WP5.1

Country reports on historical development of cross-border drinking water supply systems

ANNEXES

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WP5.1

Country reports on historical development of cross-border drinking water supply systems

ANNEX 1

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INTERNAL PARTNER REPORTING TEMPLATE - Existing cross-border water supply

Country to Country general description

Work package 5		
Component leader: UL		
Deadline for the delivery to the WP leader:		
28.3.2014.		

COUNTRY	
PARTNER NAME	
PARTNER - Final Beneficiary No	

In the case 2 partners can report for 1 WSS they can agree on joint report

DESCRIBING THE EXPERIENCES - STATUS OF EXISTING CROSS BORDER WATER SUPPLY (COUNTRY LEVEL)

* Duplicate page if needed (in order to describe more country to country status

GENERAL DATA	Data on water supply system	Description (example)	Report
REPORTING COUNTRY (1)	cross-border country (1)	SLOVENIA	
REPORTING COUNTRY (2)	cross-border country (2)	ITALY	
Estimated number of CBWSS (active)	Number and name of the CBWSS	(1) - Nova-Gorica to Gorizia and (2) Trieste to	
		Sežana; (3) Goriška Brda - Colli di Gorizia	
Estimated number of CBWSS (inactive - ceased	Number and name of the CBWSS	0	
to operate)			
Potential development of CBWSS	Number and name of the CBWSS	(1) - from Slovenia to Aquedotti Poiana; (2) From	
		HERA ACEGAS Trieste to Koper	

INTERNAL PARTNER REPORTING TEMPLATE - Existing cross-border water supply

Work package 5 Component leader: UL

Deadline for the delivery to the WP leader: 28.3.2014.

COUNTRY	
PARTNER NAME	
PARTNER - Final Beneficiary No	

In the case 2 partners can report for 1 WSS they can agree on joint report

DESCRIBING THE EXPERIENCES - STATUS OF EXISTING CROSS BORDER WATER SUPPLY

* Duplicate page if needed (in order to describe more cross border water supply systems).

GENERAL DATA

LEGAL FRAMEWORK

Data on water supply system	Description (example)	Report
Between country - water coming from (origin) and	i.e. Slovenia	
Country (2) - water supplied to (delivered)	and Italy	
Water supply system name (English)	Water supply system Nova Gorica-Gorizia	
Water supply system name (Country 1)	Vodovodni sistem Nova Gorica-Gorica	
Water supply system name (Country 2)	Aquedotto Nova Gorica - Gorizia	
Date/year established cross-border water supply	Year of the engagement of the cross border water	
	supply i.e. 1928	
Managemetn of origin side of the WSS	Vodovodi in kanalizacija Nova Gorica www.vik-	
	ng.si	
Management of delivery side of the WSS	Iris Acqua; Irisacqua.it	
Amount of water supplied (as per contract/agreement)	50 l/s, 500.000 m3/year, comments	
General nature of the CBWS - emergency water supply, peak water	Select and describe the type of the existing water	
supply, permanent water supply	supply	
Existing legal framework for the CBWS	YES/NO please describe documents, dates, general	
	contents	
Top level CBWS management body (if mutually defined)	name of the body in both languages: i.e. Stalna	
	mešna slovensko - italijanska komisija za vodno	
	gospodarstvo	
Origin country reference body for the management body	Ministry of Agriculture and Environment, Sector	
	for Water Managment	
Delivery country reference body for the CBWS management body	Ministry of External Affairs	
Legal framework management - Contract party meetings (annual,	YES/NO, comments, on experience with meetings,	
even more frequent)	how often do they take place, minutes, functioning	
	or not functioning system?	
Issues adressed on the local level	Is the local level managing the delivery contract	
	(municipialities) (to which extent)	
Issues adressed on the regional level	Is the region managing the delivery contract (to	
	which extent)	

Issues adressed on the state level	Is the state bilateral commission established and working on the issue of cross-border water supply descriptive, when have the last meetings take place. Was the cross border water supply on the agenda?	
Legal option to increase maximum annual entitlement?	Yes/No - how is the increase of contracted water amount possible, legally technically?	
Minum amount of water delivery defined?	YES/NO describe	
Which is the body assigned by the contract for the resoulution of disputes?	Description of the body for the resolution of disputes.	
Ownership of the cross-border infrastructure	Describe the ownership of the cross-border infrastructure. Usually the ownership is not shared. Each one owns the infrastructure on the national territory	
Are the water rights on the water resource assigned to the cross- border partner? In which way?	YES/NO, describe, attach the document	
Termination of the water delivery of contract	Is the water delivery contract envisaging the final date of the contract or is unlimited? Describe	
Minimal water consumption legally defined?	YES/NO, describe, attach the document	
Is the legal heretage of the systems resolved	Due to the dynamic historical development in the regon (Yugoslavia) the contracts might be resolved/set on the legally not existing entities is this issue resolved.	

CBWS ECONOMICS

Is the water price(charge) composed by different components?	YES/NO - describe the composition of water	
	charge - transportation charge, treatment charge,	
	taxes, resource charge, etc.	
How is the pricing mechanism defined (water charges)	Description on the pricing mechanism - according	
	to which legislation, confirmed, price change	
	mechanism. Description of the water price for the	
	last three years. Provide in the attachement	
	applied pricing mechanism.	
Are the minimal charges foreseen? - Fixed charges, full for empty	YES-NO, describe	
Is the non-payment procedure regulated by the contract?	YES-NO, describe	
Is there a special tariff (surcharge) for the excessive water supply?	YES-NO, describe	
Insurance cost covered - insurance cost tariff, insurance model	Is the insurance cost and insurance mechanisms	
foreseen by the contract	determined by the contract?	
Depreciation of the infrastructure, investment/maintenance plans	How is the charge for the depreciation charges	
agreed ? (amortizacija, ammortamento)	defined?	

Penalties for unfulfilment of contractual obligations?	Are penalties for unfulfilment of the obligations foreseen by the contract, YES/NO, describe	
Is the mutual inspection of records/book-keeping established? (due dilligence approach)	For the development of trusted environment among the contractual partners it is necessary to provide possiblility fot the "due dilligence" control between the contractual parties.	
General assessment of the CBWS economics	Describe if there is generaly satisfactory status regarding the CBSW economics	
Payment statistics for the last 5 years	Provide in the appendix a table with the delivery amount and payment statistics for the last 5 years.	
OTHER	Any other comments on the economics	

TECHNICAL ISSUES

	I	
Measurement of water delivered	Describe how the measurement of the water	
	delivered is performed.	
Is continuity of water supply - intermittent water supply an issue?	YES/NO, describe	
Agreed water quality issues	YES/NO, comments, as per which legislation water	
	quality issues are defined, monitoring paremeters,	
	methods, frequency, treshold levels	
Water quality monitoring jointly controlled/verified	YES/NO - descriptive - how is the water quality	
	monitored, confirmed, validated	
	, , ,	
Temperature regulated by the contract?	Is the delivery pressure defined by the contract or	
	sub-contractural documentation? Description of	
	the temperature management.	
	and temperature management	
Pressure regulated by the contract?	Is the delivery pressure defined by the contract or	
	sub-contractural documentation? Description of	
	the	
Cross - border profile management	Is the discharge/pressure measured on the specific	
	cross border structure - description of cross border	
	profile. Is the structure mutually accessable?	
	Management of closing valves?	
Construction of project facilities	How is necessary construction of new project	
	facilities agreed upon. How it is planned,	
	constructed, managed?	
Is the daily dynamics od water demand/supply an issue ?	YES/NO - is it managed by the contract, is the	
is the daily dynamics od water demand/supply an issue !	contract managing the issue, are the	
	9 9	
	tanks/reservoir on the supply side or receiving	
	side?	

Is the seasonal dynamics od water demand/supply an issue ?	YES/No, WHAT ARE THE ISSUES, is the dynamics a problem? (i.e. fluctuations due to seasonal	
	fluctuations)	
Management of water losses - are water losses in the supply, uptake	,	
side an issue?	identified according to the IWA methodology,	
	provide the WATER BALANCE accoring to the IWA	
	methodology for both water supply systems -	
	supplying, receiving	
	5 P. F. C.	
Is the water availability/demand an issue on supply country or	YES/NO, describe, trends in water availability	
demand country side?	(water source), trends in water demand, for both	
	parties on the same source.	
Transitional phenomena an issue?	Yes-no, describe	
Other technical issues?	Describe	

MANAGEMENT ISSUES

Long term planning mechanisms established?	Are the long term planning mechanisms established and adequately functioning? Planned maintenance and upgrading of the Cross-border WS for the time horizont at least 20 years. Investments on maintenance and upgrading agreed?	
LIASON OFFICERS DETERMINED? Communication process determined and functioning?	Is the system for the liason officers established.	
Joint supervision of the Water Supply System?	Are the mechanisms for the joint supervision of the WSS established? - describe them.	

Joint management of the water resource?	Is the water resource managed together or managed only by one partner, any problems with	
	the management of the water resource?	
Contingency plans existing?	Are the contingeny plans (plans for the supply in the extraordinary conditions) existing? Are they maintained/tested (annualy?). How is shortage in water supply manged. Short term shortage (pipe break) long term management. Is the electricity supply an issue (back-up supply by the generators available?).	
Main problems identified	Describe the problems occuring in the cross- border water supply	
Other comments:	Any othe comments	
Vision:	Shared vision on the functioning of the CBWS, is there a shared vision, is there a partial vision?	

GENERAL PERCEPTION ASSESSMENT

General Perception is expressing agreed opinion of the partners, separate opininions are also welcomed.		
Do you consider that the legal framework for the CB WSS is	Please describe your personal/institutional view on	
adequate, or under-defined	the issue	

Do you consider that the economic framework for the CB WS is	Please describe your personal/institutional view on	
adequate, or under-defined	the issue	
Do you consider that the technical framework for the CB WS is	Please describe your personal/institutional view on	
adequate, or under-defined	the issue	
How would you assess general perception of the cross border water	Is public assessing the CBWS as a positive	
supply in public?	component in the framework of general cross-	
	country relationships. Is there a general mistrust in	
	the relationship?	

ATTACHMENTS

Other - attachemnts		
Provide in the attachement shp file of the existing water supply	YES/NO attachement, comment other	
network		
Provide documents on general state-level framework for the cross-	general agreement enabling the cross-border	The Osimo Treaty of October 1975 settled the borders between Yugoslavia
border water supply	water supply	(Slovenia) and Slovenian-speaking Italy, accepting the "de facto" division of 1954.
Specific delivery contract	Contract on delivery	
Regulations, technical documentation	Agreements in time (cost, amount of water,	
	derogations)	
Statistics on the water supplied and payments provided for the last	Table m3/year or m3/month for the last 5 years,	
five years	payments for that period.	

INTERNAL PARTNER REPORTING TEMPLATE - POTENTIAL cross-border water supply

Work package 5

Component leader: UL

Deadline for delivering: 28.3.2014.

COUNTRY	
PARTNER NAME	
PARTNER - Final Beneficiary No	

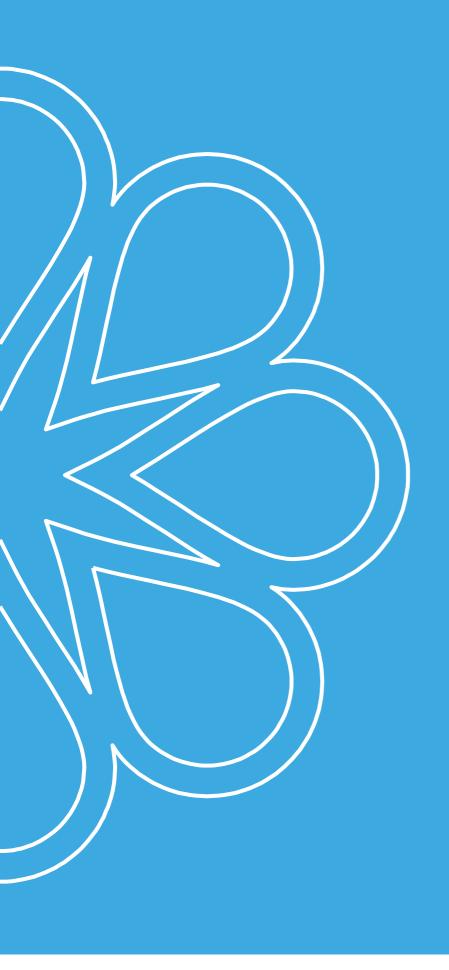
In the case 2 partners can report for 1 WSS they can agree on joint report

DESCRIBING THE EXPERIENCES - STATUS OF POTENTIAL CROSS BORDER WATER SUPPLY

* Duplicate page if needed (in order to describe more cross border water supply systems).

* Duplicate page if needed (in order to describe more cross border water supply systems).

GENERAL DATA	Data on water supply system	Description (example)	Report
	Between country - water coming from (origin)	i.e. Slovenia	
	and		
	Country (2) - water supplied to (delivered)	and Italy	
	Water supply system name (English)	Water supply system Kobarid - Cividale	
	Water supply system name (English)	Vodovodni sistem Kobarid - Čedad	
	Water supply system name (English)	Aquedotto Caporetto - Cividale	
	Managemen of origin side of the WSS	Komunalno podjetje Tolmin	www.vik-ng.si
	Managemen of delivery side of the WSS	Aquedotti Poiana	Irisacqua.it
	Amount of water supplied (as per	50 l/s, 500.000 m3/year, comments	
	contract/agreement)		
	General nature of the CBWS - emergency water	Select the type of the existing water supply	
	supply, peak water supply, permanent water		
	supply		
	Geneal description of the nature of the		
	necessity		
	Status of the preparation of the		
	technical/legal/economics and other		
	documents		
	Potential date of construction (estimated if		
	possible)		
	Describe recognized limitations inhibiting the		
	developmento of potential CBWSS		











WP5.1

Country reports on historical development of cross-border drinking water supply systems

ANNEX 2

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Lead Author/s Coordinator	dr. Primož Banovec
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Questionnaire for Internal partner reposting WP5:

Water Utility of Nova Gorica - Sector of Development and Investment.

1. General about CB WSS

Q1. Country:

Slovenia.

Q2. Partner name:

Water Utility of Nova Gorica - Sector of Development and Investment.

Q3. PARTNER - Final Beneficiary No.:

FB 4

Q4. Reporting country (1) (cross-border country (1))

Slovenia

Q5. Reporting country (2) (cross-border country (2))

Italy

Q6. Estimated number of CBWSS (active)(Number and name of the CBWSS):

Rafut - main connection, Golo Brdo - import from Italy

Q7. Estimated number of CBWSS (inactive - ceased to operate)(Number and name of the CBWSS):

Šempeter - block (reserve for the needs of hospital - currently closed)

Q8. Potential development of CBWSS(Number and name of the CBWSS):

None





2. Informaton about Existing CB WSS

Q1. Country name:

Slovenia

Q2. Partner name:

Water Utility of Nova Gorica - Sector of Development and Investment.

Q3. Partner - Final Beneficiary No.:

FB 4.

Q4. Between country - water coming from (origin country (1)) and

Slovenia

Q5. Country (2) - water supplied to (delivered):

Italy

Q6. Water supply system name (English):

Water System Mrzlek - Gorizia.

Q7. Water supply system name (Country 1):

Vodovodni sistem Mrzlek - Gorica.

Q8. Water supply system name (Country 2):

Sistema idrico Mrzlek - Gorizia.

Q9. Date/year established cross-border water supply:

CB WSS was built in 1936

Q10. Management of origin side of the WSS:

Vodovodi in kanalizacija Nova Gorica d.d.

Q11: Management of delivery side of the WSS:

Irisacqua

Q12. Amount of water supplied (as per contract/agreement):

20.6.2007: 2.000.000,00 m3/year. Amount is set in Draft of contract: "Oskrba Občine Gorica z vodo"

Q13. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply:

Permanent water supply of Gorica.





Q14. Existing legal framework for the CBWS:

Agreement between the Italian and the Socialist Federal Republic of Yugoslavia, which regards the payment of compensation for the water supply of the municipality of Gorizia from day 09/05/1979. Content of agreement within the meaning of Annex V to the Peace Treaty with Italy: 1) Supply of Gorizia Municipality of water from 1 January 1977 continue to be governed by Article 1 and Article 2 in Annex V in the Peace Treaty with Italy,

- 2) the price is revalued annually,
- 3) The amounts must be billed monthly and paid within 15 days,
- 4) This agreement is valid until 31.12.1981 and shall be considered to be extended automatically each year unless one of the parties decides to terminate it and informs the other
- Q15. Top level CBWS management body (if mutually defined):
 Mešana italijansko slovenska komisija / Commissione mista italiano-sloveno
- **Q16.** Origin country reference body for the management body: Republic of Slovenia, Ministry of Agriculture and the Environment.
- **Q17.** Delivery country reference body for the CBWS management body. Republic of Slovenia, Ministry of Foreign Affairs.
- Q18. Legal framework management Contract party meetings (annual, even more frequent):

Meetings of at least 1 x per year or when necessary

- Q19. Issues addressed on the local level:
- Q20. Issues addressed on the regional level:
- Q21. Issues addressed on the state level:

An international commission is established and operates at the local level.

Q22. Legal option to increase maximum annual entitlement?

Currently is not possible because of the dimensions of the old and new water supply facility.





Q23. Minimum amount of water delivery defined?

Minimum quantity of water supply 2,000,000.00 m3 per year was specified in the draft of contract "Oskrba Občine Gorica z vodo" dated 20.6.2007.

Q24. Which is the body assigned by the contract for the resolution of disputes?

United Nations. According to Paris peace treaty where there is in Annex V, where it says that any disputes which may arise as a result of this re-examination shall be submitted for settlement under the procedure outlined in Article 87 of the Treaty. Article 87:

1.) Except where another procedure is specifically provided under any Article of the present Treaty, any dispute concerning the interpretation or execution of the Treaty, which is not settled by direct diplomatic negotiations, shall be referred to the Four Ambassadors acting under Article 86 except that in this case the Ambassadors will not be restricted by the time limit provided in that Article. Any such dispute not resolved by them within a period of two moths shall, unless the parties to the dispute mutually agree upon another means of settlement, be referred at the request of either party to the dispute to a Commission composed of one representative of each party and a third member selected by mutual agreement of the two parties from nationals of a third country. Should the two parties fail to agree within a period of one month upon the appointment of third member, the Secretary-General of the United Nations may be requested by either party to make the appointment. 2.) The decision of the majority of the members of the Commission shall be the decision of the Commission, and shall be accepted by the parties as definitive and biding

Q25. Ownership of the cross-border infrastructure:

On the Slovenian side of the border is the owner of the infrastructure Municipality of Nova Gorica. On the Italian side of the border is the owner Municipality of Gorica.

Q26. Are the water rights on the water resource assigned to the cross-border partner? In which way?

No, the water rights of the water source are not allocated to cross-border partner. Water permit is issued for the Municipality of Nova Gorica Municipality Šempeter - Vrtojba, Municipality of Miren - Kostanjevica. Municipality Rence - Vogrsko and the Municipality of Brda, represented by the Water Utility of Nova Gorica.

Q27. Termination of the water delivery of contract

The final date is not fixed. Date of water supply is unlimited at the beginning of the supply of water by the Paris Peace Treaty.





Q28 Minimal water consumption legally defined?Legally is not defined.

Q29. Is the legal heritage of the systems resolved Legally is not defined.

Q30. Is the water price(charge) composed by different components?

Following an agreement between the Italian Republic and the Socialist Federal Republic of Yugoslavia on 09/05/1979 competent authorities of the municipalities of Gorizia and Nova Gorica price revalued regularly. Taking into account the mean index rising electricity prices in Italy and Yugoslavia, established on the basis of the official tariff for that energy, which are in force every year 1 January and mean index rising wages or personal income in the construction industry in January, taken from official data. Mean index rising electricity prices and wages to the remuneration will be determined on the basis of changes in the cost of electricity and wages, which the calculation is based on personal income to 45 percent of wages and salaries and 55 percent for electricity.

Q31. How is the pricing mechanism defined (water charges):

Pricing mechanism is described in previous answer. The last three years the price hasn't changed.

Q32. Are the minimal charges foreseen? - Fixed charges, full for empty: No, fixed costs are not defined because the price is set in the "Osnutku pogodbe Oskrba Občine Gorica z vodo" dated 20.6.2007.

Q33. Is the non-payment procedure regulated by the contract?

Q34. Is there a special tariff (surcharge) for the excessive water supply?

Q35. Insurance cost covered - insurance cost tariff, insurance model foreseen by the contract:

Not forseen.

Q36. Depreciaton of the infrastructure, investment/maintenance plans agreed ? (amortizacija, ammortamento):
No.

Q37. Penalties for unfulfilment of contractual obligations? No.





Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):

No.

Q39. General assessment of the CBWS economics:

Yes, in general the situation is satisfactory.

Q40. Payment statistics for the last 5 years:

It is not prepared yet.

Q41. Other:

No.

Q42. Measurement of water delivered:

Measurement is carried out on the water meter on the Slovenian side of the border and on the water meter on the Italian side of the border. Reading of the water meters takes place on the last working day of the month at 10.00. Participating is 1 representative of Water Utility Nova Gorica and 1 representative of the municipality of Gorizia. Calculated is the arithmetic mean of the two readings of water meters. Bill is issued 1 x per month.

Q43. Is continuity of water supply - intermittent water supply an issue?

Supply is constant. Abstraction of drinking water was suspended from 15.3.2007 to 14.5.2007 due to technical reasons. The company Irisacqua until 2007 withdrew approximately 1,200,000.00 m3 per year and after 2007 they withdraw approximately 2,000,000.00 m3 per year . The supply of water is occasionally interrupted when performing renovation water supply , for example within the project "Varovanje vodnega vira Mrzlek in celovita oskrba prebivalstva s pitno vodo na območju Trnovsko-Banjške planote, Goriških Brd in Vipavske doline " in 2009.

Q44. Agreed water quality issues:

Water quality issues take into account the applicable Slovenian legislation, which is compliant with the European (parameters, methods, frequency and location of sampling).

Q45. Water quality monitoring jointly controlled/verified:

The Water Utility of Nova Gorica monitors water quality in accordance with the HACCP standards.

Q46. Temperature regulated by the contract?

The temeprature is not regulated by the contract. One of the parameters of the internal control of quality drinking water is the temperature and is measured at each sampling.





Q47. Pressure regulated by the contract?

It is not regulated by contract.

Q48. Cross - border profile management:

A system of notification is used in case of interventions on water supply system (discharge / change in pressure).

Q49. Construction of project facilities:

Each side decides about their own investments and inform the other side about potential water supply disruptions or withdrawal of water.

Q50. Is the daily dynamics of water demand/supply an issue?

It is not an issue, it is carried out in accordance with draft of contract "Oskrba Občine Gorica z vodo" signed on 20.6.2007.

Q51. Is the seasonal dynamics of water demand/supply an issue?

There is no issue.

Q52. Management of water losses - are water losses in the supply, uptake side an issue?

Water losses are large.

Q53. Is the water availability/demand an issue on supply country or demand country side?

Since 2007 IS about 2,000,000.00 m3. Deviations occur when one or other side has some major investments.

Q54. Transitional phenomena an issue?

No.

Q55. Other technical issues?

No.

Q56. Long term planning mechanisms established?

No.

Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning?

No.





Q58. Joint supervision of the Water Supply System? SCADA control system.

Q59. Joint management of the water resource?

There is no joint management. Water resource is managed by Water Utility of Nova Gorica for Municipality of Nova Gorica.

Q60. Contingency plans existing?

No. In case of pipe break if the pressure drops and the water supply to Nova Gorica is threatened, we inform the manager of CBWSS on the Italian side about the closure or reduction of water supply for certain period of time.

Q61. Main problems identified:

Abstraction of water during the day is not uniform. Large fluctuations in current flow, which in turn affects the pressure fluctuation in the network and increase turbidity due to rising sediment in the pipeline. As a result, pressure variations may also arise failure of the weak points in the network.

Q62. Other comments:

No.

Q63. Vision:

No.

Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined:

Adequate.

Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined:

Adequate.

Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined:

Technically the system is built in accordance with the standards and regulations of the Republic of Slovenia.





Q67. How would you assess general perception of the cross border water supply in public?

Since the water supply is running smoothly and is no distraction for Slovenian consumers, the public is is not engaged on this issue and consequently there is no distrust.

Q68. Provide in the attachment shp file of the existing water supply network:

Has been provided.

Q69. Provide documents on general state-level framework for the cross-border water supply:

Agreement between the Italian and the Socialist Federal Republic of Yugoslavia, which regards the payment of compensation for the care of the municipality of Gorizia water of 9.5.1979.

Q70. Specific delivery contract:

Agreement between the Italy and the Socialist Federal Republic of Yugoslavia, which regards the payment of compensation for the care of the municipality of Gorizia water of 9.5.1979.

Q71. Regulations, technical documentation:

The standards and regulations of the Republic of Slovenia are applied.

Q72. Statistics on the water supplied and payments provided for the last five years:

Has been provided.





3. Information about potential CB WSS

```
Q1. Country name:
Slovenia.
Q2. Partner name:
Water Utility of Nova Gorica - Sector of Development and Investment.
Q3. Partner - Final Beneficiary No.:
FB 4.
Q4. Between country - water coming from (origin) and:
None are planed.
Q5. Country (2) - water supplied to (delivered):
Q6. Water supply system name (English):
/
Q7. Water supply system name (Country 1):
Q8. Water supply system name (Country 2):
Q9. Management of origin side of the WSS:
Q10. Management of delivery side of the WSS:
Q11: Amount of water supplied (as per contract/agreement):
Q12. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
Q13. General description of the nature of the necessity:
/
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Q14. Status of the preparation of the technical/legal/economics and other documents:

/

Q15. Potential date of construction (estimated if possible):

/

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:
/





Questionnaire for Internal partner reposting WP5:

Jaroslav Černi Institute

4. General about CB WSS

```
Q1. Country:
Serbia
O2. Partner name:
Jaroslav Černi Institute
Q3. PARTNER - Final Beneficiary No.:
FB 10
Q4. Reporting country (1) (cross-border country (1))
Serbia
Q5. Reporting country (2) (cross-border country (2))
Serbia
Q6. Estimated number of CBWSS (active)(Number and name of the
CBWSS):
(5) Municipalities where are WSS at the present (Arilje, Požega, Lučani, Čačak and
G.Milanovac)
Q7. Estimated number of CBWSS (inactive - ceased to operate)(Number
and name of the CBWSS):
Q8. Potential development of CBWSS(Number and name of the CBWSS):
(4) - Potential Municipalities WSS (Topola, Arandjelovac, Ljig and Kraljevo)
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5. Informaton about Existing CB WSS

Q1. Country name:

Serbia

Q2. Partner name:

Jaroslav Černi Institute

Q3. Partner - Final Beneficiary No.:

FB 10

Q4. Between country - water coming from (origin country (1)) and

Serbia

Q5. Country (2) - water supplied to (delivered):

Serbia

Q6. Water supply system name (English):

Regional Water supply system Rzav (RWS Rzav)

Q7. Water supply system name (Country 1):

Регионални водоводни систем Рзав (РВС Рзав)

Q8. Water supply system name (Country 2):

Regionalni vodovodni sistem Rzav (RVS Rzav)

Q9. Date/year established cross-border water supply:

1993

Q10. Management of origin side of the WSS:

Regional Water supply system Rzav (RWSS Rzav)

Q11: Management of delivery side of the WSS:

WSS in each of the 5 Municipalities - Arilje, Požega, Lučani, Čačak and G.Milanovac

Q12. Amount of water supplied (as per contract/agreement):

Average = 550 l/s, app. 18.000.000 m3/year, maximum about 700 l/s

Q13. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply:

Permanent water supply





Q14. Existing legal framework for the CBWS:

Yes, there is, we will describe later, when we get more details.

Q15. Top level CBWS management body (if mutually defined):

The independent company is established for regional WSS management according to National legal framework and policies

Q16. Origin country reference body for the management body: Serbia

Q17. Delivery country reference body for the CBWS management body.

The independent company is established for regional WSS management according to National legal framework and policies

Q18. Legal framework management - Contract party meetings (annual, even more frequent):

Yes, the independent company WSS Rzav have periodical meetings with representatives of Municipal water supply companies.

Q19. Issues addressed on the local level:

Yes, the questions of minimum river discharge for downstream consumers

Q20. Issues addressed on the regional level:

Water allocation among the Municipalities.

Q21. Issues addressed on the state level:

Financial issues, ownership issues and legal/policy framework

Q22. Legal option to increase maximum annual entitlement?

Yes, the 5 consumers (Municipalities) can increase the water demand if there is enough water. In the periods (quite rare) when the water deficit exist, the agreement exist related to the amount of water to be delivered to Municipalities.

Q23. Minimum amount of water delivery defined?

Generally Yes, but in a few cases there were problems because some WSS Municipalities preferred to take water on local level (cheaper)

Q24. Which is the body assigned by the contract for the resolution of disputes?

Depends of the problem type





Q25. Ownership of the cross-border infrastructure:

The majority is owned by state, but also 5 Municipalities have participated in the ownership

Q26. Are the water rights on the water resource assigned to the cross-border partner? In which way?

Yes, we will describe later, when we will know more details about the document

Q27. Termination of the water delivery of contract

Likely Yes, we will describe later, when we receive confirmation

Q28 Minimal water consumption legally defined?Yes

Q29. Is the legal heritage of the systems resolved Yes

Q30. Is the water price(charge) composed by different components? No, it is fixed and agreed

Q31. How is the pricing mechanism defined (water charges): Estimated and agreed

Q32. Are the minimal charges foreseen? - Fixed charges, full for empty:

Q33. Is the non-payment procedure regulated by the contract? We guess yes, we will describe later, when we receive more details

Q34. Is there a special tariff (surcharge) for the excessive water supply?

Q35. Insurance cost covered - insurance cost tariff, insurance model foreseen by the contract:

Not sure, we will confirm later, when we get more information

Q36. Depreciation of the infrastructure, investment/maintenance plans agreed? (amortizacija, ammortamento):

No, and its not cover with the water price





Q37. Penalties for unfulfilment of contractual obligations?

We guess no, we will confirm later, when we get more details

Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):

Jurisdiction of the RWSS Rzav, but confirmation by each Municipality is required

Q39. General assessment of the CBWS economics:

Generally yes, the water price covers only part of the expenses (salaries, overheads, chemicals, etc), but do not cover maintenance and investment.

Q40. Payment statistics for the last 5 years:

Yes, before the delivery to each Municipality WSS

Q41. Other:

WSS work continually - that's not an issue

Q42. Measurement of water delivered:

Yes, without serious water quality problem until now

Q43. Is continuity of water supply - intermittent water supply an issue?

Yes, WSS in each of the 5 Municipalities verify the quality of water

Q44. Agreed water quality issues:

No

Q45. Water quality monitoring jointly controlled/verified:

No, RWSS Rzav manage all relevant issues

Q46. Temperature regulated by the contract?

Continuity is existing

Q47. Pressure regulated by the contract?

Construction for the first (existing) stage is finalized. For the next stage (extension of the RWSS Rzav - as a planned dam), the state is in charge for the investment and construction.

Q48. Cross - border profile management:

No





Q49. Construction of project facilities:

No, because the pump stations and other capacities of RWSS are still higher than pic water demand

Q50. Is the daily dynamics of water demand/supply an issue? Generally yes, but still not important, about 4%

Q51. Is the seasonal dynamics of water demand/supply an issue?

Yes, in critical period of hydrological dry years. In addition, low demand is an issue as result of the sufficient amount of water in local springs.

Q52. Management of water losses - are water losses in the supply, uptake side an issue?

Yes, during hydrological dry years, in critical period (august - October) there is no enough water in river for consumers

Q53. Is the water availability/demand an issue on supply country or demand country side?

No significant trend, demand about the constant

Q54. Transitional phenomena an issue?

Yes, the lack of funds for investments is present

Q55. Other technical issues?

No, or not important

Q56. Long term planning mechanisms established?

Not strictly, but the construction of the dam on the Rzav river should, probably, start soon.

Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning?

All relevant issues are solved by RWSS Rzav and local Municipalities.

Q58. Joint supervision of the Water Supply System?

The independent company is established for regional WSS management (accompanied with the members of 5 WSS Municipalities)

Q59. Joint management of the water resource?

The independent company is established for regional WSS management (accompanied with the members of 5 WSS Municipalities)





Q60. Contingency plans existing?

No.

Q61. Main problems identified:

Yes: 1. Not enough water in critical period of the hydrological dry year; 2. Sometimes low demand as result of the sufficient amount of water in local springs; 3. Finding funds for Dam investment; 4. Finding way to include new consumers

Q62. Other comments:

No.

Q63. Vision:

1. To continue with good collaboration between RWSS Rzav and present 5 WSS Mun.;2. To ensure funds for dam construction are available; 3. To find administrative-financial solution to include new consumers (4 WSS Municipalities)

Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined:

No.

Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined:

The price for delivered water does not cover maintenance and investment.

Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined:

No.

Q67. How would you assess general perception of the cross border water supply in public?

Quite positive.

Q68. Provide in the attachment shp file of the existing water supply network:

Has been provided.

Q69. Provide documents on general state-level framework for the cross-border water supply:

Yes.





Q70. Specific delivery contract:

/

Q71. Regulations, technical documentation:

Exists.

Q72. Statistics on the water supplied and payments provided for the last five years:

Exists.





6. Information about potential CB WSS

Q1. Country name:

Serbia

Q2. Partner name:

Jaroslav Černi Institute

Q3. Partner - Final Beneficiary No.:

FB 10

Q4. Between country - water coming from (origin) and:

Serbia

Q5. Country (2) - water supplied to (delivered):

Serbia

Q6. Water supply system name (English):

Regional Water supply system Rzav (RWSS Rzav)

Q7. Water supply system name (Country 1):

(1) potential Municipalities: WSS Topola, WSS Aranđelovac

Q8. Water supply system name (Country 2):

(2) potential Municipalities: WSS Ljig, WSS Kraljevo

Q9. Management of origin side of the WSS:

Regional Water supply system Rzav (RWSS Rzav)

Q10. Management of delivery side of the WSS:

WSS in each Municipalities

Q11: Amount of water supplied (as per contract/agreement):

(1) potential: Average = 100 l/s, 3.000.000 m3/year, maximum 150 l/s; (2) potential: Average = 200 l/s, 6.000.000 m3/year, max. 300 l/s

Q12. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply:

Permanent water supply.





Q13. General description of the nature of the necessity:

They (these 4 Municipality WSS) do not have enough water on the local Municipality Level.

Q14. Status of the preparation of the technical/legal/economics and other documents:

Unofficial feasibility study

Q15. Potential date of construction (estimated if possible):

Dam date construction not defined (but likely soon, just the funds are problem), new consumers (WSS Municipalities) still not agreed.

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:

Complicated procedures for the definition of the Municipalities financial contribution.





Questionnaire for Internal partner reposting WP5:

P.C.Utility Neum

7. General about CB WSS

```
Q1. Country:
Bosnia and Herzegovina
Q2. Partner name:
P.C.Utility Neum
Q3. PARTNER - Final Beneficiary No.:
FB 13
Q4. Reporting country (1) (cross-border country (1))
Bosnia and Herzegovina
Q5. Reporting country (2) (cross-border country (2))
Croatia
Q6. Estimated number of CBWSS (active)(Number and name of the
CBWSS):
(1) Gabela-Hutovo-Neum (Dubrovačko primorje detachment)
Q7. Estimated number of CBWSS (inactive - ceased to operate)(Number
and name of the CBWSS):
Q8. Potential development of CBWSS(Number and name of the CBWSS):
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8. Informaton about Existing CB WSS

Q1. Country name:

Bosnia and Herzegovina

Q2. Partner name:

P.C.Utility Neum

Q3. Partner - Final Beneficiary No.:

FB 13

Q4. Between country - water coming from (origin country (1)) and

Bosnia and Herzegovina

Q5. Country (2) - water supplied to (delivered):

and Croatia

Q6. Water supply system name (English):

Regional WSS Gabela-Hutovo-Neum (Dubrovačko primorje detachment)

Q7. Water supply system name (Country 1):

Regionalni vodovod Gabela-Hutovo-Neum (odvajanje za Dubrovačko primorje)

Q8. Water supply system name (Country 2):

Regionalni vodovod Gabela-Hutovo-Neum (odvajanje za Dubrovačko primorje)

Q9. Date/year established cross-border water supply:

Cross-border water supply has been established in 1982

Q10. Management of origin side of the WSS:

Javno poduzeće Komunalno Neum d.o.o./ P.C.Utility Neum

Q11: Management of delivery side of the WSS:

Javno poduzeće Vodovod Dubrovnik d.o.o. /Public company Vodovod Dubrovnik

Q12. Amount of water supplied (as per contract/agreement):

According to Contract signed between Communal labour organization Vodovod Dubrovnik and Municipal building authority of Neum in 1982. the amount of water to be delivered to Dubrovačko primorje is 15l/s. At the moment this amount is less than agreed due to decreased water demands





Q13. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply:

General nature of the CBWS is permanent water supply of some settlements of the Dubrovačko primorje.

Q14. Existing legal framework for the CBWS:

The existing legislation is following:(1)Contract signed between Communal labour organization Vodovod Dubrovnik and Municipal building authority of Neum dating from 1982. (2) Contract signed between P.C.Utility Neum and P.C.Vodovod Dubrovnik dating from 1991. (3)Contract signed between Croatian Government and Bosnia and Herzegovina Government on water management relations arrangement dating from 1996.

Q15. Top level CBWS management body (if mutually defined):

According to the last signed contract - Contract signed between Croatian Government and Bosnia and Herzegovina Government on water management relations arrangement dating from 1996. Top level CB WSS management body is mutual Republic of Croatia and Bosnia and Herzegovina Water Management Committee/ zajedničko Povjerenstvo za vodno gospodarstvo Republike Hrvatske i Bosne i Hercegovine.

Q16. Origin country reference body for the management body:

Federalno ministarstvo poljoprivrede, vodoprivrede i šumarstva/Ministry of Agriculture, Water Management and Forestry

Q17. Delivery country reference body for the CBWS management body. Hrvatske vode

Q18. Legal framework management - Contract party meetings (annual, even more frequent):

Yes, annually or when necessary.

Q19. Issues addressed on the local level:

Apart from Water Management Committee functioning there are many issues that have to be tackled localy. Most of the day-to-day problems, necessary for the regular and continuous functioning of the CB WSS are bound to be solved, regardless from legal frameworks. Due to that, local managing is very important but unfortunately underestimated and it demands higher support from all the levels of governing.

Q20. Issues addressed on the regional level:

None.





Q21. Issues addressed on the state level:

Yes, Republic of Croatia and Bosnia and Herzegovina Water Management Committee. Meetings at least once a year or when necessary. Last meeting was held in December 2013.

Q22. Legal option to increase maximum annual entitlement?

Currently, the water amount contracted and delivered to the settlements in Dubrovačko primorje is not an issue and there are no requests for increasing it. In case of future increasing demands and with sufficient technical capacity already existing it would not be a problem.

Q23. Minimum amount of water delivery defined?

Q24. Which is the body assigned by the contract for the resolution of disputes?

As defined in Helsinki Convention, part III, Article 22. the body assigned for the resolution of disputes is court of arbitration.

Q25. Ownership of the cross-border infrastructure:

The Municipality of Neum is a legal establisher of P.C.Utility Neum and accordingly the owner of the infrastructure. P.C. Vodovod Dubrovnik owns the infrastructure on it's national territory.

Q26. Are the water rights on the water resource assigned to the cross-border partner? In which way?

No, the water rights of the water source are not allocated to cross-border partner. Water permit is issued for the P.C.Utility Neum only.

Q27. Termination of the water delivery of contract

The final date of delivery is not fixed, both in contracts from 1982 and 1991. Contract from 1996 is concluded for an idefinite period of time and it does not envisage the final date od delivery.

Q28 Minimal water consumption legally defined?

According to Contract signed between Communal labour organization Vodovod Dubrovnik and Municipal building authority of Neum in 1982. the amount of water to be delivered to Dubrovačko primorje is 15l/s. At the moment this amount is less than agreed due to decreased water demands.





Q29. Is the legal heritage of the systems resolved

Legal inheritance system is solved, but completely satisfactory. This has led to numerous problems in the managing of P. C. Utility Neum. Until war (1991) there was a contract with SIZ WSS, where a substantial portion of the cost was beared by SIZ WSS, who was also financing the construction of WSS. After the war, due to new circumstances, these institutions ceased to function and all maintenance costs were transferred to the P. C. Utility. The issue of legal inheritance is not adequate, legal heirs do not know what are their obligations. Following these problems and lack of financial resources, P. C. Utility Neum is not able to maintain the system in a satisfactory way and because of that, the WSS was left unamaintained and today's unenviable position.

Q30. Is the water price(charge) composed by different components?

No, water price (charge) is not composed of different components. It is defined as a lump sum - Water price Decision issued by the Municipal council of Neum.

Q31. How is the pricing mechanism defined (water charges):

Decision on water prices issued and adopted by the Municipal council of Neum on 05.03.2012. defines the price of water as a lump sum for the whole water supply same for the local and cross-border provision. Established water price doesn't cover costs of water production and is not actually a product of economic variables but more of a social. This is the way to protect final water consumers due to the deteriorating socioeconomic conditions eventhough it is not the best solution for the successful managing of WSS.

- Q32. Are the minimal charges foreseen? Fixed charges, full for empty:
- Q33. Is the non-payment procedure regulated by the contract?
- Q34. Is there a special tariff (surcharge) for the excessive water supply?
- Q35. Insurance cost covered insurance cost tariff, insurance model foreseen by the contract:

 No
- Q36. Depreciaton of the infrastructure, investment/maintenance plans agreed ? (amortizacija, ammortamento):
 No





Q37. Penalties for unfulfilment of contractual obligations?

Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):

No

Q39. General assessment of the CBWS economics:

Regional water supply system Gabela-Hutovo-Neum is a highly demanding and expensive mechanism to maintain. It requests continuous care and investments both from the regular incomes and all government level grants. Since the CBWS is just a detachment of our regional water supply system there are no special issues regarding CBSW economics especially if we take into consideration low water demands from the other side of the border. Nevertheless, increasing investments from Dubrovačko primorje would definitelly help in mutual maintaining of WSS.

Q40. Payment statistics for the last 5 years:

In attachment.

Q41. Other:

Nο

Q42. Measurement of water delivered:

There are two detachments for the cross-border water delivery. Measurement is performed in a way that P.C.Utility Neum measures the flow in water reservoirs Moševići and Duži both before detachments for Dubrovačko primorje. This measuring using water meters shows the quantity of water delivered to the point of cross-border provision.

Q43. Is continuity of water supply - intermittent water supply an issue?

In case of a regular water supply, when there are no breakages in the system, water supply continuity is not an issue. On the other hand, all the troubles in the system (breakages, failures, electricity issues, etc) endanger the regular water supply for both of the sides.

Q44. Agreed water quality issues:

No

Q45. Water quality monitoring jointly controlled/verified:

Water quality monitoring is not jointly controlled. It is a regular responsibility of P.C.Utility Neum and is as such delivered to Dubrovačko primorje.





Q46. Temperature regulated by the contract?

No

Q47. Pressure regulated by the contract?

No

Q48. Cross - border profile management:

Yes, there is a pressure measuring on the cross border structure and it is mutually accessible.

Q49. Construction of project facilities:

No

Q50. Is the daily dynamics of water demand/supply an issue?

No

Q51. Is the seasonal dynamics of water demand/supply an issue?

There is an issue with the seasonal dynamics of water supply during the peak summer season when local demands multiply.

Q52. Management of water losses - are water losses in the supply, uptake side an issue?

SCADA system

Q53. Is the water availability/demand an issue on supply country or demand country side?

No, there are no issues with water availability-water source.

Q54. Transitional phenomena an issue?

No

Q55. Other technical issues?

No

Q56. Long term planning mechanisms established?

There are no long term planning mechanisms established.





Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning?

System for the liaison officers is not established on the local level. Communication process is functioning spontaneously and due to the good and positive relations between two utilities.

Q58. Joint supervision of the Water Supply System?

Mechanisms for the joint supervision of the WSS have not been envisaged in the Contract and further to that not established.

Q59. Joint management of the water resource?

Water resource is managed only by one partner which is P.C.Utility Neum from the origin side of the WSS.

Q60. Contingency plans existing?

No, there is no contingency plan existing.

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Q61. Main problems identified:
/
Q62. Other comments:
```

Q63. Vision:

There is in general a positive vision on the functioning of the CBWS.

Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined:

Legal framework of the CBWS is under-defined and inadequate. The signed agreement between the Government of Croatia and the Government of Bosnia and Herzegovina did not further elaborate on the mechanisms that would help to solve issues and problems at the levels where decisions are actually made and that is at local level. If the entire cross-border management system has been reduced to the level of utility company, it can certainly be concluded that this is a big task and responsibility that small utilities can not handle.

Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined:

Economic framework of the CBWS is under-defined and inadequate. The price of water that is defined locally it is not good solution. Pricing of water based on social rather than





economic variables, although it positively resolves socio-economic issues, however, is not adequate and efficient way for the long-term profitability of WSS.

Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined:

Technical framework for the CBWS is sufficient but without legal and economic framework following, it is also inadequate.

Q67. How would you assess general perception of the cross border water supply in public?

Since the CBWS of Dubrovačko primorje is not a highly demanded part of the overall regional supply and it is not endangering the same on the local level, there is a practical positive opinion of CBWS. It is considered as a positive component in the framework of general cross-country relationship.

Q68. Provide in the attachment shp file of the existing water supply network:

Has been provided.

Q69. Provide documents on general state-level framework for the crossborder water supply:

Contract signed between Croatian Government and Bosnia and Herzegovina Government on water management relations arrangement from 1996.

Q70. Specific delivery contract:

Contract signed between Communal labour organization Vodovod Dubrovnik and Municipal building authority Neum from 1982.; Decision on fees for municipal waste and water price issued and adopted by the Municipal council of Neum on 05.03.2012

Q71. Regulations, technical documentation:

Q72. Statistics on the water supplied and payments provided for the last five years:





9. Information about potential CB WSS

```
Q1. Country name:
Bosnia and Herzegovina
Q2. Partner name:
P.C.Utility Neum
Q3. Partner - Final Beneficiary No.:
FB 13
Q4. Between country - water coming from (origin) and:
Bosnia and Herzegovina
Q5. Country (2) - water supplied to (delivered):
and Croatia
Q6. Water supply system name (English):
/
Q7. Water supply system name (Country 1):
/
Q8. Water supply system name (Country 2):
Q9. Management of origin side of the WSS:
Q10. Management of delivery side of the WSS:
Q11: Amount of water supplied (as per contract/agreement):
Q12. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
Q13. General description of the nature of the necessity:
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Q14. Status of the preparation of the technical/legal/economics and other documents:

/

Q15. Potential date of construction (estimated if possible):

/

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:
/





Questionnaire for Internal partner reposting WP5:

Faculty of Civil Engineering - University of Rijeka

10. General about CB WSS

Q1. Country:

Croatia

Q2. Partner name:

Faculty of Civil Engineering - University of Rijeka

Q3. PARTNER - Final Beneficiary No.:

FB 8

Q4. Reporting country (1) (cross-border country (1))

Croatia

Q5. Reporting country (2) (cross-border country (2))

Slovenia

- Q6. Estimated number of CBWSS (active)(Number and name of the CBWSS):
- (1) Water supply system of Liburnija and hinterland (Liburnijske vode d.o.o. (old name: Komunalac d.o.o. Opatija) JP Komunala Ilirska Bistrica d.o.o.),(2) Water supply network Slovenia (OKP Rogaška Slatina d.o.o. Humkom d.o.o.)
- Q7. Estimated number of CBWSS (inactive ceased to operate)(Number and name of the CBWSS):
- (1) For water supply of Klana (CRO), water was delivered from Ilirska Bistrica.
- **Q8.** Potential development of CBWSS(Number and name of the CBWSS):





11. Informaton about Existing CB WSS

Q1. Country name:

Croatia

Q2. Partner name:

Faculty of Civil Engineering - University of Rijeka

Q3. Partner - Final Beneficiary No.:

FB8

Q4. Between country - water coming from (origin country (1)) and

Slovenia

Q5. Country (2) - water supplied to (delivered):

Croatia and Slovenia*

(*for water supply of Jelšane (SLO): water is provided by JP Komunala

Ilirska Bistrica d.o.o. (SLO), but that water is first delivered to Liburnijske vode d.o.o. (CRO), which then supplies Jelšane)

Q6. Water supply system name (English):

Water supply system of Liburnija and hinterland

Q7. Water supply system name (Country 1):

Vodovodni sistem Liburni in zaledjem

Q8. Water supply system name (Country 2):

Vodoopskrbni sustav Liburnije i zaleđa

Q9. Date/year established cross-border water supply:

Construction of water supply system in 1937: Buzet - Starod - Šapjane - Jelšane - Klana - Mučići.

Change in supplying water in 1962: Ilirska Bistrica - Starod - Šapjane - Jelšane - Klana - Mučići - Matulji

Q10. Management of origin side of the WSS:

JP Komunala Ilirska Bistrica d.o.o., http://www.kp-ilb.si/index.html

Q11: Management of delivery side of the WSS:

Liburnijske vode d.o.o., http://www.liburnijske-vode.hr/





(old name: Komunalac d.o.o. Opatija, http://www.komunalac-opatija.hr/)

and

JP Komunala Ilirska Bistrica d.o.o., http://www.kp-ilb.si/index.html

Q12. Amount of water supplied (as per contract/agreement):

According to Contract from 1972:Minimum of 24.5 l/s. In case of available water in VS in Starod, that amount may be increased up to a maximum of 30 l/s (which is the capacity of transport pipeline). According to Contract for the supply and payment of water (1976): cca 720.000 m3/year

Q13. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply:

Permanent water supply

Q14. Existing legal framework for the CBWS:

(1) Contract for the supply and prices of water from water supply system "Visoki Kras" (26.09.1972.), between Komunalno stanovanjsko podjetje Ilirska Bistrica and Komunalno poduzeće "Vodovod" Opatija; (2) - Contract for the supply and payment of water (1976.); (4) I.Addition to basic contract from 24.11.1992. (24.02.1997.).(3) Contract for the sale and supply of water (24.11.1992.);(5) Water Act (Zakon o vodama), 17.12.2009. - it is only written that some regulations are not applicable in the case of cross-border water supply (6) Regulation on the ratification of the contract between Croatian Government and Slovenian Government on the regulation of water management relations (12.06.1997.) (7) (Uredba o potvrđivanju ugovora između Vlade Republike Hrvatske i Vlade Republike Slovenije o uređivanju vodnogospodarskih odnosa (12.06.1997.))

Q15. Top level CBWS management body (if mutually defined):

Stalna hrvatsko-slovenska komisija za vodno gospodarstvo;

Stalna slovensko-hrvaška komisija za vodno gospodarstvo

(Permanent Croatian-Slovenian Commission for Water Management)

Q16. Origin country reference body for the management body:

Ministry of Agriculture and Environment, Sector for Water Managment (SLO)

Q17. Delivery country reference body for the CBWS management body.

Ministry of Agriculture, Direction for Water Management (CRO)





Q18. Legal framework management - Contract party meetings (annual, even more frequent):

Over the last 25 years, the cooperation with the Slovenian company from Ilirska Bistrica has been friendly. Management delegations meet at least once a year, technical staff consult each other and meet if necessary.

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Q19. Issues addressed on the local level:

/

Q20. Issues addressed on the regional level:
/
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Q21. Issues addressed on the state level:

Stalna hrvatsko-slovenska komisija za vodno gospodarstvo

(Permanent Croatian-Slovenian Commission for Water Management)

Q22. Legal option to increase maximum annual entitlement?

Legally it is possible to make a contract where based on their (Ilirska Bistrica) technical capabilities current maximum amount of water would be defined, and in case of reduced abundances and technical problems minimum amounts would be defined.

There are technical limitations on Croatian side, such that maximum system throughput is now reduced, from former 29 l/s which was in practice, to 19 l/s, because there is no need for larger amounts of water from Slovenia.

Q23. Minimum amount of water delivery defined?

According to Contract from 1972: minimum of 24.5 l/s.

Q24. Which is the body assigned by the contract for the resolution of disputes?

According to Contract from 1972:District Commercial Court in Rijeka or Higher Commercial Court in Zagreb, depending on the value of the dispute. According to Contract for the supply and payment of water (1976.): District Commercial Court in Koper. According to Contract for the sale and supply of water (1992.): The Court in Koper.

Q25. Ownership of the cross-border infrastructure:

Each country owns the infrastructure on the national territory. Each country is owner up to the measuring point, i.e. from the measuring points that are on the borders.





Q26. Are the water rights on the water resource assigned to the cross-border partner? In which way?

No.

Q27. Termination of the water delivery of contract It is unlimited.

Q28 Minimal water consumption legally defined?No.

Q29. Is the legal heritage of the systems resolved

It is not problematic. What has belonged to Slovenia, it still belongs to Slovenia. The same applies to Croatia.

Q30. Is the water price(charge) composed by different components?

For Jelšane the price is not defined. Ilirska Bistrica has defined the price of 2 EUR/m3 to Liburnijske vode. This is how the price which Liburnijske vode d.o.o. pay is defined: 1) the amount of water which is delivered to Croatia is reduced with the amount of water which is delivered to Jelšane (increased by 15% due to handling and maintenance costs), what gives the amount of water that is charged to Liburnijske vode d.o.o. (2 EUR/m3); 2) charge for water supply network (59.35 EUR/month); 3) charge for watermeters (13.02 EUR/month).

Q31. How is the pricing mechanism defined (water charges):

Amount of water for Liburnijske vode d.o.o. is monitored at the border measuring instrument in Pasjak. Part of that water is delivered to Slovenia, therefore it is agreed to reduce the total amount of water from Pasjak with that part (but increased by 15% due to handling and maintenance costs), and the rest of the water is charged to Liburnijske vode d.o.o. When Yugoslavia fell apart, the calculation method for Slovenian water remained the same, although there was also customs charging before Croatia has joined EU. Water price is described in previous question. Legislation (CRO): Water Act (Zakon o vodama), Water Management Financing Law (Zakon o financiranju vodnoga gospodarstva).

Q32. Are the minimal charges foreseen? - Fixed charges, full for empty:

In case that Liburnijske vode d.o.o. don't take water from Ilirska Bistrica (0 m3) they would still have to pay (fixed charges): 2) charge for water supply network (59.35 EUR/month); 3) charge for watermeters (13.02 EUR/month).





Q33. Is the non-payment procedure regulated by the contract?

Not by the contracts that are available to us. Only courts for resolution of disputes are mentioned.

Q34. Is there a special tariff (surcharge) for the excessive water supply?

No. Everything is agreed with joint cooperation.

Q35. Insurance cost covered - insurance cost tariff, insurance model foreseen by the contract:

It is not mentioned.

Q36. Depreciaton of the infrastructure, investment/maintenance plans agreed? (amortizacija, ammortamento):

Each side maintains its own system.

Q37. Penalties for unfulfilment of contractual obligations?

According to Contract from 1972, if water supplier by his fault doesn't fulfill the obligations under Articles II and III of the contract, counterparty has the right for compensation of resulting damage.

Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):

No. Both sides communicate with each other if something is unclear. Bill after bill is paid.

Q39. General assessment of the CBWS economics:

Croatia thinks that Slovenian water is too expensive.

For Ilirska Bistrica it is more favorable to supply Jelšane in current way (through Croatia), then to buy Croatian water.

Q40. Payment statistics for the last 5 years:

See the last question in this questionnaire.

Q41. Other:

/

Q42. Measurement of water delivered:

2 measuring points: 1) on the border crossing Pasjak (measurement of amount of water that is delivered to Croatia), 2) on the border (measurement of amount of water that is delivered to Jelšane). Measurements are usually performed once a month.





Q43. Is continuity of water supply - intermittent water supply an issue?

Only some technical problems, which rarely happen (eg. when repairing pipes). During the drought Slovenia would reduce the water flow. Slovenia would always inform Croatia about that, as Croatia informs them.

Q44. Agreed water quality issues:

Legislation: - Drinking Water Directive (Direktiva o kakvoći vode za piće) which defines parameters, frequency etc. CRO:(1) Regulation on drinking water sanitary correctness (Pravilnik o zdravstvenoj ispravnosti vode za piće); (2) Rules on compliance parameters and methods of analysis of water for human consumption (Pravilnik o parametrima sukladnosti i metodama analize vode za ljudsku potrošnju); (3) Water Act (Zakon o vodama), 17.12.2009.

Q45. Water quality monitoring jointly controlled/verified:

A place on the border is agreed where pipeline extends from Šapjane to Jelšane. Croatia takes a sample, and if there's a problem with the sample, both sides consult each other. A sample is taken once a month. If water turbidity etc. occurs at springs in Slovenia, they inform Croatia about need for boiling water.

Q46. Temperature regulated by the contract?

No.

Q47. Pressure regulated by the contract?

No.

Q48. Cross - border profile management:

2 measuring points on the border - on 1st discharge and pressure are measured (pressure is measured on reducer station just after the border in Pasjak); on 2nd discharge is measured (toward Jelšane). Structures are accessible for both sides. Management of valves is agreed from both sides.

Q49. Construction of project facilities:

Everything has been built, each side builds for its own needs.

Q50. Is the daily dynamics of water demand/supply an issue?

Reservoir is in Starod (SLO). Reservoir Kavrani Breg for potential water supply is in Croatia.

Q51. Is the seasonal dynamics of water demand/supply an issue?

Seasonal dynamics used to be higher, but is lower today. Fewer number of houses in Croatia is now supplied with water (smaller order of magnitude).





Q52. Management of water losses - are water losses in the supply, uptake side an issue?

On Croatian side there is monitoring of amount of water that entered the system, and difference with amount of water that was taken by consumers. Water losses are monitored on a monthly basis. They are about 8-9 %. Supply network has been restored.

Q53. Is the water availability/demand an issue on supply country or demand country side?

On Croatian side there is a trend of decrease in water consumption.

```
Q54. Transitional phenomena an issue?

/
Q55. Other technical issues?
/
```

Q56. Long term planning mechanisms established?

Croatian side is working on a new system, for water suppy with water from Croatia (the system has been built).

Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning?

Q58. Joint supervision of the Water Supply System?

Each country supervises its own side. Measuring instruments are contact points.

Q59. Joint management of the water resource?

No, they are managed only by Slovenia.

Q60. Contingency plans existing?

There is no special plan. If a problem occurs, both sides contact each other.

```
Q61. Main problems identified:
/
Q62. Other comments:
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Q63. Vision:

WSS has been reconstructed in Croatia, and that system can supply Croatian and Slovenian settlements with water from reservoir Kavrani breg above Lipa, i.e. from springs on Učka and from Rijeka. In such way Croatia wouldn't need expensive imported water from Ilirska Bistrica, and it would become exporter instead of importer, because Croatia would then sell water for Jelšane. Ilirska Bistrica is more satisfied with current supply of Jelšane (through Croatia). In case of keeping current way of water supply, Croatia requires lower prices for Slovenian water.

Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined:

It is adequate.

Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined:

The only problem are water prices.

Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined:

It is adequate.

Q67. How would you assess general perception of the cross border water supply in public?

There were no problems with Croatian public, the price was always the same, and that's important to them. Part of the public still thinks that water from Slovenia is supplied all the way to Matulji (not just for 3 settlements).

Q68. Provide in the attachment shp file of the existing water supply network:

It has been provided.

Q69. Provide documents on general state-level framework for the cross-border water supply:

Q70. Specific delivery contract:

We have found these contracts: (1) Contract for the supply and prices of water from water supply system "Visoki Kras" (26.09.1972.), between Komunalno stanovanjsko podjetje Ilirska Bistrica and Komunalno poduzeće "Vodovod" Opatija, (2) Contract for the





supply and payment of water (1976.), (3) Contract for the sale and supply of water (24.11.1992.), (4) I.Addition to basic contract from 24.11.1992. (24.02.1997.).

Q71. Regulations, technical documentation:

Q72. Statistics on the water supplied and payments provided for the last five years:

Provided.





12. Information about potential CB WSS

```
Q1. Country name:
CROATIA
Q2. Partner name:
Faculty of Civil Engineering - University of Rijeka
Q3. Partner - Final Beneficiary No.:
FB8
Q4. Between country - water coming from (origin) and:
Q5. Country (2) - water supplied to (delivered):
Q6. Water supply system name (English):
Q7. Water supply system name (Country 1):
Q8. Water supply system name (Country 2):
Q9. Management of origin side of the WSS:
Q10. Management of delivery side of the WSS:
Q11: Amount of water supplied (as per contract/agreement):
Q12. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
Q13. General description of the nature of the necessity:
/
```





Q14. Status of the preparation of the technical/legal/economics and other documents:

/

Q15. Potential date of construction (estimated if possible):

/

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:

/





Questionnaire for Internal partner reposting WP5:

Faculty of Civil Engineering - University of Rijeka

13. General about CB WSS

Q1. Country:

Croatia

O2. Partner name:

Faculty of Civil Engineering - University of Rijeka

Q3. PARTNER - Final Beneficiary No.:

FB8

Q4. Reporting country (1) (cross-border country (1))

Croatia

Q5. Reporting country (2) (cross-border country (2))

Slovenia

- Q6. Estimated number of CBWSS (active)(Number and name of the CBWSS):
- (1) Water supply system of Liburnija and hinterland (Liburnijske vode d.o.o. (old name: Komunalac d.o.o. Opatija) JP Komunala Ilirska Bistrica d.o.o.),
- (2) Water supply network Slovenia (OKP Rogaška Slatina d.o.o. Humkom d.o.o.)
- Q7. Estimated number of CBWSS (inactive ceased to operate)(Number and name of the CBWSS):
- (1) For water supply of Klana (CRO), water was delivered from Ilirska Bistrica.
- (2) Until the year 1995, about 60 houses in Croatian settlement Banfi (Municipality Štrigova) were connected to Slovenian WSS. A new WSS was built for these households, and in 1995 connection to WSS managed by Međimurske vode d.o.o. was enabled, with supply of drinking water from water wells Nedelišće (in Međimurje, CRO).





Q8. Potential development of CBWSS(Number and name of the CBWSS):

(1) Međimurske vode d.o.o. Čakovec (CRO) delivering water to Komunalno podjetje Ormož d.o.o. (SLO).



Q1. Country name:



14. Informaton about Existing CB WSS

```
Croatia
Q2. Partner name:
Faculty of Civil Engineering - University of Rijeka
Q3. Partner - Final Beneficiary No.:
FB 8
Q4. Between country - water coming from (origin country (1)) and
Slovenia
Q5. Country (2) - water supplied to (delivered):
Croatia
Q6. Water supply system name (English):
Water supply network - Slovenia
Q7. Water supply system name (Country 1):
Vodovodno omrežje - Slovenija
Q8. Water supply system name (Country 2):
Vodovodna mreža - Slovenija
Q9. Date/year established cross-border water supply:
Q10. Management of origin side of the WSS:
OKP Rogaška Slatina d.o.o., http://www.okp.si/
Q11: Management of delivery side of the WSS:
Humkom d.o.o., http://www.humkom.hr/
Q12. Amount of water supplied (as per contract/agreement):
cca 15000 m3 per year
Q13. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
/
```





Q14. Existing legal framework for the CBWS:

(1) Water Act (Zakon o vodama), 17.12.2009. - it is only written that some regulations are not applicable in the case of cross-border water supply, (2) Regulation on the ratification of the contract between Croatian Government and Slovenian Government on the regulation of water management relations (12.06.1997.) - (Uredba o potvrđivanju ugovora između Vlade Republike Hrvatske i Vlade Republike Slovenije o uređivanju vodnogospodarskih odnosa (12.06.1997.))

Q15. Top level CBWS management body (if mutually defined):

Stalna hrvatsko-slovenska komisija za vodno gospodarstvo;

Stalna slovensko-hrvaška komisija za vodno gospodarstvo

(Permanent Croatian-Slovenian Commission for Water Management)

Q16. Origin country reference body for the management body:

Ministry of Agriculture and Environment, Sector for Water Managment (SLO)

Q17. Delivery country reference body for the CBWS management body.

Ministry of Agriculture, Direction for Water Management (CRO)

Q18. Legal framework management - Contract party meetings (annual, even more frequent):

NO.

Q19. Issues addressed on the local level:

NO.

Q20. Issues addressed on the regional level:

NO.

Q21. Issues addressed on the state level:

Stalna hrvatsko-slovenska komisija za vodno gospodarstvo

(Permanent Croatian-Slovenian Commission for Water Management)

Q22. Legal option to increase maximum annual entitlement?

With construction of water supply network on Croatian side, water delivery from OKP will be ended.





Q23. Minimum amount of water delivery defined? NO.
Q24. Which is the body assigned by the contract for the resolution of disputes?
Q25. Ownership of the cross-border infrastructure:
Q26. Are the water rights on the water resource assigned to the cross- border partner? In which way?
Q27. Termination of the water delivery of contract It is unlimited.
Q28 Minimal water consumption legally defined? NO.
Q29. Is the legal heritage of the systems resolved
Q30. Is the water price(charge) composed by different components? YES.
Q31. How is the pricing mechanism defined (water charges):
Legislation (CRO): Water Act (Zakon o vodama), Water Management Financing Law

(Zakon o financiranju vodnoga gospodarstva).

Q32. Are the minimal charges foreseen? - Fixed charges, full for empty: YES.

Q33. Is the non-payment procedure regulated by the contract? YES.





Q34. Is there a special tariff (surcharge) for the excessive water supply?

Q35. Insurance cost covered - insurance cost tariff, insurance model foreseen by the contract:

YES.

Q36. Depreciaton of the infrastructure, investment/maintenance plans agreed? (amortizacija, ammortamento):
NO.

Q37. Penalties for unfulfilment of contractual obligations? YES.

Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):

YES.

Q39. General assessment of the CBWS economics:

Q40. Payment statistics for the last 5 years:

See the last question in this questionnaire.

Q41. Other:

Q42. Measurement of water delivered:

With water meter.

Q43. Is continuity of water supply - intermittent water supply an issue? YES.

Q44. Agreed water quality issues:

Legislation: (1) Drinking Water Directive (Direktiva o kakvoći vode za piće) which defines parameters, frequency etc. CRO: (1) Regulation on drinking water sanitary correctness (Pravilnik o zdravstvenoj ispravnosti vode za piće), (2) Rules on compliance parameters and methods of analysis of water for human consumption (Pravilnik o parametrima sukladnosti i metodama analize vode za ljudsku potrošnju), (3) Water Act (Zakon o vodama), 17.12.2009.





Q45. Water quality monitoring jointly controlled/verified: YES. Q46. Temperature regulated by the contract? NO. Q47. Pressure regulated by the contract? NO. Q48. Cross - border profile management: YES. Q49. Construction of project facilities: Q50. Is the daily dynamics of water demand/supply an issue? NO. Q51. Is the seasonal dynamics of water demand/supply an issue? NO. Q52. Management of water losses - are water losses in the supply, uptake side an issue? / Q53. Is the water availability/demand an issue on supply country or demand country side? / Q54. Transitional phenomena an issue? NO. Q55. Other technical issues? / Q56. Long term planning mechanisms established? NO. It is planned to supply Hum na Sutli and Zagorska sela with water from Croatian springs.





Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning? Q58. Joint supervision of the Water Supply System? NO. Q59. Joint management of the water resource? Only supplier manages the water resource. Q60. Contingency plans existing? NO. Q61. Main problems identified: There are no problems. **Q62.** Other comments: Q63. Vision: NO. It is planned to supply Hum na Sutli and Zagorska sela with water from Croatian springs. Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined: Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined: Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined: Q67. How would you assess general perception of the cross border water supply in public?

There is no mistrust in the relationship.





Q68. Provide in the attachment shp file of the existing water supply network:

There is no shp file (it is old part of water supply network which is not recorded).

Q69. Provide documents on general state-level framework for the crossborder water supply:

Q70. Specific delivery contract:

Q71. Regulations, technical documentation:

Q72. Statistics on the water supplied and payments provided for the last five years:

Not provided.





15. Information about potential CB WSS

```
Q1. Country name:
CROATIA
Q2. Partner name:
Faculty of Civil Engineering - University of Rijeka
Q3. Partner - Final Beneficiary No.:
FB8
Q4. Between country - water coming from (origin) and:
Croatia
Q5. Country (2) - water supplied to (delivered):
Slovenia
Q6. Water supply system name (English):
/
Q7. Water supply system name (Country 1):
/
Q8. Water supply system name (Country 2):
Q9. Management of origin side of the WSS:
Q10. Management of delivery side of the WSS:
Q11: Amount of water supplied (as per contract/agreement):
Q12. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
Q13. General description of the nature of the necessity:
/
```





Q14. Status of the preparation of the technical/legal/economics and other documents:

For now there have been no negotiations with Slovenian utility companies on the possible supply of drinking water from Croatian water wells.

Q15. Potential date of construction (estimated if possible):

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:

11/11





Questionnaire for Internal partner reposting WP5:

Faculty of Civil Engineering - University of Rijeka

16. General about CB WSS

Q1. Country:

Croatia

Q2. Partner name:

Faculty of Civil Engineering - University of Rijeka

Q3. PARTNER - Final Beneficiary No.:

FB8

Q4. Reporting country (1) (cross-border country (1))

Croatia

Q5. Reporting country (2) (cross-border country (2))

Slovenia

Q6. Estimated number of CBWSS (active)(Number and name of the CBWSS):

- (1) Water supply system of Liburnija and hinterland (Liburnijske vode d.o.o. (old name: Komunalac d.o.o. Opatija) JP Komunala Ilirska Bistrica d.o.o.),
- (2) Water supply network Slovenia (OKP Rogaška Slatina d.o.o. Humkom d.o.o.)

Q7. Estimated number of CBWSS (inactive - ceased to operate)(Number and name of the CBWSS):

(1) For water supply of Klana (CRO), water was delivered from Ilirska Bistrica. (2) Until the year 1995, about 60 houses in Croatian settlement Banfi (Municipality Štrigova) were connected to Slovenian WSS. A new WSS was built for these households, and in 1995 connection to WSS managed by Međimurske vode d.o.o. was enabled, with supply of drinking water from water wells Nedelišće (in Međimurje, CRO)





Q8. Potential development of CBWSS(Number and name of the CBWSS):

(1) Međimurske vode d.o.o. Čakovec (CRO) delivering water to Komunalno podjetje Ormož d.o.o. (SLO)





17. Informaton about Existing CB WSS

```
Q1. Country name:
Croatia
Q2. Partner name:
Faculty of Civil Engineering - University of Rijeka
Q3. Partner - Final Beneficiary No.:
FB 8
Q4. Between country - water coming from (origin country (1)) and
Q5. Country (2) - water supplied to (delivered):
Q6. Water supply system name (English):
Q7. Water supply system name (Country 1):
/
Q8. Water supply system name (Country 2):
Q9. Date/year established cross-border water supply:
Q10. Management of origin side of the WSS:
Q11: Management of delivery side of the WSS:
Q12. Amount of water supplied (as per contract/agreement):
/
Q13. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
/
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Q14. Existing legal framework for the CBWS:
Q15. Top level CBWS management body (if mutually defined):
/
Q16. Origin country reference body for the management body:
/
Q17. Delivery country reference body for the CBWS management body.
Q18. Legal framework management - Contract party meetings (annual,
even more frequent):
Q19. Issues addressed on the local level:
Q20. Issues addressed on the regional level:
Q21. Issues addressed on the state level:
/
Q22. Legal option to increase maximum annual entitlement?
Q23. Minimum amount of water delivery defined?
/
Q24. Which is the body assigned by the contract for the resolution of
disputes?
/
Q25. Ownership of the cross-border infrastructure:
Q26. Are the water rights on the water resource assigned to the cross-
border partner? In which way?
```





```
Q27. Termination of the water delivery of contract
Q28 Minimal water consumption legally defined?
Q29. Is the legal heritage of the systems resolved
/
Q30. Is the water price(charge) composed by different components?
Q31. How is the pricing mechanism defined (water charges):
Q32. Are the minimal charges foreseen? - Fixed charges, full for empty:
Q33. Is the non-payment procedure regulated by the contract?
Q34. Is there a special tariff (surcharge) for the excessive water supply?
Q35. Insurance cost covered - insurance cost tariff, insurance model
foreseen by the contract:
Q36. Depreciaton of the infrastructure, investment/maintenance plans
agreed? (amortizacija, ammortamento):
/
Q37. Penalties for unfulfilment of contractual obligations?
/
Q38. Is the mutual inspection of records/book-keeping established? (due
dilligence approach):
/
Q39. General assessment of the CBWS economics:
```





```
Q40. Payment statistics for the last 5 years:
Q41. Other:
Q42. Measurement of water delivered:
Q43. Is continuity of water supply - intermittent water supply an issue?
Q44. Agreed water quality issues:
Q45. Water quality monitoring jointly controlled/verified:
Q46. Temperature regulated by the contract?
Q47. Pressure regulated by the contract?
Q48. Cross - border profile management:
Q49. Construction of project facilities:
Q50. Is the daily dynamics of water demand/supply an issue?
Q51. Is the seasonal dynamics of water demand/supply an issue?
Q52. Management of water losses - are water losses in the supply, uptake
side an issue?
```





```
Q53. Is the water availability/demand an issue on supply country or
demand country side?
Q54. Transitional phenomena an issue?
Q55. Other technical issues?
Q56. Long term planning mechanisms established?
Q57. LIASON OFFICERS DETERMINED? Communication process determined
and functioning?
Q58. Joint supervision of the Water Supply System?
Q59. Joint management of the water resource?
Q60. Contingency plans existing?
Q61. Main problems identified:
Q62. Other comments:
Q63. Vision:
Q64. Do you consider that the legal framework for the CB WSS is
adequate, or under-defined:
```





Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined: Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined: Q67. How would you assess general perception of the cross border water supply in public? Q68. Provide in the attachment shp file of the existing water supply network: Q69. Provide documents on general state-level framework for the crossborder water supply: / Q70. Specific delivery contract: Q71. Regulations, technical documentation: Q72. Statistics on the water supplied and payments provided for the last five years:





18. Information about potential CB WSS

```
Q1. Country name:
CROATIA
Q2. Partner name:
Faculty of Civil Engineering - University of Rijeka
Q3. Partner - Final Beneficiary No.:
FB9
Q4. Between country - water coming from (origin) and:
Croatia
Q5. Country (2) - water supplied to (delivered):
Slovenia
Q6. Water supply system name (English):
/
Q7. Water supply system name (Country 1):
/
Q8. Water supply system name (Country 2):
Q9. Management of origin side of the WSS:
Međimurske vode d.o.o. Čakovec (CRO)
Q10. Management of delivery side of the WSS:
Komunalno podjetje Ormož d.o.o. (SLO)
Q11: Amount of water supplied (as per contract/agreement):
Q12. General nature of the CBWS - emergency water supply, peak water
supply, permanent water supply:
```

Q13. General description of the nature of the necessity:

Međimurske vode d.o.o. now don't have a need for drinking water from other springs, or from other countries. Eventually it is possible to sell drinking water from Croatian water





wells, given the situation in neighboring Slovenian region, eg. Podravje. In that region Komunalno podjetje Ormož purifies water from water wells Mihovci with special procedure. It is extremely demanding and expensive purification process. On the other side, drinking water from water wells Nedelišće (in Međimurje, CRO) is not purified, but only preventively treated with chlorine, for health correctness during flow through pipelines.

Q14. Status of the preparation of the technical/legal/economics and other documents:

For now there have been no negotiations with Slovenian utility companies on the possible supply of drinking water from Croatian water wells.

```
Q15. Potential date of construction (estimated if possible):
```

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:





Questionnaire for Internal partner reposting WP5:

<u>CATO</u>

19. General about CB WSS

Q1. Country: Italy
Q2. Partner name: CATO
Q3. PARTNER - Final Beneficiary No.: LB
Q4. Reporting country (1) (cross-border country (1)) Italy
Q5. Reporting country (2) (cross-border country (2)) Slovenia
Q6. Estimated number of CBWSS (active)(Number and name of the CBWSS): (1) - Trieste to Sežana; (2) Sežana to Trieste
Q7. Estimated number of CBWSS (inactive - ceased to operate)(Number and name of the CBWSS): (1) - Trieste to Lipica
Q8. Potential development of CBWSS(Number and name of the CBWSS): (1) - from ACEGAS Trieste to Koper, (2) - from Koper to Trieste





20. Informaton about Existing CB WSS

Q1. Country name: Italy Q2. Partner name: CATO Q3. Partner - Final Beneficiary No.: LB Q4. Between country - water coming from (origin country (1)) and Italy Q5. Country (2) - water supplied to (delivered): Slovenia Q6. Water supply system name (English): Water supply system Trieste - Sežana Q7. Water supply system name (Country 1): AcegasAps S.p.A. Q8. Water supply system name (Country 2): Kraški Vodovod Sežana Q9. Date/year established cross-border water supply: December 18th 2001 Q10. Management of origin side of the WSS: AcegasAps; www.gruppo.acegas-aps.it Q11: Management of delivery side of the WSS:

Kraški Vodovod Sežana; www.kraski-vodovod.si

Q12. Amount of water supplied (as per contract/agreement):

Continued supply of an yearly maximum quantity of 1,2Mm3 with instant maximum flow rate of 150 cubic meter/hour





Q13. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply:

AcegasAps - Kraski: (1) Emergency supply (unexpected conditions for a period of maximum 10 days); (2) Temporary supply (scheduled supply with a 10-day notice and duration of more than 1 month); Kraski - AcegasAps: (1) Emergency supply (unexpected conditions for a period of maximum 10 days); Temporary supply (scheduled supply with a 10-day notice and a duration of more than 1 month)

Q14. Existing legal framework for the CBWS:

AcegasAps and Kraski have undersigned a "Memurandum ag Agreement" aiming at developing synergic processes in various common sectors of activity including the acqeduct supply; as application of the afore mentioned "Memorandum of Agreement", an hydraulic connetion has been created between the existing systems in the Slovenian territory and the Italian territory and a lifting statio is planned to be costructed in Slovenia; AcegasAps and Kraski intended to cooperate to improve the supply and the quality of water supply and sale in the municipalities actually supplied, and also to extend the supply to other municipalities. Decembre 18th 2001, the two companies signed an "Agreemen on exchange of drinkable water for houshold purpose" and defined particular aspects in the provision of water in case of emergency between the crossborder countries. The agreement defined also the price and the adeguation ratio of it for a long term period."Addendum - integration and modification act" by which they defined more specific conditions and started the effective provision of water from Italy to Slovenia suppling water to a part of the municipality of Sežana.

Q15. Top level CBWS management body (if mutually defined): The agreement has not been submitted to any CBWS management body

Q16. Origin country reference body for the management body: Autonomous Region Friuli Venezia Giulia

Q17. Delivery country reference body for the CBWS management body. Ministry of External Affairs

Q18. Legal framework management - Contract party meetings (annual, even more frequent):

There has not been planned any annual meeting of partners, the two structures meets when it is necessary, since theire short distance

Q19. Issues addressed on the local level:

In Italy municipalities are not allowed to manage the water system





Q20. Issues addressed on the regional level:

Yes, after 1995 the competence of Authonomous Regione Friuli Venezia Giulia ha been extended to thi field

Q21. Issues addressed on the state level:

Not for this agreement

Q22. Legal option to increase maximum annual entitlement?

Yes, there is the possibility to increase the actual amount of water delivered tio a maximum of 1,2Mcm/y with a maximum flow of 150cm/h

Q23. Minimum amount of water delivery defined?

No minimum amount has been defined, the partners accepted to use the piezometric quote to maintain a minimum flow in the pipes

Q24. Which is the body assigned by the contract for the resolution of disputes?

The agreement had defined for the law validity and arbitration the International Law of Arbitrators of the National and International Chamber of Arbitrators in Milan (Italy)

Q25. Ownership of the cross-border infrastructure:

In progress for the Slovenian indications and information

Q26. Are the water rights on the water resource assigned to the cross-border partner? In which way?

None

Q27. Termination of the water delivery of contract

The duration of the contract/agreement have an initial periode of 10 years fron the date of signature, after that the agreement is tacity extended year by year (art. 15 Duration of the contract - "Integration and Modification Act")

Q28 Minimal water consumption legally defined?

None

Q29. Is the legal heritage of the systems resolved

Q30. Is the water price(charge) composed by different components?

The pricing scheme for the service of WSS is defined in the agreement between the parties according in order of the type of drinking water supply. There are three different





rates, one rate for the supply of drinking water in case of "emergencies", the second rate for the supply of drinking water for "Temporary periode" the third rate for a drinking water supply "Continue Periode" till the maximum yearly ammount established. (see art. 5 "rates" on Act for the Integration and Modification Agreements - 08/05/2002" (Attachment: Annex 2 - Addendum)

Q31. How is the pricing mechanism defined (water charges):

The first thing it is necessary to clarify the prices defined in the Agreement are the result of a negotiation between the parties. After that the rates have a basis for calculating in the standard model where the rate guarantees the covering of the operating costs (operation and mantenance, energy, security, etc.), coverage of the invested capital for the infrastructure dedicated to delliver the WSS, as well as ensure a minimum level of profitability (There is not official document)

Q32. Are the minimal charges foreseen? - Fixed charges, full for empty: None

Q33. Is the non-payment procedure regulated by the contract?

Yes, there is a specific procedure for the mode of payment for the service of WSS, for the cases of non-payment and the warranties that the parties must issue before the first delivery of the WSS. The specific Art. 11 "Payments and warrantees" in Act "Integration and Modification Act of the Agreement on Drinking Water Exchange for Household Purpouse Signed by the parties" (Attachment: Annex 2 - Addendum)

Q34. Is there a special tariff (surcharge) for the excessive water supply? None

Q35. Insurance cost covered - insurance cost tariff, insurance model foreseen by the contract:

There is not a specific regulation in the "Agreement" in order of the insurance cost covered, insurance cost tariff, insurance model forseen by the contract. In the Agreement is regulated in the Art. 12 the "Laiability limits" in Act "Integration and Modification Act of the Agreement on Drinking Water Exchange for Household Purpouse Signed by the parties, where the parties according the general limits and coverage. In any case in the tariffe scheme the cost include some standard insurance for the operation cost of service. For warranties Art. 11 in the Act "Integration and Modification Act of the Agreement on Drinking Water Exchange for Household Purpouse Signed by the parties"





Q36. Depreciaton of the infrastructure, investment/maintenance plans agreed? (amortizacija, ammortamento):

The calculation model of the tariff is considered the cost of depreciation as a financial costs and other tipical financial costs related for the investments of the infrastructure to carry out the WSS service.

Q37. Penalties for unfulfilment of contractual obligations?

Yes, this aspects are regulated in the Act Integration and Modification Act of the Agreement on Drinking Water Exchange for Household Purpouse Signed by the parties. The general conditions are described in the art. 11 and art 12 (Attachment: Annex 2 - Addendum)

Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):

For the development of trusted environment among the contractual partners in the Agreement by the parties, in the art. 10 "Measuring instruments and drawn volume measuring (Act Integration and Modification Act of the Agreement on Drinking Water Exchange for Household Purpouse Signed by the parties).

Q39. General assessment of the CBWS economics:

AcegasAps description: after an initial period of difficulty with colleagues Sezana it has established a constructive relationship, for the technical aspects, for economic ones. Sezana Comments are in progress.

Q40. Payment statistics for the last 5 years:

AcegasAps: See Annex 3

Q41. Other:

No other comments

Q42. Measurement of water delivered:

To keep the water moving in the conduct even in the absence of critical events, is held the supply of the low-lying areas of the town of Sezana.

Q43. Is continuity of water supply - intermittent water supply an issue? In accordance with the agreements.

Q44. Agreed water quality issues:

In accordance withe the Agreement - Annex 1 and as issue in the Annex A of the Addendum - Annex 2





Q45. Water quality monitoring jointly controlled/verified:

AcegasAps comments: The characteristics of the water at the point of exchange follows the characteristics of Annex A of the Integration and modification Act of the Agreement. For the area of the town of Sezana has the same characteristics for the entire period of 365 days of the year already which is fed continuously from the aqueduct of AcegasAps. On the state border is place the flow meter and a fire hydrant to allow the withdrawal of water from the Competent Authority for the controls. The Slovenian party "in progress"

Q46. Temperature regulated by the contract?

In accordance withe the agreements and as issue in the Annex A of the Integration an modification Acts of the Agreements.

Q47. Pressure regulated by the contract?

In accordance withe the agreements and as issue in the Annex A of the Integration an modification Acts of the Agreements.

Q48. Cross - border profile management: In progress

Q49. Construction of project facilities:

At the moment there are not any project facilities. In progress for the Slovenian indications and information

Q50. Is the daily dynamics of water demand/supply an issue? In progress

Q51. Is the seasonal dynamics of water demand/supply an issue? In progress

Q52. Management of water losses - are water losses in the supply, uptake side an issue?

Are not considered water losses: each operator must bear the cost of water losses in their territory.

Q53. Is the water availability/demand an issue on supply country or demand country side?

For this case is not expexted

Q54. Transitional phenomena an issue?

Throughout the duration of the water supply there were no significant cases





Q55. Other technical issues?

/

Q56. Long term planning mechanisms established?

There are not investment plans in the medium and long term. AcegasAps: There are not investment plans envisaged in the medium and long term.

Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning?

There are no other specific mechanisms for the exchange of information between the parties as well as established in the agreements, there is at least an annual meeting between the technical staff.

Q58. Joint supervision of the Water Supply System?

In the Addendum - Annex 2 are stablisced the regulation in order of the main caracteristics to warranty the WSS, this mechanisms are developed in the art. 2 "Plants property", art. 3 Uniformity degree, art. 9 Comunications.

Q59. Joint management of the water resource?

When there are some significant problem about to the water risorse each operator inform to the other party by the mechanism stablished in the Agreement.

Q60. Contingency plans existing?

There is not exist the contingency plan to manage the expeceptional condition, there is only a best agrrement by the parties to cooperate to to do the best in case of majeure event. This agreement for mutualy cooperations is described in the Act Addendum art. 12 Liability limits.

Q61. Main problems identified:

AcegasAps: at the moment any significant problem. In progress for Slovenian party

Q62. Other comments:

No

Q63. Vision:

In progress

Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined:

In progress





Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined:

In progress

Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined:

Q67. How would you assess general perception of the cross border water supply in public?

In progress

Q68. Provide in the attachment shp file of the existing water supply network:

Annex 4 - Scheme of the water supply netork of AcegasAps, Italian territory. For the Slovenian party "in progress"

Q69. Provide documents on general state-level framework for the crossborder water supply:

The Osimo Treaty of October 1975 settled the borders between Yugoslavia (Slovenia) and Slovenian-speaking Italy, accepting the "de facto" division of 1954.

Q70. Specific delivery contract:

Annex 1 - Agreement, Annex 2 - Addendum

Q71. Regulations, technical documentation:

Annex 1 - Agreement, Annex 2 - Addendum

Q72. Statistics on the water supplied and payments provided for the last five years:

Annex 3 - Data of CBWS AcegasAps to Sezana



In progress



21. Information about potential CB WSS

Q1. Country name: Italy Q2. Partner name: CATO Q3. Partner - Final Beneficiary No.: LB Q4. Between country - water coming from (origin) and: Slovenia Q5. Country (2) - water supplied to (delivered): Italy Q6. Water supply system name (English): Water supply system Kobarid - Cividale Q7. Water supply system name (Country 1): Vodovodni sistem Kobarid - Čedad Q8. Water supply system name (Country 2): Aquedotto Caporetto - Cividale Q9. Management of origin side of the WSS: Komunalno podjetje Tolmin Q10. Management of delivery side of the WSS: Aquedotti Poiana Q11: Amount of water supplied (as per contract/agreement): 50 l/s, 500.000 m3/year, comments Q12. General nature of the CBWS - emergency water supply, peak water supply, permanent water supply: Select the type of the existing water supply Q13. General description of the nature of the necessity:





Q14. Status of the preparation of the technical/legal/economics and other documents:

In progress

Q15. Potential date of construction (estimated if possible): In progress

Q16. Describe recognized limitations inhibiting the development of potential CBWSS:

In progress





Questionnaire for Internal partner reposting WP5:

22. General about CB WSS

- Q1. Country:
- Q2. Partner name:
- Q3. PARTNER Final Beneficiary No.:
- Q4. Reporting country (1) (cross-border country (1))
- Q5. Reporting country (2) (cross-border country (2))
- Q6. Estimated number of CBWSS (active)(Number and name of the CBWSS):
- Q7. Estimated number of CBWSS (inactive ceased to operate)(Number and name of the CBWSS):
- Q8. Potential development of CBWSS(Number and name of the CBWSS):





23. Informaton about Existing CB WSS

- Q1. Country name:
- Q2. Partner name:
- Q3. Partner Final Beneficiary No.:
- Q4. Between country water coming from (origin country (1)) and
- Q5. Country (2) water supplied to (delivered):
- Q6. Water supply system name (English):
- Q7. Water supply system name (Country 1):
- Q8. Water supply system name (Country 2):
- Q9. Date/year established cross-border water supply:
- Q10. Management of origin side of the WSS:
- Q11: Management of delivery side of the WSS:
- Q12. Amount of water supplied (as per contract/agreement):
- Q13. General nature of the CBWS emergency water supply, peak water supply, permanent water supply:
- Q14. Existing legal framework for the CBWS:
- Q15. Top level CBWS management body (if mutually defined):
- Q16. Origin country reference body for the management body:
- Q17. Delivery country reference body for the CBWS management body.
- Q18. Legal framework management Contract party meetings (annual, even more frequent):
- Q19. Issues addressed on the local level:
- Q20. Issues addressed on the regional level:





- Q21. Issues addressed on the state level:
- **Q22.** Legal option to increase maximum annual entitlement?
- Q23. Minimum amount of water delivery defined?
- Q24. Which is the body assigned by the contract for the resolution of disputes?
- **Q25.** Ownership of the cross-border infrastructure:
- Q26. Are the water rights on the water resource assigned to the cross-border partner? In which way?
- Q27. Termination of the water delivery of contract
- Q28 Minimal water consumption legally defined?
- Q29. Is the legal heritage of the systems resolved
- Q30. Is the water price(charge) composed by different components?
- Q31. How is the pricing mechanism defined (water charges):
- Q32. Are the minimal charges foreseen? Fixed charges, full for empty:
- Q33. Is the non-payment procedure regulated by the contract?
- Q34. Is there a special tariff (surcharge) for the excessive water supply?
- Q35. Insurance cost covered insurance cost tariff, insurance model foreseen by the contract:
- Q36. Depreciation of the infrastructure, investment/maintenance plans agreed? (amortizacija, ammortamento):
- Q37. Penalties for unfulfilment of contractual obligations?
- Q38. Is the mutual inspection of records/book-keeping established? (due dilligence approach):
- Q39. General assessment of the CBWS economics:





- Q40. Payment statistics for the last 5 years:
- **Q41.** Other:
- Q42. Measurement of water delivered:
- Q43. Is continuity of water supply intermittent water supply an issue?
- Q44. Agreed water quality issues:
- Q45. Water quality monitoring jointly controlled/verified:
- Q46. Temperature regulated by the contract?
- **Q47.** Pressure regulated by the contract?
- Q48. Cross border profile management:
- Q49. Construction of project facilities:
- Q50. Is the daily dynamics of water demand/supply an issue?
- Q51. Is the seasonal dynamics of water demand/supply an issue?
- Q52. Management of water losses are water losses in the supply, uptake side an issue?
- Q53. Is the water availability/demand an issue on supply country or demand country side?
- Q54. Transitional phenomena an issue?
- Q55. Other technical issues?
- Q56. Long term planning mechanisms established?
- Q57. LIASON OFFICERS DETERMINED? Communication process determined and functioning?
- Q58. Joint supervision of the Water Supply System?
- Q59. Joint management of the water resource?





- Q60. Contingency plans existing?
- Q61. Main problems identified:
- **Q62.** Other comments:
- Q63. Vision:
- Q64. Do you consider that the legal framework for the CB WSS is adequate, or under-defined:
- Q65. Do you consider that the economic framework for the CB WS is adequate, or under-defined:
- Q66. Do you consider that the technical framework for the CB WS is adequate, or under-defined:
- Q67. How would you assess general perception of the cross border water supply in public?
- Q68. Provide in the attachment shp file of the existing water supply network:
- Q69. Provide documents on general state-level framework for the crossborder water supply:
- Q70. Specific delivery contract:
- Q71. Regulations, technical documentation:
- Q72. Statistics on the water supplied and payments provided for the last five years:





24. Information about potential CB WSS

- Q1. Country name:
- Q2. Partner name:
- Q3. Partner Final Beneficiary No.:
- Q4. Between country water coming from (origin) and:
- Q5. Country (2) water supplied to (delivered):
- Q6. Water supply system name (English):
- Q7. Water supply system name (Country 1):
- Q8. Water supply system name (Country 2):
- Q9. Management of origin side of the WSS:
- Q10. Management of delivery side of the WSS:
- Q11: Amount of water supplied (as per contract/agreement):
- Q12. General nature of the CBWS emergency water supply, peak water supply, permanent water supply:
- Q13. General description of the nature of the necessity:
- Q14. Status of the preparation of the technical/legal/economics and other documents:
- Q15. Potential date of construction (estimated if possible):
- Q16. Describe recognized limitations inhibiting the development of potential CBWSS:

