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# Competition Authority's position regarding the price of water services applied for by AS Tallinna Vesi

#### Starting the tariff proceedings

On 10.11.2010 the Competition Authority (hereinafter the CA) received from AS Tallinna Vesi (hereinafter ASTV) an application for the approval of the water tariffs in the cities of Tallinn and Saue together with the materials annexed thereto (hereinafter the Tariff Application).

Pursuant to the Public Water Supply and Sewerage Act<sup>1</sup> (hereinafter the PWSSA) § 14 lg 1, the following fees may be collected for water supply and leading off and purifying waste water, rain water, drainage and other soil and surface water (hereinafter the water tariff):

- 1) a charge for water extracted;
- 2) a charge for leading off and purifying waste water (hereinafter waste water);
- 3) a charge for leading off and purifying rain water and drainage and other soil and surface water (hereinafter storm water);
- 4) a basic fee.

Pursuant to the PWSSA § 14<sup>2</sup> lg 1, if the operation territory of the water undertaking is situated in a waste water collection area with a pollution load of 2,000 human equivalents (hereinafter he) or more, the water undertaking shall compile a proposal for the price of the water service and submit it to the Competition Authority for approval before establishing the price of the water service, together with a price list regarding the services related to principal services and other documentation that the price application is based on.

Tallinn is located on a waste water collection area with the registry code No RKA0370010, the pollution load of which is 468 000 he. Saue City is located a waste water collection area with the registry code No RKA0370011, the pollution load of which is 6255 he. Hence, both

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RTI 1999, 25, 363; 2010, 56, 363

operating areas constitute areas with a pollution load above 2000 he, therefore the CA's approval needs to be obtained to water tariff in line with the PWSSA § 14<sup>2</sup> lg 1.

Pursuant to the PWSSA § 14 lg 6, the water undertaking providing services to several different waste water collection areas (in this case Tallinn and Saue City) may establish a compound water tariff for all areas, considering the summarised costs of the water undertaking. Hence, ASTV has the right to submit the Tariff Application for a compound water tariff in both Tallinn and Saue cities.

Pursuant to the PWSSA § 14<sup>2</sup> lg 1, the documentation serving as the basis for a Tariff Application must enable the CA to check that the proposed price would only include the justified costs and profits laid down in subsection 14 (2).

According to the PWSSA § 14 lg 2, the price of the water service shall be established such that the water undertaking can:

- 1) cover justified operation costs;
- 2) make investments to guarantee the sustainability of the existing public water supply and sewerage systems;
- 3) comply with environmental requirements;
- 4) comply with quality and safety requirements;
- 5) operate with justified profitability on the capital invested by the water undertaking;
- 6) develop the public water supply and sewerage system, including the rain water sewerage, in accordance with the public water supply and sewerage system development plan in an 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.

In order for the CA to be able to check based on the PWSSA § 14<sup>2</sup> lg 1, whether the water tariff applied for only includes the justified costs and profits laid down in subsection 14 (2), the water undertaking is required to differentiate the costs in the accounts.

Pursuant to the PWSSA  $\S$   $7^2$  lg 1, in addition to the fulfilment of the requirements provided for in clause 18 (1) 2) of the Competition Act, a water undertaking shall keep separate account of the costs of following operations:

- 1) water supply;
- 2) leading off and purification of waste water;
- 3) leading off rainwater and drainage water and other soil and surface water;
- 4) additional services related to the operations mentioned in clauses 1–3 of this subsection;
- 5) connection charges for subscribing to the public water supply and sewerage system;
- 6) other operations.

Pursuant to the PWSSA § 7<sup>2</sup> lg 2, the costs mentioned in clauses 1–4 of this subsection must separately point out the assets acquired by grant aid.

PWSSA § 7<sup>2</sup> lg 3 states that if the water undertaking provides the service to a client or another water undertaking on the territory of several local governments, the water undertaking must keep separate account across different local governments pursuant to the provisions laid down

in subsection (1) of this section, except if local governments have reached a different agreement.

In line with the PWSSA § 14 lg 9, the CA developed the guidelines "Recommendatory principles for calculating the price of water service" (hereinafter the Guidelines) and published it in its webpage. When developing the Guidelines the provisions of the PWSSA § 14, 14<sup>1</sup>, 14<sup>2</sup> were considered, based on which the water tariff is calculated dividing the justified costs, capital cost and justified return of the water undertaking by sale volume (clauses 7.3; 7.5; 7.6 of the Guidelines), i.e. using the cost-based approach.

Based on the clause 4.8 of the Guidelines, the CA uses the following methods for checking whether the water tariff is justified:

- 1) Observing the dynamics of costs in time and the comparison thereof with the dynamics of the CPI;
- 2) In-depth analysis of the justifiability of various cost components (incl. expert opinions);
- 3) Comparison of the operating expenses of the undertaking and the statistical indicators calculated on the basis thereof with the indicators of other undertakings.

According to the Administrative Procedure Act (hereinafter APA) § 5 lg 1, the CA has the right to establish the format of administrative proceedings based on the right of discretion. Pursuant to APA § 5 lg 1, the CA has developed and published on its webpage<sup>3</sup> the tariff application forms (hereinafter the Questionnaires) in excel format: "Detailed questionnaire for water undertakings", "Simplified questionnaire for water undertakings". The questionnaires have been developed in line with the Competition Act (hereinafter CompA) § 18 lg 1 p 2; PWSSA § 7<sup>2</sup> lg 1, 2, 3 ja PWSSA § 14 lg 1, 2 and when filled in include data which according to the PWSSA § 14<sup>2</sup> lg 1 enable the CA to ensure that the water tariff applied for only includes the justified costs and profits laid down in PWSSA § 14 (2). When filling in the Questionnaires, one can proceed from the "Guidelines for the submission of a tariff application" developed by the CA and published on its webpage<sup>4</sup>".

Pursuant to the PWSSA § 14<sup>2</sup> lg 10, the CA is obligated to request an opinion from the rural municipality or city government regarding the compliance of a price application to the public water supply and sewerage development plan.

Pursuant to the PWSSA § 14<sup>2</sup> lg 7, upon the fulfilment of their obligations provided for in this Act the water undertaking shall allow the CA to examine its accounting, shall justify the bases for establishing the price of the water service and provide required explanations regarding its economic activities.

The Guidelines are Publisher on the CA's webpage (<a href="http://www.konkurentsiamet.ee">http://www.konkurentsiamet.ee</a>, menu: energeetika- ja veeteenistus/Vesi/Hinna kooskõlastamise metoodikad ja juhendid). In the tariff approval process, whilst analysing the operation and approving the tariffs of all water undertakings under the CA's regulation, the Guidelines are applied in the similar and same manner in order to avoid unequal treatment. The hamed Guidelines may be used also by local governments when approving water tariffs.

Published on the CA's webpage: <a href="http://www.konkurentsiamet.ee">http://www.konkurentsiamet.ee</a> under: energeetika- ja veeteenistus/Vesi/ Hinnataotluse vormid.

<sup>&</sup>lt;sup>4</sup> Published on the CA's webpage: <a href="http://www.konkurentsiamet.ee">http://www.konkurentsiamet.ee</a> under: energeetika- ja veeteenistus/ Vesi/ Hinnataotluse vormid.

Pursuant to the PWSSA § 14<sup>2</sup> lg 4, the decision regarding the approval of the price application shall be made within 30 days of the receipt of a suitable application. Upon processing an especially complicated or time-consuming application, the CA or the local government may extend the due date up to 90 days, by notifying of the extension of the due date before the arrival of the initial due date.

Pursuant to the PWSSA § 14<sup>2</sup> lg 11, the term for processing the price application is suspended, if the CA is not presented with the requested information, which is necessary to approve the price application.

### Data of the Applicant

ASTV's main activities include the production, treatment of water and supplying water to consumers and the discharge and treatment of waste- and storm water.

ASTV is the biggest water undertaking in Estonia, offering water and wastewater services to over 400,000 people in Tallinn. In Tallinn operating area ASTV has the exclusive right of providing public water supply and wastewater services until the year 2020. ASTV has also been appointed as a water undertaking in: Saue City, Maardu City, Saue Rural Municipality, Harku Rural Municipality. In addition ASTV is providing public water supply and/or wastewater services to several water undertakings operating in surrounding rural municipalities.

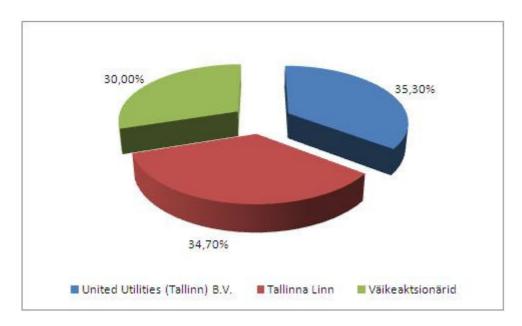
The company has two treatment plants – Ülemiste WTP and Paljassaare WwTP. Ülemiste WTP has sufficient additional capacity to increase production volumes and to provide services to a much bigger population than it is done now.

ASTV has over 20,000 contractual customers and employs 307 people.

ASTV's MB has three members, including the CEO (Chairman of the MB), COO and CFO. The Council of the company includes 9 members.

ASTV was privatised in 2001. Since 1.06.2005 ASTV shares have been listed on the main list of TSE.

As at 30.06.2010, the company had 2586 shareholders. 30% of the free float of the company on the TSE is owned by foreign institutional investors by 18.87%; institutional investors in Scandinavia and Baltic States by 5.26% and retail investors by 5.87%.



AKTSIONÄRID	AKTSIAID	OSALUS
United Utilities (Tallinn) B.V.	7 060 870	35,30%
Tallinna linn	6 939 130	34,70%
Väikeaktsionärid	6 000 000	30,00 %

The company has 20 million A-shares and 1 B-share. 30% of the A-shares i.e. 6,000,0000 is on a free float on TSE.

### Course of proceedings and positions

On November 10th 2010 the CA registered ASTV's application for approving water tariffs with the appended materials (Tariff application).

ASTV sought approval to the following water services tariffs compared to 2010:

Tariff for water (€/m³):

	2010 *	2010**	2011
Domestic	0,96	0,95	0,99
Commercial	2,36	2,32	2,44

Tariff for wastewater disposal and treatment (€/m³):

	2010 *	2010**	2011
Domestic	0,77	0,78	0,79
Commercial	1,71	1,69	1,76

2010\* data from 10.11.2010 tariff application; 2010\*\* data from ASTV website on current tariffs.

The CA determined that the Tariff application submitted on 10.11.2010 had deficiencies as per §15 section 2 of the Administrative Procedure Act. The CA explained and justified the deficiencies and how to eliminate them from the Tariff application in its letters on 17.11.2010 and 13.12.2010 and during meetings between CA and ASTV representatives on 03.01.2011.

On 14.01.2011, ASTV amended its 10.11.2010 Tariff application base documentation to the extent where the **Tariff application could be deemed as compliant with requirements from 14.01.2011**, as it allowed the CA to fulfill its obligation stipulated in PWSSA §14 section 1 to verify that the the applied tariff would only include the justified costs and profitability as stipulated in § 14 section 2 of the PWSSA. As per PWSSA §14 section 4, the deadline for processing the Tariff application commences from the moment an application compliant with requirements was submitted (in more detail –from the day following the receipt of the compliant application), i.e. 15.01.2011.

On 03.02.2011, the CA submitted an inquiry to ASTV due to the need to receive additional data for approving the water tariff. PWSSA's §14<sup>2</sup> section 9 grants the CA the right to require data that is necessary for approving water tariffs. PWSSA's §14<sup>2</sup> section 11 stipulates that the deadline for processing the Tariff application is suspended until the information requested by the CA is made available to it.

On 11.02.1011, the CA sent a letter to ASTV extending the Tariff application processing deadline from 30 days to 90 days, as

- 1) PWSSA § 14<sup>2</sup> section 10 states that the CA must ask for the opinion of Tallinn and Saue city governments on the compliance of ASTV's Tariff application with the public water and wastewater development program and the deadline for presenting such opinion was until 16.02.2011 for Tallinn and Saue city governments (the CA needs time to analyze the materials).
- 2) processing ASTV's Tariff application was more complex and laborious than anticipated, as ASTV is the largest water undertaking in Estonia and therefore it is not possible to process the water tariff during the 30 days as stipulated in PWSSA § 14<sup>2</sup> section 4.

On 24.01.2010 the CA sent an inquiry to Tallinn and Saue city governments, asking whether the investments into regulated asset base were in compliance with the public water and wastewater development program as according to PWSSA § 14<sup>2</sup> section 10.

According to the responses from Saue City Government on 10.02.2011 and from Tallinn City Government on 16.02.2011, the investments presented in the Tariff application are in accordance with the public water and wastewater development program. Based on the above, if the local municipality has fulfilled its legal obligations, the PWSSA § 14 section 2 article 2 is enforced through the investments being included in the water tariff.

On 16.02.2011, ASTV responded to the questions raised by the CA on 03.02.2011, based on which the CA addressed further questions to ASTV on 17.02.2011 and 18.02.2011. The last answers to the CA's questions were received on 21.02.2011.

### **Company characteristics**

ASTV, utilizing the right derived from PWSSA §14 section 6, would like to establish a compound water tariff for the municipalities of Tallinn and Saue, based upon gross costs. Therefore the CA shall analyze ASTV's gross costs, capital costs and justified profitability in the cities of Tallinn and Sue.

The following table (see Table 1) lists ASTV's general indicators in the period 2008-2011. The column "2011" in this letter reflects data from the 12 months that serve as the basis for calculating water tariffs, i.e. data from the **regulation period.** 

Table 1

Row						
no.	Tallinn and Saue cities		2008	2009	2010	2011
1	Volume of extracted water	th.m3	19066	18106	17916	17916
2	Wastewater disposal and treatment service total	th.m3	19088	18152	18139	18139
3	Domestic consumers	no	17 861	19 192	19 709	19 709
4	Commercial consumers	No	2386	2510	2899	2899
5	Number of water pumping stations	No	66	66	66	0
6	Number of wastewater pumping stations	No	82	87	98	0
7	Length of public water network	km	909	925	931	931
8	Length of public wastewater network	km	1213	1269	1263	1263

It is possible to conclude from the table (See Table 1) that the number of ASTV's consumers has steadily grown from 2008 to 2010 (Table 1 rows 3 and 4) and this has occurred even despite the economic recession in 2009. However at the same time water consumption (Table 1 row 1) has decreased, which is characteristic of an economic recession. The number of consumers has certainly increased partly due to the increased length of the public water network. The length of public wastewater network has decreased, contributing to the drop in wastewater disposal and treatment service volumes (Table 1 row 2).

#### Principles for calculating water tariffs.

According to article 7.1 of the Guidelines, the basis for calculating water tariffs is the allowed sales revenue during the regulation period ( $T_{allowed}$ ). The regulation period is a 12 month period, during which the costs and justified rate of return serve as the basis for calculating water tariffs (Guidelines article 2.12). Based on the above, the year 2011 is the regulation period under review. Guidelines article 7.2. allows the following costs to be included in the water tariffs:

- 1) Operating costs;
- 2) Cost of capital;
- 3) Justified rate of return.

Based on article 7.3. of the Guidelines, the allowed sales revenue is calculated based on the following formula:

$$T_{allowed} = TK + A + PT$$
,

where:

 $T_{allowed}$  allowed sales revenue;

operating costs; cost of capital;  $\boldsymbol{A}$ 

PTjustified rate of return.

According to article 7.5 in the Guidelines, the division of allowed sales revenue between the various water services must be justified and correspond to the following formula:

$$T_{lubatud} = \sum T_{lubatud_n},$$

where:

the allowed sales revenue of the respective water service;  $T_{allowed}$  -

water service.

Based on article 7.6 of the Guidelines, the allowed sales revenue serves as the basis for calculating specific water service tariffs as follows:  $hind_n = \frac{T_{lub\,atud\,n}}{m_n} \; (kr/m^3),$ 

$$hind_n = \frac{T_{lab atud_n}}{m} (kr/m^3)$$

where:

 $T_{lubacud_n}$ the allowed sales revenue of the respective water service during the regulation period;

the sales volume of the respective water and wastewater service during  $m_n$ the regulation period;

 $hind_n$ water tariff of the respective water service during the regulation period.

#### 5.1 ASTV data for calculating water tariffs

The CA has compiled the data submitted by ASTV on Tallinn and Saue cities into the following table (see Table 2), which serve as the basis for calculating the water tariff and the validness of which will thereafter be analyzed by the CA:

Table 2

	ASTV (Tallinna and Saue cities)	Charge for water	Charge for wastewater disposal and treatment**	Charge for stormwater and drainage and the disposal and treatment of other ground water and surface water and hydrants
Operating costs (th.€)	17 592	7 623	7 462	2 507
Cost of capital (th.€)	5 044	2 157	2 641	245
Justified rate of return (th.€)	23 510	13 871	8 714	925
Allowed sales revenue (th.€)	46 146	23 651	18 817	3 678
Sales volume (th.m³)		17 916	18 139	
Water tariff (€/m³)		1,32	1,04	

<sup>\*</sup>Charge for water includes the charge from both domestic and commercial customers. Water tariff  $1.32 \text{ } \text{€/m}^3$  is the weighed average water charge from both domestic  $(0.99 \text{ } \text{€/m}^3)$  and commercial customers  $(2.44 \text{ } \text{€/m}^3)$ .

The CA analyzes ASTV's water and wastewater services gross costs (see Table 2 column ASTV) – on the basis of Table 2's column "ASTV", which respectively reflects the gross operating costs, cost of capital and justified rate of return on the provision of water and wastewater services, which have been derived from (Guidelines article 7.5):

- respectively the operating costs, cost of capital and justified rate of return that serve as the basis for calculating water tariffs for domestic customers;
- respectively the operating costs, cost of capital and justified rate of return that serve as the basis for calculating water tariffs for commercial customers;
- respectively the operating costs, cost of capital and justified rate of return that serve as the basis for calculating wastewater disposal and treatment tariffs for domestic customers;
- respectively the operating costs, cost of capital and justified rate of return that serve as the basis for calculating wastewater disposal and treatment tariffs for commercial customers.

Article 2.1 of the overview submitted to the CA by ASTV on 10.11.2010 reads (on page 28) that "The tariff adjustment mechanism that was agreed for ASTV as part of the project agreements is as follows:

Tariff of the previous year

- + CPI
- + agreed 'K' factor
- + change of law
- = tariff for forthcoming year"

Agreements concluded between the City of Tallinn and ASTV do not possess a stronger legal power than the PWSSA, which the CA follows in its tariff approval process. The CA believes that the water tariff submitted for approval by ASTV is justified only if the basis for

<sup>\*\*</sup>Charge for wastewater disposal and treatment includes the charge for wastewater disposal and treatment from both domestic and commercial customers. Wastewater tariff  $1,04 \in /m^3$  is the weighed average wastewater charge from both domestic  $(0,79 \in /m^3)$  and commercial customers  $(1,76 \in /m^3)$ .

its formation complies with the principles prescribed in the PWSSA. Therefore the CA is obligated to follow only the PWSSA when analyzing ASTV's tariff application, therefore only a cost-based water service tariff is justified.

#### 5.2 Water tariffs for domestic and commercial customers.

PWSSA § 14 section 4 stipulates that the price of the water service shall not be discriminatory with regard to different clients or groups of clients. A price that is different for domestic and commercial customers must be considered discriminatory, because it does not comply with the aforementioned principle of equal treatment. PWSSA § 16 section 11 states that if a local government has established a lower price for domestic customers than commercial customers, then **the water undertaking shall bring the applied prices into compliance with the requirements of equal treatment** so that the **annual change** in the difference between prices for natural and legal persons would not exceed 1/15 of the difference applied by the water undertaking as at 31 October 2010

The explanatory notes<sup>5</sup> from the 18.02.2010 session of the parliament's economic committee<sup>6</sup> (page 15), the excerpt of which on PWSSA § 16 section 11 has been highlighted by the CA as follows:

"Section 11 regulates the often practiced situation, where a local municipality has cross-subsidized domestic customers at the expense of commercial customers when establishing water tariffs. The water-undertakings will be obligated to bring their tariffs to compliance with the requirements for cost-based prices and equal treatment so that the annual change in the difference between domestic and commercial tariffs would not exceed 1/20 of the tariff difference between the different prices as of the time this law comes into effect. Failure to comply with this requirement by the water-undertaking will serve as the basis for not approving the Tariff application. As per the implementing provisions, the price difference must be balanced out during the course of 20 years, regardless of how wide the price difference between the domestic and commercial tariffs is at the time of implementing the law. The objective of the implementing provision is to ensure a long enough transition period for ending the cross subsidization established by the local municipality, so as to avoid any domestic tariff increases and any economic or social difficulties associated with that". In the course of further legislative amendments the 20-year tariff balancing period has been replaced with 15 years, but the principle of PWSSA §16 section 11 remains the same.

Thus as per PWSSA § 16 section 11, the price difference between domestic and commercial customers in ASTV's Tariff application must decrease over 15 years.

Considering the above, the CA has compiled Table 3 on the price differences between water and wastewater tariffs charged by ASTV from domestic and commercial customers in Tallinn and Saue as of 31.10.2010.

The explanatory notes are available at http://www.riigikogu.ee/?page=eelnou&op=ems&emshelp=true&eid=790420&u=20110221125957

The explanatory note to the economic committee minutes can be found here http://www.riigikogu.ee/?page=eelnou&op=ems&emshelp=true&eid=790420&u=20110221125957

The price difference in water tariffs for domestic and commercial customers as of 31.10.2010 is  $1,37 \ \mbox{\ensuremath{$\ell$}/m^3}$  (see Table 3 row 3 column "Charge for water":  $2,32-0,95=1,37 \ \mbox{\ensuremath{$\ell$}/m^3}$ ). ASTV has in its 2011 Tariff application sought approval to a price difference of  $1,45 \ \mbox{\ensuremath{$\ell$}/m^3}$  (see Table 3 row 3 column "Charge for water":  $2,44\ \mbox{\ensuremath{$\ell$}/m^3}$  ASTV commercial water tariff application— $0,99\ \mbox{\ensuremath{$\ell$}/m^3}$  ASTV domestic water tariff application =  $1,45\ \mbox{\ensuremath{$\ell$}/m^3}$ ). Thus ASTV has increased the price difference between domestic and commercial water tariffs from  $1,37\ \mbox{\ensuremath{$\ell$}/m^3}$  at 31.10.10 to  $1,45\ \mbox{\ensuremath{$\ell$}/m^3}$ , contrary to the stipulations of PWSSA § 16 section 11, which prescribe a reduction of price differences. Based on the above and PWSSA § 14 section 4 and PWSSA § 16 section 11, the CA can not determine ASTV's Tariff application as justified.

The price difference in wastewater tariffs for domestic and commercial customers as of 31.10.2010 is  $0.91 \ \text{€/m}^3$  (see Table 3 row 3 column "Charge for wastewater disposal and treatment":1,69-0,78 = 0,91€/m³). ASTV has in its 2011 Tariff application sought approval to a price difference of  $0.97 \ \text{€/m}^3$  (see Table 3 row 3 column "Charge for wastewater disposal and treatment": 1,76€/m³ ASTV commercial wastewater tariff application – 0,79€/m³ ASTV domestic wastewater tariff application = 0,97€/m³).

Thus ASTV has increased the price difference between domestic and commercial wastewater tariffs from 0,91 €/m³ at 31.10.10 to 0,97 €/m³, contrary to the stipulations of PWSSA § 16 section 11, which prescribe a reduction of price differences. Based on the above and PWSSA § 14 section 4 and PWSSA §16 section 11, the CA can not determine ASTV's Tariff application as justified.

Table 3

		30.10.2010		ASTV Tarif		
Ro w nr.		Charge for water	Charge for wastewater disposal and treatment	Charge for water	Charge for wastewater disposal and treatment	
1	Domestic tariff	0,95	0,78	0,99	0,79	€/m³
2	Commercial tariff	2,32	1,69	2,44	1,76	€/m³
3	Price difference (commercial-domestic)	1,37	0,91	1,45	0,97	€/m³

Based on the above, the water tariff has not been formed in accordance with PWSSA §14 section 4, which states that water tariffs may not be discriminatory towards different customers or customer groups. Also, the water tariff is not in accordance with PWSSA §16 section 11, which obligates the water undertaking to bring the water tariff into compliance with the requirements for equal treatment, i.e. to abolish the discrimination in such a manner that the price difference between domestic and commercial customers would decrease. Therefore the CA can not determine ASTV's Tariff application as justified.

Based on §40 section 1 of the Administrative Procedures Act, the CA will give ASTV the opportunity to present its opinions and counterclaims in writing.

#### 5.3 ASTV's application to approve water tariffs for the period 2011 until 2015

The CA can not agree with ASTV's desire to approve water tariffs for the years 2011 until 2015 with a prognosis for an annual prescribed tariff increase, although the CA justified and explained in its 17.11.2010 and 13.12.2010 letters why the approval of water tariffs in such a manner would be in violation of the PWSSA.

The CA will hereby once again publish its position in short as specified in the letters dated 17.11.2010 and 13.12.2010.

The CA is of the position that approving the prices for water service for the period of 2011 to 2015 with an annual predetermined specific price increase is not in compliance with the provisions of the PWSSA, because the PWSSA does not provide the approval of the prices for a specific period nor an annual price increase. The costs that serve as the basis for calculating the price of water service as stipulated in §14 (2) of the PWSSA are variable over time due to circumstances dependent on the company's activities as well as circumstances not dependent on the company's activities (e.g. pollution tax rates or water resource charge rates).

It is not possible for the company to predict the changes in the costs so clearly in a longer perspective, moreover because the changes related to some of the costs derive from the law. The company cannot predict in a longer perspective the changes that take place in the economic life that impact the price of water service, especially with regard to these costs, the rates of which are conditioned by the will of the legislator (pollution tax rates or water resource charge rates).

Therefore and resulting from \$14<sup>2</sup> (6) of the PWSSA the water undertaking is obliged to monitor the circumstances not dependent on its activity, which impact the price of water service, and inform the CA 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 %. Thus for objective reasons the approval of the prices for water service in this case for the years 2011-2015 and predetermining a specific increase in the price of water service by the water undertaking is precluded.

The PWSSA does not specify the termination of the validity of an approved price for water service after a concrete term, therefore the water tariffs remain in effect until the requirements prescribed in PWSSA §14 section 2 are fulfilled. The PWSSA does not foresee predetermining water tariffs annually for a longer time period (namely 2011-2015) with specific tariff increases.

Based on the above, the CA shall analyze the ASTV's 2011 water tariff application and the costs and justified profitability that serve as the basis for that.

Based on §40 section 1 of the Administrative Procedures Code, the CA shall give ASTV the opportunity to present its opinions and counterclaims to CA's positions in writing.

#### Sale volumes and water lossses

#### **6.1 Sale volumes**

It is important to assess the sale volumes, because water tariff is calculated by dividing the allowed sale revenue of the respective water service by sale volume. The lower the sale volume, the higher is the water tariff.

Sale volumes provided by ASTV in the Taroff Application: volume of water extracted 17,916 k'm³, incl. physical persons 13 868 k'm³ and legal persons 4 047 k'm³ and the volume of discharging waste water 18,139, incl. physical persons 13 681 k'm³ and legal persons 4 458 k'm³.

#### CA's position regarding the sale volumes applied for.

ASTV has also differentiated the volume of fire fighting water among from its services provided, which has been 2 k'm³ per annum throughout the years (2008-2010). The CA is hereby drawing the attention to the fact that fire fighting water is the same kind of water as the water consumed by physical and legal persons, i.e. fire fighting water is treated in the same way as the water consumed physical and legal persons and therefore it is not correct to separate the volume of fire fighting water from the volume of other water. **Fire fighting water is also extracted from the water network and therefore ASTV is obliged to include the volume of fire fighting water in the water volume**, despite that the Tallinn and Saue City Governments pay for fire fighting water. However, the maintenance cost of fire water hydrants is not the cost of the service approved by the CA and Tallinn and Saue City Governments pay ASTV for that. The named costs must also be differentiated from the costs incurred for providing water service.

In the Tariff Application, ASTV has differentiated the cost of fire fighting water with the domestic tariffs and the maintenance cost of hydrants from the price of extracted water and wastewater discharge and treatment service. As ASTV has followed a principle in the Tariff Application, where fire fighting water is sold to the city government by the price of water meant for physical persons (the service is first of all meant for ensuring the safety of physical persons, for which the City of Tallinn pays for as a legal person), the CA shall not request the inclusion of the volume of fire fighting water in the volume of extracted water. However, should ASTV wish to submit a correction of the Tariff Application either due to this letter or upon other circumstances or ASTV would submit the Tariff Application next time, the deficiency needs to be removed for the sake of correctness.

Pursuant to the clause 4.1 of the Guidelines, whilst forecasting the sale volumes of water services, the CA analysed ASTV's actual historic indicators and the dynamics of the number of consumers. CA complied a table (vt

Table 3) based on the data submitted by the company, reflecting the sale volumes of water services in 2008 - 2011.

Table 3

Rea nr.	Tallinn and Saue city		2008	2009	2010	2011
1	Volume of extracted water physical persons	k'm³	14 432	13 960	13 868	13 868
2	Variance compared to the previous year	%		-3,3	-0,7	0,0
3	Volume of extracted water legal persons	k'm³	4 634	4 145	4 047	4 047
4	Variance compared to the previous year	%		-10,5	-2,4	0,0
5	Volume of extracted water	K'm³	19 066	18 106	17 916	17 916
6	Variance compared to the previous year	%		-5,0	-1,0	0,0

I	Service of discharge and treatment of					
7		K'm <sup>3</sup>	14 102	13 708	13 681	13 681
8	Variance compared to the previous year	%		-2,8	-0,2	0,0
9	Service of discharge and treatment of waste water, legal persons	K'm <sup>3</sup>	4 986	4 444	4 458	4 458
10	Variance compared to the previous year	%		-10,9	0,3	0,0
11	Service of discharge and treatment of waste water, total	K'm <sup>3</sup>	19 088	18 152	18 139	18 139
12	Variance compared to the previous year	%		95,1	99,9	100,0
13	Consumers, physical persons	pcs	17 861	19 192	19 709	19 709
14	Consumers, legal persons	pcs	2 386	2 510	2 899	2 899
15	Total consumers	pcs	20 247	21 702	22 608	22 608
16	Variance compared to the previous year	%		7,2	4,2	0,0
17	Length of public water network	km	909	925	931	931
18	Consumers per the length of public water network	client*/km	22	23	24	24
19	Consumption per the length of public water network	m³/m	21,0	19,6	19,2	52,0
20	Length of public waste water network	km	1 213	1 269	1 263	1 263
21	Consumers per the length of public waste water network	client/km	16,7	17,1	17,9	17,9
22	Consumption per the length of public waste water network	m³/m	15,7	14,3	14,4	14,4
23	Consumers, physical persons	pcs	17 861	19 192	19 709	19 709
24	Consumers, legal persons	pcs	2 386	2 510	2 899	2 899
25	Total consumers	pcs	20 247	21 702	22 608	22 608
26		m³/client	942	834	792	792
27	Consumption of public waste water services per client	m³/client	943	836	802	802

#### Based on the Table (vt

Table 3), ASTV has planned the volume of water to be extracted in 2011 for both physical and legal persons to be on the same level with 2010 (see Table 4 lines 2,4). Water consumption per one customer has decreased year on year, decreasing in from 942 m³ per customer in 2008 to 792 m³ per customer in 2010 (see Table 4 line 26). In 2011, ASTV has planned the decrease in sale volume per customer to stop (see Table 4 line 26). ASTV has justified the decrease in consumption during previous years with an economic recession and the use of sanitary equipment that enables a more optimum use of water.

CA has assessed and analysed the volume of water consumption forecasted by ASTV regarding both the physical persons (4 047 k'm<sup>3</sup>) and legal persons (13 686 k'm<sup>3</sup>) based on the dynamics of the sale volume and the dynamics of the number of consumers (Clause 4.1 of the Guideline) and came to a conclusion that:

- As the consumption volume has decreased both in 2009 and 2010, but for 2011 ASTV is still forecasting the sale volumes to stay on the same level of 2010,
- As ASTV has not planned any increase in the number of customers of public water network nor in the length of network for 2011,

the water consumption volumes submitted for approval are justified.

The volume of the wastewater discharge and treatment services provided to physical persons have decreased in 2010 compared to 2008 (see Table 4 line 8), however the volume of the wastewater discharge and treatment services provided to legal persons has gone through a slight increase in 2010 (see Table 4 line 10). ASTV has not planned any increase in the number of customers for 2011 (see Table 4 line 25) nor in the length of public waste water network (see Table 4 line 20).

CA, having assessed and analysed the volume of wastewater discharge and treatment service forecasted by ASTV for both legal persons (4 458 k'm<sup>3</sup>) and physical persons (13,681 k'm<sup>3</sup>) based on the dynamics of sale volumes and the dynamics of the number of consumers (clause 4.1 of the Guidelines), has come to the conclusion that:

- As the consumption volume has decreased in 2010 compared to the previous years for physical persons (form most of the consumption volume), however, for 2011 ASTV is forecasting the sale volumes to stay on the same level than that of 2010,
- As the consumption of legal persons has seen a slight increase in 2010 compared to the previous year and in 2011 ASTV has forecasted it to stay on the same level than that of 2010,
- As ASTV has not planned any increase in the number of customers of public waste water network nor in the length of network for 2011,

the water consumption volumes submitted for approval are justified.

#### 6.2 Water losses.

#### ASTV forecast regarding water losses is 23,8%.

#### CA's position regarding water losses.

Under water losses the CA means the difference between water volumes given to the network and water sold and used for own purposes.

Water loss characterises amongst other things also the technical conditions of the water network. This category includes water leakages, differences stemming from the inaccuracies of water meters, possible inaccuracies caused by standardisation, water taken through illegal connections or commercial losses.

CA is considering included in the water used for own consumption, volume of extracted water used by the water undertaking for carrying out maintenance, also in case of planned and unplanned water extraction from the public water network, but which is measurable and which is not included in water losses. The water used for own consumption does not include the water extracted for fire fighting purposes nor the volume of water that the water undertaking uses for other purposes (e.g. in office space). The water for own consumption is not accounted within the volume of sold water.

Water loss calculated based on the data submitted by ASTV forms 23.8 % of the water given to the network.

Assessing water losses is important, because in the first instance those influence:

- 1) Cost of electricity (the lower the water losses, the less electricity is used for pumping water and for treating drinking water);
- 2) Cost of chemicals (the lower the water losses, the lower is the cost of chemicals);
- 3) Cost of environmental charges (the lower the water losses, the less charges on water resource and pollution need to be paid);

The size of a water loss depends highly on the weather. The colder the winter, the higher the probability for the freezing of ground and for the moving of ground surrounding pipes caused thereby, which in turn may cause the water pipes to burst and water losses to increase.

The age, construction quality and material of the pipes are also of significant importance in terms of the causes of water losses.

Based on the materials submitted by ASTV, the CA has complied the following table (see Table 5).

Table 4

Tallinn and Saue City		2008	2009	2010	2011
Fire fighting water	K'm³	2	2	2	2
Own consumption- networks and pumping	K'm³				
stations		241	437	461	461
Metering error	K'm³	482	468	482	482
Water input	K'm³	24 096	23 398	24 104	24 104
Total volume of sold water	K'm³	19 068	18 108	17 918	17 918
Consumption of metered water	K'm³	19 309	18 545	18 379	18 379
Water loss (metered by the consumption)	m³	4 787	4 853	5 725	5 725
Water loss (metered by the consumption)	%	19,9	20,7	23,8	23,8

<sup>•</sup> Water loss also includes the metering error

It appears from the table (see Table 5) that ASTV's water losses have grown from **19.9%** in 2008 to **23.8%** in 2010.

The CA deems the increase of water losses to 23.8% as forecasted by ASTV as justified and finds that it is based on objective reasons, because 2010 winter had again lower than average decrees below Celsius over decades, which causing the ground to move whilst frozen was one of the reasons for an increase in water losses.

The above does not mean that any further increase in water losses would be acceptable without a reasonable excuse.

#### Components of the prices of water service and income statement

Pursuant to the clause 2.15. of the Guidelines, the operating expenses are justified costs to be included in the price, which do not include capital cost and financial cost. Pursuant to the clause 4.2. of the Guidelines, the costs incurred by the undertaking are divided into controllable and uncontrollable. Below the CA is going to provide its opinion on the justifiability of the

operating expenses divided to the water services in Tallinn and Saue city as forecasted in the Tariff Application according to the co-effect of the clauses 2.15 and 4.12 of the Guidelines. In order to simplify the analysis, the data on operating expenses submitted by ASTV have been grouped as follows:

- uncontrollable costs;
- controllable costs;
- costs of bad debts.

#### 7.1 Uncontrollable costs

According to Guidelines article 4.4, uncontrollable costs are those that can not be affected by the undertaking's operating activities, but are completely dependent on external factors beyond the undertaking (primarily legislative). In ASTV's case, uncontrollable costs are e.g. legally established environmental tax rates.

Guidelines article 4.5. stipulates that uncontrollable costs are completely included in the water tariff and therefore the CA verifies the principles for calculating uncontrollable costs. For example: the pollution charges established in the law are the basis for cost calculations, but the undertaking must justify pollution loads.

The CA has developed a questionnaire "Table F. Environmental tax and Table B. P&L accounts" for evaluating the justification of uncontrollable costs by water undertakings that apply for different water service tariffs in different wastewater collection areas or provide services to other water undertakings (as ASTV does).

### The uncontrollable costs of ASTV attributed to Tallinn and Saue water services in the sum of 3 126 th € (48 910 th EEK):

- Water resource tax for Tallinna and Saue cities 819 th.€ (12 853 th.EEK;
- Pollution tax for Tallinn and Saue cities 2 307 th.€ (36 093 th.EEK).

ASTV has submitted to CA data on uncontrollable costs in 2008-2010 in the 03.12.2010 file "2010-12-02 reply to CA re their reply re ASTV\*s tariff application Annex 2-8.xlsx"; Tabl F. Environmental tax, Appendix 6. Environmental Tax 2008-2010". The predicted uncontrollable costs have been submitted by ASTV in the 14.01.2011 letter nr 6/1063852-10 in the file ""2011-01-14 vastus Konkurentsiametile Lisad.xlsx", Appendix 1. Revenue and costs 2008-2011. ASTV has corrected the aforementioned date in the file "2011-02-16 vastus KA-le Lisad"; Appendix 2. Environmental tax appended to the 16.02.2011 letter nr 6/1103534-4 and also additionally in an e-mail sent to the CA on 21.02.2011.

The CA will now give its evaluation of the uncontrollable costs applied for by ASTV for the water services in Tallinn and Saue as divided into environmental taxes.

### CA's position on the water resource tax of 819 th $\in$ (12 818 th EEK) to be included in the Tallinn and Saue water tariff.

According to article 4.5 of the Guidelines, uncontrollable costs are completely included in the water tariff, but the undertaking must justify its pollution loads. ASV has submitted to the CA the undertaking's water resource payment calculations for the period 2008-2010, considering

the water volumes of respective years and fees for right for special use of water as established in the decree based on Environmental Taxes Act § 10 section 3.

CA has compiled a table (see Table 6), reflecting ASTV's fees for the special use of water based on extracted water volumes in the year 2010.

Table 5

Rea	liik	Piirkond	Tasuliik	Tasumäär		kokku	loaga	Ve erikasu kok	tustasu			
nr				krooni	€			tuh kr	tuh €			
	A	В	C	D	Е	F	G	Н	I			
	Majandusaasta 2010 (hinnang)											
		HA0132,										
		HA1106,										
		HA0382,										
	vee	HA0228,										
1	erikasutus	TL0687	E-V	1,056	0,0675	2 975 790	2 975 790	3 142	201			
	vee	HA0132,										
2	erikasutus	TL0687	O-E	0,946	0,0605	476 284	476 284	451	29			
	vee											
3	erikasutus	TL0687	veekogud	0,44	0,0281	20 457 012	20 457 012	9 001	575			
4	KOKKU					23 909 087	23 909 087	12 594	805			

The table (see Table 6 row 4) reveals tht ASTV is to pay 805 th € (12 594 th EEK) in fees for the special right to use water in the volume of 23 909 087 m3 in 2010. The proportion of the total ASTV fee for special right to use water attributed to Tallinn and Saue city water tariffs in 2010 is 745 th € (11 652 th kr) or 93%.

The CA verified the formation of the 2011 fees for the special right to use water by replacing the 2010 fees with the fees for 2011 as ASTV has predicted that the 2011 water service volumes for the entire water undertaking (including Tallinn and Saue) will remain on the same level as 2010. The CA assumes that ASTV shall ensure service quality on the same level and with similar efficiency levels as in 2010, so the volumes of water taxed with the fee for the special right to use water will remain the same in 2011 as in 2010.

The CA has performed a verification calculation based on water sales volumes, technical efficiency indicators, 2010 water volumes taxed with the fee for the special right to use water (based on the fact that ASTV has planned all the indicators to remain on 2010 levels in 2011), the 2011 fees for the special right to use water and the proportion attributable to Tallinn and City municipalities (93%).

CA determines that since the cost of water resource tax predicted for 2011 by ASTV in the sum of 885 th  $\in$  (13 853 th EEK) (including 819 th  $\in$  or 12 818 th EEK for water services provided to Tallinn and Saue) matches the respective total cost number established by CA in its verification calculations, then the predicted costs on the fees for the special right to use water in the sum of 885 th  $\in$  (13 853 th EEK) attributable to Tallinn and Saue municipalities are justified.

CA's position on the pollution tax included in the Tallinn and Saue water services in the sum of 2 307 th  $\in$  (36 093 th EEK).

According to Guidelines article 4.5, pollution tax is completely included in the water tariff, but the water undertaking must justify the pollution loads. ASTV has submitted to the CA its calculations for water pollution charges in the period 2008-2010, based on the water pollution loads of the respective years and the pollution charges established in § 20 of the Environmental Fees Act.

ASTV is predicting a pollution tax cost of 2 519 th € (39 421 th EEK) for 2011, including 2 307 th € (36 093 th EEK) for the municipalities of Tallinn and Saue.

Considering the above, the CA bases its following analysis for evaluating the justification of the water pollution costs predicted for the municipalities of Tallinn and Saue in the Tariff application on ASTV's statistical indicators from previous years.

CA has compiled a table (see Table 6), listing ASTV's water pollution calculations based on pollution loads and concentrations in the year 2010.

Table 6

											kol	kku	loa	aga	üle	loa	
Rea nr	liik	Piirkond	KOEF	Tasuliik	Tasumäär	kokku	loaga	üle loa	loata	EF. KOEF.	tuh kr	tuh €	tuh kr	tuh €	tuh kr	tuh €	loata
	A	В	С	D	Е	F	G	Н	I	J	K	L	M	N	0	P	R
	Majandusaasta 2010 (hinnang)																
1	veesaaste	TL0687	1,2	BHT7	21 363,0	54	54		0	0,5	692	44	692	44			0
2	veesaaste	TL0687	1,2	HA	5 399,0	125	125		0	0,5	406	26	406	26			0
3	veesaaste	TL0687	1,2	P	43 879,0	10	10		0	0,5	260	17	260	17			0
4	veesaaste	TL0687	1,2	NS	35 650,0	0	0		0	0,5	2	0	2	0			0
5	veesaaste	TL0687	1,2	OA	179 400,0	0	0		0	0,5	22	1	22	1			0
6	veesaaste	TL0687	1,2	N	21 988,0	174	174		0	0,5	2 301	147	2 301	147			0
	s.h temperatuuril alla 12°C	TL0687	1,2	N	21 988,0	174	174		0	0,5	2 301	147	2 301	147			0
8	veesaaste	TL0687	1,2	BHT7	21 363,0	128	128		0	1,0	3 277	209	3 277	209			0
9	veesaaste	TL0687	1,2	HA	5 399,0	337	337		0	1,0	2 181	139	2 181	139			0
10	veesaaste	TL0687	1,2	P	43 879,0	35	35		0	1,0	1 820	116	1 820	116			0
11	veesaaste	TL0687	1,2	NS	35 650,0	1	1		0	1,0	36	2	36	2			0
12	veesaaste	TL0687	1,2	OA	179 400,0	1	1		0	1,0	283	18	283	18			0
13	veesaaste	TL0687	1,2	N	21 988,0	34,79		34,79	0	10,0	9 178	587			9 178	587	0
14	veesaaste	TL0687	1,2	N	21 988,0	443	443		0	1,0	12 056	771	12 056	771			0
	s.h temperatuuril alla 12°C	TL0687	1,2	N	21 988,0	190	190		0	1,0	5 003	320	5 003	320			0
16	veesaaste	HA1106	1,5	BHT7	21 363,0	0	0		0	1,0	6	0	6	0			0
17	veesaaste	HA1106	1,5	HA	5 399,0	1	1		0	1,0	11	1	11	1			0
18	veesaaste	HA1106	1,5	P	43 879,0	0	0		0	1,0	1	0	1	0			0
19	veesaaste	HA1106	1,5	NS	35 650,0	0	0		0	1,0	0	0	0	0			0
20	veesaaste	HA1106	1,5	N	21 988,0	0	0		0	1,0	5	0	5	0			0
21	KOKKU										32 537	2 080	23 359	1 493	9 178	587	0

The table (see Table 6 row 21) reveals that ASTV has paid 2080 th € (32 537 th EEK) in environmental fees for water pollution in 2010, of which 587 th € (9 178 th EEK) the company has paid a higher 10-fold pollution charge for excessive 34,79 tons of nitrogen pollution based on Environmental Fees Act §24 section 1, applicable if pollutants have been released to a water body, ground water or soil in larger quantities and concentration than allowed.

According to the explanations submitted in an e-mail by ASTV on 21.02.2011, ASTV has paid income tax in the sum of 156 th  $\in$  (2 440 th EEK) (costs on the sum that exceeds the permitted level 587 x 21/79 = 156 th  $\in$ ) on the nitrogen load that exceeds the amount specific on the water usage permit. Thus CA has identified that ASTV has exceeded the nitrogen pollution loads allowed in the 2010 permit and has paid a higher water pollution charge for it,

because the pollutants have been released into a body of water, the ground water or the soil in larger quantities and concentration than allowed.

According to the explanations given by ASTV in their 16.02.2011 e-mail, the water usage permit issued to ASTV does not limit the amounts of nitrogen or other substances in the wastewater discharged into the sea and therefore ASTV does not cause any pollution that exceeds the right for the special use of water. At the same time ASTV has paid a higher 10-fold pollution charge on nitrogen pollution loads based on Environmental Fees Act § 24 section 1, meaning that pollutants have been released into a body of water, ground water or the soil in a larger quantity and concentration than allowed.

CA does not find it justified to include sums paid for pollution loads taxed with higher pollution charge rates based on Environmental Fees Act § 24 section 1 in the water tariff, because this is negligence of the water undertaking, which causes a higher water tariff for the customer. If ASTV has paid for nitrogen pollution loads at higher pollution charge rates as specified in EFA §24 s 1, then this indicates to anti-environment activities by the company. CA can not accept including pollution loads taxed with a higher pollution charge rate in the water tariff. If CA accepted pollution loads taxed with a higher pollution charge then it would take away from the undertaking the motivation to invest into reducing environmental pollution, because the consumer would have to pay for the resulting costs. If CA does not find it justified to include pollution loads taxed with a higher pollution charge rate in the water tariff, then this shall motivate the water undertakings to invest into eliminating pollution loads that are taxed with a higher pollution charge rate.

ASTV has not submitted the water pollution loads or its water pollution charge calculations for the year 2011, but notes that the 2011 environmental fees predictions are based on 2010 pollution loads and concentrations.

CA verified the calculation of ASTV's 2011 water pollution costs as follows:

- Since ASTV is planning all its technical and quality indicators on the same level as in 2010, the CA based its verification calculations on the pollution loads within the limits of ASTV's 2010 water usage permit.
- CA applied the environmental fees in the Environmental Fees Act § 20 on the 2011 pollution loads within the limits of the 2010 water usage permit.

Based on the above, CA's calculations show that the sum to be paid for 2011 water pollution will be 1 757 th  $\in$  (27 485 th EEK). ASTV is predicting a substantially higher water pollution cost of 2 519 th  $\in$  (39 421 th EEK), including Tallinn and Saue municipalities in the sum of 2 307 th  $\in$  (36 093 th EEK).

CA believes that ASTV's prediction for a water pollution charge in the sum of 2 519 th  $\in$  (39 421 th EEK), including 92% in Tallinn and Saue municipalities or 2 307 th  $\in$  (36 093 th EEK) is not justified, because:

- ASTV has not submitted detailed calculations on 2011 to CA (using Table 7), clearly detailing the formation of the water pollution charge: ie indicating which pollution loads ASTV has taken into consideration and which Environmental Fees Act § 20 charges have been applied to the pollution loads.
- CA's verification calculations, where 2011 environmental charges (as per EFA §20) were applied to 2010 pollution loads, gave a substantially lower result of 1 757 th € (27 485 th EEK), than the 2 5 19 th € (39 421 th EEK) planned by ASTV in the Tariff application.

Based on §40 section 1 of the Administrative Procedures Code, the CA shall give ASTV the opportunity to present its opinions and counterclaims to CA's positions in writing.

#### 7.2 Controllable costs

Pursuant to clause 4.3 of the Guidelines, the controllable costs are the costs that the undertaking may influence through a more efficient economic activity (e.g. labour costs, transport costs, other operating costs).

The CA assesses the justifiability of the controllable operating costs on the basis of the Questionnaire "TABLE B. Income Statement".

### Controllable costs presented by ASTV in the cities of Tallinn and Saue 14 154 th € (221 463 th kroons).

ASTV has submitted to the CA the data on the level of operating costs and forecast for years 2008-2011 with its letter No 6/1063852-10 of 14.01.2011 in file "2011-01-14 vastus Konkurentsiametile Lisad.xlsx", Annex 1. Revenues and costs 2008-2011. The assumptions regarding the percentage changes of the forecasted costs have been presented to the CA on 03.12.2010, in ASTV's letter No 6/1063852-2 of 02.12.2010, "ANNEX 1 FINANCIAL TABLES, Table 2. Basic cost and revenue assumptions 2011-2015".

On the basis of the submitted data, for the financial year 2011 ASTV forecasts controllable costs in the amount of 15 833 th  $\in$  (247 729 th kroons), incl for the cities of Tallinn and Saue 14 154 th  $\in$  (221 463 th kroons).

#### CA's position regarding controllable costs

Pursuant to clause 4.8 of the Guidelines in the analysis of the undertaking's costs the CA uses observing the dynamics of costs in time and the comparison thereof with the dynamics of the CPI. As ASTV's costs include a modest proportion on factors that are influenced by so-called world market prices, then the majority of these are stable cost components that are also of fixed nature. Therefore it is appropriate to compare the costs of ASTV as well as the costs divided to the cities of Tallinn and Saue with the changes to the CPI<sup>7</sup>, because the change in stable cost components mostly depends on inflation, i.e. the change in CPI.

The CA has prepared a table on the basis of the data submitted by ASTV (see Table 8) (both in kroons and euros) for analysing the controllable costs of ASTV and the cities of Tallinn and Saue.

Table	7
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<sup>&</sup>lt;sup>7</sup> Forecast of CPi for 2011: 2.5%. Economic forecast by the Ministry of Finance in summer 2010, 25.08.2010

			2008			2009			2010			2011	
Rea nr	Kontrollitavad kulud	ASTV tuh €	Tallinn & Saue tuh €	kulu osakaal ASTV kuludest %	ASTV tuh €	Tallinn & Saue tuh €	kulu osakaal ASTV kuludest %	ASTV tuh €	Tallinn & Saue tuh €	kulu osakaal ASTV kuludest %	ASTV tuh €	Tallinn & Saue tuh €	kulu osakaal ASTV kuludest %
1	Elektrienergia kulu	1 902	1 798	95%	2 136	1 999	94%	2 726	2 409	88%	3 137	2 771	88%
2	Kemikaalide kulu	1 460	1 380	95%	1 283	1 201	94%	1 317	1 188	90%	1 367	1 233	90%
3	Remondi-ja hoolduskulud	1 282	1 187	93%	1 230	1 119	91%	1 387	1 238	89%	1 451	1 300	90%
4	Materjalid	313	290	93%	385	350	91%	444	396	89%	453	406	90%
5	Transpordikulud	1 378	1 276	93%	1 223	1 112	91%	1 325	1 183	89%	1 353	1 212	90%
6	IT & sidekulud	372	345	93%	351	319	91%	284	253	89%	290	259	90%
7	Kindlustuskulud	185	171	93%	180	163	91%	151	135	89%	155	138	90%
8	Koolituskulud	71	65	93%	75	68	91%	118	105	89%	120	108	90%
9	Äri- ja konsultatsiooniteenused	755	699	93%	883	803	91%	1 318	1 177	89%	1 346	1 206	90%
10	Muud mitmesugused tegevuskulud	1 115	1 033	93%	1 064	968	91%	1 112	993	89%	540	484	90%
11	Mitmesugused tegevuskulud kokku	8 833	8 246	93%	8 810	8 102	92%	10 182	9 078	89%	10 212	9 117	89%
12	mitmesuguste tegevuskulude muutus %				-0,3	-1,8		15,6	12,0		0,3	0,4	
13	Tööjõukulud	5 651	5 235	93%	6 083	5 531	91%	5 504	4 914	89%	5 621	5 037	90%
14	tööjõukulude muutus %				7,6	5,7		-9,5	-11,2		2,1	2,5	
15	Kontrollitavad kulud kokku	14 484	13 481	93%	14 893	13 631	92%	15 701	14 003	89%	15 833	14 154	89%
16	Kontrollitavad kulud ilma kuludeta elektrienergiale	12 582	11 683	93%	12 756	11 632	91%	12 975	11 594	89%	12 696	11 384	90%
17	ASTV kontrollitavate kulude muutus (ilma elektrienergiata) % Tallinna ja Saue kontrollitavate kulude muutus (ilma				1,4%			1,7%			-2,2%		
18	elektrienergiata) %					-0,4%			-0,3%			-1,8%	

		2008				2009			2010			2011		
Rea nr	Kontrollitavad kulud	ASTV tuh kr	Tallinn & Saue tuh.kr	kulu osakaal ASTV kuludest %	ASTV tuh kr	Tallinn & Saue tuh.kr	kulu osakaal ASTV kuludest %	ASTV tuh kr	Tallinn & Saue tuh.kr	kulu osakaal ASTV kuludest %	ASTV tuh kr	Tallinn & Saue tuh.kr	kulu osakaal ASTV kuludest %	
1	Elektrienergia kulu	29 759	28 128	95%	33 423	31 278	94%	42 660	37 697	88%	49 088	43 351	88%	
2	Kemikaalide kulu	22 841	21 589	95%	20 082	18 793	94%	20 613	18 589	90%	21 386	19 286	90%	
3	Remondi-ja hoolduskulud	20 056	18 579	93%	19 248	17 502	91%	21 701	19 375	89%	22 704	20 343	90%	
4	Materjalid	4 905	4 544	93%	6 016	5 471	91%	6 940	6 196	89%	7 088	6 3 5 1	90%	
5	Transpordikulud	21 558	19 970	93%	19 139	17 403	91%	20 726	18 504	89%	21 168	18 967	90%	
6	IT & sidekulud	5 826	5 397	93%	5 485	4 988	91%	4 437	3 961	89%	4 531	4 060	90%	
7	Kindlustuskulud	2 897	2 683	93%	2 812	2 557	91%	2 368	2 114	89%	2 418	2 167	90%	
8	Koolituskulud	1 104	1 023	93%	1 170	1 064	91%	1 843	1 646	89%	1 882	1 687	90%	
9	Äri- ja konsultatsiooniteenused	11 814	10 944	93%	13 821	12 568	91%	20 626	18 415	89%	21 066	18 875	90%	
10	Muud mitmesugused tegevuskulud	17 449	16 164	93%	16 649	15 139	91%	17 403	15 538	89%	8 449	7 571	90%	
11	Mitmesugused tegevuskulud kokku	138 209	129 023	93%	137 844	126 762	92%	159 317	142 033	89%	159 780	142 658	89%	
12	mitmesuguste tegevuskulude muutus %				-0,3	-1,8		15,6	12,0		0,3	0,4		
13	Tööjõukulud	88 422	81 911	93%	95 177	86 546	91%	86 114	76 883	89%	87 949	78 805	90%	
14	tööjõukulude muutus %				7,6	5,7		-9,5	-11,2		2,1	2,5		
15	Kontrollitavad kulud kokku	226 632	210 934	93%	233 021	213 307	92%	245 446	218 928	89%	247 729	221 463	89%	
	Kontrollitavad k ulud ilma													
16	kuludeta elektrienergiale	196 872	182 805	93%	199 598	182 029	91%	202 785	181 232	89%	198 641	178 112	90%	
17	ASTV kontrollitavate kulude muutus (ilma elektrienergiata) %				1,4%			1,7%			-2,2%			
18	Tallinna ja Saue kontrollitavate kulude muutus (ilma elektrienergiata) %					-0,4 %			-0,3%			-1,8%		

From the table (see Table 8) it appears that compared to 2008 the volume of operating costs of ASTV increased in 2009 by 2.8% (see Table 8 line 15:  $14\,893$  /  $14\,484$  x  $100\,-100=2,8$ ). Compared to 2009, in 2010 the volume of operating costs increased by 5.4% (see Table 8 line 15:  $15\,701$  /  $14\,893$  x  $100\,-100=5,4$ ) and the forecast by ASTV for 2011 is that the volume of operating costs would increase by 0.8% compared to 2010. (See Table 8 line 15:  $15\,833$  /

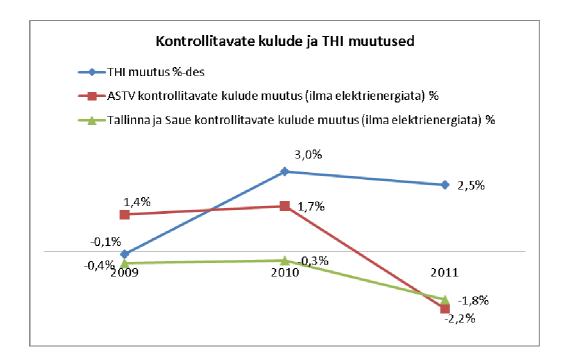
15 701 x 100 -100 = 0,8). It appears that the general increase in operating costs for the cities of Tallinn and Saue has been lower than for ASTV as a whole, reducing from 93% in 2008 to 89% in 2010 (see Table 8 line 15, column incl Tallinn and Saue) and pursuant to the forecast maintaining the same proportion also in 2011. Thus, by estimating the decrease in operating costs for Tallinn and Saue compared to ASTV's total level of operating costs, ASTV assumes a more efficient use of operating costs in Tallinn and Saue compared to previous years, which the CA assesses to be positive.

Labour costs. A significant proportion of 35% (see Table 8 line 13 divided with line 15: 5 621 / 15 833 x 100 = 35%) of the operating costs of ASTV in 2011 form the labour costs (see Table 8 line 13). Regarding the labour costs there has been an increase of altogether 7.6% in 2009 (see Table 8 line 14: 6 083/5 651 \*100% - 100% = 7,6%) compared to 2008. Thus contrarily to the general salary decrease tendency that took place in the economy at the referred period, ASTV has increased the salaries of its employees. In 2010 the number of employees of ASTV has reduced compared to the previous year from 322 to 307. From the above the CA concludes that ASTV has increased efficiency, by rearranging its work with a lesser amount of employees. The forecasted labour costs in 2011 have been planned to reduce to the level of 2008 (see Table 8 line 13), of which ASTV forecasts that the proportion of the labour costs to be divided for the provision of water services in Tallinn and Saue City in 2011 is 90%, i.e. 5 037 th € (78 805 th kr). Because the 2011 labour costs are estimated to 2008 levels, the CA assesses that the labour costs of 5037th € (78 805 tuh kr) attributable to Tallinn and Saue in the tariff are justfied.

Electricity costs 2 771 th € (43 351 th kr). ASTV purchases electricity required in production processes at the price that forms on the open market, which is why its is understandable that there was a drastic increase of 28% in the electricity costs in 2010 compared to 2009 (see Table 8 line 1: 2 726 / 2 136 x 100- 100= 28%), when the market opened and the electricity cost for consumers who purchase from open market, which also include ASTV. As ASTV started to purchase electricity from open market only on 01.04.2010, the impact of the total price increase resulting from the opening of the electricity market does not appear in 2010 but in 2011. ASTV's forecast of the electricity costs in 2011 is 3 137 th € (49 088 th kr), which refers to an assumption of an increase in electricity costs of 47% for the company (3 137 / 2 136 x 100 -100 = 47%) due to the opening of electricity market. CA deems the 2011 estimate in electricity costs in the sum of 2771 th € (43 351 tuh kr) as justified:

- o because in 2011 ASTV purchases electricity from the seller with the best bid.
- the electricity price offered by the electricity seller does not materially differ from the average price on the open market.

The figure below (see Figure 1) reflects the changes in the level of the controllable costs (without electricity costs) attributable to the water services of ASTV and Tallinn and Saue City in comparison to the change in CPI.



From the figure (see Figure 1) it appears that the general increase in ASTV's controllable costs without electricity costs in 2009 has significantly increased compared to the change in CPI, however, in 2010 and 2011 ASTV estimates that the controllable costs (without electricity costs) are less than the change in CPI. it appears that in 2009-2011 ASTV's costs attributable to the water services of Tallinn and Saue (without electricity costs) have been stable and on a considerably lower level than that of the CPI change. The above comparisons directly confirm that the controllable costs directly related to the provision of water services price is dependent on the changes in the internal market as well as the company's own ability to efficiently manage itself as per the economic conditions.

CA is of the opinion that ASTV has managed to keep the controllable costs attributable to Tallinn and Saue City on a cost-efficient level and the 2011 estimate for such costs in the sum of 14154 th  $\in$  (221 463 th kr) shall guarantee the sustainability of the Company and the provision of the water service of the required quality. Due to the above the CA deems controllable costs presented in ASTV's Tariff Application in Tallinn and Saue City in the sum of 14 154 th  $\in$  (221 463 th kr) as justified.

#### 7.3 Costs of bad debts.

Pursuant to clause 4.6 of the Guidelines costs for bad debts shall not be included in the prices for water service.

# ASTV has submitted the costs of bad debts to be included in the price of water service of Tallinn and Saue City in the amount of 312 th $\in$ (4 887 th kr).

On the basis of the submitted Tariff Application, ASTV forecasts for the financial year of 2011 the cost of bad debts in the amount of 348.6 tuh  $\in$  (5 454 th kr), incl. in Tallinn and Saue City 312 th  $\in$  (4 887 th kr) i.e. 89.6% from the proportion of the total cost item.

#### CA's position regarding bad debts.

CA does not accept that costs of bad debts are included in the price of water service, because no consumer correctly paying the invoices agrees to pay through the price of water service the invoices that have not been paid to by the debtors to the water undertaking. If to accept that costs of bad debts are included in the price of water service, then this would take off the motivation of the companies to deal with debtors and the consumers who have so far paid their invoices correctly will lose motivation to pay the invoices in future. In the opinion of the CA the bad debts must be collected through court.

Proceeding from the CA's reasoning above and from clause 4.6 of the Guidelines, pursuant to which the costs for bad debts shall not be included in the prices for water service, the CA shall not accept that the cost of bad debts in the amount of 312 th  $\in$  (4 887 th kr) of Tallinn and Saue City as presented in ASTV's Tariff Application is included in the price of water service.

Pursuant to § 40 (1) of the APA the CA shall grant ASTV a possibility to provide its opinion and objections in a written form regarding including the costs of bad debt into the price of water service.

# Investments. Calculation of regulatory asset base, capital expenditure and justified return

#### Investments.

ASTV is applying that the investments are included in the price of water services of Tallinn and Saue City in the amount of 10 338 th  $\in$  (161 755 th kr).

Pursuant to § 14 (2) clause 2 of the PWSSA the price of water service must cover the investments into existing water and waste water systems in order to secure sustainability. Thus it is important to assess the justifiability of the investments in the price of water service. For that purpose § 14<sup>2</sup> (10) of the PWSSA sets out an obligation for the CA to ask for the opinion from rural municipality or city government regarding the compliance of the price application with the PWSSS development plan. The task of the rural municipality or city government is to ensure through the PWSSS development plan the sustainability of the PWSS systems.

On 24.01.2010 the CA sent an inquiry to the City Governments of Tallinn and Saue in which it asked regarding the compliance of the investments reflected in regulatory asset base with the PWSSS development plan.

According to the responsed from Saue City Government on 10.02.2011 and Tallinn City Government on 16.02.2011 the investments included in the Tariff Application are in compliance with the PWSSS development plan. Due to this, when the local municipality has fulfilled their legal obligations, the inclusion of investments into the tariff also safeguards the fulfilment of §14 (2) clause 2 of the PWSSA.

Therefore CA accepts the investments in the sum of 10 338 th € (161 755 th kr) in the price of water service of Tallinn and Saue City, because the City Governments of Tallinn and Saue have assessed that the investments outlined in the Tariff Application are in compliance with the PWSSS development plan.

#### Principles of calculating regulatory asset base.

Pursuant to clause 2.14 of the Guidelines fixed assets and working capital used in the regulatory activity are the regulatory asset base.

Pursuant to clause 5.4 of the Guidelines it is necessary to determine the regulatory asset base for calculating the capital expenditure (depreciation of asset) and justified return.

Pursuant to clause 5.6 of the Guidelines the following shall not be included into the regulatory asset base:

- 1) Fixed assets used in non-core activity;
- 2) Long-term financial investments;
- 3) Intangible fixed assets (except for computer software and programmes' licences and connection fees paid to other water undertakings);
- 4) Fixed assets acquired through grant aid (incl. through government grants);
- 5) Fixed assets acquired from the connection fees paid by the consumers;
- 6) Unjustified investments.

Pursuant to clause 5.7 of the Guidelines when calculating the value of regulatory asset base, the residual book value at the end of the regulation period is used (Pursuant to clause 2.12 of the Guidelines regulation period is a 12-month period, the costs and justified return of which serve as the basis for calculating the prices).

### Pursuant to the data presented by ASTV the value of regulatory asset base is 353 mln € (5 523 mln kr)

ASTV considers as regulatory asset base the value that the company has calculated as follows:

- 1) In 2001, 84,887 th € (1 328,2 th kr) was paid at the privatisation of ASTV for a shareholding of 50.4% in the company.
- 2) On the basis of the sum paid for the holding of 50.4%, the company's equity value is calculated aka the company's (100%) value of 168,427 th  $\in$  (84,877 x 100% / 50,4% = 168,427 th  $\in$  aka 2 635,317 kr).
- 3) Debt obligations in the amount of 40,675 th € (636,430 th kr) have been added to the calculated value of ASTV of 2001 of 168,427 th € and the initial value of the regulatory asset base in 2001 has been calculated, which is 209,103 th € (3 271,747 th kr).

4) A table prepared by ASTV is presented below (see Table 9), based on which ASTV has come to the value of the regulatory asset base of 353 mln € (5 523 mln kr).

Table 8

mln €	2 001	2 002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Opening balance	209	225	235	241	250	264	279	302	335	336	346
CAPEX	5	3	5	4	6	5	4	2	2	4	8
Indexation*	12	8	3	7	10	12	19	32	0	9	9
Depreciation	-4	-4	-4	-5	-5	-5	-5	-5	-5	-5	-5
Enhancement infrastructure **	3	3	2	2	3	3	5	4	4	3	3
Closing balance	225	235	241	250	264	279	302	335	336	346	360
Average RCV	217	230	238	245	257	272	291	319	335	341	353

mln kr	2 001	2 002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Opening balance	3 272	3 516	3 680	3 766	3 904	4 132	4 369	4 725	5 242	5 253	5 412
CAPEX	73	50	80	64	92	74	62	37	37	55	119
Indexation*	192	127	48	114	162	183	290	493	-5	137	137
Depreciation	-62	-66	-70	-73	-74	-74	-72	-80	-78	-77	-79
Enhancement infrastructure **	42	53	27	35	47	55	76	68	57	43	45
Closing balance	3 516	3 680	3 766	3 904	4 132	4 369	4 725	5 242	5 253	5 412	5 634
Average RCV	3 394	3 598	3 723	3 835	4 018	4 251	4 547	4 984	5 248	5 332	5 523

<sup>\*</sup> Indexation is the annual correction of the asset value by CPI.

# <u>CA's position regarding the value of regulatory asset base in the price of water service of Tallinn and Saue City.</u>

The rate of return of monopoly companies must be restricted, which is also set out in § 14 (2) clause 5 of the PWSSA, which stipulates that the price of water service shall be established such that the water undertaking can operate with justified profitability on invested capital. ASTV is a monopoly, which is why the consumers do not have the option of purchasing the PWSS service from competitive companies. Proceeding from that, generally recognised price regulation principles have been formed both in Europe as well as elsewhere in the world, one aim of which is restricting the return. Without restricting the return a company in a dominant position would have an opportunity to earn excess profit from the expense of consumer and without the intervention of the regulator (in this case the CA) the consumer would have to pay up the possible excess profit of the company in a dominant position because the consumer does not have an alternative choice.

<sup>\*\*</sup> Enhancement infrastructure – networks reconstruction (basically investment).

ASTV's approach, in which the value of regulatory asset base has been derived from the value of the company agreed upon between two parties, cannot be considered justified. If to follow the principle of ASTV, due to the referred transaction the price of water service should increase for the consumers, because the value of regulatory asset base increases. At the same time there were not any improving changes in ASTV's PWSS system (no new investments have been carried out), there was just a change of owners. Pursuant to § 14 (2) of the PWSSA the change in the price of water service can only be the expenses made for the PWSS system. Thus there is also no basis for changing the price of water price only for a reason that the owner is change, i.e. it is not in compliance with law to take the sums paid at the privatisation of ASTV as the basis for calculating the price of water service.

Pursuant to clause 5.7 of the Guidelines the price of water service changes only when the owner has carried out actual investments for the development of the PWSS system. Pursuant to clause 5.7 of the Guidelines when calculating the value of regulatory asset base, the residual book value at the end of the regulation period is used (Pursuant to clause 2.12 of the Guidelines regulation period is a 12-month period, the costs and justified return of which serve as the basis for calculating the prices), as only the data refleted in the company's accounting demonstrate the company's actual investments into PWSS systems.

The CA does not consider the annual correction of the value of regulatory asset base with the CPI used by ASTV to be justified, because as a result of this the price of water service for consumers would increase each year in a situation in which the water company has not actually carried out any investments into PWSS system. Proceeding from the cost-basis principle reflected in § 14 (2) of the PWSSA only the costs actually carried out by the company can be reflected in the price of water service. However, change in CPI cannot be considered as a cost by the company. The CA considers increasing the asset values by CPI on an annual basis to be in contradiction with the principles included in § 14 (2) of the PWSSA and considers it to be unfair with regard to consumers. CA remains firm to the principles of calculating regulatory asset base as included in Guidelines, where only the investments into PWSS system actually carried out by the company are reflected in the price of water service.

In the following the CA has prepared a table for calculating the value of regulatory asset base at the end of the regulation period (see Table) on the basis of the data on fixed assets reflected in the accounting as submitted by ASTV (with file on 14.01.2010 "2011-01-14 vastus Konkurentsiametile Lisad.xlsx"page "LISA 4 Põhivara") in Tallinn and Saue City, from which the assets pointed out in clause 5.6 of the Guidelines have been deducted:

Table 9

		2008	2009	2010	Regulation period
Acquisition value of fixed assets at the beginning of the year	th €	190 792	196 172	201 568	207 486
Residual value of fixed assets at the beginning of the year	th €	124 068	125 497	126 498	127 525
Invested into the acquisition of fixed assets	th €	6 904	6 218	5 917	10 338
Calculated depreciation of fixed assets	th €	5 309	5 181	4 890	5 044
Fixed assets sold in acquisition value	th €	1 341	792		
Fixed assets sold in residual	th €	16	6		

value					
Reclassified fixed assets in	th €	182	30		
acquisition value					
Reclassified fixed assets in	th €	150	30		
residual value					
Acquisition value of fixed	th €	196 172	201 568	207 486	217 823
assets at the end of the year					
Residual value of fixed assets	th €	125 497	126 498	127 525	132 819
at the end of the year					

Pursuant to clause 5.7 of the Guidelines the CA has calculated the residual value of the regulatory asset base at the end of the regulation period  $(RAB_r)$  132, 819 mln  $\in$  (2 078 159 th kr).

Pursuant to clause 5.8 of the Guidelines the regulatory asset base at the regulation period is calculated as follows:

$$RAB = RAB_r + WC$$

where:

*RAB* - regulatory asset base;

 $RAB_r$  - residual book value of regulatory asset base at the end of a regulation period;

WC - working capital (Pursuant to clause 5.9 of the Guidelines 5% of the allowed sales revenue of the regulation period shall be taken as the basis for calculating the working capital).

When calculating the working capital the CA takes as the basis the sales revenues in Tallinn and Saue City forecasted by ASTV from the sale of water services referred to in § 14 (1) of the PWSSA, which is a charge for water extracted 23 650, 76 th  $\in$  + a charge for leading off and purifying waste water 18 817,31 th  $\in$  + a charge for leading off and purifying storm water, drainage water and other soil and surface water 3 481,01 th  $\in$ , in total 45 949,08 th  $\in$ .

Pursuant to clause 5.9 of the Guidelines the amount of working capital is 2 297,45 th € (45.949,08 sales revenue forecasted by ASTV x 5% /100% = 2 297,45 th €).

Thus pursuant to clause 5.8 of the Guidelines the CA considers a justified value of regulatory asset base at the regulation period to be 135.116 mln  $\in$  (132 819 k' $\in$  + 2 297 th  $\in$  = 135 116 th  $\in$ ), not the 353 mln  $\in$  (5 523 mln kr) applied for by the CA.

Pursuant to § 40 (1) of the APA the CA shall grant ASTV a possibility to provide its opinion and objections in a written form regarding positions of the CA, the formation of the value of regulatory asset base the costs of bad debt into the price of water service.

#### Principles for calculating capital expenditure

The capital expenditure applied for by ASTV in the price of water service in Tallinn and Saue City in the amount of 5 044 th  $\in$  (78 921 th kr).

In the price of water service ASTV has applied for the capital expenditure in the amount of  $5\,044\,th\in(78\,921\,th\,kr)$ .

### CA's position regarding the capital expenditure to be included in the price of water service of Tallinn and Saue City.

Pursuant to clause 5.1 of the Guidelines the aim of the capital expenditure is to earn back the expenses made for the acquisition of fixed assets through the price of water service during the useful lifespan of the fixed assets. Pursuant to clause 5.3 of the Guidelines capital expenditure is calculated from the depreciable fixed assets included within the regulatory asset base. Pursuant to clause 5.7 of the Guidelines in the calculation of the capital expenditure, depreciation rate on regulatory assets base reflected in the accounting shall be used.

Pursuant to the table (see Table 9) prepared by the CA on the basis of the data from the accounting presented by ASTV the depreciation rate on regulatory assets reflected in accounting is  $5\,044$  th  $\in$ .

The CA has prepared a table (see Table 10) on the lifespans of the assets reflected in accounting by ASTV:

Table 10

	ASTV's data	KIK recommendation*
Networks pipeline	54 years	40 years
Production buildings	80 years	40 years
Reservoirs and tanks	60 years	40 years
Machinery and equipment	10,6 years	15 years
Weighted average lifespan of assets		
at the regulation period	41 years	

<sup>\*</sup> Ministry of Environment Decree No 34 of 01.07.2009, useful lifespans of assets reflected in clause 10 of Annex 2 "Guidelines for preparing the feasibility study, financial and economic analysis and provisional environmental impact assessment for a project if the application for co-financing the project is submitted to the EU Cohesion Fund".

From the data reflected in the table (see Table 10) it may be concluded that ASTV generally uses a longer lifespan of assets in its accounting than is recommended in the regulation of the Ministry of Enrivonment (economically useful lifespan). The longer the lifespan of assets used in the provision of PWSS services, the lesser the price of water service. At the same time, the higher is the regulatory asset base, as the value of assets decreases slower (through deducting the depreciation from the value of regulatory asset base at the beginning of the year, the value of regulatory asset base at the end of the year is formed, which pursuant to clause 5.7 of the Guidelines serves as a basis for calculating justified return), and this, in turn, increases the service price.

As in its accounting when establishing the lifespan of assets ASTV has followed the actual technical service life of the assets (which is longer than the economically useful lifespan), due to which the application of a longer lifespan to assets decreases the sum of amortisation in the price, and enables the consumers a smoother increase in prices of water service when the company performs new investments, then, based on clause 5.7 of the Guidelines, the CA deems the depreciation in the accounting as justified in the amount of 5044 th € aka at the level that ASTV applied for in the Tariff Application.

#### Principles of the calculation of justified return

### ASTV has applied for a justified return of 25,957 k'€, incl. 23,510 k'€, (367,856 k'EEK) in the water tariff for Tallinn and Saue cities

ASTV applies for a justified return of **23 510** k' $\in$ , (367,856 k'EEK) in the water tariff for Tallinn and Saue cities. The sum of justified return included in the water tariff for Tallinn and Saue cities is based on, according to the company's explanations, the Services Agreement signed between the City of Tallinn and ASTV on 12.01.2001. ASTV is applying for the justified return set out in the Services Agreement by applying a **post-tax** rate of return of (or WACC) 6,46% on the regulated assets in the sum of 353 k'  $\in$  (5 522,914 k'EEK) referred to in the paragraph of this letter, the WACC having been calculated as follows (Table ANNEX 1 FINANCIAL TABLES submitted by ASTV – Table 7 – Forecasted cost of capital (WACC)):

Table 11

WACC calculation (%-des)	ASTV
1. Risk-free rate (real)	2,0
2. Gearing	50
3. Country risk premium	1,5
4. Equity beta	0,8
5. Cost of debt (pre-tax)	5,1
6. Cost of equity (post-tax)	7,82
7. Vanilla ( <i>WACC</i> )	6,46

ASTV has made the following calculation in order to demonstrate that the return applied for by them is justified:

- ASTV applies a rate of return of 6,46% on the value of regulated assets (353 m'€) submitted by itself, having that way calculated the post-tax profit of 22 803 k'€ or 356 780 k'EEK (353 m'€ x 6,46%/100% x 1000 conversion = 22 803 k'€).
- Thereafter ASTV adds to the post-tax profit 22 803 k'€ (356 789 k'EEK) the income tax on dividends 1 746 k'€ (27 324 k'EEK). By adding those figures ASTV arrives to the return of 24,549 k'€ (384 104 k'EEK).
- As based on the annex to the Services Agreement signed on 12.01.2001, ASTV requests justified return of 23 510 k'€, (367 856 k'EEK) in the water tariff for Tallinn and Saue cities, which is lower than the return of 24 549 k'€ (384 104 k'EEK) calculated by, then proceeding from ASTV's opinion it is in every way justified to include a return in the sum of 23 510 k'€ (367 856 k'EEK) in the water tariff for Tallinn and Saue cities.

#### CA's position on justified return.

Pursuant to the PWSSA § 14 lg 2 p 5 the price of water service shall be established such that the water undertaking can operate with justified profitability on the **capital invested** by the water undertaking. Pursuant to the clause 5.7 of the Guidelines, the invested capital is the value of the fixed assets used in the regulated activities as accounted for in the books of the company at the end of the regulation period, i.e. the value of regulatory asset base, which was described in more detail in the clause of this letter.

According to the clauses 6.1 and 6.2 the justified return is calculated by multiplying the value of regulatory asset base with a justified rate of return:

$$JR = r_p \times RAB;$$

where:

*JR* - justified return;

 $r_p$  - justified rate of return (WACC);

*RAB* - regulatory asset base.

Based on the clause 6.3 of the Guidelines, the justified rate of return equals with the weighted average cost of capital (WACC) i.e.:

 $r_p = WACC$ .

Based on the clause 6.5 of the Guidelines, the CA uses when calculating the *WACC* a Gearing, of which 50% is debt and 50% equity. CA does not use the company's book data for calculating the gearing of *WACC*. However, the gearing provided by ASTV in the table 12 corresponds to the gearing named by the CA (see Table 11line 2 and Table 12 line 10).

In order to provide more detailed explanations of the principles outlined in the clauses 6.4 to 6.10, the CA has developed guideline materials named "Guidelines for calculating WACC (2011) for calculating WACC for distant heating, electricity, gas and water companies, which is published on CA's webpage <a href="http://www.konkurentsiamet.ee/?id=10947">http://www.konkurentsiamet.ee/?id=10947</a>. The table 5 in the clause 3 of the named guidelines sets out a WACC of 8,18% for water undertakings, the basis for calculation of which is set out in the following table (see Table 12)

Table 12

WACC calculation (%)	water
	undertakings
1. Yield of riskfree 10-y German bonds	3,58
2. Estonian country risk premium	1,9
3. Risk premium of the debt of an undertaking	1
4. Pre-tax cost of debt	6,48
1. Yield of riskfree 10-y German bonds	3,58
2. Estonian country risk premium	1,9
7. Market risk premium (McKinsey)	5
8. Beta (gearing 50%:50%)	0,88
9. Pre-tax cost of equity	9,88
10. Debt/equity ratio (50%:50%)	0,5

11. WACC 8,18

"The Guidelines for calculating the weighed average cost of capital WACC 2011" includes detailed explanations and justifications for determining and using all the WACC calculation components (risk-free 10-year German bond rates, Estonian country risk premium etc).

The WACC used by ASTV does not correlate with the WACC used by CA and the principles of the Guidelines. When RAB is calculated using Guidelines article 5.7. the undertaking's net book value of fixed assets as reflected in the bookkeeping, as has been done by CA in article 8.2 of this letter, then WACC should be nominal. ASTV however uses a "vanilla" WACC, which the CA does not approve. CA considers it appropriate to use a nominal WACC in calculating justified profitability, because it has taken into account investment risk levels, economic cycle phases, inflation etc.

Since component values (except for gearing) used as the basis for WACC by ASTV in the table (see Table 12) do not correlate with the values presented in the table (see Table 12), then CA can not determine them as justified. In its justified profitability calculations CA follows the values of WACC components in the table (see Table 12), giving a justified WACC value of 8,18%.

Thus the justified profitability as per PWSSA § 14 section 2 article 5 and Guidelines article 6 will be **11 052,5** th  $\in$  (**172 934** th **EEK**) (regulated assets 135 116 th  $\in$  x 8,18% (WACC)/100%=11 052,5 th  $\in$ ).

ASTV has applied for a justified profitability of 23 510 th  $\in$  (367 856 th EEK), which is double (23 510/11 052,5 = 2,1) value of justified profitability calculated as per PWSSA § 14 section 2 article 5 and Guidelines article 6.

Based on the above, the CA can not find it justified to approve ASTV's applied justified profitability in the water tariffs in Tallinn and Saue in the sum of 23 510 th € and therefore in the overall Tariff application, because water tariffs are formed through dividing justified costs, cost of capital and justified profitability with water sales volumes. If one of the components for calculating tariffs is not justified, then the entire applied tariff is incorrect.

Based on §40 section 1 of the Administrative Procedures Code, the CA shall give ASTV the opportunity to present its opinions and counterclaims to CA's positions in writing.

#### **Conclusion**

In summary the CA is of the position that proceeding from §14 of the PWSSA and the Guidelines the price of water service must be cost-based and include justified return. Taking as the basis the positions expressed in this letter, which are based on §14 of the PWSSA, §16 (11) of the PWSSA and the Guidelines, the CA cannot regard the price of water service for Tallinn and Saue City applied for by ASTV to be justified for the following reasons:

- 1) Pollution tax paid for water pollution in the sum of 2307 th € (36 093 th kr) in the price of water service is not justified;
- 2) The price of water service includes cost of bad debts in the sum of 312 th  $\in$  (4 887 tuh kr), which, is not allowed to be included into the tariff as per the Guidelines;
- 3) Return applied for in the sum of 23 510 th € (367 856 th kr) does not comply with the justified return calculated according to the Guidelines in the amount of 11 052,5 th € (172 934 tuh kr) nor does it accord with the justified return from the capital invested by water company stipulated in §14 (2) clause 5 of the PWSSA;
- 4) Price of water services has not been formed in compliance with §14 (4) of the PWSSA and ASTV has not brought the price applied for into compliance with the requirements of equal treatment stipulated in §16 (11) of the PWSSA, i.e. the price difference between physical and legal persons as at 31.10.2010 has not been decreased;
- 5) Approval for the price of water service also for years 2012-2015 has been applied with an annual predetermined price increase, which is not in compliance with the PWSSA.

Pursuant to §40 (1) of the Administrative Procedure Act an administrative authority shall, before issue of an administrative act, grant a participant in a proceeding a possibility to provide his or her opinion and objections in a written, oral or any other suitable form

On the basis of §40 (1) of the Administrative Procedure Act, the CA hereby shall provide ASTV with a possibility to submit its positions regarding the price components to be included in the price of water service at the latest by 15 March 2011, taking into account the positions presented by the CA in this letter. After the receipt of the reasoning and explanations from ASTV to the positions referred to in this letter, the CA shall adopt a final decision regarding the approval or non-approval of the price of water service.

In case ASTV shall not submit its additional explanations regarding the circumstances pointed out in this letter by 15 March 2011 the latest, the CA shall adopt a decision on the basis of the existing data.

Sincerely, (signed digitally)

Märt Ots Director General