



Reports of Cases

OPINION OF ADVOCATE GENERAL
KOKOTT
delivered on 25 March 2021¹

Case C-22/20

European Commission

v

Kingdom of Sweden

(Waste water treatment plants)

(Failure to fulfil obligations – Directive 91/271/EEC – Urban waste-water treatment – Secondary waste water treatment – More stringent treatment of discharges into sensitive areas – Loyal cooperation – Provision of information)

I. Introduction

1. With the Urban Waste Water Treatment Directive ('the UWWTD'),² the Union obliges Member States to set up and operate waste water treatment plants with a specific treatment performance for settlements of certain sizes. In the present proceedings, the Commission accuses Sweden of having breached that obligation in a number of agglomerations.

2. In that context, it is necessary, first, to clarify whether an exception in the directive for sites in high mountain regions must also be applied to locations in the Far North on account of similar environmental conditions. Second, the parties are in dispute as to which measurement data is used to determine the performance of a waste water treatment plant. And third, the Commission complains that Sweden has not provided certain measurement data necessary to assess a defence, namely the 'natural reduction' of nitrogen.

¹ Original language: German.

² Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ 1991 L 135, p. 40), as amended by Council Directive 2013/64/EU of 17 December 2013 (OJ 2013 L 353, p. 8), is applicable to the present case.

II. Legal context

3. Article 4 of the UWWTD provides for what it refers to as a secondary treatment of waste water:

‘1. Member States shall ensure that urban waste water entering collecting systems shall before discharge be subject to secondary treatment or an equivalent treatment as follows:

— at the latest by 31 December 2000 for all discharges from agglomerations of more than 15 000 p.e. [(population equivalent)],

— at the latest by 31 December 2005 for all discharges from agglomerations of between 10 000 and 15 000 p.e.,

— at the latest by 31 December 2005 for discharges to fresh-water and estuaries from agglomerations of between 2 000 and 10 000 p.e.

1a. ...

2. Urban waste water discharges to waters situated in high mountain regions (over 1 500 m above sea level) where it is difficult to apply an effective biological treatment due to low temperatures may be subjected to treatment less stringent than that prescribed in paragraph 1, provided that detailed studies indicate that such discharges do not adversely affect the environment.

3. Discharges from urban waste water treatment plants described in paragraphs 1 and 2 shall satisfy the relevant requirements of section B of Annex I. ...’

4. Article 5 of the UWWTD establishes specific requirements for discharges into particularly sensitive areas:

‘1. For the purposes of paragraph 2, Member States shall by 31 December 1993 identify sensitive areas according to the criteria laid down in Annex II.

2. Member States shall ensure that urban waste water entering collecting systems shall before discharge into sensitive areas be subject to more stringent treatment than that described in Article 4, by 31 December 1998 at the latest for all discharges from agglomerations of more than 10 000 p.e.

2a. ...

3. Discharges from urban waste water treatment plants described in paragraph 2 shall satisfy the relevant requirements of Annex I.B. ...’

5. Article 10 of the UWWTD concerns the local climate:

‘Member States shall ensure that the urban waste water treatment plants built to comply with the requirements of Articles 4, 5, 6 and 7 are designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions. When designing the plants, seasonal variations of the load shall be taken into account.’

6. Under Article 15(1), first indent, of the UWWTD, the competent authorities or appropriate bodies are to monitor, inter alia, discharges from urban waste water treatment plants to verify compliance with the requirements of Annex I.B in accordance with the control procedures laid down in Annex I.D.

7. Section B of Annex I (‘Discharge from urban waste water treatment plants to receiving waters’) of the UWWTD provides the following in point 2:

‘Discharges from urban waste water treatment plants subject to treatment in accordance with Articles 4 and 5 shall meet the requirements shown in Table 1.’

8. Table 1 of Annex I to the UWWTD is headed ‘Requirements for discharges from urban waste water treatment plants subject to Articles 4 and 5 of the Directive’ and is presented below:

Parameters	Concentration	Minimum percentage of reduction
Biochemical oxygen demand (BOD ₅ at 20 °C) without nitrification ...	25 mg/l O ₂	70-90 40 under Article 4(2)	...
Chemical oxygen demand (COD)	125 mg/l O ₂	75	...
...’

9. According to point 3 of Section B of Annex I to the UWWTD, ‘discharges from urban waste water treatment plants to ... sensitive areas ... shall in addition meet the requirements shown in Table 2 of this Annex.’

10. Table 2 of Annex I to the UWWTD governs, in particular, the reduction of nitrogen:

‘Requirements for discharges from urban waste water treatment plants to sensitive areas which are subject to eutrophication as identified in Annex II.A(a). One or both parameters may be applied depending on the local situation. The values for concentration or for the percentage of reduction shall apply.’

Parameters	Concentration	Minimum percentage of reduction
...
Total nitrogen ...	15 mg/l (10 000 – 100 000 p.e.) ...	70-80	...
	10 mg/l (more than 100 000 p.e.)’

11. Section D of Annex I to the UWWTD details reference methods for monitoring and evaluation of results. Point 3 specifies that the minimum annual number of samples shall be determined according to the size of the treatment plant and be collected at regular intervals during the year. For treatment plants which are of a size between 2 000 and 9 999 p.e., the minimum number is 12 samples during the first year. In subsequent years four samples are required if

the samples collected during the first year comply with the UWWTD. If one of the four samples fails, 12 more samples must be taken in the following year. For treatment plants which are of a size between 10 000 and 49 000 p.e., the minimum number is 12 samples.

12. Point 4 of Section D of Annex I to the UWWTD governs the relationship between the various measurement results and the limit values:

‘The treated waste water shall be assumed to conform to the relevant parameters if, for each relevant parameter considered individually, samples of the water show that it complies with the relevant parametric value in the following way:

- (a) for the parameters specified in Table 1 ... a maximum number of samples which are allowed to fail the requirements, expressed in concentrations and/or percentage reductions in Table 1 ... is specified in Table 3;
- (b) for the parameters of Table 1 expressed in concentrations, the failing samples taken under normal operating conditions must not deviate from the parametric values by more than 100%. ...
- (c) for those parameters specified in Table 2 the annual mean of the samples for each parameter shall conform to the relevant parametric values.’

13. Table 3 of Annex I to the UWWTD governs the number of samples and the permissible deviations from the limit values prescribed in Article 4.

Series of samples taken in any year	Maximum permitted number of samples which fail to conform
4-7	1
8-16	2
17-28	3
29-40	4
41-53	5
54-67	6
...	...

III. Pre-litigation procedure and forms of order sought

14. In 2010, 2014 and 2017, the Commission invited Sweden to submit observations on the application of the UWWTD. Based on those observations, it sent a reasoned opinion to Sweden on 8 November 2018, requesting the Member State to comply with the objections within two months, that is to say, by 8 January 2019.

15. As the Commission was not satisfied with Sweden’s replies, it brought the present action, and claims that the Court should:

- declare that the Kingdom of Sweden has failed to fulfil its obligations under Article 4(3) of the Treaty on European Union by not providing the Commission with the information necessary

for it to assess the accuracy of the claims that the agglomerations Habo and Töreboda satisfy the requirements of the UWWTD;

- declare that the Kingdom of Sweden has failed to fulfil its obligations under Article 4 in conjunction with Articles 10 and 15 of the UWWTD by not ensuring that, before it is discharged, urban waste water from the agglomerations Lycksele, Malå, Mockfjärd, Pajala, Robertsfors and Tännålen is subject to secondary treatment or an equivalent treatment in accordance with the requirements of the directive;
- declare that the Kingdom of Sweden has failed to fulfil its obligations under Article 5 in conjunction with Articles 10 and 15 of the UWWTD by not ensuring that, before it is discharged, urban waste water from the agglomerations Borås, Skoghäll, Habo and Töreboda is subject to more stringent treatment than that described in Article 4 of the directive in accordance with the requirements of the same directive; and
- order the Kingdom of Sweden to pay the costs.

16. The Kingdom of Sweden concedes that the waste water treatment plants of the agglomerations Lycksele, Pajala and Malå do not satisfy the requirements of Article 4 of the UWWTD and claims that the Court should:

- dismiss the action as to the remainder; and
- order the European Commission to pay the costs.

17. The parties have submitted written observations.

IV. Legal assessment

18. The infringement proceedings concern compliance with two obligations under the UWWTD, namely secondary treatment under Article 4 (see Section A) and more stringent treatment under Article 5 (see Section B), in a total of ten Swedish agglomerations. Furthermore, the Commission claims that Sweden did not cooperate loyally with it because it did not provide certain information (see Section C).

A. Article 4 of the UWWTD – secondary treatment of waste water

19. The Commission alleges infringement of Articles 4, 10 and 15 of the UWWTD in relation to six agglomerations: Lycksele, Malå, Pajala, Mockfjärd, Robertsfors and Tännålen.

20. Under the second indent of Article 4(1) of the UWWTD, the Member States are to ensure that, in agglomerations of between 10 000 and 15 000 population equivalent (p.e.), urban waste water entering collecting systems is subject to secondary or equivalent treatment before discharge. In the present case, that obligation concerns the agglomeration Lycksele. Under the third indent of Article 4(1) of the UWWTD, the same obligation applies to discharges to fresh-water and estuaries from agglomerations of between 2 000 and 10 000 p.e. In the present case, this concerns the agglomerations Malå, Mockfjärd, Pajala, Robertsfors and Tännålen.

21. Article 4(3) of the UWWTD refers to section B of Annex I for the precise requirements for waste water treatment, point 2 of which refers, in turn, to Table 1 of Annex I. It is clear from that table that the ‘biochemical oxygen demand’ of discharges from urban waste water treatment plants subject to the provisions of Articles 4 and 5 of the directive may not exceed 25 mg/l oxygen or must be reduced by at least 70% in relation to the load of the influent of those plants and that the ‘chemical oxygen demand’ of those discharges may not exceed 125 mg/l oxygen or must be reduced by 75% in relation to the load of the influent of the plants.³

22. Although, the Commission does not mention the agglomeration Töreboda in the form of order sought by it in relation to Articles 4, 10 and 15 of the UWWTD, it does complain of excessive biochemical oxygen demand there too in connection with the form of order sought by it in relation to Articles 5, 10 and 15. Pursuant to paragraph B.2 of Annex I to the UWWTD, the relevant requirements set out in Table I of Annex 1 also apply in accordance with Article 5. Due to the thematic proximity, I will examine that claim in Section A below.

23. According to Article 10 of the UWWTD, Member States are to ensure that the urban waste water treatment plants built to comply with the requirements of Article 4 are designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions.

24. Lastly, the first indent of Article 15(1) of the UWWTD and section D of Annex I thereto regulate the control procedures. Point 3 of section D of Annex I provides for 12 samples for agglomerations of between 10 000 and 49 999 p.e., that is to say, the agglomerations Lycksele and Töreboda in the present case. For agglomerations of between 2 000 and 9 999 p.e., that is to say, the other five agglomerations, it provides for at least 12 samples during the first year of operation of the waste water treatment plant. In subsequent years, four samples are sufficient, unless one of the samples in the previous year did not meet the requirements. In such a case, 12 samples are to be taken. In all cases, samples are to be collected at regular intervals. In addition, Table 3 of Annex I specifies how many samples may deviate from the limit values, depending on the number of samples.

1. Agglomerations Lycksele, Malå and Pajala – undisputed infringements

25. The parties agree that the chemical oxygen demand of the water in the outlets of the waste water treatment plants of the agglomerations Lycksele, Malå and Pajala is higher than that permitted by Article 4(3) of the UWWTD and section B of Annex I thereto. The same is true of the biochemical oxygen demand in the agglomeration Lycksele.

26. Those infringements with regard to treatment performance under Article 4 of the UWWTD necessarily entail an infringement of Article 10, since those waste water treatment plants were clearly not designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions, that is to say, to satisfy the requirements of Article 4.

27. The Commission’s action is therefore well founded in that respect.

³ See Commission Staff Working Document ‘Evaluation of the Council Directive 91/271/EEC of 21 May 1991, concerning urban waste-water treatment’, SWD(2019) 700 final, p. 3, the entries ‘Biochemical oxygen demand’ and ‘Chemical oxygen demand’.

28. However, the Commission has not shown that the sampling of waste water in those agglomerations was incompatible with Article 15 of the UWWTD. Consequently, in that respect the action is unfounded.

2. Malå and Pajala agglomerations – biochemical oxygen demand

29. It has also been established that the biochemical oxygen demand of the water in the outlets of the waste water treatment plants of the agglomerations Malå and Pajala exceeds the values of Article 4(3) of the UWWTD and section B of Annex I thereto, that is to say, the treatment performance of the waste water treatment plant is too weak in this respect.

(a) Equivalence with locations in high mountain areas

30. Sweden invokes Article 4(2) of the UWWTD to justify this, however. According to that provision, urban waste water discharges to waters situated in high mountain regions (over 1 500 m above sea level) where it is difficult to apply an effective biological treatment due to low temperatures may be subjected to treatment less stringent than that prescribed in paragraph 1, provided that detailed studies indicate that such discharges do not adversely affect the environment.

31. Although the agglomerations Malå and Pajala are not located in a high mountain region, Sweden submits, without being contradicted on this point, that the climatic conditions in that northern region of the country make effective biological treatment of waste water difficult in a manner similar to that in the high mountain regions of other areas of the Union. Sweden concludes from this that Article 4(2) of the UWWTD is applicable to those agglomerations.

32. Contrary to the view taken by Sweden, that outcome cannot be achieved by an interpretation of Article 4(2) of the UWWTD, as that provision is unambiguously limited in all language versions to clearly delimited high mountain regions over 1 500 m above sea level. Therefore, the Swedish view in fact does nothing more than completely ignore the geographical requirement of Article 4(2). Less effective treatment has to be permitted wherever effective biological treatment of waste water is difficult due to low temperatures, provided that detailed studies indicate that such discharges do not adversely affect the environment. Sweden therefore requests a *contra legem* interpretation and thus implicitly raises a plea of partial invalidity of Article 4(2) with regard to the requirement of a location in high mountain areas.⁴

33. Although higher-ranking law militates in favour of that plea (see Section (b)), Member States cannot use such arguments to challenge the validity of secondary law in infringement proceedings (see Section (c)).

⁴ See judgments of 1 October 2020, *Entoma* (C-526/19, EU:C:2020:769, paragraph 43), and of 17 December 2020, *De Masi and Varoufakis v ECB* (C-342/19 P, EU:C:2020:1035, paragraphs 35 and 36). As regards the meaning of the wording, see also judgments of 24 November 2005 (*Deutsches Milch-Kontor*, C-136/04, EU:C:2005:716, paragraph 32), and of 19 December 2019, *Puppinck and Others v Commission* (C-418/18 P, EU:C:2019:1113, paragraph 76).

(b) Higher-ranking law

34. The limitation of Article 4(2) of the UWWTD to high mountain regions could be in conflict with higher-ranking law. Thus, according to the first sentence of Article 4(2) TEU, the Union is to respect the equality of Member States before the Treaties. Furthermore, it follows from the second indent of Article 191(3) TFEU that, in preparing its policy on the environment, the Union is to take account of the environmental conditions in the various regions of the Union.

35. Although the Court has not yet specified precisely how equality of Member States is to be interpreted, it can be assumed that the case-law on the principle of equal treatment also applies in favour of Member States in this respect. Under that principle, comparable situations are not to be treated differently and different situations are not to be treated alike unless such treatment is objectively justified.⁵

36. Restricting the exception under Article 4(2) of the UWWTD to the high-mountain locations expressly referred to could result in unequal treatment of Member States which is incompatible with those principles. Locations in certain Member States would be exempt from requirements, while those in others would not, even though the environmental conditions to be taken into account pose similar difficulties in meeting those requirements in both cases and a derogation requires the absence of adverse environmental effects.

37. In this respect, it can be left open to what extent individuals, companies or NGOs subject to EU law can rely on equality of States or the principle of equal treatment in such cases.

(c) Objections raised by Member States

38. In any event, outside the period prescribed for bringing an action for annulment, a Member State cannot contest the lawfulness of an act adopted by the EU legislature which has become final in its regard. It is settled case-law that it cannot, therefore, properly plead the unlawfulness of a directive as a defence in an action for a declaration that it has failed to fulfil its obligations arising out of its infringement of that directive.⁶ For the same reasons, moreover, the Commission is also prevented from pursuing procedure for failure to fulfil obligations arising out of an infringement of primary law if the national measures do not comply with contested secondary law.⁷ Nor can other parties rely incidentally on the invalidity of a measure of EU law if they would have had an undoubted right to seek its annulment by way of a direct action.⁸

39. The Court bases that case-law on the system of legal protection of the Treaties and, in particular, on the function of the time limit for bringing an action – to create legal certainty. However, the restriction of submissions of Member States and of the Commission is also justified by the fact that they play an important role in the shaping of EU law and have a privileged position with regard to the review of EU law in accordance with the second paragraph of Article 263 TFEU.

⁵ Judgments of 19 October 1977, *Ruckdeschel and Others* (117/76 and 16/77, EU:C:1977:160, paragraph 7); of 3 May 2007, *Advocaten voor de Wereld* (C-303/05, EU:C:2007:261, paragraph 56); of 12 May 2011, *Luxembourg v Parliament and Council* (C-176/09, EU:C:2011:290, paragraph 31); and of 8 December 2020, *Poland v Parliament and Council* (C-626/18, EU:C:2020:1000, paragraph 93).

⁶ Judgments of 27 October 1992, *Commission v Germany* (C-74/91, EU:C:1992:409, paragraph 10); of 6 July 2006, *Commission v Portugal* (C-53/05, EU:C:2006:448, paragraph 30); and of 29 July 2010, *Commission v Austria* (C-189/09, not published, EU:C:2010:455, paragraph 15).

⁷ Judgment of 5 October 2004, *Commission v Greece* (C-475/01, EU:C:2004:585, paragraph 17 et seq.).

⁸ Judgments of 9 March 1994, *TWD Textilwerke Deggendorf* (C-188/92, EU:C:1994:90, paragraph 17), and of 25 July 2018, *Georgsmarienhütte and Others* (C-135/16, EU:C:2018:582, paragraph 17).

40. They are therefore responsible for preventing impairments of the principle of equality of States as early as in the legislative process or to challenge them before the Court immediately afterwards. If this does not happen, it is contrary to the EU's system of legal protection for the Court to correct the Member States' obligations under EU law in their favour subsequently in the context of procedures for failure to fulfil obligations by means of an interpretation that goes beyond the wording.

41. It is true that Sweden was not involved in the legislative process leading to the adoption of the UWWTD, but acceded to the EU later. However, in acceding, Sweden expressly agreed to the UWWTD, including Article 4(2), and did not take any steps towards adapting the provision to the environmental conditions in the Far North.⁹ The fact that such adaptations were possible is shown, for example, by the territorial exceptions to the protection of the beaver (*Castor fiber*) and the wolf (*Canis lupus*) under the Habitats Directive.¹⁰

42. Moreover, even though there have not been any such adjustments, Sweden, as a member of the Council, can still take the initiative to bring them about. In addition to informal contact with the Commission,¹¹ Sweden can, in particular, work towards the Council requesting the Commission to undertake desirable studies and submit appropriate proposals in accordance with Article 241 TFEU.

43. There is clearly greater scope for assessing the environmental impact of extending the exemption of Article 4(2) of the UWWTD to the Far North in such a framework than in judicial proceedings. The regions concerned could thus also be precisely defined. This is because the Swedish reading of the provision leads to great difficulties in the delimitation of the areas covered. Which northern locations correspond to regions above 1 500 m?

44. Therefore, the restrictive effect of the time limit for bringing an action is not only necessary for reasons of legal certainty, but is also expedient. Consequently, Sweden's invoking of Article 4(2) of the UWWTD should be rejected.

(d) Interim conclusion

45. Therefore, Sweden has also failed to fulfil its obligations under Articles 4 and 10 of the UWWTD with regard to the biochemical oxygen demand of the water in the outlet of the waste water treatment plants of the agglomerations Malå and Pajala.

⁹ Even when the UWWTD was applied to the States of the European Economic Area, in particular Norway and Iceland, none of the parties concerned apparently saw any reason to extend the exception of Article 4(2) of the UWWTD to agglomerations in the Far North. See Article 74 and point 13 of Annex XX to the Agreement on the European Economic Area (OJ 1994 L 1, p. 496).

¹⁰ Annex I, Section VIII, E.4(d)(1) of the Act concerning the conditions of accession of the Kingdom of Norway, the Republic of Austria, the Republic of Finland and the Kingdom of Sweden and the adjustments to the Treaties on which the European Union is founded (OJ 1994 C 241, p. 175).

¹¹ See Commission Staff Working Document 'Evaluation of the Council Directive 91/271/EEC of 21 May 1991, concerning urban waste-water treatment' (SWD[2019] 700, p. 167).

3. *Mockfjärd agglomeration – irregular sampling*

46. For the Mockfjärd agglomeration, the results of the samples comply with Article 4 of the UWWTD and Annex I thereto. It is true that between 11 January and 27 December 2018, three out of 19 samples had excessive biochemical oxygen demand and one out of 17 samples had excessive chemical oxygen demand.¹² However, according to Table 3 of Annex I, up to three deviations are permitted for 17 to 28 samples per year.

47. Be that as it may, no samples were taken at all between 16 May and 18 October 2018. The Commission derives from this an infringement of Articles 4, 10 and 15 of the UWWTD.

48. That gap in sampling is incompatible with Article 15 and point 3 of section D of Annex I of the UWWTD, because, according thereto, samples must be collected at regular intervals. However, the intervals are not regular if all samples are collected during a period of seven months, and there is not a single sample for the other five months. This also applies if the obligation of regularity is limited to the minimum number of four mandatory samples that had to be taken in the case of the Mockfjärd agglomeration in 2018.

49. The Commission takes the view that this necessarily results in an infringement of the treatment standards of Articles 4 and 10 of the UWWTD because, without regular sampling over a whole year, it does not have the information required to determine compliance with those requirements.

50. However, that stance is not convincing. I have already explained that sampling is not a prerequisite for compliance with Articles 4 and 10 of the UWWTD, but a means of evidence to prove compliance with these provisions or an infringement.¹³ This also explains why, in one case, the Court allowed a single sample to suffice for the purpose of acknowledging the effectiveness of the waste water treatment plant in question.¹⁴

51. However, the sampling programme pursuant to Article 15 of the UWWTD and Annex I thereto has significant indicative value for the assessment of whether a specific waste water treatment plant complies with the requirements of Articles 4 and 10 of the UWWTD. For example, if samples from a plant regularly exceed limit values during certain seasons due to external conditions, such as the weather or the hosting of many tourists, it could be concluded from this that the treatment performance does not comply with the secondary treatment requirements under Articles 4 and 10 of the directive.

52. The fact that individual samples satisfy the requirements during other periods would not be sufficient to rebut that indication. The reason for this is that, for compliance with Article 4 of the UWWTD, it is not sufficient that a plant ensures sufficient treatment at certain times or during certain periods. Rather, subject to certain very rare exceptional situations, the plant must ensure sufficient treatment of the waste water *at all times*. It is precisely for that reason that Article 10 of the UWWTD requires that the plants are able to cope with seasonal variations of the load and normal local climatic conditions.

¹² Annex 8 to the application, p. 1133.

¹³ My Opinion in the *Commission v Portugal* case (C-557/14, EU:C:2016:119, points 29 to 31). See also judgment of 14 September 2017, *Commission v Greece* (C-320/15, EU:C:2017:678, point 34), and Opinion of Advocate General Bobek in that case (*Commission v Greece*, C-320/15, EU:C:2017:246, point 57).

¹⁴ Judgment of 28 January 2016, *Commission v Portugal* (C-398/14, EU:C:2016:61, paragraph 39).

53. Accordingly, the Court has held that Article 4 of the UWWTD is infringed if the waste water treatment plants and sewerage systems in question discharge untreated waste water from storm water overflows into water bodies too frequently.¹⁵ For that issue, it is irrelevant whether samples are available that prove sufficient treatment performance for other points in time.

54. From that perspective, the gap in sampling serves as an indication that the waste water treatment plant of the Mockfjärd agglomeration did not satisfy the requirements of Articles 4 and 10 of the UWWTD between May and October 2018. A further indication of an infringement of this requirement comes by way of the fact that Sweden attributes the gap in sampling to conversion work carried out at the waste water treatment plant. It would not be surprising if the treatment performance of the plant had been reduced as a result.

55. However, the Commission does not seek a finding that the performance of the waste water treatment plant of the Mockfjärd agglomeration fell short of requirements between May and October 2018. Although such a form of order would be conceivable,¹⁶ it would be inadmissible in the present case, as that period was not the subject of the letter of formal notice or the reasoned opinion.

56. Nor is the form of order sought by the Commission directed at establishing that a practice is, to some degree, of a consistent and general nature or a general and persistent failure to fulfil obligations.¹⁷ Although the form of order sought could be interpreted in such a way, the Commission's argument is clearly not aimed at demonstrating an infringement over a longer period of time. This is shown in particular by the fact that the application only discusses the data from 2018, without addressing data from previous or subsequent periods.

57. Rather, the form of order sought requests a declaration that the waste water treatment plant of the Mockfjärd agglomeration does not, in principle, comply with the requirements of Articles 4 and 10 of the UWWTD and Annex I thereto. The infringement of Article 15 has no independent significance in that connection, but serves solely as evidence of the infringement.

58. This is because the question of whether a Member State has failed to fulfil its obligations in such a way must be determined by reference to the situation prevailing in the Member State at the end of the period laid down in the reasoned opinion.¹⁸ Moreover, an action for failure to fulfil obligations under the second paragraph of Article 258 TFEU may be brought before the Court only if the Member State concerned has failed to comply with the reasoned opinion within the period laid down by the Commission for that purpose.¹⁹

59. It is therefore the state of affairs on 8 January 2019 that is relevant in the present case.

60. For the assessment of the performance of the waste water treatment plant at that time, conclusions regarding performance during the gap in sampling serve only as circumstantial evidence, which is rebutted by other circumstantial evidence.

¹⁵ Judgments of 18 October 2012, *Commission v United Kingdom* (C-301/10, EU:C:2012:633, paragraphs 85, 86 and 93), and of 4 May 2017, *Commission v United Kingdom* (C-502/15, not published, EU:C:2017:334, paragraphs 44 to 46).

¹⁶ See, with regard to air quality, judgment of 10 May 2011, *Commission v Sweden* (C-479/10, not published, EU:C:2011:287).

¹⁷ See, in this regard, my Opinion in the *Commission v Bulgaria* case (C-488/15, EU:C:2016:862, points 39 et seq. and the case-law cited).

¹⁸ Judgments of 16 December 1997, *Commission v Italy* (C-316/96, EU:C:1997:614, paragraph 14); of 6 December 2007, *Commission v Germany* (C-456/05, EU:C:2007:755); and of 29 July 2019, *Commission v Austria* (Civil engineers, patent agents and veterinary surgeons) (C-209/18, EU:C:2019:632, paragraph 48).

¹⁹ Judgments of 31 March 1992, *Commission v Italy* (C-362/90, EU:C:1992:158, paragraph 9); of 27 October 2005, *Commission v Italy* (C-525/03, EU:C:2005:648, paragraph 13); and of 18 May 2006, *Commission v Spain* (C-221/04, EU:C:2006:329, paragraphs 22 and 23).

61. The reason for this is that, on 8 January 2019, eleven samples relating to biochemical oxygen demand were available for the period running from the end of the gap in sampling, that is to say, over almost three months, all of which satisfied the requirements of Articles 4 and 10 of the UWWTD.

62. Eight samples relating to chemical oxygen demand are available after the gap, one of which shows (significantly) excessive demand, but the values for chemical oxygen demand consistently complied with the requirements before the gap in sampling. With a total of 17 samples, however, even three deviations would have been permissible according to Table 3 of Annex I.

63. In the absence of any further indications of insufficient treatment performance, those results are sufficient to remove doubts about the treatment performance of the waste water treatment plant of the Mockfjärd agglomeration upon expiry of the period specified in the reasoned opinion. Rather, it can be assumed that, at that time, the plant satisfied the requirements of Articles 4 and 15 of the UWWTD – possibly also on account of the conversion work.²⁰

64. The action should therefore be dismissed as regards the Mockfjärd agglomeration.

4. Robertsfors agglomeration – biochemical oxygen demand

65. The situation regarding the Robertsfors agglomeration appears to be similar to that regarding the Mockfjärd agglomeration. In 2018, although initially 11 out of 24 samples showed excessive biochemical oxygen demand, all six samples taken since 23 October 2018 showed a reduction of at least 70%, which satisfied the requirements.²¹ However, the Commission also states that the situation in 2018 is significantly worse than that in 2016. Only six out of 24 samples showed excessive demand that year.²²

66. In light of all the foregoing, however, that indication of a deterioration in the performance of the plant is not sufficient to conclude that there was an infringement at the relevant time. The reason for this is that Sweden has already explained, in its reply to the reasoned opinion, that there were operational problems at that waste water treatment plant in 2018 and that measures were taken to remedy them.²³ The values of the last six samples therefore serve as indications that the treatment performance of the plant was sufficient as at 8 January 2019, on account of those measures.

67. The action should therefore be dismissed as regards the Robertsfors agglomeration.

5. Tännålen agglomeration – biochemical oxygen demand

68. For the Tännålen agglomeration, six out of 35 samples in 2018 showed excessive biochemical oxygen demand, although only four exceedances would have been permitted.

²⁰ See the letter of Dala Vatten och Avfall AB of 21 December 2018, Annex 10 to the application, p. 1175 and point 54 above.

²¹ Annex 10 to the application, p. 1131.

²² Annex 7 to the application, p. 937.

²³ See Annex 10 to the application, p. 1085, 1086 and 1173.

69. All insufficient results are from the period from late February to mid-April. The 21 subsequent samples until the end of December, on the other hand, show a very low demand.²⁴ It could be inferred from this that the performance of the plant has improved.

70. However, it is a source of concern that the samples for 2016 show a similar pattern, namely four samples with excessive demand from January to April and then samples with very low demand. This is confirmed by a letter from the competent municipal administration dated 20 December 2018, cited by the Commission. This shows that the upgrading measures taken in 2018 were not sufficient to satisfy the requirements of the UWWTD during the peak load period (*'högbelastningssäsong'*).²⁵

71. However, with its defence, Sweden submits additional sample data for the period running up to May 2019 which does not show excessive biochemical oxygen demand.

72. It is true that, against this, the Commission contends that that data originates (almost entirely) from the period after the expiry of the time limit for the reasoned opinion on 8 January 2019 and is therefore irrelevant for the assessment of the complaint. In doing so, however, the Commission fails to recognise that data collected after the relevant date also allow conclusions to be drawn about the performance of the waste water treatment plant at that time.²⁶ This is because, if there had once again been exceedances of the limit values during the peak load period in the first months of the year, it would have to be concluded that the plant was still insufficient. Without such exceedances, however, it can be assumed that the plant satisfied the requirements at the relevant time, in contrast to previous years – presumably due to the upgrading measures carried out in the intervening period.

73. Consequently, the action should be dismissed as regards the Tännålen agglomeration.

6. Töreboda agglomeration – biochemical oxygen demand

74. Lastly, the parties are in dispute as to whether the waste water treatment plant of the Töreboda agglomeration sufficiently reduces the biochemical oxygen demand of the discharged waste water.

75. In its response to the reasoned opinion, Sweden notified 50 samples for the period between 8 November 2017 and 6 November 2018.²⁷ Although Sweden submits additional data for November and December 2018 in its rejoinder,²⁸ no reasons are given for that delay, contrary to Article 128(1) of the Rules of Procedure of the Court of Justice. That evidence is therefore inadmissible.²⁹

76. The parties are in dispute as to whether nine deviations during the first half of the year demonstrate that the waste water treatment plant reduces the biochemical oxygen demand insufficiently. However, that issue is ultimately irrelevant.

²⁴ Annex 10 to the application, p. 1115.

²⁵ Annex 10 to the application, p. 1167 and 1168.

²⁶ See judgment of 10 March 2016, *Commission v Spain* (C-38/15, not published, EU:C:2016:156, paragraph 45).

²⁷ Annex 10 to the application, p. 1150.

²⁸ Annex 4 to the rejoinder.

²⁹ Judgment of 10 November 2016, *Commission v Greece* (C-504/14, EU:C:2016:847, paragraph 86), and, to that effect, judgment of 14 April 2005, *Gaki-Kakouri v Court of Justice* (C-243/04 P, not published, EU:C:2005:238, paragraph 33).

77. According to the response to the reasoned opinion, the section that carries out the biological treatment stage in the waste water treatment plant underwent conversion work in the first half of 2018.³⁰ As this stage constitutes the core of the secondary treatment,³¹ that conversion work explains why the biochemical oxygen demand during the second half of the year is much lower than during the first half of the year and the results of the later samples clearly exceed the requirements of the directive.

78. The data for the second half of the year which was submitted in due time therefore allows the conclusion that the plant complies with Articles 4 and 10 of the UWWTD at the relevant time, 8 January 2019. In this respect, the action must therefore be dismissed as regards the Töreboda agglomeration.

79. If the Court nevertheless wishes to address the data from the first half of 2018, it should be recalled that, according to Article 4 and Table 1 of Annex I of the UWWTD, the biochemical oxygen demand may not exceed 25 mg/l oxygen or must be reduced by at least 70% in relation to the load of the influent of the waste water treatment plant. The heading for the table states that the values for concentration or for the percentage of reduction are to apply.

80. Although the Commission emphasises that 18 of the samples showed an oxygen demand of more than 25 mg/l, in nine of those samples the oxygen demand was reduced by at least 70% in relation to the load of the influent. They therefore complied with the requirements of Table 1 of Annex I to the UWWTD.

81. The percentage of reduction in demand was not determined for the remaining nine samples, however. They therefore show deviations from Table 1 of Annex I to the UWWTD. However, according to Table 3, a maximum of five deviations are permitted for 41 to 53 samples taken in any year.

82. However, Sweden takes the view that only the 23 samples for which the percentage of reduction in oxygen demand was determined should be taken into account. There is only one deviation among those samples, and even three deviations would be permissible for that number of samples.

83. Since according to the heading for Table 2 of Annex I to the UWWTD, the values for concentration *or* for the percentage of reduction are to apply, the Swedish position could be understood to mean that it has opted for the second assessment standard. However, if the samples are regarded as evidence of compliance with Article 4, nine documented deviations from the required levels cannot be ignored. They therefore serve as indications of an infringement during the first half of 2018.

84. Moreover, the Commission rightly criticises the fact that that data was not collected on a sufficiently regular basis, because the data submitted in the present case in an admissible manner³² do not cover, in particular, November and December 2018.

³⁰ Annex 10 to the application, p. 991.

³¹ See the definition of the term 'secondary treatment' in the working document (p. 6) cited in footnote 3.

³² Regarding the data that would close that gap but was submitted late, see point 75.

85. However, those considerations do not call into question the assessment of the performance of the waste water treatment plant as at 8 January 2019, because – as already stated in points 77 and 78 – this is demonstrated by the measurement results for the second half of 2018 that were submitted in good time, and the poorer results for the first half of the year can be attributed to the conversion work.

86. With regard to the Töreboda agglomeration, it therefore cannot be established in the present case that the waste water treatment plant insufficiently reduced the biochemical oxygen demand at the relevant time, that is to say, 8 January 2019.

7. *Interim conclusion*

87. Sweden has therefore failed to fulfil its obligations under Article 4 in conjunction with Article 10 of the UWWTD, because it did not ensure that, before it is discharged, urban waste water from the agglomerations Lycksele, Malå and Pajala is subject to secondary treatment or an equivalent treatment.

88. This plea in law should be rejected as to the remainder.

B. *Article 5 of the UWWTD – nitrogen reduction*

89. With regard to four agglomerations – Borås, Skoghall, Habo and Töreboda – the Commission complains of a breach of the obligation to carry out more stringent treatment under Articles 5, 10 and 15 of the UWWTD.

90. According to Article 5(2) of the UWWTD, the competent authorities must take the necessary measures to ensure that urban waste water entering collecting systems is before discharge into sensitive areas to be subject to more stringent treatment than that described in Article 4 of the directive, by 31 December 1998 at the latest, for all discharges from agglomerations of more than 10 000 p.e.

91. The rules governing the more stringent treatment of discharges into such sensitive areas follow from a chain of references: Article 5(3) of the UWWTD refers to section B of Annex I Point 3 of that section refers, in turn, to the requirements in Table 2 of that annex.

92. Sweden has identified the coastal waters between the Norwegian border and the municipality of Norrtälje as sensitive to eutrophication or to the risk of eutrophication as a result of nitrogen discharges. The agglomerations concerned indirectly discharge their waste water into those bodies of water. They must therefore reduce nitrogen levels in their waste water treatment.

93. For nitrogen, paragraph D.4(c) and Table 2 of Annex I to the UWWTD require either a reduction enabling compliance with an annual mean of 15 mg/l for agglomerations of 10 000 to 100 000 p.e. or 10 mg/l for larger agglomerations, or a minimum percentage of reduction of 70% to 80%.

94. Moreover, Article 10 of the UWWTD obliges Member States to ensure that the urban waste water treatment plants built to comply with the requirements of Article 5 also are designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions.

1. Borås agglomeration

95. The waste water of the Borås agglomeration was initially treated by the Gässlösa waste water treatment plant, but it was replaced by the Sobacken waste water treatment plant as of 28 May 2018. The latter has a capacity of more than 100 000 p.e. and must therefore not exceed a value of 10 mg/l nitrogen or must achieve a minimum percentage of reduction of 70% to 80%.

96. As a result of the changeover, it was not possible for Sweden to already report an annual mean for that plant in its response to the reasoned opinion. Instead, Sweden reported an annual mean of 18 mg/l nitrogen for both plants, that is to say, an exceedance.³³

97. However, Sweden submitted with its defence additional sample data for the period running up to 5 September 2019 that demonstrates an annual mean of 9 mg/l and an average nitrogen reduction level of 70% for the Sobacken plant.³⁴

98. According to the considerations in connection with the data of the Tännaldalen agglomeration,³⁵ that data allows the conclusion that the Sobacken waste water treatment plant complied with the requirements of Articles 5 and 10 of the UWWTD at the relevant time, that is to say, on 8 January 2019.

99. Moreover, the consideration that it can take a certain amount of time for a newly constructed waste water treatment plant to operate optimally also militates in favour of that conclusion. Accordingly, initially the data submitted shows highly excessive values but then improves significantly and remains relatively stable.

100. Consequently, the action must be dismissed as regards the Borås agglomeration.

2. Skoghall agglomeration

101. The Skoghall agglomeration has two waste water treatment plants, namely Sättersviken, with 5 457 p.e., and Hammarö, with 15 000 p.e. The parties agree that both plants must each comply with the limit values for plants of agglomerations of between 10 000 and 100 000 p.e., that is to say, a maximum value of 15 mg/l nitrogen or a nitrogen reduction level of 70% to 80%. That view is correct, as the requirements applicable to large agglomerations could be circumvented through the distribution of waste water across several small waste water treatment plants.

102. In its response to the reasoned opinion, however, Sweden indicated an annual mean of 17 mg/l for the Sättersviken plant for the period from 9 November 2017 to 6 November 2018.³⁶ The Commission therefore assumes an infringement of Articles 5 and 10 of the UWWTD.

103. By its defence, Sweden submits that that waste water treatment plant experienced operational problems which have been remedied. Furthermore, the Member State has submitted additional sample data that demonstrates an annual mean of 12 mg/l nitrogen and an average nitrogen reduction level of 73% for the period from 6 April 2018 to 15 May 2019.³⁷

³³ Annex 10 to the application, p. 1153.

³⁴ Annex B.15.

³⁵ See above, point 72.

³⁶ Annex 10 to the application, p. 1145.

³⁷ Annex B.16.

104. That submission, in combination with the new data, allows the conclusion, in line with the considerations in connection with the data of the Tännådalens agglomeration,³⁸ that the Sättersviken waste water treatment plant of the Skoghall agglomeration satisfied the requirements of Articles 5 and 10 of the UWWTD at the relevant time, that is to say, on 8 January 2019.

105. The action is therefore to be dismissed in this respect.

3. *Habo agglomeration*

106. The waste water treatment plant of the Habo agglomeration has a capacity of 17 000 p.e. It has no special equipment for reducing the amount of nitrogen in the waste water and therefore only removes approximately 30%, resulting in an annual mean of 40 mg/l. However, Sweden claims that the nitrogen content discharged into rivers and lakes is reduced by 87% through natural processes. That reduction results from a scientifically recognised model, submits Sweden. Together with the reduction achieved by the waste water treatment plant, 91% of the nitrogen originally contained in the waste water is therefore removed before the water reaches the sensitive coastal waters.³⁹

107. Due to its capacity, that plant must achieve the limit value of 15 mg/l nitrogen or a nitrogen reduction level of 70% to 80%. The Court has previously recognised that a natural reduction is taken into account in the assessment of the reduction.⁴⁰ However, the Commission requires that the effectiveness of such a reduction is proven by current measurement data. That objection is understandable, because only on the basis of current measurement data can the Commission verify the model.

108. Sweden's defence here is not entirely free of contradictions. On the one hand, it submits that it is not feasible to continuously measure the nitrogen input and output of all nitrogen-polluted waters in Sweden.⁴¹ On the other hand, it states that more recent measurements were nevertheless taken to confirm and calibrate the model.⁴² That data is freely accessible on the internet.⁴³

109. The Commission counters that submission by stating that Sweden has not provided the required data. That criticism cannot be rejected from the outset, since, according to Article 124(1)(d) of the Rules of Procedure, the defence must state the evidence produced or offered. Normally, therefore, data in support of the legal argument put forward, that is to say, evidence, must be submitted to the Court together with the written pleading.

110. However, the Commission did not specify, either in the court proceedings or in the reasoned opinion, precisely which measurement data it needs in order to be able to verify the model of natural reduction of nitrogen. Sweden was therefore unable to provide precisely that data. The

³⁸ See above, point 72.

³⁹ Annex 10 to the application, p. 1139 and 1140.

⁴⁰ Judgment of 6 October 2009, *Commission v Sweden* (C-438/07, EU:C:2009:613, paragraphs 101 and 104).

⁴¹ Paragraph 21 of the defence.

⁴² Paragraph 29 of the defence.

⁴³ Sweden refers to the website miljodata.slu.se/mvm/.

reference to the data available on the internet must therefore be regarded, rather, as an offer of evidence on the basis of which the Commission could have criticised the use of the model more precisely.

111. To that end, the Commission should have analysed the content of the data available on the internet. If the examination of the data proved to be very time-consuming, it should have requested, if necessary, an extension of the time limit or a stay of proceedings.

112. Nothing of this kind was done.

113. The Commission's objection that Sweden did not submit the necessary measurement data for verification purposes must therefore be rejected. The action must therefore also be dismissed as regards the Habo agglomeration.

4. Töreboda agglomeration

114. Due to its capacity of 35 500 p.e., the waste water treatment plant of the Töreboda agglomeration must likewise achieve the limit value of 15 mg/l nitrogen or a nitrogen reduction level of 70% to 80%.

115. According to the response to the reasoned opinion, it does not have any special equipment for reducing the amount of nitrogen in waste water and therefore only removes approximately 43%. However, Sweden claimed a natural reduction of a further 50%, with the result that the nitrogen in the waste water is reduced by 71% in total before it reaches the sensitive coastal waters.⁴⁴ According to the considerations made just above in relation to the Habo agglomeration, those values are sufficient to demonstrate a sufficient reduction of nitrogen.

116. Sweden also submits with its defence the results of nitrogen reduction samples collected between 4 January and 30 December 2019. According to those results, even without taking a natural reduction into account, the plant achieved an average value of 14 mg/l and an average reduction of 73% in 2019 – presumably due to the conversion work carried out in the first half of 2018.⁴⁵ Those values prove *a fortiori* that the waste water treatment plant of the Töreboda agglomeration sufficiently reduced the nitrogen load of the waste water at the relevant time.

117. The allegation that Sweden has infringed Articles 5, 10 and 15 of the UWWTD with regard to the Töreboda agglomeration is therefore unfounded.

5. Interim conclusion

118. The second plea in law must therefore be rejected in its entirety.

C. Article 4(3) TEU – loyal cooperation

119. Lastly, the Commission submits that Sweden has breached its duty of loyal cooperation under Article 4(3) TEU by failing to provide all the necessary data in relation to the agglomerations Habo and Töreboda. According to the Commission, Sweden has not provided it

⁴⁴ Annex 10 to the application, p. 1149 and 1150.

⁴⁵ See above, point 77.

with the information necessary for it to assess the accuracy of Sweden's claims about the extent of the natural reduction and conformity with the directive's requirement of nitrogen removal on that basis.

120. It is true that in proceedings under Article 258 TFEU for failure to fulfil obligations it is for the Commission to prove the allegation that the obligation has not been fulfilled. It is therefore the Commission's responsibility to place before the Court the information needed to enable the Court to establish that the obligation has not been fulfilled, and in so doing the Commission may not rely on any presumptions. The Member States are nevertheless required, under Article 4(3) TEU, to facilitate the achievement of the Commission's tasks, which consist inter alia, pursuant to Article 17(1) TEU, in ensuring that the provisions of the Treaty and the measures taken by the institutions pursuant thereto are applied. In particular, account should be taken of the fact that, where it is a question of checking that the national provisions intended to ensure effective implementation of a directive are applied correctly in practice, the Commission, which does not have investigative powers of its own in the matter, is largely reliant on the information provided by any complainants and by the Member State concerned. It follows in particular that, where the Commission has adduced sufficient evidence of certain matters in the territory of the defendant Member State, it is incumbent on the latter to challenge in substance and in detail the information produced and the consequences flowing therefrom.⁴⁶

121. In the reasoned opinion, the Commission stated that Sweden had not complied with that obligation because it had not provided more recent measurement results on the reduction of nitrogen between the discharge of water from the waste water treatment plants and the sensitive coastal waters.⁴⁷ As already stated,⁴⁸ that claim is understandable, since a calculation based on a model can be verified only on the basis of actual measurement values.

122. Sweden responded to this with, in particular, a statement from the Sveriges meteorologiska och hydrologiska institut (Swedish Meteorological and Hydrological Institute; 'the SMHI').⁴⁹ The SMHI explicitly states that although more recent measurement values for the nitrogen content in the waters were used, they were not available on the SMHI website because they were taken from the database of another institution.⁵⁰

123. By virtue of that incomplete information, Sweden has violated the principle of loyal cooperation and obstructed the present proceedings. Although the Commission had complained about the lack of data, the SMHI neither provided such data nor specified the source of the more recent data or its location on the internet. That omission is all the more serious given that – as the defence shows – it would have been easy to provide the information concerned. At the same time, it would have been good scientific practice to cite the publicly accessible source of the data used. On the basis of that information, the Commission would have been much better placed to prepare the present action and may have even abandoned the complaints regarding the agglomerations Habo and Töreboda.

⁴⁶ Judgments of 26 April 2005, *Commission v Ireland* (C-494/01, EU:C:2005:250, paragraphs 41 to 44), and of 18 October 2012, *Commission v United Kingdom* (C-301/10, EU:C:2012:633, paragraphs 70 to 72).

⁴⁷ See, regarding the Habo agglomeration, paragraph 95, and, regarding the Töreboda agglomeration, paragraph 122 (Annex 9 to the application, pp. 1149, 1152 and 1153).

⁴⁸ See above, point 107.

⁴⁹ Annex 10 to the application, p. 1349 et seq.

⁵⁰ Annex 10 to the application, p. 1350.

124. It is true that, since that information would have been so meaningful, it would also have been in keeping with the principle of loyal cooperation if the Commission had asked Sweden once again, at least informally, to transmit the measurements in question. However, it could not have known that access to them would have been so unproblematic. Therefore, the absence of a further request from the Commission does not preclude a finding that Sweden has breached the principle of loyal cooperation.

125. Sweden has therefore failed to fulfil its obligations under Article 4(3) TEU, since it did not, during the pre-litigation procedure, provide the Commission with the information necessary for it to assess whether the waste water treatment plants of the agglomerations Habo and Töreboda satisfy the requirements of the UW/WT D.

V. Costs

126. Pursuant to Article 138(3) of the Rules of Procedure, the parties are to bear their own costs where – as is the case here – each party succeeds on some and fails on other heads.

VI. Conclusion

127. I therefore propose that the Court should:

- (1) Declare that the Kingdom of Sweden has failed to fulfil its obligations under Article 4 in conjunction with Article 10 of Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment, because it did not ensure that, before it is discharged, urban waste water from the agglomerations Lycksele, Malå and Pajala is subject to secondary treatment or an equivalent treatment.
- (2) Declare that the Kingdom of Sweden has failed to fulfil its obligations under Article 4(3) TEU, since it did not, during the pre-litigation procedure, provide the European Commission with the information necessary for it to assess whether the waste water treatment plants of the agglomerations Habo and Töreboda satisfy the requirements of Directive 91/271.
- (3) Dismiss the action as to the remainder.
- (4) Order the European Commission and the Kingdom of Sweden to bear their own costs.