THE ABRIDGED EXCERPT FROM THE FEASIBILITY STUDY OF THE PROGRAMME OF RECONSTRUCTION AND REPLACEMENT OF THE WORN-OUT EQUIPMENT AND WATERWORKS TOGETHER WITH THE COMPLETION OF COMMENCED SEWERAGE SYSTEM

Bečej, 30th May, 2005

1. General data about the Investor

The Investor is	Public Corporation "Vodokanal" with the headquarters in Bečej, Danilo Kiš 3
Identification number of corporation	08069921
Business code for water supply	41000
Business code for sewerage system	90000
Corporation registration	The corporation has been registred in the Court of Exchequer under ref. no. 2308/1998.
Basic line of business of the Investor	The basic line of business of the Investor is the production and the distribution of drinking water and treatment and channeling of sewage and effluent.
Phone number	021/812-931
E-mail	Vodokanb@EUnet.yu
Depositor of the own assets of the Investor	Vojvođanska banka, the branch in Bečej
Contact and information person	Galus Žolt, the director and Kasaš Šandor, the assistant director
Date of the foundation of the Investor	PC »Vodokanal« was founded in 1969

2. The most important phases of the techical-technological development of the watert supply sys.

The most important phases in the development of the corporation are: the projecting and construction of the waterscoop field, the construction of objects and facilities for gassing and deferment, the construction of main and secondary waterworks 114 km in length, the construction of the objects and facilities for the treatment of sewage and waste water, the construction of the collector, secondary and tertiary sewerage system 56 km in length.

The planned construction of all the above-mentioned objects and equipment began in 1970 and lasted until 1992. The financing of these investments was realised from the funds of the voluntary tax of all the citizens of Bečej in the period of 18 years.

The annual capital investments amounted to DM 2,5 million, which converted in euros amounts to EUR 1,25 million. The total investment in the above-mentioned investments in the mentioned period amounted to DM 45 million, which converted in euros amounts to about EUR 22,5 million.

3. The description and specification of the planned investments

Since due to the lack of financial resources we have not been able to carry out the maintenance of the equipment, installations, constructed waterworks and water gauges on the regular basis, we have detected the losses of water in the transport from the source to the consumer location.
In order to reduce the losses of water in the transport, we have decided to approach the renewal and replacement of the worn-out equipment on the principle of priority.
On the basis of the determined parameters, in cooperation with the self-government authorities, the Public Corporation "Vodokanal" has prepared the feasibility study of the projected capital investments, whose most important parts are presented in the continuation of this abridged excerpt from the study.

I	***Premeasurement and precalculation of the preliminary designs whose construction has been planned***		
1.	Construction of wells		
	- wells drilling		3,600,000
	- equiping of wells with appropriate equipment		1,100,000
	- equiping of wells		400,000
	- transit duct of installations		1,200,000
	- electrical equipment		500,000
	- electrical installations		400,000
		Σ	7,200,000
			x 7
			50,400,000
2.	Connecting with TS underground power cable		3,200,000
3.	Replacement of power cable		3,800,000
4.	Equiping of existing wells		3,050,000
	- underwater pumps 3 pieces		
	- underwater pumps 2 pieces		
		Σ	60,450,000

which converted in euros acccording to

average exchange rate on 07/02/2005 amounts to EUR 755,625

II	***Reconstruction of water conditioning station***		
1.	Replacement of the equipment for chlorine station		5,000,000
2.	Replacement of centrifugal pumps		4,100,000
3.	Replacement of electromotive valves		2,400,000
4.	Replacement of slide rule walves		350,000
		Σ	11,850,000

which converted in euros acccording to
average exchange rate on 07/02/2005 amounts to EUR 148,125

III	***Acquisition of stainless steel equipment for sewage treatment plant***		
1.	Acquisition of the stainless steel equipment for sewage treatment plant		4,550,000
2.	Replacement of 3 pieces of pump generating units		6,250,000
3.	High pressure autocistern for the unclogging of sewerage system		9,000,000
4.	Acquisition and assembly of water flow gauges- 2 pieces		900,000
5.	Construction of aerated sand filter objects		
	- construction part		8,000,000
	- equipment		4,000,000
6.	Construction of the building objects with sanitary and xygiene facilities (100 m2)		6,000,000
7.	Construction of the objects and acqusition and assembly of equipment for sewage transfer		2,500,000
		Σ	41,200,000

which converted in euros acccording to
average exchange rate on 07/02/2005 amounts to EUR 515,000

IV	***Investments in the construction of waterworks***		
1.	Waterworks Ø 200 mm		17,635,800
2.	Waterworks Ø 100 mm		26,505,570
3.	Waterworks Ø 100 mm		37,146,330
		Σ	81,287,700
4.	Replacement of worn-out waterworks Ø 150 mm		20,748,000
5.	Replacement of waterworks Ø 100 mm		124,488,000
6.	Ultrasound gauge Ø 50 – Ø 400 mm		
	2 pieces for DIN 1,200,000, which amounts to		2,400,000
		Σ	228,923,700

which converted in euros acccording to
average exchange rate on 07/02/2005 amounts to EUR 2,861,546

V	**Replacement of worn-out waterworks**		
1.	Replacement of worn-out waterworks Ø 100 mm		44,460,000
2.	Inductive gauge Ø 250 mm		278,708
3.	Acquisition of new water gauges		6,040,342
		Σ	50,779,050

which converted in euros according to
average exchange rate on 07/02/2005 amounts to EUR 634,738

VI	**Investment in sewage and effluent collector of sewerage system**		
1.	Construction of main sewage collector		
	Ø 400 – 700 mm 4,170 m in length		63,991,980
			26,676,000
2.	Construction of sewage collector		
	Ø 400 – 500 mm 2,010 m in length		28,391,270
3.	Construction of sewage collector		
	Ø 200 – 300 mm 1,710 m in length		11,175,840
		Σ	103,559,040

which converted in euros according to
average exchange rate on 07/02/2005 amounts to EUR 1,294,488

VII	***Construction of sewerage system***		
	- Ø 250 mm		116,688,000
	- Ø 200 mm		98,567,820
		Σ	215,255,820

which converted in euros according to
average exchange rate on 07/02/2005 amounts to EUR 2,690,697

VIII	**Precalculation of equipment and mechanization**		
1.	Acquisition of Compressor		900,000
2.	Acquisition of freight vehicle		140,000
3.	Acquisition of tractor		1,000,000
4.	Acquisition of tractor trailer		100,000
5.	Acquisition of mobile diesel generating units		
	- power 60 kVA		690,000
	- power 30 kVA		510,000
		Σ	3,340,000

which converted in euros according to
average exchange rate on 07/02/2005 amounts to EUR 41,750

IX. Reconstruction and adaptation of catchment and reservoirs and other additional facilities

Reconstruction and adaptation of catchment and reservoirs and other additional facilities and reconstruction and annexing of these objects into business premises 300 m2, whose precalculated value amounts to DIN 39,450 per 1 m2, which in total amounts to DIN 12,000,000 which converted in euros according to average exchange rate on 07/02/2005 amounts to EUR150,000.

Recapitulation
of the above-mentioned capital investments

Description	in dinars	in euros
1. Construction and equiping of wells	60,450,000	755,000
2. Reconstruction of water conditioning station	11,850,000	148,125
3. Acquisition of stainless steel equipment for the sewage treatment plant	41,200,000	515,000
4. Investments in the construction of waterworks	228,923,700	2,861,546
5. Replacement of the worn-out waterworks	50,779,050	634,738
6. Investment in the collector for sewage and effluent	103,559,040	1,294,400
7. Construction of sewerage system	215,255,820	2,690,697
8. Precalculation of equipment and mechanization	3,340,000	41,750
9. Reconstruction and adaptation of catchment and reservoirs and other additional facilities	12,000,000	150,000
Total	**727,357,610**	**9,091,881**

The structure of capital investments (in DIN 000)

1. Building objects	676,007
2. Equipment	42,040
3. Water flow gauges	3,300
4. Water gauges	6,010
	Σ 727,357

which converted in euros according to

average exchange rate on 07/02/2005 amounts to of EUR 9,091,969

By means of these investments we will achieve the construction of new and replacement of the worn-out and depreciated production and service capacities, and alongside this we will achieve appropriate values of economic and non-economic effects.

Since our corporation does not possess enough of own financial resources for the construction and replacement of worn-out equipment and other capacities, we have to turn to domestic or foreign banks and development funds or other financial institutions.

We will obtain the realisation of economic effects from the calculation of the total income and costs and income sheet, presented on pages 47 – 51 of the Feasibility study.

We have planned the account of income and cost according to the extrapolation method, which is based on constant and static prices and datas for the whole period of the realization of the investment programme.

The account of amortization on the existing previously constructed resources

The total cost of amortization the previously constructed investments amounts to DIN 21,228,000.

The account of amortization for new capital investments

According to the dynamic plan of the capital investments in the replacement of worn-out objects and equipment:

1. for the investments in the year 2005 the amortization amounts to 5,896,000
2. for the investments in the year 2006 the amortization amounts to 6,380,000
3. for the investments in the year 2007 the amortization amounts to 5,866,000
4. for the investments in the year 2008 the amortization amounts to 11,632,000
5. for the investments in the year 2009 the amortization amounts to 4,118,000
6. for the investments in the year 2010 the amortization amounts to 7,268,000

Total: 41,160,000

The account of the interest costs and the installments of credit repayment

Amount of credit :		727,357,000
Interest :	2%	
Term of repayment:	20 years	
Grace period:	5 years	
Interest account for the grace period:		72,735,000
Total amount of debt:		800,092,000
		(727,357,000 + 72,735,000)
Interests for the period 2010 – 2024 amount to		127,006,000
Repayment of installments for the period 2010 – 2024 amounts to		800,092,000
Account of annuities amounts to		927,098,000
Average installment of the repayment of the debt principal amounts to		53,339,000

The survey of the annual water production and consumption with the emphasis on the importance of reduction of water losses

Average annual water consumption in the observed period amounts to	3,329,717 m3
Households consumption amounts to	1,018,000 m3
Economy and institutions consumption	913,000 m3
Loss of water in transport due to worn-out waterworksand water gauges	1,398,000 m3
which in percents amounts to 41,98%, which rounded off amounts to 42%	
Annual value of water losses at the average price of DIN 30,49	
amounts to	DIN 57,318,000

If we would cut these losses for just 20%, we would provide the annual saving value that amounts to DIN 33,987,720.

The rationalization of electricity consumption

The rationalization of electricity consumption by means of acquisistion and assembly of frequent regulator of the electromotor amounts to 40%.

If we compare the value of investments acquisition, that is the credit with the saving achieved, we will obtain the increase of profit, by means of electricity saving, that amounts to DIN 2,486,000.

By means of this saving we will be able to realise the refund of invested resources in the period of 1,95, that is about 2 years.

We have performed this calculation of the refund according to the formula:

$$T_s = \frac{ANP}{TIV} = \frac{4,858,000}{2,486,000} = 1,95$$

where T_s = static time period of the refund of invested credits
ANP = average value of net profit
TIV = total investments value

It can be seen from these data that these investments are very rational and profitable, because their investment can be refunded in the period of less than 2 years.

The rationalization of the capacities exploitation of the previously constructed sewerage system, by connectiong sewage from septic pits to it

By means of connecting of new households to the sewerage system the incomes from sewerage system services will be increased:

1.	in the year 2006 for		1,013,000
2.	in the year 2007 for		2,750,000
3.	in the year 2008 for		5,306,000
4.	in the year 2009 for		8,133,000
5.	in the year 2010 for		11,896,000
		Σ	29,098,000
6.	connecting to the new sewerage system in the period 2011 – 2024 (11,896,000 x 14)		166,544,000
		Σ	195,642,000

Although these incomes are calculated according to constant prices, it is clear that they will be periodically corrected in accordance to the rise of input prices and macroeconomic policy goals.

Effective water saving

Effective water saving after the reconstruction and replacement of the waterworks in the period 2006 – 2024 amounts to DIN 171,584,000.

The recapitulation of the realised net profit according to the income sheet in the period 2005 – 2024

In the period 2005 – 2024 net profit that amounts to DIN 890,867,00 will be realised, which has been clearly presented on pages 52 and 53 of the Feasibility study.

The survey of the economic-financial indicators

$$\text{1. Profitability of capital investments} = \frac{\text{Net profit}}{\text{Investments}} = \frac{890{,}867{,}000}{727{,}357{,}000} = 1{,}22$$

$$\text{2. Reproductive ability} = \frac{\text{Net profit + Amort.}}{\text{Total capital invest.}} = \frac{890{,}867{,}000 + 502{,}536{,}000}{727{,}357{,}000} = \frac{1{,}393{,}403{,}000}{727{,}357{,}000} = 1{,}91$$

$$\text{3. Thrift} = \frac{\text{Spent resources}}{\text{Total income}} = \frac{867{,}092{,}000}{1{,}856{,}946{,}000} = 0{,}46$$

$$\text{4. Liquidity} = \frac{\text{Short-term claims}}{\text{Short-term commitments}} = \frac{14{,}531{,}000}{8{,}231{,}000} = 1{,}76$$

$$\text{5. Qualitative structure of employees} = \frac{\text{No. of employees with university-level and tertiary school qualifications}}{\text{Total no. of employees}} \times 100 = \frac{10 \times 100}{63} = 15{,}87\%$$

$$\text{6. Total income on no. of employees} = \frac{\text{Total income}}{\text{No. of employees}} = \frac{108{,}772{,}000}{63} = 172{,}654$$

$$\text{7. Capital equipment of working place} = \frac{\text{Total investments}}{\text{No. of employees}} = \frac{727{,}357{,}000}{63} = 1{,}154{,}536$$

Besides the above-mentioned concise data and excerpts from the feasibility study, here we will draw the attention of the users of this synthesis to descriptively presented descriptions under the headings ***Alternative financial sources for financing of the development requirements,*** presented in the Feasibility study, as well as the economic-financial indicators, presented on this page of this abridged excerpt.

The director

Galus Žolt, hydrobiologist