

ESTONIAN COMPETITION AUTHORITY

Mr Ian Plenderleith
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Your ref: 02.03.2011 No 6/1073392-3
Our ref: 01.04.2011 No 9.1-2/10-0448-044

Response to the inquiry by AS Tallinna Vesi regarding the calculation of WACC

On 2 March 2011 the Competition Authority (hereinafter the CA) registered a letter No 6/1073392-3 from AS Tallinna Vesi (hereinafter ASTV). In the following the CA shall provide answers to the questions submitted in ASTV's letter.

ASTV's question: What does the CA believe are the advantages of compensating for inflation through the WACC rather than by indexing the asset base, as Ofwat does in its regulation of privatised utilities?

CA's response: When responding to this question and the following questions the CA shall proceed from the Public Water Supply and Sewerage Act (hereinafter the PWSSA). Irrespective whether the company is privatised or not, when approving the price of water service the CA shall proceed from PWSSA and the principle of equal treatment.

Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
- 6) develop the public water supply and sewerage system, incl storm water sewerage, in accordance with the public water supply and sewerage system development plan in a specific development area where more than 50 per cent of residential buildings for which building permits were issued before 22 March 1999 are connected to the public water supply and sewerage system.

Pursuant to §14 (9) of the PWSSA the CA prepared a methodology "Recommended principles for calculating the price of water service" (hereinafter the Methodology) and published it on its website.

Pursuant to clauses 6.1 and 6.2 of the Methodology the justified profitability is calculated on the basis of applying a justified rate of return on the regulatory asset base.

Pursuant to clause 6.3 of the Methodology the justified rate of return equals with the rate of weighted average cost of capital or WACC.

The CA has prepared and published on its website a document "Juhend kaalutud keskmise kapitali hinna WACC leidmiseks (2011)" ("Instruction for calculating the WACC (2011)", which in detail explains the bases for calculating WACC. The WACC reflected in the abovementioned document "Juhend kaalutud keskmise kapitali hinna WACC leidmiseks (2011)" ("Instruction for calculating the WACC (2011)" is nominal, i.e. it includes among other things also inflation.

ASTV's question: I would like some clarity on whether i) inflation risk is transferred toward consumers? or ii) whether the inflation risk would remain with the company.

CA's response: Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
- 6) develop the public water supply and sewerage system, incl storm water sewerage, in accordance with the public water supply and sewerage system development plan in a specific development area where more than 50 per cent of residential buildings for which building permits were issued before 22 March 1999 are connected to the public water supply and sewerage system.

Pursuant to §14¹ (1) of the PWSSA the water undertaking establishes the price of water service and shall disclose these at least 30 days before the date as of which such price applies.

§14² (1) of the PWSSA stipulates that in case the operating area of the water undertaking is located on the wastewater collection area, the pollution load of which is 2000 population equivalent or more, then the water undertaking prepares the proposal for the price for water service (price application) and submits it before establishing the price for water service with the price list of the services related to the main services and other documentation serving as the basis for the price application for the approval of the Competition Authority. The Competition Authority checks that the priced applied for includes only the justified costs and justified profitability provided in § 14 (2) of the PWSSA.

Pursuant to §14² (6) of the PWSSA water undertaking is obliged to monitor the circumstances not dependent on its activity, which impact the price for water service, and inform the Competition Authority at the latest within 30 days as of the occurrence of the circumstances, which may impact the price for the service more than by 5%.

§14² (6) of the PWSSA obliges water undertakings to constantly monitor the compliance of the price of water services with §14 (2) of the PWSSA.

Proceeding from the abovementioned, if the company is of the position that with the impact of inflation the valid price of water service is not cost-based anymore, nor does not comply with the terms stipulated in §14 (2) of the PWSSA, then it is entitled to submit the price application to the CA.

ASTV's question: Could the Competition Authority provide more details on any additional analysis and calculations of the various investment circumstances (risk level, phase of economic cycle, money supply, inflation etc) it may have undertaken?

CA's response: In the approval of the price of water service the CA proceeds from the PWSSA. Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
- 6) develop the public water supply and sewerage system, incl storm water sewerage, in accordance with the public water supply and sewerage system development plan in a specific development

area where more than 50 per cent of residential buildings for which building permits were issued before 22 March 1999 are connected to the public water supply and sewerage system.

Pursuant to §14¹ (1) of the PWSSA the water undertaking establishes the price of water service and shall disclose these at least 30 days before the date as of which such price applies.

§14² (1) of the PWSSA stipulates that in case the operating area of the water undertaking is located on the wastewater collection area, the pollution load of which is 2000 population equivalent or more, then the water undertaking prepares the proposal for the price for water service (price application) and submits it before establishing the price for water service with the price list of the services related to the main services and other documentation serving as the basis for the price application for the approval of the Competition Authority. The Competition Authority checks that the priced applied for includes only the justified costs and justified profitability provided in § 14 (2) of this Act.

Pursuant to §14 (9) of the PWSSA the CA prepared a Methodology and published it on its website. In the approval of the prices of water services the CA proceeds from this Methodology.

§14² (10) of the PWSSA stipulates that the CA is obliged to ask for the opinion from rural municipality or city government regarding the compliance of the price application with the PWSSS development plan, i.e. opinion regarding the investments to be made. Thus in processing the tariff application the CA takes into account the investments that the local government has considered justified.

ASTV's question: The CA states that it uses “the average rate of return of the last five years of German bonds”, but without justifying why the use of German inflation is appropriate in the context of Estonian assets.

CA's response: Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
- 6) develop the public water supply and sewerage system, incl storm water sewerage, in accordance with the public water supply and sewerage system development plan in a specific development area where more than 50 per cent of residential buildings for which building permits were issued before 22 March 1999 are connected to the public water supply and sewerage system.

Pursuant to §14 (9) of the PWSSA the CA prepared a Methodology and published it on its website. In the approval of the prices of water services the CA proceeds from this Methodology.

Pursuant to clauses 6.1 and 6.2 of the Methodology the justified profitability is calculated on the basis of applying a justified rate of return on the regulatory asset base.

Pursuant to clause 6.3 of the Methodology the justified rate of return equals with the rate of weighted average cost of capital or WACC.

The CA has prepared and published on its website a document “Juhend kaalutud keskmise kapitali hinna WACC leidmiseks (2011)” (“Instruction for calculating the WACC (2011)”).

Page 3 of the document “Juhend kaalutud keskmise kapitali hinna WACC leidmiseks (2011)” (“Instruction for calculating the WACC (2011)” provides the following explanation: “For the estimation of the nominal risk free rate the CA uses the 5-year (2006-2010) average interest rate of the

German government 10-year bonds, to which the Estonian country risk premium will be added. Since the nominal risk-free rate changes over time, the cost of debt and equity capital and the WACC also changes in time. The reason for using of the German bonds is the circumstance that the Estonian state has not issued long term bonds so far. The German bond is appropriate as it is the biggest Euro-zone country. The Netherlands, for example, as well use the return of German bonds. Also, the 10-year bonds are much more similar to shares rather than the 1-year bonds.”

ASTV’s question: How and to what extent is inflation reflected in WACC.

CA’s response: Pursuant to the explanations provided in the previous item, the CA has prepared and published on its website a document “Juhend kaalutud keskmise kapitali hinna WACC leidmiseks (2011)” (“Instruction for calculating the WACC (2011)”, and the WACC components calculated on the basis thereof are inflation-sensitive. If the inflation increases, the components that serve as the basis for calculating the WACC also increase and thereby also WACC, from which it is possible to conclude that the inflation is included in WACC.

ASTV’s question: it would be important if the CA could provide more details on how the country risk is calculated and on the reasons why it considers its country risk estimate appropriate.

CA’s response: Pursuant to the explanations provided in the previous items, the CA has prepared and published on its website a document “Juhend kaalutud keskmise kapitali hinna WACC leidmiseks (2011)” (“Instruction for calculating the WACC (2011)”, which in detail explains the bases for the formation of WACC. On the abovementioned page 3 of the Methodology, the following explanation has been provided.

According to an evaluation by the Bank of Estonia in May 2006 the country risk is determined by the relative amount of money that the Estonian state has to pay in excess compared to the countries with higher credit rating (e.g. Germany), when it borrows from international markets. Most simple way is to compare differences in the interest rates of governmental bonds. The Government of Estonia has no such bonds and therefore the country risk can be evaluated by the comparison of the differences in money markets, basing on the difference between Talibor and Euribor quotations. As the rate of return of the German bonds is taken as an average for the last five years, then also for the Estonian country risk evaluation it is justified to base on the last five year arithmetical average difference between the Talibor and Euribor quotations for 2006-2010. To that end each month’s last day indicators are taken and on their basis the Talibor and Euribor arithmetical average quotations are calculated and then the difference between these arithmetical averages is found. The CA used the following two sources for finding arithmetical average quotations: <http://www.eestipank.info/> for the Talibor and <http://www.euribor.org/> for the Euribor.

ASTV’s question: How does the CA’s methodology ensure equity investors will not be treated more unfavourably than debt investors?

CA’s response: Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
- 6) develop the public water supply and sewerage system, incl storm water sewerage, in accordance with the public water supply and sewerage system development plan in a specific development

area where more than 50 per cent of residential buildings for which building permits were issued before 22 March 1999 are connected to the public water supply and sewerage system.

Pursuant to §14 (2) of the PWSSA and the Methodology the price of water service must be justifiably cost-based.

Pursuant to §14 (9) of the PWSSA the CA prepared a Methodology and published it on its website. The Methodology has been prepared in compliance with clause 5 of §14 (2) of the PWSSA, based on which the justified profitability on capital invested by the water company shall be included in the price of water service. The implementation of this principle ensures that all companies and investors are treated equally.

ASTV's question: How will the CA protect equity investors from government tax policy risk/gain?

CA's response: Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
- 6) develop the public water supply and sewerage system, incl storm water sewerage, in accordance with the public water supply and sewerage system development plan in a specific development area where more than 50 per cent of residential buildings for which building permits were issued before 22 March 1999 are connected to the public water supply and sewerage system.

Pursuant to §14¹ (1) of the PWSSA the water undertaking establishes the price of water service and shall disclose these at least 30 days before the date as of which such price applies. Following the making of the resolution by which the price is established, the water undertaking shall publish a notice regarding establishment of the price at the home page of the local government or the water undertaking and once in at least one local or county newspaper.

§14² (1) of the PWSSA stipulates that in case the operating area of the water undertaking is located on the wastewater collection area, the pollution load of which is 2000 population equivalent or more, then the water undertaking prepares the proposal for the price for water service (price application) and submits it before establishing the price for water service with the price list of the services related to the main services and other documentation serving as the basis for the price application for the approval of the Competition Authority. The Competition Authority checks that the priced applied for includes only the justified costs and justified profitability provided in § 14 (2) of the PWSSA.

Pursuant to §14² (6) of the PWSSA water undertaking is obliged to monitor the circumstances not dependent on its activity, which impact the price for water service, and inform the Competition Authority at the latest within 30 days as of the occurrence of the circumstances, which may impact the price for the service more than by 5%.

§14² (6) of the PWSSA obliges water undertakings to constantly monitor the compliance of the price of water services with §14 (2) of the PWSSA.

Proceeding from the abovementioned, if the company is of the position that with the impact of inflation the valid price of water service is not cost-based anymore, nor does not comply with the terms stipulated in §14 (2) of the PWSSA, then it is entitled to submit the price application to the CA.

ASTV's question: Should the inflation estimates by the CA prove to be different from the actual inflation in the regulatory period can you please say how the CA plans to compensate the water companies or the customers for any under or over estimation of inflation?

CA's response: Pursuant to §14 (2) of the PWSSA price of water service shall be established such that the water undertaking can:

- 1) cover reasoned operating costs;
- 2) make investments into existing water and waste water systems in order to secure sustainability;
- 3) comply with environmental protection requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on invested capital;
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§14² (1) of the PWSSA stipulates that in case the operating area of the water undertaking is located on the wastewater collection area, the pollution load of which is 2000 population equivalent or more, then the water undertaking prepares the proposal for the price for water service (price application) and submits it before establishing the price for water service with the price list of the services related to the main services and other documentation serving as the basis for the price application for the approval of the Competition Authority. The Competition Authority checks that the priced applied for includes only the justified costs and justified profitability provided in § 14 (2) of the PWSSA.

Pursuant to §14² (6) of the PWSSA water undertaking is obliged to monitor the circumstances not dependent on its activity, which impact the price for water service, and inform the Competition Authority at the latest within 30 days as of the occurrence of the circumstances, which may impact the price for the service more than by 5%.

§14² (6) of the PWSSA obliges water undertakings to constantly monitor the compliance of the price of water services with §14 (2) of the PWSSA.

Proceeding from the abovementioned, if the company is of the position that with the impact of inflation the valid price of water service is not cost-based anymore, nor does not comply with the terms stipulated in §14 (2) of the PWSSA, then it is entitled to submit the price application to the CA.

Sincerely

Märt Ots
Director General