

COMMENTS AND RESPONSES

on

**Draft Regional Water and Wastewater Master Plan
on the territory of ViK in liquidation EOOD Pazardzhik**

prepared by Consortium "Seureca, SCE, Hidroproekt – Sofia, Arcadia Engineering" in pursuance of
Municipal Infrastructure Development Project – Preparation of Regional Master Plans for Water Supply and Sewerage – Central Region, MIDP – MP – QCBS2

№	Date	Questions, comments, proposals	Statement of the Consultant	Result reflected in the RMP
Comments by ViK in liquidation EOOD Pazardzhik				
1	30.09.2013	In finalizing the plan minor adjustments may be made for changes that have occurred in the water supply and sewerage systems during the last year /additional water meters installed at the inlet, altered pattern of chlorination, etc. /	Corrected	
2		At certain places in the text there are technical errors with wrong names of settlements or water operator, texts in English and spelling errors - mostly omitted or incorrectly put spaces between sentences and before semicolons. Detailed information on spotted errors, omissions and inaccuracies will be presented to the team preparing the document.	Corrected	
PISA Remarks from the Assessment Note				
1. EXECUTIVE SUMMARY				
Objectives and Scope of the Regional Master Plan				
		<ul style="list-style-type: none"> The first chapter has to include more summarized information about non-compliance with the EU Directives. Some information should be added about the importance of the Master plan as a base for development of the next stages- Feasibility Studies, CBA, Application forms, Tender Documentations, 	<ul style="list-style-type: none"> The EU Directives motivating the Regional Master Plan and applied deadlines are exposed in § 0.4 "National Objectives and Regional Targets". More detailed information on legal framework and objectives is available in the § 1 the § 0.1 is referring to. About the function of the Master Plan (2nd remark), sentence will be added:"The Regional Master Plan will be supporting the Water and Sewage Infrastructure development policy and the 	

	Design and Construction. <ul style="list-style-type: none"> The ToR's objectives have to be presented together with the other objectives. A table with relevant European Directives, including deadlines, has to be presented or references should be provided. 	corresponding financing plan. It will serve as basis for the further stages of development : feasibility studies, Application Forms, Tender Documentation, design and construction" <ul style="list-style-type: none"> About the function of the Master Plan (2nd remark), sentence will be added: "The Regional Master Plan will be supporting the Water and Sewage Infrastructure development policy and the corresponding financing plan. It will serve as basis for the further stages of development : feasibility studies, Application Forms, Tender Documentation, design and construction" The EU Directives motivating the Regional Master Plan and applied deadlines are exposed in § 0.4 "National Objectives and Regional Targets". More detailed information on legal framework and objectives is available in the § 1 the § 0.1 is referring to. 	
	Current Situation and Deficiencies		
	<ul style="list-style-type: none"> The deficiencies should be linked to the EU Directives to have better understanding of the short term investment programs described in the next chapters. 	European directives are focusing on resulting situation and not deficiencies themselves, which of course are inducing non-compliance.	
	<ul style="list-style-type: none"> It is better to give a definition of water supply systems /zones / here. 	<ul style="list-style-type: none"> A definition has been given. 	Item 0.2.2.1.1.
	<ul style="list-style-type: none"> Point 0.2.2.4 – It should be presented more quantified information for kind of water mains in the tables. 	<ul style="list-style-type: none"> Added 	Item 0.2.2.4.
	<ul style="list-style-type: none"> Point 0.2.2.4.1.- It is described that there are 3 water yielding zones, but in the table under the text they are 4. It should be mentioned that the forth is in standby. 	<ul style="list-style-type: none"> Added 	Item 0.2.2.4.1.
	<ul style="list-style-type: none"> Point 0.2.2.4.7.- It should be mentioned that the water sources are in the regulation of the settlement. 	<ul style="list-style-type: none"> Added 	Item 0.2.2.4.7.
	<ul style="list-style-type: none"> On page 11 in the presented table the information for water mains is not correct, it should be fixed. 	<ul style="list-style-type: none"> Corrected 	Item 0.2.2.4.1.
	<ul style="list-style-type: none"> It is not clear whether 100% of the population has access to potable water. 	<ul style="list-style-type: none"> It is written in Item 0.2.2., right before Item 0.2.2.1. 	
	<ul style="list-style-type: none"> In general, suggestion is to forward in this chapter a table with the main IWA indicators which reflect the potable water (service grade, quality, Non Revenue of Water, Water losses per length of pipe network ...) and sewage treatment situation in general (connection and treatment grade, Infrastructure Leakage Index,...) . These IWA indicators allow to high light to regional situation in comparison with the rest of Bulgaria and Europe. 	Table of the IWA indicators is provided in chapter 3.3.2. However data collected from the WSSC are of very uneven quality and liability. Emphasizing these figures in the ES would give a distorted view of the situation unless going more into the details	No correction
	Projections		
	<ul style="list-style-type: none"> It should be presented the source for table 0-4. 	<ul style="list-style-type: none"> Added 	Item 0.3.1.

	<ul style="list-style-type: none"> The analysis does not contain a split-up of the water demands in domestic and nondomestic use, real water losses, apparent water losses and other parameters as mentioned in chapter 3 of the PISA Guidance note. 	<p>Details of water demand, losses and other parameters are given in Chapter 3 and Chapter 5. The Consultant thinks that the purpose of the summary is to provide general data.</p>	
	<p>National Objectives and Regional Targets</p>		
	<ul style="list-style-type: none"> The sensitive areas should be listed or referred. 	<p>Sensitive areas are described in Chapter 3.1.</p>	
	<p>Investment Programme and Economic Analysis</p>		
	<ul style="list-style-type: none"> Maps of the planned water supply infrastructure and planned waste water infrastructure have to be presented in the ES or to be referred to the appendices. 	<p>Investments are presented on Map No 5,6,9,11,13,15,17,19,21,23,25,27,29,31,33,35 and 37.</p>	
	<p>Financial Affordability</p>		
	<ul style="list-style-type: none"> This chapter has to be renamed on Macro-Affordability. 	<p>Corrected</p>	
	<p>Prioritization of infrastructure investments</p>		
	<ul style="list-style-type: none"> The way how a project gets a certain priority should be explained. Compliance Summary Tables for the Short, Medium and Long Term investment programs for potable and waste water should be provided or references should be made to the main text where the tables are presented. 	<p>This is explained in the methodology – Appendix 4-7</p> <p>The described tables are added to Item 0.6</p>	
	<p>Chapter 1</p>		
	<ul style="list-style-type: none"> p. 67 – The World Bank give recommendations and advice but the approval is not its authority 	<p>Corrected</p>	
	<p>Chapter 2</p>		
	<ul style="list-style-type: none"> Groundwater Quality Samples: A new Annex needs to include the full groundwater testing results, together with the set local threshold of the parameters as per Directive 2006/118/EC. Thematic Maps: PISA recommends the use of thematic maps to visualise the regional conditions. References to the Appendixes should be given. 	<ul style="list-style-type: none"> Data on groundwater quality is available only in the hydrogeological reports for the individual water sources. These reports were prepared several years ago in connection with obtaining permits for water abstraction. No sampling and analysis of the water resources have been made in the recent months and years. In item 3.2.4.1, attention is drawn to the fact that the quality of water from the water sources is not controlled regularly (no continuous monitoring). The Consultant has provided a recommendation for conducting permanent monitoring of water quality from all water sources. Thematic maps have been presented when necessary and when information is available (there are no criteria for their qualitative and quantitative composition); There are references to the Appendix in a certain place, the 	

			relevant Appendix is related to.	
		Chapter 3 <ul style="list-style-type: none"> Water Forecast: Forecast of the flow of water sources must be presented. Maps and photographs: The Thematic Maps need to be presented. The Maps need to identify the elements mentioned in the text. Industry: According TOR (point 5.1) there must be a table with waste water flow m³/day and wastewater load kg/day (BOD₅, Suspended Solids (SS), total Nitrogen, total Phosphorus, COD). 	<ul style="list-style-type: none"> The TOR contain no explicit requirement for climatological studies and a study of climate change impact on the flow of water sources. The flow of water sources is connected not only with climate but also with many other activities – forest protection, actual operation of water sources, etc. Making such a forecast should be subject to a special study based on years of regular monitoring of the flow of water sources and different impacts on them. Thematic maps have been presented when necessary and when information is available (there are no criteria for their qualitative and quantitative composition); Industry is shown by branches and key businesses, including wastewater quantity in m³/day. The Water Operator does not have data on pollution from individual enterprises. The project for Pazardzhik WWTP contains a summary balance of industry contribution to the overall pollution of wastewater entering the urban treatment plant. None of the enterprises within the area of ViK Pazardzhik has wastewater metering equipment and the Water Operator cannot provide a contract for own monitoring or such assigned to an accredited laboratory. For that reason, in the RMP, the Consultant recommends the Operators to renegotiate the connection contracts by setting a condition for compliance with the requirements of Ordinance №: 7, which includes a periodic monitoring of the quality of waste water and its metering before discharge into the urban sewage. Here, although we have no specific data on wastewater composition we are to clarify that based on the production process of the enterprises Iskra Elhim and Kauchuk, we explicitly recommend that waste water from these enterprises is not connected to the urban sewerage in the future, due to its characteristics and the possibility of serious pollution of urban waste water. It is also firmly recommended that waste and sludge from the local wastewater treatment plants of these enterprises are neither disposed of to urban landfills nor included in the balance of sludge to be utilized as they are dangerous. These 	Items 3.2; 3.7.5.2; 3.5.11,

			two treatment plants and the enterprises Ognyanovo Winery OOD, Duropak Trakia AD located on the land belonging to Glavinitsa, Industry Informatsionni Nositeli AD, Pazarzhik Municipality, which also have operational treatment plants and discharge their waste water directly into the receiving water body, are not within the scope of activity of the Water Operator. They are controlled by the authorities of Pazarzhik RIEW.	
		<ul style="list-style-type: none"> • p.113 – Figure 3-1 should be translated and provided. • p.138 - Figure 3-2 should be translated and provided. • p.141 - Figure 3-3 should be translated and provided. • p.143 - Figure 3-4 should be translated and provided. • p.144 - Figure 3-5 should be translated and provided. • p.145 - Figure 3-6 should be translated and provided. • p.146 - Figure 3-7 should be translated and provided. • p.147 - Figure 3-8 should be translated and provided. • p.150 - Figure 3-9 should be translated and provided. • p.151 - Figure 3-10 should be translated and provided. • p.152 - Figure 3-11 should be translated and provided. 	The figures themselves are in both languages. The text below has been translated.	
		Chapter 4		
		<ul style="list-style-type: none"> • p. 269 – Table 4-9 please, describe what is the unit cost. • All presented figures in this chapter should be translated and improved. • Format of the presented tables for different alternatives for each water supply system should be the same. 	<ul style="list-style-type: none"> • Unit price. For example: Price for laying of 1 linear meter of water pipe, Price for construction of 1 water reservoir, price for construction of DWTP, etc. • All figures have been translated and the format has been improved. • Corrected 	
		Chapter 5		
		<ul style="list-style-type: none"> • The income of the population of Pazardzhik, Septemvri and Lesichovo municipalities is not calculated in accordance with PISA Guidance. Incomes are taken for the Pazardzhik region and they should be adapted to the smaller municipality on the 	The Consultant accepts the comment and corrections have been made in the model and the text of the Final report.	Corrected

		<p>basis of the proportion of urban to rural population.</p> <ul style="list-style-type: none"> In the text no explanation is provided why the electricity costs in the forecast period are decreasing by 5% in the period 2013 – 2019, in 2020 are equal to 2012 and after that are increasing by 0.5%. In the calculation of water tariffs inflation is applied which does not correspond to PISA Guidance and the VAT rate applied till 2013 is 22% instead of 20%. Incremental O&M costs are taken from external file and could not be checked. In the text is provided explanation of the methodology for their calculation. They are increasing in time. Page 367 says that the number of people in the household of the region is 2,2 and the actually used number is 2.7. Page 388 – mentions 2.6 persons per household. The Bulgarian text says that the income of the 3rd decile group is used only while calculations show the correct income of the lowest 3 decile groups is used. 	<p>The Consultant has made a technical error in determining the costs of sanitation that affects the total costs. The adjustment was made in the Final Report.</p> <p>The Consultant accepts the comment and corrections have been made in the model and the text of the Final report.</p> <p>The model was added pages including O&M costs of new assets related to the cost calculations.</p> <p>The Consultant accepts the comment and corrections have been made in the model and the text of the Final report.</p> <p>The Consultant accepts the comment and corrections have been made in the model and the text of the Final report.</p>	<p>Corrected</p> <p>Corrected</p> <p>Corrected</p> <p>Corrected</p> <p>Corrected</p>
Comments by Lesichovo Municipality				
	30.09.2013	<p>The draft regional master plan should take into account the following project proposals by Lesichovo Municipality:</p> <ul style="list-style-type: none"> "Rehabilitation of part of the water supply network of the village of Lesichovo, Lesichovo Municipality" - rehabilitation amounting to 10 700 m, approved by a signed contract with the financing body; the project is under implementation. Submitted project proposal "Reconstruction and rehabilitation of the water supply network in Lesichovo municipality", including the following sites: <ul style="list-style-type: none"> village of Tserovo - length of the water supply network 14 575 21 m ; village of Lesichovo - length of the water supply network 265.19 m ; 	<p>The short-term programming period of the Master Plan does not include funds for the said sites because they do not correspond to the objectives of the study. Such means are provided in the medium- and long-term programming period.</p>	

		<ul style="list-style-type: none"> - village of Kalugerovo - length of the water supply network 223 m ; - village of Pamidovo - length of the water supply network 143.93 m ; - village of Shtarkovo - length of the water supply network 95.46 m ; - village of Dinkata - length of the water supply network 127.84 m ; - village of Borimechkovo - length of the water supply network 3272.63 m 		
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