MINUTES

of the meeting of the committee for organising and implementing the sale of and subscription for shares in public limited company Tallinna Vesi

Tallinn 23rd November 2000

Beginning: 11:00 a.m.; end: 1:55 p.m.

Chair: Heiki Kivimaa

Recording secretary: Veiko Meremäe

Participants: Heiki Kivimaa, Heigo Kaldra

Invitees: Priit Pärtelpoeg, Henrik Igasta, Priit Koit, Sten Luiga, Priit Pahapill

Absentees: Ivar Virkus, Vladimir Masterov, Heino Mölder, Kristen Michal

The agenda:

1. Discussion on the amendments made by the investors to the shareholders' contract, the contract for the purchase and sale of and subscription for shares, and the service contract of AS Tallinna Vesi.

The following was decided:

- 1. AS Suprema shall add the amendments made by the committee to the contracts.
- 2. The committee shall approve the drafts of the shareholders' contract, the contract for the purchase and sale of and subscription for shares, and the service contract of AS Tallinna Vesi.

The next meeting of the committee will be held on 30th November 2000 at 11:00 a.m.

The integral part to the minutes is Annex no 1 – Matters to be decided before completion of the final draft contracts – on 3 pages.

Heiki Kivimaa Chair

Veiko Meremäe Recording Secretary Tallinn City Property Department COPY OF THE COPY IS TRUE /signed/ ÜLLE SAMORODNI Archivist

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Annex no 1 to minutes no 48 of the committee's meeting 23/11/2000

Matters to be decided before completion of final draft contracts

As a result of the meeting with the qualified tenderers, the final principal matters have been selected which need to be decided by the steering committee before the final draft contracts will be sent out. AS Tallinna Vesi has also made its proposals.

1. Minimum requirements for the construction of water and sewerage utility lines

Tallinna Vesi has made the following proposal:

The draft contract has set a task to achieve a decrease of 25% in leakages in the water supply network and a decrease of 20% in the number of sewerage cloggages by 2005.

At the same time, the reconstruction work in the volume of 5 km per annum (i.e. 0.5-0.6% of the total length of the networks) is planned for the renewal of networks.

Taking into account the age of the existing networks and the frequency of failures thereof, the planned volume of reconstruction work cannot be considered as sufficient for the performance of the given task. Therefore, we think it necessary to make amendments to Table A1 *Drinking water* and Table A2 *Collection, cleaning and discharge of waste water* in Annex D III (sanctions) to the draft contract, in the following wording:

Table A1 *Drinking water*:

Reconstruction or replacement of pipes WS6/WS10:

To replace "A minimum of 5 km of the main water pipeline per annum" with "A minimum of 10 km of the main water pipeline per annum"

Table A2 Collection, cleaning and discharge of waste water

Reconstruction or replacement of pipes WW1

To replace "At least 5 km of pipes per annum" to replace with "A minimum of 10 km of the sewerage pipeline per annum"

Decision – at the current stage of the privatisation process, it is not reasonable to introduce such amendments.

2. Payment for fire water

Tallinna Vesi has made a proposal to impose an obligation on the City to organise accounting for the use of fire water by the rescue board and to pay for the used water on the basis of the tariff applicable to private persons.

Decision – to add this obligation to the service contract.

3. Taking into account the business plan upon evaluation of the tender

All parties have expressed their wish to fix the performance of the business plan submitted as a part of the tender as an obligation of the parties and one part of the tender. The alternatives are as follows:

- The business plan will become binding after approval thereof by the supervisory board.
- The business plan will become binding on the parties by acceptance of the tender, except when the business plan does not comply with good practices.

Decision - The business plan shall not be taken into account upon evaluation of the tender. The business plan shall not be binding on the parties before approval thereof by the supervisory board of AS Tallinna Vesi.

4. Confirmations of the City concerning correctness of the audited annual reports

Northumbrian Water emphasises the wish that the City would unconditionally (i.e. not on the best knowledge basis) confirm the correctness of the information presented in the annual report for the previous year.

Decision – it shall remain as it was, i.e. the City shall give its assurances on the best knowledge basis.

5. Justified profitability

The Public Water Supply and Sewerage Act provides for justified profitability (JP) as one tariff component. At the same time, there is no clear regulation or judicial practice in Estonia concerning the determination of PT. As a result, the investors make a proposal to determine the amount of PT or its establishment rules more precisely. Therefore, we make a proposal to further specify the matter as follows:

As of the fifth year, the tariff coefficients are determined for an advance period of five years by way of negotiations between the city and the company on the basis of the company's tender. The tender also includes the investor's understanding of JP. If the city considers the offered JP to be justified and the parties fail to reach a consensus, the size of JP shall be determined by an independent international expert who shall analyse JPs of five comparable companies and shall additionally take into account:

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- the generally accepted business practices of water companies
- the economic situation of Estonia and Tallinn
- the vision presented in the business plan

Decision – to provide for determination of justified profitability in the contract according to the above method.

6. Termination of the contract and sale of the investor's shares

All three tenderers have emphasised the need to determine clear principles for the event if the parties violate the contract or the special and exclusive right to act as a water undertaking, which is granted to the company, expires. The investors believe that it is especially important to regulate a situation where violation of laws or the contract by the City brings about significant damage to the company and investor.

As a result, we offer the following solution:

a) Termination of the contract due to the shortcomings of the company (investor)

- The grounds for termination are specified in the service contract (penalties of the company in the amount of 3 million EUR within one year and 5 million EUR within two years, substantial violation of the contract, etc. The amounts are changed proportionally to a change in tariffs).
- The city has the right to buy all the shares held by the investor.
- The price is the value of the company's equity.

b) Termination of the contract due to the shortcomings of the city

- If the city has outstanding penalties or damages of over 10 million EUR adjudicated by a court decision or arbitration award. The amounts are changed proportionally to a change in tariffs)
- after a period of 60 days for the payment of penalties
- the city has the obligation to buy the shares held by the investor
- the price is the value of the company's equity, plus the dividends paid to the city within the last five years

c) If the special and exclusive right expires, except when due to the shortcomings of the company (investor) (section 1)

- the investor has the right to sell the shares without any restrictions with regard to the buyer
- the parties have the right to demand liquidation of the company
- the contract specifies that if the parties wish to buy each other's shares, the price is the amount of the equity; at the same time, no obligation is established to make a transaction at such a price level.

Decision – to agree to this solution, in principal. To replace number "12" in part B with number "14" in part B and delete clause two, i.e. the period of 60 days for payment of penalties. In part C, to delete clause C, i.e. the right to demand liquidation of the company.

7. Resolution of disputes

NWU wishes to provide that should a general meeting of shareholders fail to reach a consensus in certain matters, the matter shall be resolved by an arbitration court.

Decision – not to agree to such a provision.

8. Change of tariffs upon amendment of laws

The previous draft of the contract prescribed that a change in the cost base of the company due to amendments to laws provides a basis for negotiating the tariffs only if the effect on costs is more than 5% per annum. The proposal is to provide that the same right will also be created should the change be more than 7.5% within two years.

Decision – to agree to this.

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Appendix B

This appendix provides a simple stylised example to illustrate the similarities between the two following approaches to determining allowed revenues:

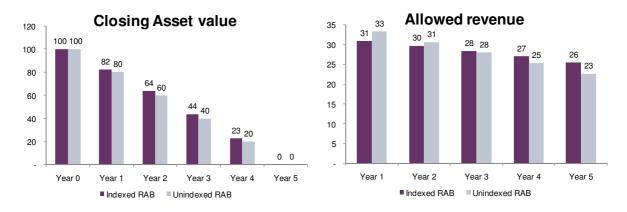
- 1) indexation of the asset base, combined with a real cost of capital
- 2) no indexation of the asset base, combined with a nominal cost of capital

The example is based on the following assumptions:

- an initial investment of €100
- asset life of 5 years
- straight-line depreciation over the asset life (ie, €20 per year for 5 years)
- no under- or over-recovery of operating or capital expenditures
- a real cost of capital of 10% (13.3% in nominal term)
- inflation rate of 3%, constant across the period

The profile of asset value and allowed revenues under case 1 (indexed RAB) and case 2 (unindexed RAB) are shown in the figure below. Importantly, although the profile of allowed revenues differs in both cases, both result in a net return of 10.0% (13.3% nominal) for the company over the 5-year period.

Chart 1 Closing asset value and allowed revenue



Importantly, under the assumptions laid-out above, the net present value of both streams of cash flows is equal, both in real and nominal terms. In cases where the assumption of constant inflation is relaxed and inflation is allowed to vary during the five-year period (with a constant real and nominal WACC), the net present value of both streams of cash flows is equal, but only in real terms.

The calculations used to determine closing asset value are detailed in Table 1 below.

Table 1 Evolution of the value of the asset: real and indexed

		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Inflation used in asse	et valuation						
Rate	(a)	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Index	(b)	1.00	1.03	1.06	1.09	1.13	1.16
Real asset value							
Opening real asset value	(c)	-	100.0	80.0	60.0	40.0	20.0
CAPEX	(d)	100.0	_	_	_	_	_
Historical cost depreciation	(e)	-	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)
Closing real asset value	(f) = (c + d + e)	100.0	80.0	60.0	40.0	20.0	_
Indexed asset value							
Opening indexed asset value	(g)	_	100.0	82.4	63.7	43.7	22.5
CAPEX	= (d)	100.0	_	_	_	_	_
Historical cost depreciation	= (e)	-	(20.0)	(20.0)	(20.0)	(20.0)	(20.0)
Indexation of depreciation	(h) = (e) * (b - 1)	_	(0.6)	(1.2)	(1.9)	(2.5)	(3.2)
Indexation of assets (re- valuation)	(i) = (g) * (a)	_	3.0	2.5	1.9	1.3	0.7
Closing indexed asset value	(j) = (g + d + e + h + i)	100.0	82.4	63.7	43.7	22.5	0.0

The allowed revenue calculations are detailed in Table 2 (indexed RAB) and Table 3 (unindexed RAB) below.

Table 2 Allowed revenue for indexed RAB

		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Allowed return on capital	(a) = real allowed cost of capital * Table 1 (g+i)		10.3	8.5	6.6	4.5	2.3

Regulatory depreciation	(b) = (c+d)	20.6	21.2	21.9	22.5	23.2
Historical cost depreciation	(c) = - Table 4.1 (e)	20.0	20.0	20.0	20.0	20.0
Indexation of depreciation	(d) = - Table 4.1 (h)	0.6	1.2	1.9	2.5	3.2
Allowed revenue	$(\mathbf{e}) = (\mathbf{a} + \mathbf{b})$	30.9	29.7	28.4	27.0	25.5

Table 3 Allowed revenue for unindexed RAB

		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Allowed return on capital	(a) = nominal allowed cost of capital * Table 1 (g)		13.3	10.6	8.0	5.3	2.7
			10.0	10.0			
Regulatory depreciation	(b) = - Table 4.1 (e)		20.0	20.0	20.0	20.0	20.0
Allowed revenue	(c) = (a+b)		33.3	30.6	28.0	25.3	22.7

Külli Haab Energeetika- ja veeteenistuse juhataja Konkurentsiamet Auna 6 10317 Tallinn

> Your ref: 09.02.11 nr 9.1-1/10-0111-003 Our ref: 02.03.2011 nr 6/1073392-2

Dear Ms Haab,

Thank you very much for your letter date 9 February 2011. In your response you have clearly outlined how the Competition Authority (CA) calculates and applies its own WACC calculation in the regulated utilities sector. Within your response you have outlined some basic regulation and cost of capital principles, such as when using a nominal WACC then assets should not be indexed to avoid double counting of inflation, and that the amount of revenue required by investors depends on many circumstances, risk level, phase of economic cycle, money supply, inflation etc. These are general economic statements that I would certainly agree with.

However, none of the very specific questions raised in our letter dated 28 December have been answered in your letter dated 9 February 2011 (nor are they addressed in the CA's methodology document). Therefore, I am writing to highlight some areas of your response that would merit further clarifications, or where the method you describe seems at odds with fundamental regulatory principles:

- Compensation for inflation
- Compensation for country risk
- Compensation for taxes

In this letter I address each area in turn.

Compensation for inflation

Neither the CA's methodology nor the description from your letter provides a clear description of how the investors in ASTV are adequately compensated for inflation risk. From fully transparent regulation I would expect to be able to obtain a clear explanation of the following: first, how does the tariff methodology ensure that investors can be compensated for inflation; second, what justifies the use of a particular inflation measure.

Firstly, the CA needs to demonstrate that the use of a nominal WACC with un-indexed assets provides an adequate compensation for inflation. In this context, it would be helpful to consider how possible alternative approaches would compare. For instance, how does the CA's method compare to the method adopted by other water regulators? What does the CA believe are the advantages of compensating for inflation through the WACC rather than by indexing the asset base, as Ofwat does in its regulation of privatised utilities?

I would also like the CA to explain how its methodology would ensure that the company is compensated for inflation risk, that is, the effects of inflation fluctuations within a price control (this relates to my **first question** in the December 28th letter). I would like some clarity on whether i) inflation risk is transferred toward consumers? or ii) whether the inflation risk would remain with the company (this relates to my **third question** in the December 28th letter)? For instance, inflation risk could be allocated towards consumers if the allowed WACC each year was updated to account for changes in inflation, or by indexing tariffs by an appropriate inflation index each year. Alternatively, inflation risk could be allocated towards the company if a constant nominal WACC is assumed for a longer price control period. As indicated by the CA's WACC determinations for 2007, 2008 and 2010 (8.31%, 8.31% and 8.26%, respectively), the CA appears to have assumed broadly the same inflation

rate for all periods, despite considerable changes in Estonian inflation across those years (see attached table with OECD data).

Dataset: Key Short-Term Economic Indicators										
Subject	Consumer	prices: all i	tems_							
<u>Measure</u>	re Growth on the same period of the previous year									
Frequency		Annual								
Time	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Country										
Estonia i	3,6	1,3	3,0	4,1	4,4	6,6	10,4	-0,1	3,0	

In your letter you state "The change in inflation and the required rate of return are certainly not in correlation (when one of the factors changes then the other factor will not change immediately)". This statement is not only unfounded, but its meaning is also unclear; is the CA implying that inflation does not need to be considered given that there are other factors? A regulatory methodology that is consistent with sound economic principles (including real financial capital maintenance) would need to ensure the net return earned by investors includes a compensation for inflation, in addition to a compensation for any inflation risk that is allocated to the company. At this point, to assist with the transparency/openness of the new regulatory regime, could the Competition Authority provide more details on its methodology and any additional analysis and calculations of the various investment circumstances (risk level, phase of economic cycle, money supply, inflation etc) it may have undertaken?

Secondly, it would be helpful if the CA clearly stipulated the reasons for using a particular inflation measure. In particular, I would like clarity on the exact level of inflation assumed by the CA when estimating the allowed returns for recent years (this relates to my **second question** in the December 28th letter). The CA states that it uses "the average rate of return of the last five years of German bonds", but without justifying why the use of German inflation is appropriate in the context of Estonian assets. I note that over the past five years German inflation has been considerably lower than Estonian inflation, with Estonian inflation 3.3% per annum higher than German inflation over the period to 2006 to 20010 (see table below with OECD data).

Dataset: Key Short-Term Economic Indicators										
Subje	ect	Consumer	prices: all i	<u>items</u>						
<u>Measu</u>	<u>ıre</u>	Growth on	the same p	eriod of the	previous y	/ear				
Frequen	су	y Annual								
Tir	ne	2002	2003	2004	2005	2006	2007	2008	2009	2010
Country										
Estonia	i	3,6	1,3	3,0	4,1	4,4	6,6	10,4	-0,1	3,0
Germany	i	1,5	1,0	1,7	1,5	1,6	2,3	2,6	0,4	1,1

data extracted on 24 Feb 2011 11:27 UTC (GMT) from OECD.Stat

In summary, for the reasons explained above I perceive a lack of clarity in the CA's methodology and the responses in your letter regarding how the CA treats inflation within its WACC calculation. As a result, I disagree with your statement "The questions raised in this letter have been explained previously in the explanations/responses by the Competition Authority to the methodology "Recommended principles for calculating the price of water service" as well as at the several meetings with the representatives of AS Tallinna Vesi" and would ask you to answer the questions raised above and in our letter dated 28 December 2010.

Compensation for country risk

As explained in our recent tariff application, a compensation for the Estonian country risk also needs to be included in the allowed returns for ASTV in addition to the compensation for inflation (which is discussed above). In that respect, it is important that the CA clearly explains how it measures the country risk premium and also that it outlines the reasons why using this measure is appropriate?

In the February 9th letter, the CA does provide some explanation of how it measures country risk: "Pursuant to the Instruction the referred risk-free rate of return is increased with country risk and by the difference of the arithmetic average of the 5 last years of Euribor and Talibor quotations, which in 2010 was 1.8% and in 2011 it was 1.9%".

However, the CA does not provide a justification of why it considers Euribor/Talibor to be an appropriate measure of country risk premium. The Talibor quotation is based on a local only, not widely used market, and is primarily made up of short term quotations (ranging from overnight borrowings to a period of 12 months). As explained in our recent tariff submission, a measure of country risk would need to be based on longer term instruments in order to be consistent with the maturity of instruments used for the other WACC parameters. In the absence of long-term Estonian government bonds, credit default swaps (CDS) for the Republic of Estonia could be a useful guide. For example ten year Estonian CDS exceeded German CDS by approximately 1.5% over the past year. It should be noted however that this measure does not include an inflation differential, which would need to be taken into account separately.

Furthermore, as of 30 December 2010, the Talibor is no longer published by the Bank of Estonia. Therefore, from a practical perspective, it will be impossible to rely on such a measure, in spite of its obvious failings, going forward.

Finally, it is important to clearly distinguish the elements of compensation that relate to country risk from those that relate to inflation, as some measures encompass both. For example, the difference between yields on German and Estonian government bonds would capture both inflation differentials and country risk, while the difference between CDS for the same countries would only capture a country risk element. The CA should ensure that the compensation it allows for country risk is consistent with its approach to compensate for inflation.

In summary, it would be helpful if the CA could provide more details on the reasons why it considers its country risk estimate appropriate and preferable to other alternative measures?

Compensation for taxes

Regarding your responses as to why investors should be paid a post tax rate of return, I thank you for your explanations which address the **last question** in my letter dated December 28th. Before I outline the reasons why I disagree with your statements, I thought that it would be useful to briefly return to first principles as a way to structure the discussion.

Economic regulation is intended to ensure that a company can recover its costs and earn a reasonable return on its invested capital, while providing incentives for efficiency and investment. In particular, under the building blocks approach, part of allowed revenue consists of a compensation for P&L costs such as operating expenses, depreciation, interest and taxes.

- Operating expenses are compensated directly in the allowed revenue (with the appropriate mechanisms to incentivise efficiency);
- Depreciation is also included directly in the allowed revenue to compensate for previous investments in fixed assets;
- Interest expenses are typically compensated through the cost of capital;
- Tax expenses can be compensated either through the cost of capital or directly in the allowed revenue, in a similar way as operating expenses.

Compensation to shareholders, which captures the return required by equity investors, is generally provided through the cost of capital. This comprises both dividends and future expected returns in the form of capital appreciation.

Against the backdrop of these general principles, I now address the points you list to justify your position on the compensation for taxes.

First, you state that according to the Public Water Supply and Sewerage Act the justified return is calculated as operating profit, and that "the income tax on dividends occurs after the operating profit". This factual statement is correct from an accounting perspective. I should note that § 14 (3) of the Act also states that "the price [...] shall be established such that the water undertaking can: 1) cover production costs; [...] 4) operate with justified profitability". Here, "justified profitability" relates to the return attributable to debt and equity investors in the company, net of all other expenses. This is also recognised by the CA in electricity regulation, where it identifies one of the key regulatory principles as the "guarantee of acceptable return on invested capital for investors, i.e. at least equivalent return that they would obtain on investments with the same degree of risk". Unless the company is compensated for taxes it is liable to pay, equity investors would be under-compensated, and this would be inconsistent with the Act. A parallel can be drawn to the treatment of interest payments: those are included in the allowed return (through the WACC) even though they also "occur after operating profit". In other words, the fact that tax payments "occur after operating profits" is not in itself a reason for not allowing a compensation for taxes. As a consequence of the above, how does the CA's methodology ensure equity investors will not be treated more unfavourably than debt investors?

In your second statement, you state that dividend payment is "voluntary". Whilst paying out dividends is voluntary it is not rational to believe that anyone would invest in long run assets such as those in the water sector without ever receiving any form of cash return/dividends. In fact by using such treatment it could be said that the regulation in its current format is discriminatory against those investors who would like to receive an annual return on their invested capital. Utility companies are generally known to be dividend investments rather than growth investments. By their very nature they are considered to be stable long term investments that require large amounts of capital to be invested over long periods of time. In this situation investors will require an appropriate level of dividends to retain their investment or attract new investors should they choose to exit. By insisting that equity investors can only make a return on pre-tax earnings, the CA is effectively asking these investors to fully take governmental tax policy risk. For example, should the government increase or decrease the rate of tax then the rate of return will automatically change, which could completely overturn the basis for the original investment decision. In this case companies that wish to attract external equity investment will find it much harder to attract new investors. As a consequence how will the CA protect equity investors from government tax policy risk/gain?

In your third point, you state that "most of the countries do not take the payment of dividends into account in the WACC for regulated activity". I would first like to note that dividend models, such as the dividend growth model (DGM), are commonly used by regulators along with market evidence to estimate the cost of equity. For instance, the UK Competition Commission considered evidence from the DGM in its determinations for Bristol Water (2010) and Stansted Airport (2008). Secondly, while dividends are not always taken into account explicitly in regulatory determinations, many countries do take into account a tax charge in order to ensure an adequate post-tax return for equity investors. As stated above, taxes can compensated by using a pre-tax WACC (for example, as done by Energiekamer and CER, the Dutch and Irish energy regulators) or directly as a component of allowed revenue (for example, as done by Ofwat for water companies in England and Wales).

In summary, I do not agree with the reasons put forward by the CA to justify not allowing a compensation for corporate taxes in the allowed returns. As noted above, the proposed approach is inconsistent with economic principles and with regulatory precedents. Furthermore, this approach would result in an under-recovery for equity investors and be inconsistent with the Public Water Supply and Sewerage Act's requirement that prices should allow companies to earn "justified profitability". Given the statements above, in the interests of open dialogue, it would be very helpful if the CA could demonstrate how its methodology does not prejudice equity investors?

I am certain that the CA recognises the importance of this discussion for the customers, investors and ASTV itself. It is of fundamental importance that all the above stakeholder groups clearly understand

the points and questions raised above and in our letter dated 28 December 2010. With clear and well communicated explanations all parties will know their rights and responsibilities within the current regulation, which I'm sure is the intention of the law and the regulation. Therefore if could the CA please answer the questions raised in the letter above and questions 1 to 3 in our letter dated 28 December 2010 (see appendix 1), as to date I do not believe these very specific questions have yet been answered.

I remain open for further dialogue with the CA to help progress these letters and questions. I look forward to a constructive and positive response.

Yours sincerely,

Ian John Alexander Plenderleith Chairman of the Management Board