual meter adopted for the ATRD4 tariff are as follows:

- for all end customers in an apartment block or a group of housing units without individual meters but where there is a communal meter, and where a supply contract has been taken out collectively, a contract fee equal to that for tariff option T1 is charged, applied to the number of housing units supplied with gas, and a proportional charge equal to that for tariff option T1 is applied to the gas consumption measured by the communal meter;
- for end customers without individual meters or a communal meter, the reduced fixed rate, based on gas consumption of 660 kWh, is applied.

<sup>2</sup> Profile estimating the consumption of "flat" customers, with annual baseline consumption between 0 and 6 MWh, varying little with the weather since mainly in relation to cooking and hot water

<sup>3</sup> Profile estimating the consumption of "heating" customers, with annual baseline consumption between 6 and 300 MWh, heavily dependent on the weather

### **3. Invoicing the costs of connection, transportation and specific services between first tier and second tier distribution system operator**

The tariff rules regarding second tier distribution system operators (DSO) defined in the administrative order of 24 June 2009 approving the tariffs for use of the natural gas distribution networks are renewed:

- the first tier DSO invoices the second tier DSO for 50% of the transportation costs, calculated using the first tier DSO's ATRD tariff. This value of 50% applies whichever the upstream DSO. This charge covers:
  - normative operating expenses, which represent on average 47% of the ATRD tariff (operating expenses / total expenses);
  - and a proportion of the normative capital costs for future enhancements, representing on average 3% of the ATRD tariff;
- all connection costs on the first tier network are invoiced to the second tier DSO;
- associated services are invoiced additionally by the first tier DSO to the second tier DSO, based on the first tier DSO's price list for services.

Thus a second tier DSO is a user of the first tier DSO's network, but one with special attributes:

- it is a delegated public-service organization as regards the licensing contract, and consequently has public-service obligations;
- it is responsible for operating a distribution network, and thus transports gas not for its own consumption but in order to enable suppliers located in its service area to supply their customers;
- it has a stable, long-term presence, since concessions are generally granted for around 30 years.

The second tier DSO therefore has a special relationship with the first tier DSO, which cannot be managed within the operational and contractual framework provided for other network users. The special features of the position of second tier DSO, and the general interest prompted by improvements that develop competition in the distribution activity and in the supply activity in the territory of new licences, justify creating a tariff structure specific to second tier DSO that reflects the principles of equality and cost coverage.

In addition, the clauses of French Decree n°2008-740 of 28 July 2008 relating to the development of the gas service and extensions to the public natural gas distribution networks, apply in general to connecting gas consumers, but not to connecting second tier DSO. Indeed, the concepts of territory and eligible customer found in Article 3 of this Decree do not correspond to the situation of second tier DSO. Consequently, provisions under Title II of the Decree above mentioned apply only when a network is extended within the territory of the concession, and cannot apply to connecting second tier DSO.



# TARIFFS FOR USE OF GRDF'S PUBLIC NATURAL GAS DISTRIBUTION NETWORKS

## A. Definitions and general principles

### 1. Definitions

#### **Shipper:**

Individual or legal entity which concludes a supply contract with a distribution system operator (DSO) on the natural gas distribution network. The shipper may be the customer, the supplier or the agent of either, as the case may be, as defined in Article L.111-97 of the French Energy Code.

#### **Delivery point:**

Exit point from a distribution network where a DSO delivers gas to an end customer in fulfilment of a supply contract on the distribution network signed with a shipper.

#### **Transmission Distribution Interface Point (*Point d'interface transport distribution – PITD*):**

Physical or notional interface point between a transmission system and a distribution system for natural gas.

#### **Second tier distribution system operators (“Second tier DSO”):**

A DSO is described as "second tier" if its network is supplied by means of another natural gas distribution system which is itself directly connected to the transmission system. The upstream DSO is described as "first tier".

#### **Expenses and revenues clawback account (CRCP):**

The CRCP is an off-balance sheet fiduciary account funded at regular intervals by all or some of the variances in expenses or income between the actual expenses and income figures recorded and the forecast expenses and income figures for predefined accounts items. All or part of the balance of this account is cleared by means of a decrease or increase in the scale of tariffs.

### 2. Billing per delivery point

The tariff is applied per delivery point. The amounts owed for each delivery point supplied by a shipper are totalled in that shipper's monthly invoice.

### 3. Services covered by the tariff for the use of GrDF's public natural gas distribution networks

Use of GrDF's distribution networks cannot give rise to any billing other than that resulting from application of the tariff herein, with the exception of additional services for which tariffs are published by the DSO within its own service catalogue.

The tariff for use of GrDF's public distribution network covers at least the following services:

- services relating to quality and safety:
  - continuity of supply under the conditions stipulated in statutory order ("decree") no. 2004-251 of 19 March 2004 on public service obligations in the gas industry;
  - notice of service interruptions for engineering work, in accordance with the statutory order of 19 March 2004;
  - provision of a number for reporting emergencies and troubleshooting, available 24/7;
  - a 24-hour emergency call-out service for safety-related problems, pursuant to the administrative order of 13 July 2000 on safety regulations for the distribution of combustible gas through pipelines;

- guaranteed calorific value stipulated by the administrative orders of 16 September 1977 and 28 March 1980;
  - available pressure upstream from the delivery point, in compliance with the standard delivery terms and conditions published by the DSO;
  - initial response on customer site for troubleshooting or repair in the event of gas supply failure;
  - assessment of indoor equipment that has been idle for over six months and measures to raise the awareness of customers and gas industry stakeholders of the safety issues surrounding indoor equipment;
- services relating to consumption metering:
    - provision of a meter when the flow rate is under 16 m<sup>3</sup>/hour;
    - periodic checking of meters and converter calibration;
    - continuity of metering and depressurisation;
    - periodic meter reading, as stipulated in section 5 hereunder;
    - notice of meter-reader visits for end customers under options T1 and T2;
    - option for end customers under options T1 and T2 to read their own meters and forward the reading.
  - services relating to contract management:
    - administrative tasks relating to switching suppliers or amendments to supply contracts;
    - work at the customer site in the event of termination.
  - other:
    - making telephone appointments for all technical operations requiring investigation;
    - for tier-2 DSOs, all services relating to natural gas supply from the relevant Transmission Distribution Interface Point (PITD).

#### 4. Structure and choice in tariff options

The tariff includes four main options:

- three two-part options, T1, T2 and T3, each comprising a subscription and a charge proportional to the quantities delivered;
- one three-part option, T4, comprising a subscription, a charge proportional to the contracted daily capacity, and a charge proportional to the quantities delivered;

The shipper concerned decides which tariff option is applied to each delivery point.

For all end customers in an apartment block or a group of housing units without individual meters but where there is a communal meter, and where a supply contract has been taken out collectively, a two-part tariff is applicable comprising:

- a subscription equal to tariff option T1 applied to the number of housing units supplied with gas;
- a proportional charge equal to that for tariff option T1 applied to the gas consumption measured by the communal meter.

For end customers without individual meters or a communal meter, the tariff applicable is a fixed-rate, based on the T1 option and gas consumption of 660 kWh per year.

The tariff also includes a tariff option known as the "proximity tariff" (TP), which can be used for delivery points relating to end customers having a statutory entitlement to connect to the transmission system. This

tariff option comprises a subscription, a charge proportional to the contracted daily capacity, and a charge proportional to the straight-line distance between the delivery point in question and the nearest transmission system. This charge proportional to distance is adjusted by a multiplier coefficient that depends on the population density of the municipality where the delivery point in question is located.

## 5. Delivery point meter-reading method

Options T1 and T2 include half-yearly meter reading.

Option T3 includes monthly meter reading.

Options T4 and TP include daily metering, read on a daily or monthly basis.

The shipper may choose more frequent meter reading than that included within the tariff option for the delivery point concerned. The tariff applied is shown in the DSO's service catalogue.

## 6. Monthly or daily subscription charges for daily capacity

Tariff options T4 and TP include a charge for annual subscription for daily capacity. It is also possible to subscribe for daily capacities on a monthly or daily basis.

The monthly subscription charge for daily capacity is equal to the annual subscription charge for daily capacity multiplied by the following coefficients:

Months	Monthly charge as a proportion of the annual charge
January – February	8/12
December	4/12
March – November	2/12
April – May – June – September – October	1/12
July – August	0.5/12

When smooth running of the network so allows, daily subscription charges for daily capacity are sold by GrDF to meet sporadic and exceptional end-customer needs.

The daily subscription charge applicable for daily capacity is equal to 1/20th of the monthly charge for the appropriate month.

## 7. Penalties for exceeding contracted daily capacity

Each month, for tariff options T4 and TP, exceeding daily capacity subscribed is subject to fines.

The excess over daily capacity taken for any given month is equal to the sum of the maximum excess over daily capacity for the month in question plus 10% of other excesses over daily capacity for the month that are greater than 5% of the contracted daily capacity.

The penalty is payable when the excess calculated in this way is greater than 5% of the contracted daily capacity. For the portion of the excess between 5% and 15% of the contracted daily capacity, the penalty is equal to this portion of the excess multiplied by twice the monthly charge for daily capacity as defined in the previous section.

For the portion of the excess above 15% of the contracted daily capacity, the penalty is equal to this portion of the excess multiplied by 4 times the monthly charge for daily capacity as defined in the previous section.

## 8. Grouping delivery points

Under option T4, the grouping of daily capacity subscription charges for several delivery points is permitted when the following conditions are simultaneously met:

- the relevant delivery points are on the distribution network of one DSO and are supplied from the same PITD;
- the gas delivered to each of the relevant delivery points is intended to meet, after transformation, the needs of a single end user on a single site. This utilisation leads to alternate consumption of all or part of the natural gas delivered.

The annual subscription charge for daily capacity for option T4 is increased by 20% when subscription charges for more than one delivery point are grouped together for billing. The annual subscription remains due for each delivery point.

## 9. Supply of one delivery point by more than one shipper

When several shippers simultaneously supply a single delivery point, they must select the same tariff option. The selected tariff applies fully to each of them, with the exception of the T4 option and the "proximity tariff" (TP) option for which the sum due monthly in respect of the subscription and the charge proportional to the distance is split between the shippers concerned pro rata relative to the contracted capacities for the month in question for that delivery point. When, for a given month, the total contracted capacity is zero, the amount is split on the basis of the previous month.

## 10. Tariff handling for second tier DSOs

A DSO is described as "second tier" if its network is supplied by means of another natural gas distribution network which is itself directly connected to the transmission network. The upstream DSO is described as "first tier".

In terms of tariffs and contracts, the second tier DSO's distribution network is made directly accessible to shippers from the transmission network in the following way:

- shippers pay the second tier DSO a single tariff covering the gas supply service from the relevant PITD to the end customer's delivery point;
- the charges to be covered by second tier DSO tariffs include the costs of supply over the first tier DSO's distribution network;
- these costs form the subject matter of a contract between the first and second tier DSOs, or a protocol in the event they are both one and the same legal entity, submitted to CRE.

The first tier DSO invoices the second tier DSO for 50% of the transportation costs calculated using the first tier DSO's ATRD tariff. This 50% proportion applies irrespective of the upstream DSO.

The first tier DSO invoices the second tier DSO the full costs of connecting to the first tier DSO's network, i.e.:

- the full cost of the connection;
- if applicable, the full cost of the intake system (also known as an "extension");
- and the full costs of upgrading the first tier DSO's system when they are directly and immediately attributable to the second tier DSO (or otherwise, the share of the cost of engineering work that is attributable to the second tier DSO in proportion to peak flow rates).

The first tier DSO additionally invoices the second tier DSO for any additional services calculated using the first tier DSO's service catalogue.

## B. Equalised tariff for use of GrDF public natural gas distribution networks

The tariff for use of public natural gas distribution networks run by Gaz réseau Distribution France (GrDF), other than those licensed by virtue of the provisions of Article L.432-6 of the French Energy Code, is equalised within the GrDF service area.

The tariff defined hereunder is intended to apply for approximately four years commencing 1 July 2012, with an automatic adjustment on 1 July every year.

### 1. Equalised GrDF tariff applicable from 1 July 2012 to 30 June 2013

#### Main tariff options:

The tariff for use of public natural gas distribution networks within the GrDF service area is as follows:

Tariff option	Annual subscription in €	Proportional charge in €/MWh	Annual subscription charge for daily capacity in €/MWh/day
T1	30.96	24.57	
T2	119.64	7.23	
T3	679.92	5.07	
T4	13,737.72	0.71	178.68

#### "Proximity tariff" (TP) option:

The tariff charges for the "proximity tariff" (TP) option are as follows:

Tariff option	Annual subscription in €	Annual subscription charge for daily capacity in €/MWh/day	Annual distance charge in €/metre
TP	32,049.96	89.16	58.44

A multiplier is applied to the annual distance charge, which is equal to:

- 1 if the population density of the municipality is under 400 inhabitants per km<sup>2</sup>;
- 1.75 if the population density of the municipality is between 400 and 4,000 inhabitants per km<sup>2</sup>;
- 3 if the population density of the municipality is over 4,000 inhabitants per km<sup>2</sup>.

#### Customers with no individual meter but having a communal meter:

For all end customers in an apartment block or a group of housing units without individual meters but where there is a communal meter, and where a supply contract has been taken out collectively, a subscription equal to that for tariff option T1 is charged, applied to the number of housing units supplied with gas, and a proportional charge equal to that for tariff option T1 is applied to the gas consumption measured by the communal meter.

#### Customers with no individual or communal meter:

For end customers with no individual meter or communal meter associated with a communal supply contract, the tariff applicable is an annual fixed charge of €47.16.

When a gas meter reading simultaneously includes consumption payable at both the old and new tariffs, it is split in proportion to the number of days in each period.

## 2. Equalised GrDF tariff applicable commencing 1 July 2013

The GrDF schedule of tariffs is automatically adjusted on 1 July of every year Y, commencing 1 July 2013, by applying the following percentage change to all tariff charges in force on 30 June of year Y:

$$Z = \text{CPI} - X + k$$

CPI is the measure of inflation used for revising the schedule of tariffs on 1 July in year Y, equating to the annual average change over the calendar year Y-1 in the consumer price index excluding tobacco as calculated by the French national statistics office, INSEE, for all households in the whole of France<sup>4</sup>.

X is the annual percentage change in the schedule of tariffs equal to - 0.2%

k is the change in the scale of tariffs, expressed as a percentage, resulting from clearing the balance of the CRCP.

The resulting schedule of tariffs is published by the CRE before 1 July every year in the official gazette (*Journal Officiel*) of the French Republic and submitted to the Ministers with responsibility for energy and the economy.

### 2.1. Calculation of the balance of the CRCP

The CRE calculates the balance of the CRCP every year following the method described in the table below.

Whenever the final amount for a variance is not known with certainty when the calculation is performed, it is estimated based on the best information available at the time. Such estimates are corrected the following year on the basis of final values.

Item covered by the CRCP	Proportion of amount covered by the CRCP	Method of calculating amount for each item
Capital costs	100%	Difference between: <ul style="list-style-type: none"><li>the capital costs figure calculated ex post on the basis of actual figures relating to investments, assets removed from the RAB, inflation, and assets under construction relating to investment for the smart metering project's construction phase;</li><li>the estimated capital costs included in the income to be recovered by the tariff, corrected for the actual inflation recorded from 2013.</li></ul> To this balance are added the financial incentives generated by the investment programme cost control incentive mechanism for investment, excluding investment in safety and system mapping.
Income received from tariff charges proportional to volumes of gas supplied over the distribution network	100%	Difference between: <ul style="list-style-type: none"><li>income from the volume of gas supplied, calculated ex post on the basis of half-yearly gas volumes per tariff option that were actually supplied over the period in question;</li><li>half-yearly forecast income per tariff option from estimated volumes of gas supplied, used to establish the tariff charged over the period in question.</li></ul>

<sup>4</sup> The annual average change over year Y-1 equals the rate of change expressed as a percentage in the annual average index, equating to the simple arithmetic mean of the 12 monthly indices for the year, i.e. from January to December, for consumer prices excluding tobacco for all households in the whole of France (series 641194), between the years Y-2 and Y-1.

Cost of gas purchases to cover losses and various discrepancies, and variance accounts	80%	Difference between: <ul style="list-style-type: none"> <li>• purchasing costs for gas and the balance of supplier variance accounts and inter-operator variance accounts between GrDF and the TSOs, calculated ex post on the basis of actual figures;</li> <li>• estimated gas purchasing costs</li> </ul> In the event of variation of over 5% between the market price of gas to cover losses and various discrepancies and the forecast purchase price adopted in the tariff trajectory, the benchmark figure adopted for gas purchase costs will be reviewed.
Changes to GrDF's costs resulting from revised cost allocations for common service costs shared between ERDF and GrDF	100 %	Changes to costs resulting from revised cost allocations for common service costs, calculated ex post on the basis of actual figures. This amount is included conditional upon a full, simultaneous setoff reversing this revised cost allocation in the tariff for use of ERDF's electricity distribution network.
Income received for catalogue services in the event that changes in the price of such services are different from those resulting from the indexing formulae stated in the service catalogue.	100 %	Difference between: <ul style="list-style-type: none"> <li>• the income received by the operator, calculated ex post on the basis of the number of services provided and the price of the services after changes;</li> <li>• the income the operator would have received if prices had not changed, calculated ex post on the basis of the number of services provided and the price that would have been charged for the services according to the indexing formulae stated in the service catalogue.</li> </ul>
Penalties received by GrDF for exceeding contracted capacities for clients under options T4 and TP	100 %	Financial value of penalties invoiced over the period in question.
Financial incentives generated by the incentive regulation mechanism for quality of service:	100 %	Financial value of penalties and/or bonuses in connection with quality of service indicators that are linked to financial incentives, excepting that related to the respect of appointments.

The balance of the CRCP calculated for a calendar year Y is cleared as follows:

- the portion of this balance entailing a change to the scale of tariffs at 1 July in the year Y+1, less than or equal to 2% in absolute terms, is cleared entirely at this date. It determines the value of k;
- the remainder of the balance, if any, is carried over to the CRCP calculated for the calendar year Y+1.

Any variance there may be between the final balance and the provisional balance of the CRCP for 2011 stipulated in this tariff will be included in the balance of the CRCP for 2012.

For 2012, variances are calculated with thresholds defined on the basis of forecast data for the first half-year 2012 stipulated in the administrative order on tariffs of 2 June 2008 and on forecast data for the second half-year 2012 given in this tariff ruling.

Amounts included in the CRCP are updated with an interest rate equivalent to the risk-free rate adopted under this tariff ruling. This rate is set at 4.2% per year, nominally, before tax and applies over a period of:

- 18 months for variances recorded over the years 2012, 2013, 2014 and 2015;
- 12 months for any balance of CRCP that may be carried forward from one year to another.

At the end of the tariff period, the balance of CRCP comprising variances recorded for the year 2015, estimated variances for the first half-year of 2016, and amounts carried forward in respect of previous years are used to define the tariff for the following tariff period.

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Furthermore, the financial consequences of audits conducted by the CRE will be included in the CRCP.

## 2.2. Reference values for expense and income items governed by the CRCP mechanism

Forecast costs and income subject to the CRCP mechanism:

In current €m	2012	2013	2014	2015	2016
Capital costs (to be adjusted for actual recorded inflation from 2013)	1,553.9	1,593.5	1,637.6	1,680.5	1,721.7
Cost of gas purchases to cover losses and various discrepancies	58.1	66.9	68.3	68.1	68.5

Forecast volumes of gas supplied (in MWh):

Tariff option	2012	2013	2014	2015	2016
T1	5,961,037	5,981,963	6,018,639	6,106,987	6,248,137
T2	161,339,046	159,272,878	157,870,838	156,379,716	155,369,820
T3	97,663,860	97,376,945	97,384,355	97,263,969	97,635,017
T4	58,427,817	58,025,705	57,683,978	57,580,100	57,826,807

## 2.3. Other reference values used to calculate the factor k

Forecast average annual number of customers connected:

Tariff option	2012	2013	2014	2015	2016
Fixed rate	77,000	3,000	2,000	1,000	1,000
T1	3,080,195	3,079,841	3,016,852	2,966,806	2,923,163
T2	7,817,653	7,839,177	7,859,105	7,877,897	7,896,296
T3	104,481	105,507	106,382	107,033	107,908
T4	2,839	2,862	2,880	2,905	2,926
TP	58	58	58	58	58

Forecast annual contracted daily capacities (in MWh/day):

Tariff option	2012	2013	2014	2015	2016
T4	374,457	371,796	369,535	368,848	370,480
TP	20,185	20,185	20,185	20,185	20,185

Forecast distance for the proximity tariff (TP) (in m):

Tariff Option	2012	2013	2014	2015	2016
TP	41,703	41,703	41,703	41,703	41,703

## 2.4. Method for switching from annual to half-yearly forecasts:

Half-yearly breakdown of the volumes of gas supplied in a year Y per tariff option:

Tariff option	First half-year	Second half-year
T1	53%	47%
T2	57%	43%
T3	58%	42%
T4	59%	41%

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Half-yearly breakdown of the number of customers connected in a year Y per tariff option:

- the average number of customers connected in the first half-year is calculated as follows:

$$\frac{((\text{averagenumbercustomer}_{\text{yearY-1}} + \text{averagenumbercustomer}_{\text{yearY}}) / 2 + \text{averagenumbercustomer}_{\text{yearY}})}{2}$$

- the average number of customers connected in the second half-year is calculated as follows:

$$\frac{((\text{averagenumbercustomer}_{\text{yearY}} + \text{averagenumbercustomer}_{\text{yearY+1}}) / 2 + \text{averagenumbercustomer}_{\text{yearY}})}{2}$$

These two formulae are also applied identically to provide a half-yearly breakdown per tariff option for the forecast annual contracted daily capacities and forecast distances.

### 3. Incentive-based mechanism for cost control in GrDF's investment programmes, excluding investments in safety and system mapping

The financial incentive-based mechanism implemented applies to variances between the forecast trajectory for investment spending, excluding investment in safety and system mapping, included in tariff calculations, and GrDF's corresponding actual spending figures, under the following terms:

- every year, any variance between GrDF's forecast and actual investment spending figures is calculated. This variance gives rise to a calculation of the standard capital expenditure for the year, based on the WACC for the current tariff and a standard depreciation period of 40 years;
- 25% of this standard capital expenditure figure is added to or deducted from the calculated capital expenditure figure, in the event that actual spending is under or over the forecast figures respectively. This bonus (or penalty, respectively) is paid to (or taken from) GrDF via the CRCP's capital costs item;
- this bonus or penalty is only included for one year and is capped at an absolute value of €2m per year.

The CRE may decide to adjust the benchmark forecast trajectories on a case by case basis, especially in the event of regulatory changes entailing substantial new investment or if the actual investment spending figures prove to be way below the forecasts over the course of the period.

The investment trajectory, excluding investment in safety and system mapping, to which the mechanism applies, is as follows:

In current €m	2012	2013	2014	2015	2016
Investment spending excluding investment in safety and system mapping	343.2	368.2	382.0	421.7	415.7

In addition to this mechanism, quantitative indicators are put in place to check that the operator's investment programme cost controls are not having an adverse effect on carrying out investments. These indicators are as follows:

- length in km of new network development:

	Indicator	Associated investments
<b>Description</b>	Length in km of new network development installed in the year (connecting new customers)	Total development investment
<b>Scope</b>	Gas distribution pipes	Development investment including network / network facilities, connections and facilities in buildings (under concessions)
<b>Frequency of reporting to CRE</b>	Annual	

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Forecast trajectories					
	2012	2013	2014	2015	2016
Length in km	1,386	1,356	1,444	1,516	1,518
Investment spending (current €m)	197.8	211.8	237.7	258.6	266.5

- number of biomethane facilities connections:

	Indicator	Associated investments			
Description	Number of biomethane facilities connected in the year	Tangible biomethane-related investment			
Scope	Biomethane facilities	Biomethane-specific facilities –injection station, measurement and control devices, odourisation station- (out of concessions) and connection of facilities to GrDF's distribution system -network extension and connection- (under concessions)			
Frequency of reporting to CRE	Annual				
Forecast trajectories					
	2012	2013	2014	2015	2016
Number of connections	4	8	28	40	35
Investment spending (current €m)	1.2	2.4	8.7	12.8	11.5

- number of new delivery points (first installation or replacement):

	Indicator	Associated investments			
Description	Number of new customer delivery points installed over the year	Investment in customer delivery points, identified by asset category			
Scope	Customer delivery points	Customer delivery points (out of concessions)			
Frequency of reporting to CRE	Annual				
Forecast trajectories					
	2012	2013	2014	2015	2016
Number of new delivery points	4,200	4,200	4,200	4,200	4,200
Investment spending (current €m)	17.3	17.6	18.0	18.3	18.6

- number of periodic checks and calibration of industrial meters (Vérification périodique et étalonnage de compteurs industriels - VPEi):

	<b>Indicator</b>	<b>Associated investments</b>			
<b>Description</b>	Number of VPEi carried out over the year, whether or not they resulted in the meter being replaced	Total investment in meters with maximum flow rate greater than or equal to 16 m <sup>3</sup> /hour, identified by asset category			
<b>Scope</b>	Meters of maximum flow rate greater than or equal to 16 m <sup>3</sup> /hour	Meters of maximum flow rate greater than or equal to 16 m <sup>3</sup> /hour (out of concessions)			
<b>Frequency of reporting to CRE</b>	Annual				
<b>Forecast trajectories</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Number of VPEi</b>	26,711	26,711	26,711	26,711	26,711
<b>Investment spending (current €m)</b>	19.1	19.4	19.8	20.2	20.6

- variation in the number of active domestic meters eligible for periodic checks and calibration of domestic meters (Vérification périodique et étalonnage de compteurs domestiques - VPEd) between 1 Jan and 31 Dec in any given year:

	<b>Indicator</b>	<b>Associated investments</b>			
<b>Description</b>	Variation over the year in the number of active domestic meters eligible for VPEd, identified by their year	Total investment in meters with maximum flow rate strictly under 16 m <sup>3</sup> /hour			
<b>Scope</b>	Meters of maximum flow rate strictly under 16 m <sup>3</sup> /hour	Meters of maximum flow rate strictly under 16 m <sup>3</sup> /hour (out of concessions)			
<b>Frequency of reporting to CRE</b>	Annual				
<b>Forecast trajectories</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Change in number</b>	426,039	521,239	511,598	478,010	480,668
<b>Investment spending (current €m)</b>	33.6	39.0	39.1	37.6	38.6

In addition four other investment spending monitoring indicators are tracked by the CRE to ensure that the investments are successfully completed, these having no impact on the incentive-based mechanism for investment programme cost control:

- length in km of network replaced:

	<b>Indicator</b>		<b>Associated investments</b>		
<b>Description</b>	Length in km of network replaced over the year		Total asset replacement investment		
<b>Scope</b>	Gas distribution pipes		Asset replacement investment including network / network facilities, connections and facilities in buildings (out of concessions)		
<b>Frequency of reporting to CRE</b>	Annual				
<b>Forecast trajectories</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Length in km</b>	412	412	412	414	414
<b>Investment spending (current €m)</b>	238.8	241.8	238.7	244.5	250.7

- length in km of network laid as restructuring extensions / upgrades:

	<b>Indicator</b>		<b>Associated investments</b>		
<b>Description</b>	Length in km of network laid over the year as extensions excluding new development		Investment in first installations excluding new development and excluding safety devices installed on main facilities		
<b>Scope</b>	Gas distribution pipes		Investment in first installations excluding new development / network facilities (within concessions)		
<b>Frequency of reporting to CRE</b>	Annual				
<b>Forecast trajectories</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Length in km</b>	94	96	106	108	104
<b>Investment spending (current €m)</b>	30.4	31.7	34.8	32.9	33.4

- facilities moved at third-party request:

	Indicator	Associated investments			
<b>Description</b>	Facilities moved at third-party request	All investment in relation to moving and/or altering network facilities agreed at the request of third parties only			
<b>Scope</b>	Network / network facilities, connections and facilities in buildings	All investment in relation to moving and/or altering network facilities agreed at the request of third parties only			
<b>Frequency of reporting to CRE</b>	Annual				
<b>Forecast trajectory</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Investment spending (current €m)</b>	52.3	53.9	55.5	57.0	58.5

- number of plans geo-referenced over the year:

	Indicator	Associated investments			
<b>Description</b>	Number of plans geo-referenced over the year (new and existing plans, already digitised or otherwise)	Geo-referencing investment			
<b>Scope</b>	Geo-referencing of plans	Geo-referencing of plans (excluding related information system development) (intangible fixed assets – out of concessions)			
<b>Frequency of reporting to CRE</b>	Annual				
<b>Forecast trajectories</b>					
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Number of plans</b>	156,565	161,277	156,372	154,665	128,973
<b>Investment spending (current €m)</b>	24.1	23.7	23.0	23.3	20.1

#### 4. Incentive-based mechanism for achievement of objectives for GrDF's measures for promoting the use of gas

##### 4.1. Mechanism

The mechanism differentiates the two markets affected by measures for promoting the use of gas undertaken by GrDF, i.e. the "residential" market and the "tertiary and industrial" market. One indicator is monitored for each of these two markets:

- for the "residential" market, the indicator is the sum total of new housing units heated by gas over the period 2012-2015;
- for the "tertiary and industrial" market, the indicator is the sum total of new customers connected to the network over the period 2012-2015.

Two forecast trajectories have been defined for each of these indicators:

- a reference trajectory, showing the forecast values for the indicator equating to the budget for promoting gas use covered by the ATRD4 tariff (i.e. €45m);
- a basic trajectory, showing the forecast values for the indicator equating to a budget for promoting gas use that is constant with respect to the actual 2010 figure (i.e. €30m);

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The incentive-based regulation mechanism applies to variances calculated on 31 December 2015 between the actual figures and the reference trajectory, for each of the two indicators. If the reference trajectory is not achieved, the mechanism results in a penalty for GrDF, calculated under the following terms:

<b>Residential market</b>	
Actual figure between reference value and basic value	$\text{Penalty} = \left( \frac{\sum_{2012}^{2015} \text{New housing units heated by gas}_{\text{Actual}} - \sum_{2012}^{2015} \text{New housing units heated by gas}_{\text{Réf}}}{\sum_{2012}^{2015} \text{New housing units heated by gas}_{\text{Base}} - \sum_{2012}^{2015} \text{New housing units heated by gas}_{\text{Réf}}} \right)$
Actual figure below the basic value	Penalty = €22m

<b>Tertiary and industrial market</b>	
Actual figure between reference value and basic value	$\text{Penalty} = \left( \frac{\sum_{2012}^{2015} \text{New customers connected}_{\text{Actual}} - \sum_{2012}^{2015} \text{New customers connected}_{\text{Réf}}}{\sum_{2012}^{2015} \text{New customers connected}_{\text{Base}} - \sum_{2012}^{2015} \text{New customers connected}_{\text{Réf}}} \right)$
Actual figure below the basic value	Penalty = €8m

The maximum penalty that GrDF can be charged is capped, being equal to half the additional budget for GrDF's promotion of gas use as granted by the CRE within the ATRD4 tariff compared to the actual figure for 2010, i.e. €30m across the whole tariff period.

The total of any penalties that may be incurred will be used to reduce the figure for costs to be recovered in the next tariff.

The operator is also to present a progress report on the action plan undertaken in this area together with an assessment of past measures to market stakeholders every year as part of the GTG.

#### **4.2. Reference values subject to the mechanism**

Reference and basic forecast trajectories (as cumulative total of new housing units heated by gas and cumulative total of new tertiary and industrial customers connected to the network):



		2012	2013	2014	2015	2016
Cumulative total of new housing units heated by gas	Reference trajectory	181 013	372 471	578 388	790 995	1 000 065
	Basic trajectory	154 285	296 976	437 259	567 814	696 314
Cumulative total of new tertiary and industrial customers connected to the network	Reference trajectory	4 750	9 250	13 650	18 100	22 600
	Basic trajectory	4 650	9 000	13 250	17 450	21 550

## 5. Regulation mechanism for GrDF's quality of service

Quality of service monitoring is in operation for GrDF in the key areas of the operator's business. This monitoring takes the form of indicators, submitted regularly by GrDF to the CRE. The quality of service monitoring indicators put in place for GrDF must be made public on its both suppliers and general public websites.

Some indicators that are particularly important for the correct functioning of the market are subject to a system of financial incentives.

Quality of service monitoring indicators submitted by GrDF to the CRE must be certified by an external body. Moreover, the GrDF quality of service monitoring mechanism may be subject to any audit that the CRE may deem appropriate.

### 5.1. GrDF's quality of service monitoring indicators giving rise to financial incentives

#### a) Number of scheduled appointments missed by the DSO:

<b>Calculation:</b>	Figure reported on the 1 <sup>st</sup> of month M+2: <u>Number of scheduled appointments missed by the DSO in month M with compensation paid</u> (i.e. two figures monitored: - for 6M <sup>7</sup> customers - for JJ <sup>8</sup> /JM <sup>9</sup> /MM <sup>10</sup> customers)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all appointments scheduled, thus approved by the DSO</li> <li>- all service call appointments involving intervention by a member of DSO staff and the customer's presence, missed through the DSO's own actions: <ul style="list-style-type: none"> <li>o until 30 June 2013: all missed appointments reported by suppliers within 90 calendar days via the OMEGA portal;</li> <li>o from 1 July 2013: all missed appointments automatically identified by the operator.</li> </ul> </li> <li>- 6M customers and JJ/JM/MM customers are monitored separately</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly</li> </ul>

<sup>7</sup> Energy delivered is measured half-yearly and the figure for that measurement is read by the DSO half-yearly

<sup>8</sup> Energy delivered is measured daily and the figure for that measurement is read by the DSO every day

<sup>9</sup> Energy delivered is measured daily and the figures for those measurements are read monthly by the DSO at the end of the month for all the days in the month

<sup>10</sup> Energy delivered is measured monthly and the figure for that measurement is read by the DSO monthly

<b>Objective:</b>	100% of missed appointments: <ul style="list-style-type: none"> <li>o until 30 June 2013: reported by suppliers within 90 calendar days via the OMEGA portal;</li> <li>o from 1 July 2013: automatically identified by the operator;</li> </ul> give rise to compensation
<b>Incentives:</b>	- penalties: amounts identical to those invoiced by GrDF in the event of non-performance of scheduled service calls as a result of the customer's or the supplier's own actions (absence at appointed time, etc.), on the basis of the customer's tariff option, for each appointment missed. - payment: directly to the suppliers
<b>Implementation date:</b>	- already in place since 1 July 2008 - automated detection of appointments missed by the DSO from 1 July 2013

b) *Proportion of start-ups completed within the deadline requested*

<b>Calculation:</b>	Ratio, by customer type, reported on the 1st of month M+2:  <u><i>(Number of start-ups achieved during month M within deadline requested (if this deadline is longer than the catalogue deadline) or within a deadline ≤ the catalogue deadline (if the deadline requested is shorter than the catalogue deadline)) / Total number of start-ups achieved during the month M</i></u>  (i.e. four figures monitored: <ul style="list-style-type: none"> <li>- all customers combined</li> <li>- 6M customers</li> <li>- MM customers</li> <li>- JJ/JM customers)</li> </ul>
<b>Scope:</b>	- all start-ups involving travel (with/without meter installation), excluding urgent start-ups - all suppliers combined - 6M customers, MM customers and JJ/JM customers are monitored separately
<b>Monitoring:</b>	- frequency of calculation: monthly - frequency of reporting to the CRE: monthly - frequency of publication: monthly - frequency of compensation calculation: annually
<b>Objective:</b>	Only the overall proportion (all customers combined) carries a financial incentive: <ul style="list-style-type: none"> <li>- basic objective: 92% per calendar year</li> <li>- target objective: 93.5% per calendar year</li> </ul>
<b>Incentives:</b>	- penalties: €100,000 per calendar year if the proportion fails to reach the basic objective - bonus: €100,000 per calendar year if the proportion is greater than or equal to the target objective - payment: to the CRCP
<b>Implementation date:</b>	- monitored since 1 January 2011 - implementation of incentives: 1 July 2012

c) *Proportion of shut-downs completed within the deadline requested*

<b>Calculation:</b>	<p>Ratio, by customer type, reported on the 1st of month M+2:</p> <p><u>(Number of shut-downs achieved during month M within deadline requested (if this deadline is longer than the catalogue deadline) or within a deadline ≤ the catalogue deadline (if the deadline requested is shorter than the catalogue deadline)) / Total number of shut-downs achieved during the month M</u></p> <p>(i.e. four figures monitored:</p> <ul style="list-style-type: none"> <li>- all customers combined</li> <li>- 6M customers</li> <li>- MM customers</li> <li>- JJ/JM customers)</li> </ul>
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- Shut-downs following contract termination (excluding service disconnections for non-payment) at customer's request</li> <li>- all suppliers combined</li> <li>- 6M customers, MM customers and JJ/JM customers are monitored separately</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: annually</li> </ul>
<b>Objective:</b>	<p>Only the overall proportion (all customers combined) carries a financial incentive:</p> <ul style="list-style-type: none"> <li>- basic objective: 94% per calendar year</li> <li>- target objective: 95.5% per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €100,000 per calendar year if the proportion fails to reach the basic objective</li> <li>- bonus: €100,000 per calendar year if the proportion is greater than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- monitored since 1 January 2011</li> <li>- implementation of incentives: 1 July 2012</li> </ul>

d) *Proportion of connections completed within the deadline agreed*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2: <u>Number of connections on stream during month M within the deadline agreed / number of connections on stream during month M</u>  (i.e. two figures monitored: - connections $\leq 6\text{-}10\text{m}^3/\text{hour}$ excluding extensions - connections $> 10\text{m}^3/\text{hour}$ and connections with extensions)
<b>Scope:</b>	- all connections - i) simple connections without extension with a meter flow-rate $\leq 6\text{-}10\text{m}^3/\text{hour}$ and - ii) connections with extensions and connections with a meter flow-rate $> 10\text{m}^3/\text{hour}$ monitored separately
<b>Monitoring:</b>	- frequency of calculation: monthly - frequency of reporting to the CRE: monthly - frequency of publication: monthly - frequency of compensation calculation: monthly
<b>Objectives:</b>	- for the proportion for connections $\leq 6\text{-}10\text{m}^3/\text{hour}$ excluding extensions: o basic objective: 82% per month o target objective: 87% per month - for the proportion for connections $> 10\text{m}^3/\text{hour}$ and connections with extensions: o basic objective: 85% per month o target objective: 90% per month
<b>Incentives:</b>	- penalties: €10,000 per month strictly below the basic objective - bonus: €10,000 per month if the proportion is greater than or equal to the target objective - payment: to the CRCP
<b>Implementation date:</b>	- monitored since 1 July 2010 - implementation of incentives: 1 July 2012

e) *Proportion of half-yearly readings (6M) over actual figures (read or taken by customer)*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2: <u>Number of 6M PCE [metering or estimation point] actual figures read or taken by customer during month M / Number of 6M PCE figures reported during month M</u>  (i.e. one figure monitored)
<b>Scope:</b>	- all meter figures read or taken by customers for 6M PCE - gas figures only
<b>Monitoring:</b>	- frequency of calculation: monthly - frequency of reporting to the CRE: monthly - frequency of publication: monthly - frequency of compensation calculation: annually
<b>Objectives:</b>	- basic objective: 96.8% per calendar year - target objective: 97.2% per calendar year
<b>Incentives:</b>	- penalties: €100,000 per calendar year if the proportion fails to reach the basic objective - bonus: €100,000 per calendar year if the proportion is greater than or equal to the target objective - payment: to the CRCP
<b>Implementation date:</b>	- monitored since 1 July 2008 - implementation of incentives: 1 July 2012

f) *Quality of JJ readings transmitted to TSOs for daily allocations to PITDs:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2:  <i>(Sum for each day J of month M of the number of consumption figures for remotely-metered JJ customers included in the allocation calculations on J+1) / (Sum for each day J of month M of the number of remotely-metered JJ customers recorded in the OMEGA SI for day J)</i>  (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all figures actually read</li> <li>- no fall-back / replacement figures are included</li> <li>- all suppliers, ZETs and TSOs combined</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: monthly</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 94% per month</li> <li>- target objective: 98% per month</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per point below the basic objective</li> <li>- bonus: €20,000 per point above the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2008</li> </ul>

g) *Delay before transmission to the TSOs of daily estimations of quantities loaded by suppliers at PITDs:*

<b>Calculation:</b>	Figure reported on the 1st of month M+2:  <i>Number of days in month M where the DSO sent provisional allocations calculated at J+1 within the deadline agreed between the TSO and the DSO</i>  (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all TSOs combined</li> <li>- all days with agreed deadline met for both TSOs (the penalty is due if at least one TSO is affected by a delay)</li> <li>- all days with agreed deadline not met at the request of either TSO (such days are recorded as days where the agreed deadline is met by the DSO)</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 355 days per calendar year</li> <li>- target objective: 360 days per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per day below the basic objective</li> <li>- bonus: €20,000 per day above the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2008</li> </ul>

h) DSO's supplier portal availability rate:

<b>Calculation:</b>	Weekly availability ratios up to the end of month M, for full weeks, reported on the 1st of month M+2:  <i><u>(Number of hours of actual portal availability during the week) / (Total number of scheduled hours of portal availability during the week)</u></i>  (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- OMEGA portal only, all functionalities available to suppliers, excluding Web services</li> <li>- causes of unavailability: any event preventing, disrupting or significantly slowing down use of the portal by suppliers, scheduled or otherwise</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: weekly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: weekly and annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 99% per week</li> <li>- target objective: 99.5% per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €10,000 per week strictly below the basic objective</li> <li>- bonus: €50,000 per calendar year if the rate is greater than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2008</li> </ul>

i) Proportion of responses to supplier complaints within 15 calendar days:

<b>Calculation:</b>	Ratio reported on the 1st of month M+2:  <i><u>Number of supplier complaints closed within 15 calendar days during month M / Total number of supplier complaints closed during month M</u></i>  (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all complaints where a response must be provided to the supplier by the DSO (complaints where the response must be provided to the customer by the DSO are not included)</li> <li>- all complaints reported on the OMEGA portal only, including complaints about missed appointments</li> <li>- all suppliers and all types of customer (T1/T2/T3/T4/TP) combined</li> <li>- closed complaint: complaint where a "meaningful" response (not acknowledgement of receipt) has been sent by the DSO to the supplier</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly</li> </ul>
<b>Objective:</b>	95% of supplier complaints reported on the OMEGA portal per month dealt with within 15 calendar days
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €2,000 per point below the objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2010</li> </ul>

j) *Proportion of responses to customer complaints within 30 calendar days:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2: <u>Number of end customer complaints closed within 30 calendar days during the quarter M-2 to M / Total number of end customer complaints closed during the quarter M-2 to M</u> (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all complaints where a response must be provided to the end customer by the DSO (complaints where the response must be provided to the customer by the supplier are not included)</li> <li>- all written or oral means of reporting a complaint</li> <li>- all types of customer (T1/T2/T3/T4/TP) combined</li> <li>- closed complaint: complaint where a "meaningful" response (not acknowledgement of receipt) has been sent by the DSO to the customer</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: quarterly</li> <li>- frequency of reporting to the CRE: quarterly</li> <li>- frequency of publication: quarterly</li> <li>- frequency of compensation calculation: quarterly</li> </ul>
<b>Objective:</b>	100% of end-customer complaints dealt with within 30 calendar days
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalty: €25 per complaint not dealt with within 30 calendar days</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2010</li> </ul>

k) *Publication rate by OMEGA for JJ/JM readings:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2: <u>Sum between the 8<sup>th</sup> working day of month M and the 7<sup>th</sup> working day of month M+1 of the JJ/JM PCE remotely read for which the reading was received and published by OMEGA over that period / Sum of the number of JJ/JM PCE remotely read for which the reading was received by OMEGA over that period</u> (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all existing JJ/JM PCE</li> <li>- all cyclical and service shut-down readings (start-up readings not included)</li> <li>- all suppliers combined</li> <li>- calculation in day J+7</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly and annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 99.6% per month</li> <li>- target objective: 99.9% per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per point below the basic objective</li> <li>- bonus: €100,000 per calendar year if the level is greater than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 January 2010</li> </ul>



l) *Publication rate by OMEGA for MM readings:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2:  <u>Sum between the 8th working day of month M and the 7th working day of month M+1 of the MM PCE read for which the reading was received and published by OMEGA over that period / Sum of the number of MM PCE read for which the reading was received by OMEGA over that period</u>  (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all existing MM PCE (not only remotely read)</li> <li>- all cyclical and service shut-down readings (start-up readings not included)</li> <li>- all suppliers combined</li> <li>- calculation in day J+7</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly and annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 99.6% per month</li> <li>- target objective: 99.9% per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per point below the basic objective</li> <li>- bonus: €100,000 per calendar year if the level is greater than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 January 2010</li> </ul>

m) *Publication rate by OMEGA for 6M readings:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2:  <u>Sum over month M of the number of 6M PCE read for which the reading was received and published by OMEGA over the period / Sum of the number of 6M PCE read for which the reading was received by OMEGA</u>  (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all existing 6M PCE (not only remotely read)</li> <li>- all cyclical and service shut-down readings (start-up readings not included)</li> <li>- all suppliers combined</li> <li>- calculation in day J+2</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly and annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 99.6% per month</li> <li>- target objective: 99.9% per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per point below the basic objective</li> <li>- bonus: €100,000 per calendar year if the level is greater than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 January 2010</li> </ul>

n) *Variance from contract scope regarding alternative suppliers:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2: <u>Sum of PCE out for alternative suppliers on the last working day of month M / Sum of PCE actually attached to alternative suppliers' portfolios in OMEGA on the last working day of month M</u> (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all existing alternative suppliers' PCE</li> <li>- alternative suppliers only</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly and annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 0.20% per month</li> <li>- target objective: 0.10% per calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per month strictly above the basic objective</li> <li>- bonus: €100,000 per calendar year if the level is less than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2009</li> </ul>

o) *Proportion of rejects from month M corrected in M+1:*

<b>Calculation:</b>	Ratio reported on the 1st of month M+2: <u>Number of rejects corrected during month M / Number of rejects generated during month M-1</u> (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all existing PCE</li> <li>- all suppliers combined</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 99% per month</li> <li>- target objective: 99.5% per month</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €20,000 per point below the basic objective</li> <li>- bonus: €20,000 per month if the proportion is greater than or equal to the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 July 2010</li> </ul>

p) *Size of supplier's distribution imbalance accounts:*

<b>Calculation:</b>	Figure reported on the 1st of month M+2: <u>Sum of supplier's distribution imbalance accounts for month M in energy and absolute value</u> (i.e. one figure monitored)
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all existing PCE</li> <li>- all suppliers combined</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: annually</li> </ul>
<b>Objective:</b>	<ul style="list-style-type: none"> <li>- basic objective: 7 TWh cumulatively over the calendar year</li> <li>- target objective: 6 TWh cumulatively over the calendar year</li> </ul>
<b>Incentives:</b>	<ul style="list-style-type: none"> <li>- penalties: €0.50 per MWh above the basic objective</li> <li>- bonus: €0.50 per MWh below the target objective</li> <li>- payment: to the CRCP</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- already in place since 1 January 2011</li> </ul>

q) *Level of corrected meter figures*

<b>Calculation:</b>	<p>Following ratios reported on the 1st of month M+2:</p> <ul style="list-style-type: none"> <li>- for 6M customers: <u>(Number of readings reported with a 'corrected' status for month M – Number of corrections following start-ups for month M) / Total number of readings reported for month M</u></li> <li>- for other customers: <u>Number of active PCE where the figure was corrected in month M / Total number of active PCE in month M</u></li> </ul> <p>(i.e. two figures monitored)</p>
<b>Scope:</b>	<ul style="list-style-type: none"> <li>- all changes to meter figures, regardless of the triggering event, with the exception of corrections following service start-ups for 6M customers</li> <li>- all real figures, plus all calculated figures for customers other than 6M customers</li> <li>- all suppliers combined</li> </ul>
<b>Monitoring:</b>	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to the CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of compensation calculation: monthly</li> </ul>
<b>Implementation date:</b>	<ul style="list-style-type: none"> <li>- monitored commencing 1 July 2012</li> <li>- implementation of incentives: 1 July 2013</li> </ul>

## 5.2. Other GrDF quality of service monitoring indicators

### a) Environmental indicators:

Indicator name	Indicator calculation	Indicator scope	Frequency of reporting to the CRE and publication	Implementation date
Atmospheric emissions of greenhouse gases relative to energy supplied	Ratio reported on the 1st of March in year Y+1: <u>Tonnes of greenhouse gases (CO<sub>2</sub> equivalent) emitted into the atmosphere in year Y / Quantities of gas supplied over the DSO's network in calendar year Y</u> (i.e. one figure monitored)	<ul style="list-style-type: none"> <li>- methane leaks from distribution lines</li> <li>- methane emissions during engineering or incident maintenance work, emissions caused by facilities operations</li> <li>- emissions from the DSO's vehicle fleet and its buildings</li> <li>- the indicator is reported with the figure for the volume of gas supplied during the calendar year</li> </ul>	Year	Already implemented

### b) Indicators related to quotations and service calls:

Indicator name	Indicator calculation	Indicator scope	Frequency of reporting to the CRE and publication	Implementation date
Average time taken to switch supplier	Figure, by customer type, reported on the 1st of month M+2: <u>Average number of days needed to complete a supplier changeover during month M</u> (i.e. three figures monitored: - 6M customers - MM customers - JJ/JM customers)	<ul style="list-style-type: none"> <li>- all supplier changeovers</li> <li>- all suppliers combined</li> <li>- 6M customers, MM customers and JJ/JM customers are monitored separately</li> </ul>	Month	1 July 2012

Proportion of supplier changeovers completed within requested deadline	<p>Ratio, by customer type, reported on the 1st of month M+2:</p> <p><u>Number of supplier changeovers achieved within the requested deadline during month M / Total number of supplier changeovers achieved during month M</u></p> <p>(i.e. three figures monitored:  - 6M customers  - MM customers  - JJ/JM customers)</p>	<ul style="list-style-type: none"> <li>- all supplier changeovers</li> <li>- all suppliers combined</li> <li>- 6M customers, MM customers and JJ/JM customers are monitored separately</li> </ul>	Month	1 July 2012
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c) *Indicators related to end-customer relationships:*

Indicator name	Indicator calculation	Indicator scope	Frequency of reporting to the CRE and publication	Implementation date
Call centre availability rate for end customers	<p>Ratio, by call centre number, reported on the 1st of month M+2:</p> <p><u>Number of calls answered in month M / Number of calls received in month M</u></p> <p>(i.e. two figures monitored:  - gas access reception service no. (AGNRC no.)  - safety and repair no.)</p>	<ul style="list-style-type: none"> <li>- all types of call answered/received during the call centre's opening hours</li> <li>- all contact types</li> <li>- all types of customer (T1/T2/T3/T4/TP) combined</li> </ul>	Month	Already implemented

<p>Number of end-customer complaints by type</p>	<p>Figure, by complaint type, reported on the 1st of month M+2: <u>Total number of end-customer complaints closed during the quarter M-2 to M</u> (i.e. five figures monitored: - Total - Delivery - Delivery-related service production - Individual gas connection - Business market gas connection)</p>	<p>- all complaints where a response must be provided to the end customer by the DSO (complaints where the response must be provided to the customer by the supplier are not included) - all written or oral means of reporting a complaint - all types of customer (T1/T2/T3/T4/TP) combined - closed complaint: complaint where a "meaningful" response (not acknowledgement of receipt) has been sent by the DSO to the customer</p>	<p>Quarter</p>	<p>Already implemented</p>
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d) *Indicators related to supplier relationships:*

Indicator name	Indicator calculation	Indicator scope	Frequency of reporting to the CRE and publication	Implementation date
<p>Number of supplier complaints by type</p>	<p>Figure, by complaint type, reported on the 1st of month M+2: <u>Total number of supplier complaints closed during month M</u> (i.e. six figures monitored) - Total - Reception service - Supply and network quality - Service management and delivery - Metering data - Reminders)</p>	<p>- all complaints where a response must be provided to the supplier by the DSO (complaints where the response must be provided to the customer by the DSO are not included) - all complaints reported on the OMEGA portal only, including complaints about missed</p>	<p>Month</p>	<p>Already implemented</p>

Proportion of supplier complaints dealt with in over 2 months	Ratio reported on the 1st of month M+2: <u>Number of supplier complaints closed in over 2 months during month M / Total number of supplier complaints closed during month M</u>  (i.e. one figure monitored)	appointments  - all suppliers and all types of customer (T1/T2/T3/T4/TP) combined  - closed complaint: complaint where a "meaningful" response (not acknowledgement of receipt) has been sent by the DSO to the supplier	Month	Already implemented
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e) *Indicator related to metering and invoicing:*

Indicator name	Indicator calculation	Indicator scope	Frequency of reporting to the CRE and publication	Implementation date
Rate of 6M PCE customer absence for meter-reading 3 times or more	Ratio reported on the 1st of month M+2: <u>Number of 6M PCE figures estimated in month M owing to customer absence 3 times or more for six-monthly reading / Number of 6M PCE to be read in month M</u>  (i.e. one figure monitored)	- all existing 6M PCE  - all figures estimated (neither read nor taken by customer) because of customer absence for reading  - all cyclical and shut-down readings (start-up readings not included)  - all suppliers combined	Month	Already implemented

Signed in Paris on 28 February 2012.

For the Energy Regulation Commission,  
The President,

Philippe de LADOUCKETTE

50/50 (translated from the French: only the original in French is authentic)