

Anticipated acquisition by Severn Trent Plc of Dee Valley Group plc

Decision on duty to refer

ME/6629/16

The CMA's decision on reference under section 32 of the Water Industry Act 1991, as amended by the Water Act 2014, given on 16 December 2016. Full text of the decision published on 22 December 2016.

Please note that [X] indicates figures or text which have been deleted or replaced in ranges at the request of the parties for reasons of commercial confidentiality.

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SUMMARY

1. Severn Trent Plc (**ST**), the holding company for Severn Trent Water Limited (**SVT**), has agreed to acquire Dee Valley Group plc (**DV**), the holding

company of Dee Valley Water plc (**DVW**) (the **Merger**). ST, SVT, DV and DVW are together referred to as the **Parties**.

2. Under the Water Industry Act 1991 (**WIA91**), as amended by the Water Act 2014 (**WA14**), if the Competition and Markets Authority (**CMA**) believes that it is or may be the case that the Merger is a merger of two or more water enterprises (water merger), it is under a duty to refer the Merger to a phase 2 investigation unless the CMA believes that:
 - (a) the turnover of the water enterprise being taken over, and that of at least one of the water enterprises already belonging to the person making the takeover, is less than £10 million; or
 - (b) the Merger arrangements are not sufficiently advanced or are unlikely to proceed; or
 - (c) the Merger is not likely to prejudice the Water Services Regulation Authority's (**Ofwat**) ability, in carrying out its functions, to make comparisons between water enterprises; or
 - (d) the Merger is likely to prejudice Ofwat's ability to make comparisons between water enterprises, but the prejudice is outweighed by relevant customer benefits (**RCBs**) relating to the Merger.
3. Before the CMA makes a decision on whether to refer a merger it must request and consider Ofwat's opinion on (c) and, if necessary, (d) above.
4. The CMA believes that both SVT and DVW are water enterprises and that, as a result of the Merger, they will cease to be distinct. Accordingly, arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a water merger. The CMA also believes that the relevant turnover of both SVT and DVW is over £10 million.
5. The CMA therefore assessed whether the Merger would be likely to prejudice Ofwat's ability, in carrying out its functions, to make comparisons between water enterprises.
6. In the context of a phase 1 assessment of the Merger, the CMA has interpreted the statutory test as requiring it to:
 - (a) first, assess the impact of the Merger on Ofwat's ability to make comparisons between water enterprises and assess whether there is a realistic prospect that the impact is adverse; and

- (b) second, consider whether any adverse impact, either individually or in combination with any other adverse impact(s), is significant enough to amount to prejudice.¹
7. Ofwat uses comparisons to perform a number of functions, including during its periodic price reviews for setting price limits and service quality requirements, and between price reviews for monitoring and enforcement and spreading best practice. A water merger could affect Ofwat's ability to make comparisons in a number of ways across each of these functions. Therefore, consistent with the CMA's guidance on the assessment of water mergers (the **Guidance**),² the CMA considered a number of factors for the purposes of assessing the Merger's impact, including:
- (a) the extent to which the Merger involves overlaps;
 - (b) whether the Merger involves the loss of an independent comparator;
 - (c) the extent to which the Merger will change benchmarks;
 - (d) the number and quality of independent observations that remain;
 - (e) whether the Merger leads to the loss of a company with important similarities for comparisons;
 - (f) whether the Merger leads to the loss of a company with important differences for comparisons; and
 - (g) whether Ofwat could amend its approach to reduce the impact of the loss of a comparator.
8. For the purposes of its assessment, the CMA has considered the views of ST, Ofwat and third parties both on: (i) the appropriate approach for determining any realistic adverse impact, based on the factors listed above; and (ii) the significance of that impact for the purposes of determining whether it is significant enough to amount to prejudice. The level of customer detriment arising, as identified by any quantitative analysis, is only one factor in the assessment of whether any adverse impact is significant enough to amount to prejudice.
9. Consistent with the Guidance, in reaching its decision the CMA placed significant weight on Ofwat's opinion on whether the Merger is likely to

¹ This approach was also followed by the CMA in the phase 2 water merger investigation of the acquisition by Pennon Group plc, the owner of South-West Water, of Bournemouth Water Investments Limited (**Pennon/Bournemouth**).

² [Water and sewerage mergers: CMA49](#), paragraph 4.15.

prejudice its ability, in carrying out its functions, to make comparisons between water enterprises. Ofwat submitted that it believed the Merger was not likely to prejudice its ability to make comparisons between water enterprises, and it provided detailed reasons to support its view.

10. ST provided the CMA with a report analysing the impact of the Merger (the **Report**). On the basis of its review of the evidence and the submissions made by Ofwat, ST and third parties, the CMA believes that:
 - (a) The approach for determining the impact of the Merger on a qualitative and quantitative basis applied in the Report is reasonable and consistent with that used by the CMA in the phase 2 water merger investigation of *Pennon/Bournemouth* in 2015, such that any adverse impact which has been identified in the Report on that basis is realistic;³
 - (b) The Merger will not remove a high performing company from Ofwat's set of comparators, which could impact on regulatory benchmarks used by Ofwat. At Ofwat's last price review in 2014 (**PR14**), DVW was only classified as an 'upper quartile' company in relation to the extra retail costs associated with servicing metered customers and the number of water interruptions. Quantitative modelling of customer detriment based on PR14 benchmarks indicates that any impact is not significant enough to suggest that these impacts would, either individually or in combination, amount to prejudice;
 - (c) Although the Merger reduces the number of independent observations in Ofwat's econometric and other models, it does not significantly reduce the precision of those estimates or their susceptibility to outliers. To the extent the impact on precision can be meaningfully quantified, the loss of precision in Ofwat's quantitative analysis as a result of the Merger is no more than that associated with *Pennon/Bournemouth*, and Ofwat will still be able to use its comparator models even when the cumulative effect with *Pennon/Bournemouth* is considered.¹ In addition, qualitative analysis indicated minimal impact in the context of the observations the Parties' positions provide; and
 - (d) DVW's performance is less significant for the purposes of making comparisons with other water enterprises as it is only in limited circumstances that it has attributes that are of assistance to Ofwat in making such comparisons.

³ ME/6532/15, [Pennon/Bournemouth](#), 5 November 2015.

11. For these reasons, the CMA believes that the potential adverse impacts associated with the Merger are not significant enough, either individually or in combination, to be likely to prejudice Ofwat's ability to make comparisons between water enterprises. The CMA has not needed to consider RCBs. The Merger will therefore **not be referred** under section 32 of the WIA91, as amended by WA14 (the **Act**).

ASSESSMENT

Parties

12. ST is a holding company of SVT, which is a water and sewerage company (**WASC**) in England and Wales. For regulatory purposes, SVT is a WASC operating wholly or mainly in England. The regulated turnover of SVT in the financial year ended 31 March 2016 was £1,506 million in the UK.
13. DV is the holding company of DVW, which is a water-only company (**WOC**) that supplies water-only services in northeast Wales and northwest Cheshire. For regulatory purposes, DVW is a WOC operating wholly or mainly in Wales. The regulated turnover of DVW in the financial year ended 31 March 2016 was £25.4 million in the UK.

Transaction

14. On 16 November 2016, ST announced its intention to make an offer to acquire the entire issued and to be issued voting and non-voting ordinary share capital of DV by way of a scheme of arrangement of DV.

Jurisdiction

15. Under the Act, mergers between water enterprises are subject to a special water merger regime. The test under the special water merger regime is whether a merger could prejudice Ofwat's ability to make comparisons for the purpose of carrying out its statutory functions, including setting price controls for regulated water enterprises.
16. The CMA has jurisdiction⁴ to examine a water merger under the special water merger regime where:

⁴ [Water and sewerage mergers: CMA49](#), paragraph 2.8.

- (a) arrangements are in progress which, if carried into effect, will result in a merger of any two or more water enterprises (anticipated merger), or such a merger has taken place;
 - (b) the turnover of the water enterprise being taken over, and at least one of the water enterprises already belonging to the person making the takeover, is greater than £10 million (the turnover test);⁵ and
 - (c) where the merger has taken place, the merger completed not more than four months before the reference for a phase 2 investigation, unless completion took place without this having been made public and without the CMA being informed of it.
17. The CMA believes that the Merger gives rise to a water merger under the special water merger regime for the following reasons:
- (a) SVT and DVW are each a ‘relevant undertaker’, within the meaning of section 219 of WIA91 (ie ‘a water undertaker or sewerage undertaker’),⁶ meaning that they are both ‘water enterprises’ for the purposes of section 35(1) of WIA91;
 - (b) SVT and DVW will cease to be distinct as a result of the Merger; and
 - (c) The relevant turnover of both DV and SVT exceeds £10 million in the UK.
18. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in a merger between two or more water enterprises (ie a water merger).
19. The initial period for consideration of the Merger under section 34ZA(3) of the Enterprise Act 2002 started on 30 November 2016 and the statutory 40 working day deadline for a decision is therefore 27 January 2017.

Counterfactual

20. The CMA assessed the impact of the Merger on Ofwat’s ability to carry out comparisons against the situation that would prevail in the absence of the Merger. Consistent with its approach to general merger phase 1 investigations,⁷ the CMA believes the most cautious realistic counterfactual is

⁵ The relevant turnover is limited to the provision of services as a water or water and sewerage company, ie the ‘regulated’ turnover.

⁶ Under section 6 of WIA91, the appointment of a company to be a relevant undertaker shall be by service on the company of an instrument in writing containing the appointment and describing the area for which it is made.

⁷ *Merger Assessment Guidelines* (OFT1254/CC2), September 2010, from paragraph 4.3.5. The *Merger Assessment Guidelines* have been adopted by the CMA (see *Mergers: Guidance on the CMA’s jurisdiction and procedure* (CMA2), January 2014, Annex D).

a situation where the Merger is assumed not to have occurred and the two firms continue to operate under independent ownership. Both Ofwat and ST submitted that this was the appropriate counterfactual for the assessment of the Merger.

Background

21. This section outlines the background to the special merger regime, including the role of Ofwat and its use of comparators and the legal framework for the CMA's assessment.

Use of comparators by Ofwat

22. There are currently 17 water companies in England and Wales: 10 WASCs and 7 WOCs, which are typically smaller. Water enterprises are regional monopolies regulated by Ofwat. Ofwat regulates according to its statutory duties, in particular to further the customer objective and to secure that water companies carry out their functions and are able to finance their activities (including long-term resilience for water companies in England).⁸
23. Ofwat makes comparisons between water enterprises for several purposes. These purposes are to:
- (a) set wholesale price controls;
 - (b) set retail price controls (for household (**HH**) and non-household (**NHH**));
 - (c) monitor and set performance targets for wholesale quality of service (through outcome delivery incentives (**ODIs**));
 - (d) monitor and incentivise improvement in retail quality of service (through the service incentive mechanism (**SIM**)); and
 - (e) spread best practice and undertake monitoring and enforcement activities outside the price control.
24. As set out in paragraphs 23(a) and 23(b) above, one of Ofwat's primary functions is to set price limits, which determine the amount of revenue water enterprises can collect during the subsequent price control period. Ofwat sets these limits for a five-year period following a price review, the latest of which (PR14) set revenues for the period 2015 to 2020. During PR14, Ofwat made use of comparisons in wholesale costs, retail costs, wholesale quality of

⁸ [Water and sewerage mergers: CMA49](#), paragraph 1.18.

service, and retail quality of service, and also undertook other comparisons, such as quality of business plan submissions, quality of the evidence base for wholesale cost special factor claims and customer engagement.

25. Within the wholesale price control process, Ofwat uses econometric modelling and other benchmarking approaches to determine the level of efficient costs for each company. This comparative approach can improve cost estimation, as Ofwat is better able to determine the efficient costs of water enterprises by comparing costs across a number of independent firms. The number and quality of comparators is of particular importance to econometric modelling since its statistical robustness depends on the number, independence, and degree of variation of observations.
26. As well as the comparisons made at periodic price reviews, Ofwat also makes comparisons between approaches taken by different companies to aid ongoing activities in relation to monitoring and enforcement activities, and to spread best practice. For example, Ofwat has reviewed companies' approaches to: (i) board leadership and transparency; (ii) social tariffs; (iii) customer redress; and (iv) claims for interim changes in price limits during a price control period.

Legal framework

27. Until November 2015 the CMA had a duty to refer any water merger for a phase 2 investigation provided that (i) the anticipated or completed arrangements would result or had resulted in a merger of two or more water enterprises; and (ii) the turnover of both the water enterprise being taken over and of those already belonging to the acquirer was each greater than £10 million.
28. Since November 2015, the Act enables the CMA to clear a merger between two or more water enterprises in England and Wales after a phase 1 investigation, either unconditionally or by accepting undertakings in lieu of a reference. The Act states that the CMA is under a duty to refer a water merger for an in-depth phase 2 investigation unless the CMA believes that:
 - (a) the merger arrangements for anticipated mergers are not sufficiently advanced or are unlikely to proceed;
 - (b) the merger is not likely to prejudice Ofwat's ability, in carrying out its functions, to make comparisons between water enterprises; or

(c) the merger is likely to prejudice Ofwat's ability to make comparisons, but the prejudice is outweighed by RCBs.⁹

29. Before the CMA makes a decision on whether there is a duty to refer it must request and consider Ofwat's opinion on considerations (b) and, if necessary, (c) above.¹⁰

Framework for assessment

30. For the purposes of its phase 1 assessment of a water merger, the CMA has interpreted the statutory test as requiring it to:

(a) first, assess the impact of the merger on Ofwat's ability to make comparisons between water enterprises and assess whether there is a realistic prospect that the impact is adverse; and

(b) second, consider whether any adverse impact, either individually or in combination with any other adverse impact(s), is significant enough to amount to prejudice.

31. In the present case, in order to address (a) and (b) above, the CMA has considered the views and evidence provided by ST, Ofwat and third parties both on: (i) the appropriate approach for determining any realistic adverse impact; and (ii) the significance of that impact for the purposes of determining whether it is significant enough to amount to prejudice. Consistent with the Guidance, in reaching its decision the CMA placed significant weight on Ofwat's opinion on whether the Merger is likely to prejudice its ability, in carrying out its functions, to make comparisons between water enterprises.

Determining the realistic adverse impact on Ofwat's ability to make comparisons

32. Consistent with the Guidance (and Ofwat's Statement of Methods),¹¹ the CMA considered a number of factors for the purposes of assessing the Merger's impact on Ofwat's comparisons, including:

(a) the extent to which the Merger involves overlaps;¹²

(b) whether the Merger involves the loss of an independent comparator;

⁹ *Water and sewerage mergers: CMA49*, paragraph 1.13.

¹⁰ *Water and sewerage mergers: CMA49*, paragraph 1.14.

¹¹ *Ofwat's approach to mergers and statement of methods*, Appendix A1.3.

¹² For example, a WOC taking over wastewater activities would not be expected to prejudice Ofwat's ability to make comparisons with other water companies.

- (c) the extent to which the Merger will change benchmarks;
 - (d) the number and quality of independent observations that remain;
 - (e) whether the Merger leads to the loss of a company with important similarities for comparisons;¹³
 - (f) whether the Merger leads to the loss of a company with important differences for comparisons;¹⁴ and
 - (g) whether Ofwat could amend its approach to reduce the impact of the loss of a comparator.
33. The CMA has considered the views and evidence provided by ST,¹⁵ Ofwat and third parties on the appropriate analytical approach for determining any realistic adverse impact based on the factors listed above, placing significant weight on Ofwat's views. The CMA sought to understand the methodology and assumptions used for the analysis undertaken by both ST and Ofwat, and considered whether they appeared reasonable.
34. The CMA found that the views of ST and Ofwat on the appropriate analytical approach for determining any realistic adverse impact resulting from the Merger are aligned and consistent with the approach applied in *Pennon/Bournemouth*. The CMA also did not receive any evidence from third parties to suggest that the proposed approach is not reasonable on the facts of this case. The CMA has therefore not found it necessary to conduct a detailed analysis of whether a different analytical framework should be used for the purposes of determining the realistic impact of the Merger.
35. The approach adopted by both ST and Ofwat was to:
- (a) base the assessment on the approach Ofwat developed for PR14;
 - (b) use adjusted models, and the resulting benchmarks, which take account of *Pennon/Bournemouth* and assume, conservatively, that the merging Parties will no longer be valuable as separate comparators; and
 - (c) consider the impacts of the Merger on those models and future benchmarks.¹⁶

¹³ In particular by reducing the number or quality of comparators operating in similar circumstances to other water companies.

¹⁴ For example, the loss of a comparator that might provide good examples of leading or best practice across the sector.

¹⁵ ST's Report addressed each of the seven criteria for assessment as set out in paragraph 32.

¹⁶ The CMA notes that, in any future water merger, the CMA may apply a different approach as it considers appropriate given the circumstances of each individual case.

36. The CMA believes that any adverse impacts identified as result of this analytical approach are realistic.

Assessing the significance of any adverse impact

37. The CMA has then sought to determine whether, in the context of the analytical framework used by ST and Ofwat, any adverse impact identified is sufficiently significant, either individually or in combination with other adverse impact(s), to amount to prejudice to Ofwat's ability to make comparisons. Again, the CMA has considered the views of Ofwat, ST and third parties. The CMA notes that the level of customer detriment identified by any quantitative analysis is only one factor in the assessment of whether any adverse impact is significant enough to amount to prejudice.

Assessment

38. Given that the Merger involves overlaps in the provision of (i) wholesale water services, (ii) retail HH services, and (iii) retail NHH services,¹⁷ the Merger involves the loss of an independent comparator and meets the criteria identified at paragraphs 32(a) and 32(b) above. Therefore, the following sections discuss ST's submissions, Ofwat's opinion and the CMA's assessment, taking into account any third party evidence, with respect to the factors outlined in paragraphs 32(c)-32(f).
39. It was not necessary for the CMA to assess the Merger with respect to whether Ofwat could amend its approach to reduce the impact of the loss of a comparator (paragraph 32(g)), since, as set out below, the CMA believes that the potential adverse impacts associated with the Merger are not significant enough, either individually or in combination, to be likely to prejudice Ofwat's ability to make comparisons between water enterprises.

The extent to which the Merger will change benchmarks

40. At PR14 Ofwat used benchmarking in the following areas: (i) wholesale costs; (ii) HH retail costs; (iii) ODIs (ie mean zonal compliance, water quality contacts and water supply interruptions); and (iv) SIM.
41. The CMA has considered whether the loss of a comparator resulting from the Merger could affect Ofwat's ability to make comparisons by removing a high

¹⁷ Further to [Severn Trent/United Utilities](#) (2016) decision, SVT's activity in relation to NHH customers is separate to its other activities and managed via a new 50/50 joint venture company (**JVCO**) with United Utilities Group Plc. The CMA notes that transfer of the DVW's NHH customers as a result of the Merger (whether initially to ST or to the JVCO at a later date) may give rise to a relevant merger situation reviewable under the general merger regime pursuant to the Enterprise Act 2002.

performing company from Ofwat's set of comparators, which could impact benchmarks used by Ofwat and weaken the challenge to the wider industry.¹⁸

ST's submissions

42. ST estimated the impact of the Merger on each benchmark, holding each company's performance constant and assuming the performance of the merged entity is equal to the weighted average of the performance of each of the Parties. ST then sought to monetise this impact by calculating the associated change in price limits. Consistent with the CMA's assessment in *Pennon/Bournemouth*, ST used both static¹⁹ and forward-looking²⁰ approaches and estimated the impact of the Merger for different time periods, using different assumptions about any convergence in performance and about future Ofwat's policy, depending on the area of analysis. As sensitivity tests, ST also applied alternative versions of the forward-looking approach and used the cost models adopted by the CMA in its Bristol Water plc price determination²¹ (**Bristol Water Report**) instead of Ofwat's PR14 models.
43. With respect to benchmarks for wholesale costs, the Report concluded that the Merger would not lead to a detriment to customers under the static approach. The Report also concluded that the Merger would not lead to a detriment to customers under the central version, as well as most alternative versions of the forward-looking approach. ST submitted that only one alternative approach/sensitivity²² showed a detriment to customers. The Report quantified this detriment as £3.3 million, based on the net present value (**NPV**) calculated over 30 years. The Report did not identify any customer detriment as a result of the Merger under any other scenario or sensitivity.
44. With respect to benchmarks for HH retail costs, the forward-looking approach identified the potential for customer detriment under certain convergence assumptions. The largest impact²³ identified customer detriment of £3.5 million, based on the NPV calculated over five years.

¹⁸ [Water and sewerage mergers: CMA49](#), paragraph 4.14.

¹⁹ The static approach is based on re-calculating the PR14 control (adjusted for *Pennon/Bournemouth*) with SVT and DVW as one comparator rather than two.

²⁰ Under the forward-looking approach, the analysis starts with companies' business plan rankings based on the analysis at PR14 and simulates how these rankings may change in the future by applying the change matrix, which is based on historical information of how companies' rankings have changed over time.

²¹ [Bristol Water plc price determination](#), 6 October 2015.

²² Forward-looking approach using historical rankings.

²³ Forward-looking approach based on convergence from 2020 to 75% of frontier in 2040.

45. With respect to water supply interruptions, ST found that the Merger could lead to a detriment of £0.3-0.4 million, based on the NPV calculated over five years.
46. With respect to the ODIs for mean zonal compliance and water quality contacts, as well as for the SIM, ST concluded that the Merger would not lead to any customer detriment under any realistic modelling approach.
47. ST concluded that, given the adverse impacts identified are smaller than those in *Pennon/Bournemouth*, the potential detriment arising from the Merger is not significant enough to prejudice Ofwat's ability to make comparisons.

Ofwat's opinion

48. Ofwat's testing of the impact of the Merger on benchmarks involved two stages: first, Ofwat validated the performance rankings produced by the Report; second, Ofwat considered the impact of both static and forward-looking approaches to quantify the potential adverse impacts from the Merger. Ofwat then took a risk-based approach to testing the quantification of the potential adverse effects, and focused its testing on those benchmarks where the Parties were relatively high performers.²⁴ For those areas where the Parties did not appear in the upper performance quartile at PR14, and would not do so following the *Pennon/Bournemouth* merger, Ofwat did not carry out the same degree of detailed probing as it determined that, in such areas, there is a low risk of a significant adverse impact. However, Ofwat reviewed the methods used in the Report and compared them with those in *Pennon/Bournemouth* to check consistency in the overall approach.
49. Ofwat noted that there are two areas where the Parties are among the upper quartile performers: (i) HH retail costs (specifically the incremental cost of serving metered customers); and (ii) ODI for water supply interruptions. In these two areas Ofwat undertook an in-depth review of the assumptions and calculations underpinning the assessments in the Report. Ofwat submitted to the CMA that it was satisfied that the estimates of adverse impacts quantified in the Report are reasonable and consistent with those that derive from a reasonable application of the approach used in Ofwat's Statement of Methods and in the CMA's report on *Pennon/Bournemouth*.
50. Ofwat concluded that DVW played only a modest role in the benchmarking work that supported PR14 and therefore the potential adverse impacts associated with the Merger are not significant enough, either individually or in

²⁴ Ofwat acknowledged that underperforming companies could become leading companies in the future.

combination, to be expected to amount to prejudice to Ofwat's ability to make comparisons between water enterprises.

CMA's assessment

51. The CMA reviewed the Report and Ofwat's opinion with respect to the impact of the Merger on each benchmark and found that it applied the methodology previously used by Ofwat and the CMA in the *Pennon/Bournemouth* case, the assumptions made were reasonable and appropriate, and it evaluated all reasonable approaches and sensitivities.
52. The CMA notes that the detriment figures identified in the Report were not central forecasts but only one of a number of potential realistic outcomes. The CMA also notes that the adverse impacts were not (generally) identified under other reasonable assumptions. In particular:
 - (i) With respect to the ODIs for mean zonal compliance and water quality contacts, as well as for the SIM, the Merger would not lead to a customer detriment under any realistic modelling approach.
 - (ii) With respect to the wholesale costs benchmark, the Merger would only lead to customer detriment in one sensitivity (see paragraph 43).
 - (iii) With respect to benchmarks for HH retail costs and ODI for water supply interruptions, the Merger may lead to a customer detriment (see paragraphs 44 and 45).²⁵
53. In this context, while the CMA notes that there is a realistic prospect of some adverse impact, the potential detriment is smaller than that estimated in *Pennon/Bournemouth*, which, in that case, was not considered significant enough to amount to prejudice.
54. The CMA also put significant weight on Ofwat's views, which are aligned with those of ST in concluding that any adverse impact on benchmarking is not sufficient to amount to prejudice.
55. No third party provided any quantitative evidence to indicate that the impact on Ofwat's benchmarks would be significant.
56. For these reasons, the CMA believes that there is no realistic prospect that, as a result of the Merger, future benchmarks would be set at a less

²⁵ The CMA has reason to believe that there is an error in the ST's calculation of the impact under HH retail costs. The effect of this error is to overstate the size of the adverse impact. However, the CMA has not attempted to correct the error as this is not critical for the CMA's decision.

challenging level to such a degree that, either individually or in combination, this amounts to prejudice to Ofwat's ability to make comparisons between water enterprises.

The number and quality of independent observations that remain

57. In addition to the direct impacts on Ofwat's benchmarks from the loss of an independent comparator, a reduction in the number of comparators can also have an impact on the robustness of Ofwat's analysis by reducing the number of independent observations in Ofwat's econometric and other models. This could reduce the precision of those estimates or their susceptibility to outliers.²⁶
58. There are two main ways in which the Merger may have an adverse impact on the precision of Ofwat's econometric modelling:
- (a) The loss of an independent data point for statistical analysis, in this case going from 17 water companies to 16. This results in an inherent loss in precision. A standard principle of statistical theory is that fewer data points will lead to less precise econometric estimates.
 - (b) SVT and DVW may have specific characteristics which make them useful for Ofwat in modelling wholesale costs. If SVT's or DVW's data provide useful variation in certain variables which helps Ofwat to identify key determinants of wholesale costs across companies, and some of this variation is lost as a result of the Merger, this may result in a loss of precision in Ofwat's models. On the other hand, if the Merger does not lead to a significant loss in variation, or if the variation is driven by company-specific factors which are less important in estimating cost drivers for the industry as a whole, then the Merger is less likely to lead to a significant loss in precision.
59. Other things equal, the impact from the loss of a comparator may be expected to increase for each successive merger that occurs, as fewer comparators would remain.²⁷

ST's submissions

60. ST submitted that, as SVT and DVW will continue to operate under separate licences, two comparators would continue to be available for Ofwat's

²⁶ For example, Ofwat submitted that in PR14 it found it more difficult to develop robust models for wastewater than for water services, at least in part because it had only 10 comparators for wastewater compared with 18 for water.

²⁷ [Water and sewerage mergers: CMA49](#), paragraphs 4.14(b) and 4.19.

econometric benchmarking. Moreover, given that both companies will continue to operate in different operating environments (and therefore with different cost drivers), both comparators would continue to provide valuable information.

61. Consistent with the approach undertaken in *Pennon/Bournemouth*, the Report looked at four main methods to estimate the statistical loss in precision:
 - (a) The General Approach, which measures the loss in precision related to a loss of data points. This approach does not take account of the specific Parties to the Merger;
 - (b) The Specific Approach, which measures the loss in precision by re-estimating Ofwat's models under a simulation of the specific merged entity;
 - (c) Bootstrapping, which measures the loss of precision by using Ofwat's models to estimate outcomes under different random simulations of the current data set; and
 - (d) A Qualitative Approach, which looks at the theoretical statistical reduction in precision which may arise from the loss of DVW's independent observations.
62. ST submitted that, although there are inherent difficulties in producing precise and meaningful estimates, the monetised loss of precision pursuant to (a) to (c) above as a result of the Merger is smaller than the loss of precision found in *Pennon/Bournemouth*. ST also applied additional sensitivity tests, which showed that the magnitude of the loss of precision as a result of the Merger would not be material.
63. Under the Qualitative Approach, ST assessed, for each of the 18 variables used in Ofwat's PR14 water cost models, what the impact of the Merger would be on the amount of variation between companies. If a variable is going to be usable in a cost model, there needs to be enough variation (ie if the variable has the same value for all companies, it cannot be used to explain why the companies have different costs). This additional analysis was intended to reveal whether the Parties have specific characteristics which cause them to improve the robustness of Ofwat's wholesale cost assessment models.
64. In *Pennon/Bournemouth*, the CMA indicated that a reduction in between-company variation of more than 10% for a particular variable was potentially problematic; though, in that case, it found four such variables, it concluded that any resulting loss in precision in Ofwat's overall cost model was likely to

be small. In the present case, ST found that the Merger would lead to a reduction of more than 10% for three variables: the proportion of properties with water pressure below reference levels, the proportion of water input from river abstractions, and the proportion of usage by metered non-household properties. However, pursuant to the CMA's assessment in *Pennon/Bournemouth*, ST submitted that the impact associated with this loss of variability was not material.

Ofwat's opinion

65. Ofwat noted that the approach followed in the Report does not directly address customer detriment which can be associated with a loss in precision, and also noted that the assessment in the Report does not recognise that the impacts of the loss of a comparator on precision are cumulative. However, Ofwat recognised the difficulty in determining customer detriment as a result of a loss in precision and concluded that, despite the lack of direct observation, the Merger gave rise to only modest quantitative and qualitative estimates of detriment due to a reduction in the number and quality of independent observations available. In particular:
- (a) Ofwat submitted that the magnitude of ST's estimates of the loss in precision presented in the Report are broadly in line with the estimates derived by the CMA in its assessment of the loss of precision in *Pennon/Bournemouth*.
 - (b) With regard to the Qualitative Approach, Ofwat noted that, in relation to the proportion of properties with water pressure below reference levels, DVW is an outlier with relatively poor performance, suggesting that it may be of limited value for benchmarking purposes. This leaves only two variables, out of 18, with a reduction in between-company variability of more than 10%, which Ofwat said does not suggest a material loss of precision.
 - (c) Ofwat observed that it had previously said that the loss of up to two small WOC comparators was unlikely to prejudice its ability to make comparisons in the PR19 wholesale cost assessment.²⁸
66. Ofwat concluded that it does not consider this Merger to give rise to the loss of an important comparator.

²⁸ In [Annex 3](#) of PR14 Final Determination Notice, Ofwat said: 'we consider that, if one or two companies were to merge during the PR14 price control period, the PR19 wholesale cost assessment models would still be robust enough to be used in the same way that the PR14 models have been. Consequently, we consider that the loss of precision from the loss of a comparator would have no material impact on customers.'

CMA's assessment

67. The CMA reviewed the Report and Ofwat's opinion with respect to the impact of the Merger on the number and quality of independent observations that would remain post-Merger. The CMA found that both ST and Ofwat had applied the methodology previously used by Ofwat and the CMA in *Pennon/Bournemouth*, and that the assumptions made by ST and Ofwat in their assessments were generally reasonable and appropriate.
68. The CMA notes that this analysis does not produce a direct estimate of customer detriment and recognises the difficulties associated with producing this analysis. The CMA therefore recognises the limitations in relying on this analysis to provide a meaningful basis for assessment.
69. The CMA found that the analysis of the loss of precision performed by ST and Ofwat has not revealed any basis for concluding that the Merger would have a significant impact on Ofwat's ability to make comparisons.
70. The CMA put significant weight on Ofwat's views, which are aligned with ST's in concluding that any adverse impact on precision was not sufficient to amount to prejudice, even if it is not possible to base this view on a quantification of customer detriment.
71. The majority of third parties indicated that the impact of the Merger on the robustness and precision of Ofwat's models would not be significant.
72. For these reasons, the CMA believes that there is no realistic prospect that the loss of precision as a result of the Merger would be significant enough to amount to prejudice to Ofwat's ability to make comparisons between water enterprises.

Loss of a company with important similarities or differences

73. A merger in the wholesale water sector can lead to the loss of a company with important similarities or differences to the remaining companies. This could affect Ofwat's ability to make comparisons across companies that are operating in similar circumstances facing similar issues,²⁹ or across companies with important differences. For example, differences can take the form of best practice in some areas, or the use of innovative approaches. A company can also be a valuable comparator because it may help Ofwat assess how companies perform in particularly challenging conditions. The

²⁹ [Water and sewerage mergers: CMA49](#), paragraphs 4.20.

loss of a comparator with important similarities or differences as a result of the merger can have an adverse impact on Ofwat's use of comparators.³⁰

ST's submissions

74. ST assessed each of the areas where Ofwat uses comparators to identify whether the loss of DVW would reduce Ofwat's ability to make effective comparisons. They submitted that, given the difference in size between SVT and DVW, it is likely that the performance of the merged entity will be almost identical to the performance of SVT. For this reason, ST did not consider it necessary to evaluate SVT as a comparator as they said this will not change as a result of the Merger. Therefore, ST focused on the value of DVW as a comparator.
75. ST submitted that DVW has limited attributes that are useful to Ofwat in making qualitative comparisons with other companies or sub-sets of companies, and provides limited scope to apply best practice across the sector to help deliver an efficient, high quality service to customers. In particular:
- (a) DVW has not demonstrated particular best practice that could be used by Ofwat; and
 - (b) there are only a few examples where DVW could be categorised as part of the group of best practice companies. In PR14, it appears that DVW demonstrated best practice in engaging with customers on topics such as the Pay-As-You-Go-rate; and it is also an active contributor to Ofwat's public consultations, raising issues that may be specific to small companies.
76. ST concluded that it is highly unlikely that the loss of DVW as a comparator will have a material effect on Ofwat's ability to make comparisons, and therefore will not introduce a level of detriment over and above the detriment discussed above.

Ofwat's opinion

77. Ofwat carried out a qualitative assessment of the potential impact of the Merger on its ability to spread best practice by making comparisons across the following areas: (i) customer engagement; (ii) company specific adjustments to cost benchmarking results; (iii) company behaviour; (iv)

³⁰ [Water and sewerage mergers: CMA49](#), paragraphs 4.21.

accounting information and the reporting of data; (v) financeability, risk and reward; and (vi) performance commitments and ODIs.

78. Ofwat found that, based on its past performance, DVW has attributes that would provide some assistance to Ofwat in making comparisons with other water companies in only very limited circumstances (such as demonstrating that a small WOC can retain a stock exchange listing). Ofwat submitted that SVT has been a more helpful comparator, eg in respect of aspects of its customer engagement and ODIs, but, in general, Ofwat would not expect the Merger to jeopardise these aspects of its performance given that SVT is a much bigger enterprise than DVW.
79. Ofwat concluded that the loss of DVW as a comparator would not represent a material adverse impact on its ability to make comparisons between water enterprises.

CMA's assessment

80. The CMA believes that there is no realistic prospect of the Merger prejudicing Ofwat's ability to make comparisons between water enterprises as a result of the loss of a company with important similarities or differences. In reaching this view, the CMA has placed significant weight on Ofwat's opinion. The CMA has also based its view on evidence from third parties, the majority of which said that they do not consider DVW as a particularly valuable comparator for Ofwat's purposes.

Conclusion

81. Ofwat told the CMA that it believed the Merger was not likely to prejudice its ability to make comparisons between water enterprises, and it provided detailed reasons to support its view.
82. Taking into account Ofwat's opinion, ST's evidence and third party submissions, the CMA believes that the potential adverse impacts associated with the Merger are not significant enough, either individually or in combination, to be likely to prejudice Ofwat's ability to make comparisons between water enterprises.
83. The CMA has not needed to consider RCBs.

Third party views

84. The CMA contacted NHH customers of the Parties, other WASCs and WOCs, as well as relevant sector regulators, government and trade bodies.

85. Concerns were raised about the potential impact of the Merger on the charges paid by DVW's customers. In this regard, the CMA notes that it is common for merged water enterprises to continue to use separate charging schemes. Moreover, as discussed above, the CMA does not believe that the Merger will impact on Ofwat's ability to use comparators in setting its price limits.
86. One individual customer, the Welsh Government and Dee Valley's employees also raised concerns in relation to the potential loss of jobs associated with the Merger, as well as the possible loss to the Welsh economy. The CMA notes that under the current legal framework and regulatory regime these factors are not directly relevant to assessing Ofwat's ability to make comparisons.
87. Where appropriate, and to the extent possible within the relevant legal framework within which water mergers are assessed by the CMA, third party comments have been taken into account in the assessment above.

Decision

88. For the reasons set out above, the CMA believes that the Merger is not likely to prejudice Ofwat's ability, in carrying out its functions, to make comparisons between water enterprises.
89. The Merger will therefore **not be referred** under section 32 of the Act.

Andrew Wright
Director of Mergers
Competition and Markets Authority
16 December 2016

ⁱ The CMA based this statement on a statement in Ofwat's opinion. Ofwat wishes to clarify the context. Ofwat considered the impact of the Merger, taking into account the *Pennon/Bournemouth* merger and, therefore, the cumulative impact as a whole has been assessed. However, Ofwat stated in its opinion that it had not carried out an assessment of the cumulative effect on the loss of precision of its comparator models. It was satisfied, based on analysis carried out in the course of its last price review process (PR14), that it could continue to use its comparator models following the loss of one further comparator following the *Pennon/Bournemouth* merger, but that cumulative effect on loss of precision may have to be assessed in more detail in future mergers.