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Decision – Opinions on the draft WACC attachment

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Opinions on the draft WACC attachment for energy and water companies in the Caribbean Netherlands for the years 2020 – 2022

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1 Introduction and reader's guide

1. In order to make sure the decision-making process regarding the establishment of method decisions takes place as carefully as possible, the Netherlands Authority for Consumers and Markets (ACM) has offered stakeholders the opportunity to submit their opinions on the WACC attachment. In this annex ACM discusses the questions and suggestions submitted by the stakeholders on the draft WACC attachment for energy and water companies in the Caribbean Netherlands for the years 2020 – 2022.[1] This annex is part of the WACC attachment Caribbean Netherlands 2020-2022 to the method decision Caribbean Netherlands 2020-2025.

2. ACM received opinions on the draft WACC attachment from:
   - ContourGlobal Bonaire B.V. (hereafter: ContourGlobal)
   - Water en Energiebedrijf Bonaire N.V. (hereafter: WEB)

3. ACM has arranged the opinions point-by-point, following the chapter layout of the draft WACC attachment. The opinions are clustered, summarised, and numbered by topic. For each opinion, a table indicates which respondents have submitted an opinion, and whether the opinion has led to a change of the draft WACC attachment.[2] Each opinion is provided with a response and conclusion from ACM.

[1] Stakeholder within the meaning of Article 2.1, first paragraph, of the BES Electricity and Drinking Water Regulation.
[2] In this context, changes may also include textual changes or amended or additional explanations of the WACC attachment.

2 Opinions on the purpose of using the WACC

4. In this chapter, ACM discusses the opinions that relate to chapter 2 of the draft WACC attachment.

Opinion 1: "A comparison in the Caribbean and assessment against local circumstances is lacking."

Respondents	Does it lead to a change in the WACC attachment?
WEB	No

Summary of opinion

5. WEB is of the opinion that ACM should compare the results of the WACC with the local circumstances. No assessment or study has been carried out into whether the results represent a correct proxy for the cost of capital that companies in the Caribbean Netherlands actually incur. This means that the decision is not only inadequate but also that it does not comply with the relevant regulations. WEB argues that ACM should have at least investigated what returns are awarded to other islands in the Caribbean. For example, ACM could simply have made a request to Carilec, the sector organisation for utility companies in the Caribbean. There is no mention of such an exercise in the draft decision.

ACM's response to the opinion

6. In the restored WACC decision 2017-2021, ACM has assessed the plausibility of its WACC decision by comparing the results on a parameter level with WACC decisions of other European regulators. In the Caribbean region, there are fewer comparable WACC reports, and even fewer for countries in comparable situations. The Carilec report contains the actual realised returns of several utilities in the Caribbean or, more specifically, member utilities of Carilec. ACM sets a normative WACC based on an efficiently financed utility company. ACM deems a comparison with realized returns to be incorrect, as these cannot be directly compared with the WACC.[3] ACM therefore does not consider this report to be a source for comparison. In addition, ACM emphasises that it is not a goal unto itself on ACM's part to set the WACC (the level thereof) in line with those of other regulators. A comparison of the WACC with those of other regulators serves as a check on the plausibility of the WACC. In the WACC attachment ACM has explained why the method leads to the best estimate of the different parameters. Even if other sources showed a higher return, that would not necessarily lead to a change to ACM's setting of the WACC.

Conclusion on the opinion

7. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

[3] ACM, *"Winsten van gereguleerde energienetbeheerders"*, maart 2015, p. 6-7.

3 Opinions on the method

8. In this chapter ACM discusses the opinions that relate to chapter 3 of the draft WACC attachment.

Opinion 2: "EER's WACC estimate is not based on EER's own economic rationale, but on the guidelines that ACM provided and ACM's previous WACC determination"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No
WEB	No

Summary of opinion

9. ContourGlobal is of the opinion that the analysis by European Economic Research Limited (EER) heavily relies on both the ACM method for WACC calculation and ACM's previous WACC determination for ContourGlobal. As a result, ACM's WACC determination is lacking a second opinion from independent economic experts, as well as insight into the most recent trends in regulatory finance from other mature energy regulators throughout Europe.

10. WEB states that EER only performed an update of the parameters. EER does not make a statement about the validity of certain choices. Therefore ACM cannot fall back on the fact that an external agency conducted the research.

ACM's response to the opinion

11. ACM determines WACC's for a large number of different sectors and periods, and notices that, in practice, many different approaches exist for estimating a WACC. ACM strives for a consistent and correct application of the WACC in all sectors, which is the reason why ACM provides guidelines for the consultant. ACM takes into account new developments with regard to the WACC, but does not consider it necessary to start a new WACC method from scratch for each regulatory period. ACM made a choice that falls within its discretion. In addition, a consistent method over time and sectors also makes the regulatory regime more predictable, which offers certainty to investors.

12. Against this backdrop, ACM requested EER to conduct a study and to propose a credible peer group of companies, and to calculate the different parameters and the WACC. As ContourGlobal and WEB have noted, ACM and EER are transparent about what follows from the ACM method and what is decided by the consultant. This does not alter the fact that, within the guidelines as provided by ACM, EER has conducted its own research based on its own economic rationale, and it justified its choices and results in its report.

Conclusion on the opinion

13. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 3: "The WACC should include a small-firm premium."

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

14. ContourGlobal is of the opinion that EER's approach does not account for the asymmetric risks involved with investing in smaller firms. Previous reports of NERA demonstrate how the academic literature supports the addition of a small-firm premium to adjust for the fact that investors require a risk premium to invest in smaller firms relative to equivalent larger firms. According to ContourGlobal, this remains the case, and it is commonly seen in regulatory decisions by many other mature energy regulators in Europe when setting price controls for small firms.

ACM's response to the opinion

15. The application of a small-firm premium to correct for the size of a company has been part of ongoing appeals between ContourGlobal and ACM.

16. In the appeal process, the previous consultant (Boer & Croon Corporate Finance, hereafter: BCCF) responded to the fact that the companies in the peer group are larger than ContourGlobal. In short, the size of a company is not important for the level of systematic risk.[4] Furthermore, another report of BCCF concluded that no widely accepted economic theory exists that supports the use of a small-firm premium.[5] The existence of a small-firm premium is controversial[6], and the application of one in regulatory decisions is rare.[7] Moreover, in the past, ACM has been advised against applying a small-firm premium.[8] ACM notes that the arguments of ContourGlobal do not give cause to deviate from these findings.

17. ACM does not share the opinion that a small-firm premium needs to be applied to correct for the size of ContourGlobal.

Conclusion on the opinion

18. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 4: "Unfair to weigh Europe the same as Latin America and the US"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No
WEB	No

Summary of opinion

19. ContourGlobal argues that ACM is wrong to give Europe the same weight as the US and Latin America in the cost of debt. The inclusion of Europe biases the cost of debt downward, and the current methodology leads to a lower cost of debt compared with the US, which is not realistic. This would imply that investors are more willing to invest on Bonaire than in the US market. This is not tenable given the risks that investors are likely to face in the Caribbean Netherlands. Moreover, Europe and the US are mature economies that are more attractive to investors than relatively small and obscure jurisdictions such as Bonaire.

[4] Boer & Croon Corporate Finance B.V., *"Additional opinionary to peer group determination for the Dutch Caribbean (energy & water)"*, p. 6; Boer en Croon Corporate Finance B.V.

[5] Boer & Croon Corporate Finance, *"Finaal rapport: Additioneel onderzoek naar de Small Firm Premium"*, 2015, p. 3-4.

[6] CBb, 8 October 2015, ECLI:NL:CBB:2015:317, r.o. 4.9.3; The Brattle Group, *"Update to WACC Parameters for Drinking Water"*, 2017, p. 11-12.

[7] Boer & Croon Corporate Finance, *"Finaal rapport: Additioneel onderzoek naar de Small Firm Premium"*, 2015, p. 25-26.

[8] The Brattle Group, *"Update to WACC parameters for drinking water"*, 2017, p. 11-12.

20. WEB argues that the inclusion of Europe as a reference region is incorrect. The fact that the Caribbean Netherlands are part of the Netherlands does not mean that Europe is a reference market. The fact that Dutch financial institutions in general and institutions such as BNG and Waterschappen do not finance utilities in the Caribbean Netherlands is evidence of that. According to WEB, there would be a government guarantee on loans by Dutch utility companies. European investors are simply unwilling to invest in the Caribbean Netherlands. The inclusion of Europe as a reference region is based on a wrong assumption. It is an illusion that European investors would be willing to invest against the same conditions as in Europe. The financial market in the Caribbean Netherlands differs from the efficient markets in Europe.

21. Just like Latin America and the US are not part of the WACC for the European part of the Netherlands, Europe should not be a reference region for the Caribbean Netherlands. The Caribbean Netherlands are best comparable to the US and Latin America. The exclusion of Europe as a reference market leads to more realistic outcomes. WEB only has interests on Bonaire and not in Europe.

ACM's response to the opinion

22. In chapter 2 of the WACC attachment, ACM explains why it bases the WACC on the returns in Europe, the US and Latin America. The choice for these regions is not arbitrary. The US and Latin America are regions that are geographically close, and also, they are both regions where the dollar is the regular currency, just like the Caribbean Netherlands. However, the fact that the Caribbean Netherlands are part of the Netherlands also influences the risk of investing in the regulated companies. Investors benefit from the institutional, judicial, governmental and regulatory framework of the Netherlands. These characteristics should be included when estimating the opportunity costs of the potential investors and is best observable in a European context.

23. The fact that the cost of debt for the Caribbean Netherlands is, for some of the years, lower than the cost of debt for the US, does not lead to the conclusion that the method is incorrect. As mentioned, not just the US is relevant when calculating the required return. The risk of the companies is not identical to that of US companies, and is also affected by, for example, the regulatory regime. In the case of the companies in the Caribbean Netherlands, the regulatory framework ensures that they can earn back their efficient costs. This type of regulation is much more in line with other European companies than it is with the American context.

24. ACM does not dispute the fact that the financial markets in Europe differ from those in the Caribbean Netherlands, or that a company in the Caribbean Netherlands will not finance itself against the same conditions as a company in Europe. This is the reason why ACM does not just include Europe as the sole reference market, but also includes Latin America and the US. By combining the US, Latin America and Europe, ACM bases the returns on a mix of emerging and mature economies. For the same reason, the claim by WEB that there would be a government guarantee on loans by Dutch utilities also does not mean that the outcome is not representative. The cost of debt for the regulated companies in the Caribbean is not equal to the rates of Dutch utilities, but is based on a mix of utility bonds in Europe, the US and Latin America.

25. In its ruling of August 22, 2018[9], the Court in First Instance concluded that ACM has explained that the regulated companies in question are a potentially attractive investment opportunity because of their monopoly and the guaranteed demand, which decreases the risks for investors. The claim by

[9] ECLI:NL:OGEABES:2018:30, section 8.17.

WEB that European investors would be unwilling to invest in the Caribbean Netherlands is not substantiated by any evidence. Moreover, in the same ruling, the court also mentions the loan by ContourGlobal at Rabobank. The fact that ContourGlobal, as a utility company in the Caribbean Netherlands, was able to get funding from Rabobank, disproves the point made by WEB that Dutch financial institutions would be unwilling to invest in the Caribbean Netherlands.

26. On the basis of these arguments, ACM decides to maintain the inclusion of Europe as a reference market. A comparison with only the US or Latin America does not capture all the aspects that are relevant for the WACC of the regulated companies in the Caribbean Netherlands. Also, ACM sees no reason to weigh these regions differently, as there is no objective method to justify and determine a specific weight. If ContourGlobal wanted to suggest a different weighting of the regions, it also did not specify in what way and based on what objective criteria the regions should be weighted. ACM therefore sees no reason to change its estimate of the cost of debt.

Conclusion on the opinion

27. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 5: "The WACC should include a regional risk premium"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

28. The WACC should include a regional risk premium. The standard approach when estimating the cost of capital is to reflect the risk involved in investing in the target's location. ContourGlobal estimates a regional risk premium based on Aruba, Curacao, and Sint Maarten.

ACM's response to the opinion

29. ACM agrees that, when calculating the cost of capital, the region the companies are active in should be taken into account. ACM does so when calculating the WACC, by including Europe the US and Latin America as reference markets. ACM explains in opinion 4 why these regions are relevant in the case of the Caribbean Netherlands. By including these reference markets, ACM estimates the required return for the Caribbean Netherlands based on characteristics that are relevant for the regulated companies. ACM is of the opinion that, through the application of this method, the WACC already reflects the risks involved with investing in a company in the Caribbean Netherlands.

30. The region the companies are active in is also taken into account in other aspects of the method of regulation. One example is that ACM acknowledges the risk of natural disasters in the Caribbean region. The method therefore includes a provision that, in case of an unforeseen, extreme circumstance (*force majeure*), ACM will calculate the extra costs related to the circumstance and will enable the company to recoup these in a subsequent year.[10] In addition to this, if there were regional factors that lead to consistently higher costs of operation, this would also be reflected in the tariffs. This is because ACM bases the tariffs of a company largely on the costs in the most recently closed financial year of that specific company. These aspects further decrease the risk of the companies in the Caribbean Netherlands.

[10] This is also described in more detail in section 116 of the method decision for the regulatory period 2020 – 2025.

31. ContourGlobal suggests a different method to take into account the region the companies are active in, where it calculates a regional risk premium based on the risk premium on the sovereign debt of Aruba, Curacao and Sint Maarten, instead of the risk premium for utility companies. ContourGlobal does not explain why this method would lead to better outcomes. ACM has already explained why its method leads to a representative return for the regulated companies. Therefore, ACM sees no reason to adjust its method.

Conclusion on the opinion

32. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

4 Opinions on the peer group

33. In this chapter ACM discusses the opinions that relate to chapter 4 of the draft WACC attachment.

Opinion 6: "EER uses too few comparators"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

34. ContourGlobal is of the opinion that EER has included too few comparators into the peer group. EER states that a minimum of ten firms for a peer group is preferred, but after removing for illiquid firms only eight firms are used. A beta estimated from a small sample is at risk of estimation error. There is a trade-off between group size and peer relevance, but ContourGlobal suggests more firms could have been added.

ACM's response to the opinion

35. ACM has a preference for a peer group of at least ten firms. However, as ContourGlobal also mentions in its opinion, there is a trade-off between the group size and peer relevance. On the one hand, increasing the number of firms reduces the statistical estimation error. On the other hand, adding more firms brings the risk of including peers that are not sufficiently comparable to the firms in the Caribbean Netherlands. ACM has asked EER to look for potential peers. This resulted in a selection of eight peers that EER deemed sufficiently comparable and of which the shares were sufficiently liquid.

36. In the preparations for the method decision for network operators in the European Netherlands, ACM has asked the consultant Rebel whether a minimum of ten peers is always required. Rebel argued that a minimum of six or seven peers is sufficient to reduce the statistical estimation error.[11] In its ruling on the 24th of July 2018[12], the Dutch Trade and Industry Appeals Tribunal (CBb) also ruled that ACM is allowed to deviate from the minimum of ten peers. ACM therefore sees no reason to include more peers.

Conclusion on the opinion

37. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 7: "The peer group is biased towards European peers"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

38. ContourGlobal argues that the peer group is biased towards European peers, with too little representation from Latin America. Out of the eight peers, five are based in continental Europe and only one in Latin America. This approach fails to reflect the regional risk involved with investing in the Caribbean Netherlands, which is closest to the US and Latin America. Two out of

[11] https://www.acm.nl/sites/default/files/old_publication/publicaties/16168_rebel-reactie-op-zienswijzen-wacc-2016-07-26.pdf.
[12] ECLI:NL:CBB:2018:348, section 2.3.9.

the three regions are also developed, mature economies, and EER does not rely on any peers from emerging markets other than Latin America. The peer group is weighed over 50 percent towards Europe, but the risks involving the Caribbean Netherlands are highly unlikely to be exactly the same as those involving continental Europe. Also, the approach is inconsistent with the methodology elsewhere in the calculation of the WACC, where the three regions are weighted equally. ContourGlobal suggests the inclusion of an extra peer (Compania Energetica Sao Paulo) from Latin America.

ACM's response to the opinion

39. In its search for comparators for the firms in the Caribbean Netherlands, EER started from the peer group that was used in the previous period. EER checked whether these firms still met the criteria for inclusion in the peer group, and also searched for additional peers. In its search for new peers, EER used a broad scope by including the Caribbean, comparable islands and/or island groups, Europe, the United States and Latin America.

40. In her decision on the 22nd of August 2018, the Court in First Instance ruled that ACM is not limited to companies in the Caribbean region when deciding on a peer group, and that ACM was allowed to use a peer group that consists of companies from Europe, the US and Latin America in the WACC for the first regulatory period (2017-2019). Similar to the situation in the previous period, in the new research by EER there were no comparators in the Caribbean or other islands and/or island groups that met the criteria. The peer group that finally resulted for ContourGlobal includes more European firms than firms from the other regions, but this is simply due to the fact that, for the other regions, fewer comparators were found that were equally comparable and also met all the liquidity criteria. In its report, EER describes why peers were excluded. Some peers were excluded from the determination of the gearing because they did not have a credit rating, or were excluded from the determination of the beta because the shares of these companies were not sufficiently liquid.

41. ACM does not share the opinion of ContourGlobal that the peer group is not representative of the risk profile of the companies in the Caribbean Netherlands, and that an identical number of peers from all regions would be necessary. The peer group is used to estimate the beta, which represents the risk of the comparators of the firms relative to the market as a whole of the respective region. This beta is then used to estimate the required return in the three regions (Europe, the US and Latin America). ACM therefore still takes into account the differences between the three regions, and does not, as ContourGlobal suggests, assume that investing in Europe is identical to the Caribbean Netherlands. ACM is of the opinion that the three regions together best reflect the characteristics of the companies in the Caribbean Netherlands, as ACM also describes in chapter 2 of the WACC attachment.

42. ACM has asked EER whether the higher number of European peers in the peer group relative to the other regions affects the representativeness of the resulting beta, and whether the peer as suggested by ContourGlobal would be a good addition to the peer group. EER argues that the selection of the peer group was based on such rigorous checks that the companies selected are sufficiently liquid and are involved in similar activities to the regulated entities. EER believes that, as a result, the risk profile of the chosen peer group is the closest to the regulated entities. Moreover, EER argues that the proper locus for regional risk effects is the ERP, not the beta for which the peer group is used. ACM already bases the ERP on an average of all three regions. EER finds no intrinsic reason why the beta should be expected to be higher in a region that is 'higher-risk'.

43. EER also checks whether the addition of extra peers from Latin America and the US changes the resulting beta. EER however concludes that the inclusion should only be considered, at the risk of the extra companies being less similar, if it maintains an energy balance[13] among the comparators that approximately matches the regulated entity. EER demonstrates that, if more companies are added while maintaining the energy balance among the comparators, the resulting estimate will be equal to the earlier estimate of 0.46. ACM therefore sees no reason to change the earlier beta or to conclude that the initial peer group is not representative.

Conclusion on the opinion

44. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

[13] The energy balance that EER mentions in its memo is the mix between the different energy sources, such as fossil and renewable energy, of the companies in the peer group. EER aims to strike a balance in the peer group between the different energy sources.

5 Opinions on the generic parameters

45. In this chapter ACM discusses the opinions that relate to chapter 5 of the draft WACC attachment.

Opinion 8: "ACM has reduced the corporate tax rate to zero percent which leads to a lower WACC at low levels of gearing"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

46. ContourGlobal notes that ACM reduces the corporate tax rate to zero percent, but maintains a low estimate of efficient gearing. As a result, the resultant pre-tax WACC is lower than it would be with the reinstated effective tax rate of five per cent. A higher tax rate results in a higher WACC at low levels of gearing. The five per cent rate would therefore lead to a higher pre-tax WACC for ContourGlobal, all else being equal.

ACM's response to the opinion

47. ACM agrees that a higher corporate tax rate, all else being equal, leads to a higher WACC. As explained in the WACC attachment, the ACM method prescribes that the corporate tax rate is equal to the applicable tariff for the regulated entity. There is no tax rate on the Caribbean Netherlands that qualifies as a corporate tax rate. As a result, ACM uses a tax rate of zero per cent.[14] NERA also uses the zero per cent tax rate in its calculations for ContourGlobal.

Conclusion on the opinion

48. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 9: "ContourGlobal's gearing estimate is inconsistent with ACM's previous determination."

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

49. EER's gearing estimate for ContourGlobal is lower than ACM's previous determination. This is inconsistent with EER's lower cost of debt estimate for ContourGlobal since 2016, which would imply that the most efficient gearing structure for ContourGlobal would be to take up higher levels of debt than in 2016. The same is true regarding EER's cost of equity estimate for ContourGlobal, which is higher than in 2016. At the least, EER should revert to the 2016 WACC determination for ContourGlobal's gearing rather than adopt a new lower level. This gearing level is still low for an efficient estimate (as it implies no change in capital structure despite debt becoming more cost-effective than equity) but would more accurately reflect the true efficient level of gearing for ContourGlobal.

ACM's response to the opinion

[14] This rate is confirmed by KPMG's 'Corporate tax rates table'.

50. ACM does not agree that a lower gearing per definition is inconsistent with a lower cost of debt. ContourGlobal assumes a one-on-one relationship between the gearing level and the cost of debt, while there are multiple effects on financial markets that influence the two parameters. Consequently, it can occur that both the gearing and the cost of debt can be lower compared with earlier periods. The gearing of the companies in the peer group and the cost of debt are a reflection of the actual situation on financial markets. As such, there is no reason to consider reverting back to the gearing level of the 2016 WACC determination.

51. ACM notes that in the previous WACC determination, there were not enough peers with an investment grade rating to calculate the gearing for ContourGlobal directly. Consequently, ACM was unable to determine the gearing based on the peers for ContourGlobal. Therefore, ACM estimated the gearing for ContourGlobal indirectly using an average of the peer groups of the other regulated companies. In the current determination, however, EER was able to find enough peers for ContourGlobal with an investment grade credit rating to determine the gearing for ContourGlobal directly. Based on these new insights, ACM deems EER's estimate of the efficient level of gearing for ContourGlobal to be accurate.

Conclusion on the opinion

52. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 10: "EER uses the median of the comparator group rather than the mean to calculate average beta and gearing."

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

53. In order to calculate the asset beta and efficient gearing level for ContourGlobal, EER calculates these parameters for a comparator group, using the median value rather than the mean. ContourGlobal is of the opinion that using a median is a less accurate method of assessing the returns required by investors in ContourGlobal, because it fails to incorporate all information within the peer group. For a skewed or highly-varied dataset, which is common with few data points such as EER's peer group for ContourGlobal (only eight comparators), the median will not reflect the distribution of the data.

54. According to ContourGlobal, in the case of EER's comparator group for ContourGlobal, the median is also more sensitive to outliers than the mean. When a sample is small and irregularly distributed, the large difference between observations near the median firm can result in the median being more sensitive to outliers than the mean. ContourGlobal illustrates this concept by removing Zespol from EER's comparator group in calculating the asset beta, which changes the median by a greater margin than the mean.

55. ContourGlobal adds that, at least in part for this reason, ACM's peers in mature regulatory regimes rely on the mean. For instance, energy regulators in Germany, the UK, Sweden, Austria, Ireland and Luxembourg all take the mean of comparator sets to calculate an average, as outlined in previous NERA reports.

ACM's response to the opinion

56. ACM uses the median for the calculation of the asset beta and the gearing, as the median is less susceptible to outliers in a peer group. Typically, there is a large spread of beta values, with some very high and very low values. Using the median gives less weight to more extreme values, which are less likely to be a good estimate. This does not mean that outliers have no effect on the median, but the effect of outliers is not unreasonably large. In the specific case of Zespol, the median indeed responds stronger to the removal of this peer than does the mean of the sample. However, this one observation does not change the rule that, in general, the median is a more stable estimation method which gives less weight to outliers.

57. With regard to the regulation in the European Netherlands, consultant Rebel has advised ACM for the aforementioned reason that the median should be taken instead of the average, especially when the peer group is relatively small (as is also the case for ContourGlobal).[15] The same recommendation for regulators has been given in a research by The Brattle Group for the European Commission.[16] Moreover, this approach is consistent with the WACC determination for the European Netherlands. ACM sees no reason to deviate from the regulatory practice in other sectors.

Conclusion on the opinion

58. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 11: "Zespol's beta is biased due to government intervention"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

59. EER has wrongfully included Zespol into the peer group. Zespol's beta is likely to be materially understated due to government intervention by the Polish government. ContourGlobal claims that there is strong evidence that government intervention biases a firm's beta downwards.

ACM's response to the opinion

60. In its report on the WACC for the Caribbean Netherlands, EER mentions that the sale of EDF Polska on the 13th of November 2017 is unlikely to have any implications on the systematic risk of Zespol.[17] ACM has asked EER to opinion in more detail on this in a separate memo.

61. In the memo, EER finds that the beta for Zespol is at the lower end of the distribution, but it is not particularly different from the other betas. If, according to ContourGlobal, Zespol could be considered an outlier at the lower end, Pattern Group could be considered an outlier at the higher end. A beta in the order of 0.3 is not uncommon in fossil electricity production, and hence, there is no reason to exclude the firm from the analysis. EER points to the use of the median as an argument to dismiss any influence of the acquisition on the asset beta.

62. EER also argues that the removal of Zespol is not justified, as the company meets all the criteria of a suitable comparator. ACM agrees on this, and notes that, in any peer group, there will be differences between the different companies and their circumstances. The ACM does not claim

[15] Rebel, "*The WACC for the Dutch TSO's and DSO's*", 29 March 2016, p. 19
[16] The Brattle Group, "*Review of approaches to estimate a reasonable rate of return for investments in telecoms networks in regulatory proceedings and options for EU harmonization*", 14 July 2016, p. 57-58.
[17] Europe Economics, "*WACC calculation for the Caribbean Netherlands*", June 2019, p. 8.

that every company in the peer group is identical to the regulated companies in the Caribbean Netherlands, as this is impossible in any peer group determination. This does not mean that the peer group (as a whole) is not representative for the systematic risk of the regulated companies.

63. Based on the above arguments, ACM sees no reason to exclude Zespol from the peer group.

Conclusion on the opinion

64. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

6 Opinions on the Cost of Equity

65. In this chapter ACM discusses the opinions that relate to chapter 6 of the draft WACC attachment.

Opinion 12: "EER estimates the ERP and the risk-free rate over different time period lengths."

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

66. EER estimates the cost of equity using the CAPM equation, which requires estimating both an ERP and a risk-free rate. ContourGlobal is of the opinion that EER is not consistent in its estimation method for these two inputs. In particular, it measures ERP using an estimation window from 1900 to 2018, and the risk-free rate using an estimation window from 2016 to 2018. EER's CAPM calculation therefore uses two parameters estimated over significantly different estimation windows. This is inconsistent, and implies that a risk-free rate is more accurately estimated over a shorter window but an ERP is more accurately estimated over a longer window. This assumption is not substantiated by any economic evidence or rationale.

67. Furthermore, this approach yields inaccurate cost of equity estimates because the ERP may be negatively correlated with the risk-free rate in the short term. Government bond yields have been lower in recent years following quantitative easing attempts in larger economies, meaning the ERP is currently likely to be higher than its historical long-run average. More recent estimates of ERP are likely to be higher than longer term ones. EER's inconsistent approach therefore combines a short-term risk-free rate estimate (which is lower than the long-run average) with a long-term ERP estimate (which is lower than the short-term average), meaning it essentially chooses the estimation windows yielding the lowest possible cost of equity estimate.

68. ContourGlobal finds that the risk-free rate increases to 3.80 per cent in nominal terms when using a long estimation window (1900 – 2018), which is consistent with EER's choice of estimation window for the ERP.

ACM's response to the opinion

69. ACM estimates all parameters in the best way possible. For the underlying parameters of the WACC, the estimation method can differ between parameters. This is true for estimating the reference period for the ERP and the risk-free rate. It is a commonly used practice for European regulators to use different reference periods.[18]

70. In its report, EER remarks that the spot-rate is the best indicator for the risk-free rate tomorrow, as it contains the most recent information. However, EER also concludes that spot-rate predictions are more volatile, and that the average predictions (using a three-year average) outperform the spot rates when predicting more recent periods (Figure 5.1 of EER's report).

71. The choice for different estimation windows also depends on the availability of data. For the risk-free rate, daily estimates are available, whereas for the ERP, estimates are only provided on an annual basis. In order to have sufficient observations for the ERP to be statistically reliable, it is desirable to use an as long as possible period. For the ERP, multiple other regulators use the

[18] CEER, "*CEER Report on Investment Conditions in European Countries*", 2017, p. 38-48.

historical ERP by DMS, of which the latest version has an estimation window of 1900 to 2018. For the risk-free rate, a shorter period can be used due to higher data frequency. If the risk-free rate were to be based on a longer period to match the period for the equity risk premium, representativeness would decrease, and a less accurate estimate would consequently follow.

72. Multiple other regulators base the CAPM on a long series of historical data to determine the ERP and a shorter period for the risk-free rate.[19] Therefore, ACM sees no reason to deviate from its method.

Conclusion on the opinion

73. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 13: "Total market return more stable than ERP"

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

74. ContourGlobal argues that the total returns are historically more stable than the equity premium. The volatility means that the equity premium as used by EER is less precise. Other regulatory bodies have started to adapt their approaches in light of this evidence.

ACM's response to the opinion

75. In opinion 12, and also in sections 6.1 and 6.3 of the method decision, ACM describes the method for estimating the risk-free rate and the equity risk premium, and why this leads to the best estimate of the parameters. Both the method for the risk-free rate and the method for the equity risk premium have been applied in many different sectors and over multiple regulatory periods. In its ruling on the 19th of January 2017[20], the Dutch Trade and Industry Appeals Tribunal (CBb) argues that ACM was allowed to apply both methods in the case of KPN. Finally, the CEER Report on Investment Conditions in European Countries shows that estimating the equity risk premium based on the research by Dimson, Marsh and Staunton is a method that is applied by other European regulators as well.[21]

76. The fact that, according to ContourGlobal, the total returns are historically more stable does not mean that this leads to the best estimate of the cost of equity. ACM would also like to note that, by taking a long-term average of the equity risk premium, the volatility of the equity risk premium estimate is very small. Based on these considerations, ACM therefore sees no reason to deviate from its method.

Conclusion on the opinion

77. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

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[19] CEER, ""*CEER Report on Investment Conditions in European Countries*", 2017, p.38-48; CBb 19 January 2017, ECLI:NL:CBB:2017:3, section 4.1.3.
[20] ECLI:NL:CBB:2017:3, section 4.1.3.
[21] CEER Report on Investment Conditions in European Countries, 11th December 2017.

7 Opinions on the Cost of Debt

78. In this chapter ACM discusses the opinions that relate to chapter 7 of the draft WACC attachment.

Opinion 14: "Cost of debt estimate based on an investment grade rating is inconsistent, as the comparators are not all investment grade either."

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

79. EER exclusively uses BBB-rated debt indices to estimate ContourGlobal's cost of debt. In constructing a comparator group for ContourGlobal, however, EER added firms that were not BBB-rated or higher. By incorporating these lower-rated firms ContourGlobal's peer group, EER implies that ContourGlobal is comparable with some firms that do not have an investment-grade credit rating. By excluding these comparators from the cost of debt estimate for ContourGlobal, EER underestimates ContourGlobal's cost of debt.

ACM's response to the opinion

80. For the estimation of the beta it is not necessary that all firms have an investment grade rating. As explained in Annex 2 of EER's report, by calculating the asset betas EER corrects for any effect financial leverage has on the risk profile of a company. EER uses the Modigliani Miller equation to de-leverage the betas. Since EER already corrects for the financial leverage, it is not necessary to include only peers with an investment grade credit rating in the beta calculation. For the cost of debt, it is not possible to correct for the financial leverage of the companies in the bond index. Therefore, it is logical that ACM only looks at BBB-rated companies for the cost of debt. ACM does not agree that this approach underestimates the cost of debt.

Conclusion on the opinion

81. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 15: "EER fails to reflect the risk of investing in the Caribbean Netherlands by using BBB rated peers as a benchmark for ContourGlobal's cost of debt estimate."

Respondents	Does it lead to a change in the WACC attachment?
ContourGlobal	No

Summary of opinion

82. ContourGlobal does not have a credit rating issued by a ratings agency. EER and ACM provide insufficient data to conclude on the correct credit rating for debt issuance in the Caribbean Netherlands electricity production market.

ACM's response to the opinion

83. In constructing the peer group, ACM does not use the actual credit rating of a company but instead chooses the credit rating which reflects an efficient utility company. ACM considers an efficient regulated company to have a credit rating that is at least investment grade (BBB or higher). Regulation also provides more certainty to recoup costs, lowering the financial risk of a

firm. The fact that ContourGlobal is not rated itself does not influence this choice, as ACM looks at the situation of an efficient regulated company.

Conclusion on the opinion

84. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 16: "There is a mismatch between the actual costs of financing and the cost of debt."

Respondents	Does it lead to a change in the WACC attachment?
WEB	No

Summary of opinion

85. WEB claims that there will be a significant under-coverage on the costs for new loans. WEB is currently looking for financing through a new loan. The most favourable financing option for WEB has an interest rate that is higher than the cost of debt that ACM estimates. WEB notes that the higher interest costs can only be compensated by applying a lower return on equity. Consequently, WEB will be unable to achieve the reasonable return as determined in the draft WACC decision.

ACM's response to the opinion

86. ACM calculates a normative WACC for an efficiently financed utility company. When calculating the WACC, ACM does not look at the actual financing costs of the regulated company. On the 22nd of August 2018[22], the Court in First Instance ruled that the calculation of the WACC concerns the calculation of the efficient costs, not the actual costs. This is confirmed by the use of the concept of the "return that is customary in the course of trade" in Article 2.1, paragraph 2 of the E&D Regulation.[23] A return that is customary in the course of trade cannot be deduced from the actual costs incurred by a (or: one) company.

87. ACM underscores that the WACC is not a guaranteed return. The realised return of a company depends on the actions and decisions by the company. If a company finances itself against higher rates than the efficient cost as set by ACM, this will indeed lower the return that is left for the equity holders. This is similar to what would be the case in competitive markets. If a company would finance itself less efficiently than its competitors, it would also not be able to charge higher tariffs to its clients to compensate for that. In that case, the higher costs of debt would also decrease the profits of the company.

Conclusion on the opinion

88. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.

Opinion 17: "ACM should take exchange rate risk into account"

Respondents	Does it lead to a change in the WACC attachment?
WEB	No

Summary of opinion

[22] ECLI:NL:OGEABES:2018:30, section 8.5.
[23] ECLI:NL:OGEABES:2018:30, section 8.6.

89. ACM should take into account the fact that European debt is nominated in euros, whereas WEB borrows in US dollars. If there is a certain interest rate on euro-denominated loans in Europe, this does not mean that a company can borrow against the same rates in a US dollar zone. If WEB would be able to borrow in Europe, this loan would be in euros. This would lead to exchange rate risks, which WEB should hedge. This increases the costs for WEB.

ACM's response to the opinion

90. ACM takes into account that Bonaire is a US dollar-denominated economy by including the US and Latin America as reference markets. Apart from being geographically close to the Caribbean Netherlands, both regions share with the Caribbean Netherlands that the dollar is widely used in financing. This is an aspect that is relevant to investors. However, by basing the returns for the regulated companies on just these two regions, ACM would ignore an important aspect that is relevant for the risk of the regulated companies. The fact that the Caribbean Netherlands is a part of the Netherlands influences the risk of investing in the regulated companies. Investors benefit from the institutional, judicial and governmental framework of the Netherlands. These characteristics should be included when estimating the opportunity costs of the potential investors and are best observable in a European context.

91. The fact that Europe is included as a reference market does not mean that WEB is also expected to borrow in Euros. This is of course for WEB to decide. ACM therefore sees no reason to adjust for any exchange rate risks. Europe is included next to the other two regions to account for certain aspects that are relevant for the risk profile of an efficient regulated company, and therefore also for the estimation of the efficient cost of debt.

Conclusion on the opinion

92. This opinion has not led to any changes to the WACC attachment compared with the draft WACC attachment.