



Annex 4. Case assignment

Description and requirements for Dutch network operators

1 Summary of the assignment

The ACM requests a report on the WACC for Dutch network operators.

This report should contain an advice with respect to several parameters of the WACC and should also provide an answer to an additional question. The parameters to be determined are the market risk premium, the peer group, the asset beta, the equity beta and the gearing. The additional question is: Should any adaptations be made to the WACC as a result of the new method of regulating network operators?

The assignment includes availability for answering questions from stakeholders during the consultation period.

2 General background

ACM has the legal duty to determine a regulatory method for tariff determination (method decisions) for gas and electricity network operators (both transmission operators and distribution operators) in the Netherlands. This includes the determination of a WACC.

The tender document contains an overview of the WACC methodology the ACM uses. It lists and explains the general approach of the ACM to the WACC. The exceptions for network operators are explained below.

The Tenderer is expected to calculate several key WACC parameters. The Tenderer is also expected to use his knowledge of financial markets and any relevant developments to perform a sanity check on the applied method and results. If any adjustments to the methodology are necessary, or if it leads to unfair outcomes, the Tenderer should notify the ACM accordingly.

The ACM strives to apply a consistent methodology for setting the WACC across all sectors it regulates (such as network operators, telecoms, harbor pilots and drinking water). Therefore, changes in the WACC methodology may have implications for other regulated sectors. Consequently, any adjustments must be thoroughly motivated and will be evaluated by ACM.

The process followed by the ACM to establish the regulatory method, including the WACC, is highly interactive and provides ample opportunities for stakeholder feedback:

- First, the ACM has the legal obligation to consult the regulatory method with stakeholders. To meet this obligation, the ACM will organize meetings to discuss at least one draft version of the report with stakeholders. Stakeholders typically share their views during these meetings, although they might also submit their opinions in writing at any moment in this process. The ACM will distribute a summary of this feedback to the Tenderer. The Tenderer is required to take these stakeholder

viewpoints into account to ensure that the report is adequately substantiated in relation to these viewpoints.

- Second, stakeholders have the legal right to submit their views on the ACM's draft method decisions. The ACM's reply to their views is included as a separate annex to the final method decisions. In case any new viewpoints or arguments arise during this phase, the ACM may request the Tenderer advice by mail, or if needed, by phone. The Tenderer will not be asked to write additional memos in response to these submissions.
- Third, once published, the method decisions will likely be subject to legal proceedings in front of the administrative court (The Netherlands Trade and Industry Appeals Tribunal).¹ This requires the report to be thoroughly substantiated. However, potential involvement of the Tenderer during this phase is not part of this assignment.

3 Research questions

This report should contain an advice with respect to several parameters of the WACC and should also provide an answer to an additional question.

3.1 Determination of parameters of the WACC

The ACM asks the Tenderer to determine:

- Market risk premium;
- Peer group;
- Asset beta and equity beta;
- Gearing.

3.2 Additional question – What is the effect of the new regulatory method on the WACC?

The ACM has decided to change the way in which Dutch network operators are regulated from 2027 onwards. In the current system, transmission system operators (TSOs) are subject to revenue regulation based on cost estimates (including a reasonable return) and the application of a benchmark score and a frontier shift to their costs. The distribution system operators (DSOs) are currently subject to tariff regulation based on the application of a yardstick with a productivity improvement factor based on the DSOs themselves. For a number of cost items ex-post tariff corrections are applied. This means that the difference between the cost estimate and the actual costs is reimbursed. The most important are: cost of energy and power (all), remaining asset value of network parts upon divestiture (gas), removal costs of networks and connections (gas DSOs), cost of eliminating transport problems (congestion; electricity TSO), transport costs of other networks (electricity),² volumes of local feed-in (mainly solar power and green gas) insofar as they are not accounted for correctly in the yardstick (DSOs), the actual level of the asset base to which the WACC is applied (TSOs) and the risk-free rate and the debt interest rate in the WACC (all).

¹ College van Beroep voor het Bedrijfsleven in Dutch (CBb).

² In the case of gas the costs of the TSO are paid for by suppliers.

From 2027 onwards, however, the ACM has decided to implement a new regulatory method. This change is driven by the enormous challenges posed by the energy transition, which must be balanced with the need for energy affordability and by shortcomings of the current regulatory method. Whereas the current regulation has an ex-post, output-oriented and TOTEX-based character, the new regulatory method is relatively more ex-ante and input-oriented. Specifically, in the new method, all operational costs and depreciation of network operators will be reimbursed via the tariffs, including a reasonable rate of return (WACC) on the actual asset base. Safeguards will be introduced to preserve an incentive to reach optimal performance and efficient cost levels. These include elaborate reporting of costs and performance by network operators, monitoring by the ACM, and auditing processes of network operators by the ACM. These safeguards are designed to stimulate network operators to become more efficient, and have the information and possibility to learn and improve. Ultimately the ACM has the possibility to intervene in the tariffs and apply a reduction when some costs are deemed to be inefficient. This combination of safeguards should prevent the reimbursement of inefficient costs

The new method consists of two pillars:

1. Estimating and reimbursing costs. Estimating costs in a simple way, most probably relying on detailed and substantiated cost estimates of the network operators, and correcting ex-post if the actual costs are higher or lower than the estimated costs. Ex-post corrections should be as small as possible, so estimates should be good.
2. Oversight framework with the possibility to intervene when costs are deemed inefficient. The following elements are currently worked out:
 - a. Auditing processes by the ACM. Determining the efficiency of the internal organization of network operators.
 - b. Monitoring costs and performance by the ACM. The aim is to have a clear view on the cost efficiency and productivity of network operators.
 - c. Transparency and clarification by network operators (explain and improve). Network operators should be capable to clarify and explain, and show improvements towards efficient network operation on indications of inefficiency. Network operators will have to be more transparent and publish more information.
 - d. Consequences of assessments applied by the ACM. Indications of possible inefficiencies may lead to intervention by the ACM. The method includes a ladder of escalation with different levels of severity and intervention by ACM, with the ultimate step to declare costs inefficient and reduce tariffs accordingly.

The ACM has presented the outline of the new regulatory method in a stakeholder meeting. In this meeting, the ACM has indicated that the new regulatory method may decrease the risk profile of network operators and that the ACM will investigate this issue. Stakeholders have put forward the following opinions:

- Some network operators note that the new regulatory method is not a pure cost-plus approach, because the ACM has the power to exclude costs from reimbursement, although the risk for this may be lower than in the current regulatory method.
- One network operator asks to investigate the potential effect on the WACC of a possible future move back to incentive regulation
- One network operator posed that the fundamental principle of regulation in Europe is to allow reimbursement of efficient costs including a reasonable return. The WACC is determined using a peer group. For these regulated peers the same principle holds: they are allowed to redeem their efficient costs. Therefore the degree to which a cost-plus methodology is used for the peers or for the Dutch network operators is not relevant for the determination of the beta. This network operator also posits that the introduction of the new regulatory method by ACM uses the same principle: reimbursement of efficient costs including a reasonable return in which the ACM has the power to exclude inefficient costs from reimbursement.

- Two users do not comment on the proposed new regulatory method, but mention that with the current regulatory method a large share of costs of the gas TSO receives an ex-post tariff correction, meaning these costs are fully reimbursed. They wonder whether such an ex -post tariff correction leads to a lower the risk profile and should have resulted in a lower WACC.

The ACM wants to know if the new regulatory method affects the WACC, for example because it might decrease the risk profile of the network operators. Therefore some additional notes are included with regards to cost reimbursements within the current regulatory method (2022-2026):

- The current regulatory method includes measures in the regulation of gas network operators to deal with declining use and divestment of assets. These measures include accelerated depreciation, reimbursement of remaining asset value of divested network parts and removal costs (only for DSOs) and a nominal WACC (instead of a real WACC). The ACM intends to maintain these measures in the new regulatory method, but will finetune the acceleration factor in the depreciation.
- In the current regulatory period, the ACM employs a so-called real-plus WACC for electricity. This means that half of the compensation for inflation that suppliers of capital require is being reimbursed immediately via the WACC, while the other half is added to the asset base and hence will be reimbursed in later years. Until 2021 ACM used a real WACC. There is no decision yet on this issue for the new regulatory period.
- For a long time the ACM has been using a normative WACC based on data from financial markets. The ACM will also do so in the next regulatory period.
- In the current regulatory period, the ACM uses an ex-post tariff correction for the interest rate (risk-free rate and the interest rate on debt), which are key inputs in the WACC formula. Under this approach the difference between the ex-ante estimated interest rate and the actual ex-post realization (the average interest rate during the previous year) is reimbursed through yearly adjustments to the tariffs. This ensures regulated tariffs are in line with market conditions.

The ACM asks the Tenderer to answer the following research question: how does the switch to the new regulatory method affect the WACC for Dutch network operators? Does it, for instance, affect the risk profile of network operators, and, as a result, require a readjustment of beta? Are any other parameters of the WACC impacted by the regulatory change? Please address this issue thoroughly.

4 Final product of the study

The ACM requires the results of the study to be presented in one report.

- This report should contain a clear description of the approach of determining the requested WACC parameters, as well as the results (estimated values) and a clear answer to the additional question about the effect of the new regulatory method on the WACC.
- The report should be accompanied by a database and a model (spreadsheet) of the calculations and the underlying data. The database and the model should be user-friendly and suitable for publication.
- The report needs to be written for well-informed non-experts. It should be comprehensible, complete, well referenced and thoroughly substantiated.

5 WACC method for network operators

The ACM applies the same methodology for the WACC to all four types of network operators (gas/electricity, TSOs/DSOs). The last version of this methodology is described in the following documents:

- The Brattle Group, [The WACC for the Dutch Electricity TSO and Electricity and gas DSOs](#), 7 April 2021.³
- The ACM, [Gewijzigd methodebesluit regionale netbeheerders gas 2022-2026](#) (Revised method decision DSO's gas), ACM/UIT/6000687, 14 december 2023, section 8.4.1.
- The ACM, [Uitwerking van de methode van het redelijk rendement \(WACC\), Bijlage bij de gewijzigde methodebesluiten 2022-2026](#) (WACC annex), ACM/UIT/607249, 14 december 2023.

The current ACM method for network operators can be summarized as follows:

- The current regulatory period is five years (2022-2026). The law prescribes a term of 4-8 years.
- The method for determining the WACC is the same for all network operators, except that TenneT offshore received an uplift of the beta due to its large investments:
- A nominal WACC is used for gas and a real-plus WACC for electricity.
- There are two types of WACCs:
 - A WACC for financing expansion investments (WACC new capital)
 - A WACC for financing existing assets (WACC existing capital).

The two WACCs differ with respect to the cost of debt. The WACC existing capital uses an embedded cost approach for the cost of debt to take existing debt into account ('trapjesmodel' or staircase model). The WACC new capital does not take existing capital into account.

- The risk-free rate is determined by averaging the interest rates on Dutch and German government bonds with a remaining maturity of twenty years and a reference period of three years of daily data.
- The general approach of the ACM with respect to the selection of peers (liquidity, comparability) can be found in aforementioned report by The Brattle Group.. In that report Brattle mainly selected companies with a high percentage of regulated network activities (>2/3) operating in the Eurozone as peers. Note that the low number of peers is a concern.
- The equity betas are estimated by regressing the daily returns of individual stocks on the market returns over the last three years. The general approach of the ACM mentions the statistical analysis.
- The general approach of the ACM mentions the determination of the equity risk premium (ERP).
- The cost of debt is based on a single-A European utility bond index with remaining maturity of 10 years.⁴ 15 basis points are added to the resulting interest rate to compensate for transaction costs.
- Gearing is calculated as the three-year average of quarterly gearing ratios of each peer company, obtained by dividing net debt over market capitalization. This gearing, reflecting efficient debt financing decisions, is used to determine the ratio between equity and debt in the WACC and to calculate the equity beta.
- The general approach of the ACM contains the tax rate to be used.

³ After this report two changes were made: the ACM decided to change the maturity of the risk-free rate to 20 years, and the Court ruled that a floor of 0,5% should be applied to the risk-free rate.

⁴ Until 2023 C58310Y, from 2024 IGEEUA10 BVLI.