



Yerevan RPE Project

SCADA WORKS

DETAILED DESIGN REPORT

FINAL VERSION

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VTI -International Activities

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1. JUSTIFICATORY REPORT

1.1. STATE OF THE DRINKABLE WATER DISTRIBUTION SYSTEM

1.1.1. DRINKING WATER PRODUCTION

The drinking water comes almost completely of harnessings of springs waters and partially from the drillings near the springs. One only site is composed by artesian wells for a debit of 4m³/sec. All the water power have a good quality. All the sources of supply present a very good quality. Waters are weakly mineralized and little corrosive.

1.1.2. DRINKABLE WATER DISTRIBUTION SYSTEM

The drinkable water distribution system is constituted by 1900 km of pipes to which it is necessary to add about 720 km of adduction conducts.

The drinkable water distribution system constitutes the major challenge of the Yerevan system.

It is globally degraded and badly structured because of the lack of means for its extension and its maintenance. The losses in water are important. The corrosion and the excessive pressures are the major reasons of these bad performances.

It results from it a service in intermittent water in numerous places and important costs because the gravitational resources are insufficient and must be completed by pumped resources (site of Araratyan). This site represents 25 % of the global operating costs of Yerevan Djur.

1.2. REMOTE PROCESSING OF THE DRINKING WATER NETWORK

The drinkable water distribution system of Yerevan in summer recently equipped with a system of remote processing allowing the centralization of data, mainly the debits and the levels.

This current system allows only the provision for the developer of restricted information and is not sufficient to allow a more optimal management of the distribution network.

The objective of the new system of remote processing is to allow the developer to collect the data and to manage at a distance the main organs of the drinkable water distribution system to be able to master and optimize this latter.

1.2.1. JUSTIFICATION OF THE WORKS

The system of drinking water distribution of Yerevan consists of numerous sites of production and a complex network of pipes. This set is equipped with numerous sensors allowing to know flows and so to better know the functioning of the network. The system of remote processing in place, allows only the gone back up of the information of these flows.

With the aim of mastering and optimizing the functioning of the distribution network, it is necessary to complete the park of instrumentation (flow meters, pressure sensor) and of equipments (motorized valves) which will allow to complete the collected data and to act directly on the network.

The existing system of remote processing, allowing only the data acquisition and having no capacity to realize operations of command will be replaced by a real system of remote processing.

1.2.2. DESCRIPTION OF THE WORKS

Three origins of data must be remotely managed :

- The pressure sensor on the network.
- The flowmeters on the network.
- The stations (plants, springs, tanks).

It is all in all about 130 sites of measure that must be connected(bound) with a system of supervision which will centralize the collected data.

The system of collection and exploitation of the data installed will have to allow:

- The display in quasi-real time of the state of the drinkable water distribution system.
- To alert the developer in case of failure of one of the organs of the system.
- The automation of the production of statistical data.

It is intended to install the central post of the system of supervision in the building office of Yerevan Djur.

The above-mentioned system of remote processing will have to allow:

- To control in quasi-real time the smooth running of the main production sites.
- To warn quickly the operators in case of failure on the system to limit the times of intervention.
- To optimize the progress of the information connected to the system to improve the reliability and the accessibility to the information.
- To produce regular dashboards (daily, monthly and annual) to direct the research for the failures (leaks, etc.).
- To optimize the performance indicator of the contract of lease.

The system of remote processing will also have to allow:

- To command the opening or the closure of motorized regulation valves.
- To command the starting or the stop of the pumps of drillings distributed on big area in both fields of harnessing and the access of which is very difficult in particular in winter.

1.3. DRINKABLE WATER DISTRIBUTION SYSTEM ARCHITECTURE

The system of drinking water distribution is constituted by eleven production sites feeding a network organized in 9 under systems of distribution.

1.3.1. PRODUCTION SITES

Production sites are constituted in the following way :

- Fields of drillings :
 - APARAN (13 drillings)
 - KATNAGHBYUR (13 drillings)
- Pumping stations :
 - ARARATYAN 3 & 4
 - ARZAQAN - GYUMUSH
 - ARZNI
 - GARNI
 - SHOR SHOR
- Springs :
 - DZORAGHBYUR-YERGES
 - TSARAVAGHBYUR

1.3.2. DISTRIBUTION NETWORK

Each of the distribution sub-systems takes for origin a production site and feed one or several sectors through one or several tank sites.

The distribution sub-systems are constituted in the following way :

- APARAN Network :
 - 1 field of drillings (13 drillings).
 - 3 tank sites.
 - 14 sectors of distribution.
- ARARATYAN Network :
 - 2 pumping stations. (ARARATYAN 3 & 4)
 - 1 tank site.
 - 3 sectors of distribution.
- ARZAKAN - GYUMUSH Network :
 - 2 pumping stations. (ARZAKAN & GYUMUSH)
 - 1 lifting station on the network (KHARBERG)
 - 4 tank sites.
 - 12 sectors of distribution.
- ARZNI Network :
 - 1 pumping station.
 - 2 tank sites.
 - 1 sector of distribution.
- DZORAGHBYUR-YERGES Network :
 - 1 spring.
- GARNI Network :
 - 1 pumping station.
 - 1 chlorination station.
 - 4 tank sites.
 - 11 sectors of distribution.

- KATNAGHBYUR Network :
 - 1 pumping station.
 - 8 tank sites.
 - 24 sectors of distribution.
- SHOR-SHOR Network :
 - 1 pumping station.
 - 1 tank site.
- TSARAVAGHBYUR Network :
 - 1 spring.
 - 1 tank site.
 - 4 sectors of distribution.

1.3.3. EXISTING INSTRUMENTATION EQUIPMENTS

Certain number of instrumentation equipments is already installed on the drinking water distribution system.

This equipments are mainly, flowmeters, level sensors and pressure sensors, who are installed on differents components of the distribution sub-system, such as pumping station, spring, tank and sector of network.

1.3.4. EXISTING RECORDING EQUIPMENTS

Certain number of data recorders is already installed on the drinking water distribution system.

This equipments are data loggers, who are installed on differents components of the distribution sub-system, such as pumping station, spring, tank and sector of network.

1.3.5. EXISTING COMMUNICATION EQUIPMENTS

Certain number of communication equipments is already installed on the drinking water distribution system.

This equipments are GSM transmitters, who are installed on differents components of the distribution sub-system, such as pumping station, spring, tank and sector of network, and who are connected at the supervision system.

2. DESCRIPTIVE REPORT

2.1. DRINKABLE WATER DISTRIBUTION OPTIMIZATION PROJECT

2.1.1. OBJECTIVE

The objective of the installation of the remote processing system on the drinking water distribution system, is to have a concrete visualization of the functioning of the system and to be able to operate orders of command, for optimize its efficiency.

2.1.2. MEANS

The implementation of the system of remote processing on all the various components of the system of distribution has to allow to reach the aforesaid goal

Of numerous of equipments are already installed, and are connected to the Locator system of remote processing, accessible by the developer via internet in the offices of Yerevan Djur.

2.1.3. PROJECT

The existing system of remote processing, developed by a local company (LOCATOR) is a system which allows only the data acquisition.

Of more this system is not a system owner (Web server Locator) and is accessible for the developer only through the internet network.

The objective of the project is to install a complete system of supervision allowing the acquisition of the data, the orders of command and the developer of which will be an owner.

2.1.4. MEANS OF TRANSMISSION DATA

The transmission system of the data will be realized by GSM.

This solution can be retained definitively only after validation of the coverage area of the local telephone operator, in particular in sites distant from Yérévan. (Pumping stations, reservoirs, network, etc.)

A redundancy can be envisaged by the use of the intranet network (telephony fixes with modem).

2.1.5. MEANS OF IMPLEMENTATION OF THE SYSTEM

The development of the system of control commands being bound to a predefined budget, it will be advisable to define axes of priorities.

These priorities can be of material order (choice of a type of equipment) or strategic (Choice of a part of the drinking water distribution system or a type of installation of the system)

These priorities must be clearly identified in the tender documents to be able to optimize the management of the drinking water distribution system.

2.1.6. PROJECTION ON THE EQUIPMENTS OF THE CONTROL COMMANDS SYSTEM

The system of control commands require within the framework of its development the forecast to equip the various components of the drinking water distribution system.

These various components are the following ones:

- A central post of control commands (Supervision work station).
- The pumping stations.
- The springs.
- The fields of drillings.
- The Tanks.
- The points of data recording on the main line of the distribution network.
- The points of data recording on the sectors of the distribution network.

The various equipments to be connected with the system of control command are the following ones:

- Ultrasonic flowmeter. (Via transmitters)
- Pressure sensor.
- Level sensor.
- Motorized regulation valve.
- Motor of pump in the pumping station.

3.PROJECT DESCRIPTION

3.1. OBJECT

The present chapter in for object to define needs for the study, the supply, the transport, the installation, the development, the essays and the training necessary for the realization of a system of remote processing for the whole network of the drinkable water supply of Yérevan.

The network to be overseen is constituted by the following elements:

- 6 production pumping stations.
- 2 Springs including each 13 pumps of harnessing.
- 1 lifting pumping station on the network.
- 1 chlorination station.
- 24 tank sites.
- 19 control points on the main line.
- 64 control points on the sector on the distribution network.

The various equipments to be connected with the system of control command are the following ones

- Ultrasonic flowmeter. (Via transmitters)
- Pressure sensor.
- Level sensor.
- Motorized regulation valves.
- Motor of pump.
- Electric Characteristics of sites (Voltage, Intensity,....)

3.2. DEFINITION

3.2.1. OBJECTIVE

The installed of remote processing system has to bring to the developer as to the Client the following profits:

- The optimization of the functioning of the network thanks to the concentration of the data and the possibility of commanding at a distance the critical organs of the network (pumps, valves of regulations).
- The continuity of service by the immediate consideration of a major technical incident before the defect is perceptible by the users.
- The optimization of the interventions and the operating costs by avoiding the useless travels thanks to the transmission of precise and reliable information.
- The control of the consumptions (electricity, etc.) by controlling perfectly the parameters of functioning of the installations..
- The traceability of the incidents and the operations of repair associated.
- La traçabilité des incidents et des opérations de dépannage associés.
- The possibility of realizing an effective preventive maintenance.

3.2.2. MEANS

To facilitate the handling of the installations of remote processing by the developer, the tenderers will have to hand a proposing offer:

Of the material answering the characteristics and the wanted features.

Of the material(equipment) of suppliers having robust references in various remote processing networks.

The clearly defined services concerning the development of the application of remote processing and the necessary training, so allowing the autonomy of the staff.

3.2.3. LEXICON

One numbers of technical equipments will be quoted in this document under the shape of abbreviations defined below:

- RTU : Remote Terminal Unit.
- GSM : Cellular Telephony Transmission System.
- DI : Digital Input.
- DO : Digital Output.
- AI : Analog Input.
- AO : Analog Output.

3.3. NETWORK PRESENTATION

3.3.1. FUNCTIONNING GENERAL OF THE REMOTE PROCESSING NETWORK

All the sites concerned by the remote processing will be equipped by RTU (Simplified RTU or Evolutionary RTU).

The RTU's will allow the remote monitoring of the various sites by the sending of the alarms, the archived data and the balance sheet of functioning towards the Central Post of Remote processing (SCADA).

In case of failure of the communications between the RTU's and the SCADA, RTU's will have to be able to transmit alarms towards the agents of the developer by the sending of message by vocal or SMS.

The SCADA will archive all the information received of RTU's in a sauvegardable base, and will make the provision of the information and the archivings in the form of curves overview diagram and reports of exploitation.

The data transmission will be made by the support GSM dated or RTC and according to a secured protocol avoiding the loss of information.

The information available on the SCADA will be also available for consultation by one or several computers situated in the concerned Management (remote access).

The RTU's will have to allow the command of various equipments such as pumps or motorized valves, as well as the modification of instructions of the injectors of chlorine in local or remote functioning.

3.3.2. OVERVIEW DIAGRAM OF THE REMOTE PROCESSING NETWORK

A general overview diagram of the network is represented in Appendix (Plan joins).

3.3.3. REMOTE PROCESSING EQUIPMENT FOR GARNI NETWORK (NETWORK N°1)

The Garni network is constituted by a pumping station equipped with 5 pumps feeding 4 tanks, and a chlorination station.

The project includes the control and the command of the pumping station, the chlorination station, the 4 tanks, the 5 points on the main line as well as of 11 points (sectors) on the distribution network.

3.3.3.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Garni network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Garni (1.1)	5	1	(3)		(6)			5 U&I	Yes	Yes
Chlorination Station	Garni (1.A)			2			(1)	1		Yes	Yes
Main Line	Nubar Main FI (1.2)		1							Yes	Yes
	Noubarashen Petrol (1.2.A)		(1)	(1)		(1)				Yes	Yes
	Arinberd FI (1.4)		1							Yes	Yes
	Sari tax (1.7)		2	(1)						Yes	Yes
	Nardos Khoren (1.8)		1							Yes	Yes
Tanks	Noubarashen (1.3)									Yes	Yes
	Arin-Berd (1.5)		4	(1)	1	(6)	1			Yes	Yes
	Araratyan (1.6)		1	(1)	1	(2)	1			Yes	Yes

	Abovian Purak (1.9)		7 + (2)		2	(12)	1			Yes	Yes
Network	Sector Kentron 1 (1.9)		1 (*)							Yes	Yes
	Sector Kentron 2 (mosc-abov) (1.10)		1	(1)						Yes	Yes
	Sector Kentron 3 (Ter-isahak) (1.11)		1							Yes	Yes
	Sector Kentron 4 (1.9)		1 (*)							Yes	Yes
	Sector Kentron 5 (Ter-Mosc) (1.12)		1							Yes	Yes
	Sector Kentron 5 (boiler) (1.13)									Yes	Yes
	Sector Kentron 7 (1.9)		1 (*)							Yes	Yes
	Sector Kentron 8 (Charentc) (1.14)		1	(1)						Yes	Yes
	Sector Kentron 8/1 (Charentc) (1.14)		1	(1)						Yes	Yes
	Erebuni hrarak (erebuni) (1.5.1)		1	(1)						Yes	Yes
	Erebuni hrarak (Ayvazovski) (1.5.1)		1	(1)						Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.3.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Garni network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Garni (1.1)	Pump	5	20		5	
	Flowmeter	1	1	1		
	Pressure Sensor	3		3		
	Flow Regulation Valve	6	18	6	6	6

	Power Meter	5		10		
	Evolutionary RTU	1	39	20	11	6
Chlorination Station Garni (1.A)	Pressure Sensor	2		2		
	Chlorine Dosimeter	1		1		
	Chlorine Injector	1				1
	Evolutionary RTU	1		3		1
Main Line Nubar Main FI (1.2)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Main Line Noubarashen Petrol (1.2.A)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Flow Regulation Valve	1	3	1	1	1
	Evolutionary RTU	1	4	3	1	1
Main Line Arinberd FI (1.4)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Main Line Sari tax (1.7)	Flowmeter	2	2	2		
	Pressure Sensor	1		1		
	Simplified RTU	1	2	3		
Main Line Nardos Khoren (1.8)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
						5
Tank Arin-Berd (1.5)	Flowmeter	4	4	4		
	Pressure Sensor	1		1		

	Level Meter	1		1		
	Flow Regulation Valve	6	18	6	6	6
	Chlorine Dosimeter	1		1		
	Evolutionary RTU 1	1	7	3	2	2
	Evolutionary RTU 2	1	15	10	4	4
Tank Araratyan (1.6)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Level Meter	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	7	6	2	2
Tank Abovian Purak (1.9)	Flowmeter	9	9	9		
	Level Meter	2		2		
	Flow Regulation Valve	12	36	12	12	12
	Chlorine Dosimeter	1		1		
	Evolutionary RTU 1	1	35	15	11	11
	Evolutionary RTU 2	1	5	5		
	Evolutionary RTU 3	1	5	4	1	1
Network Sector Kentron 1 (1.9)	Included in 1.9 RTU					
Network Sector Kentron 2 (mosc-abov) (1.10)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		

Network Sector Kentron 3 (Ter-isahak)(1.11)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector Kentron 4 (1.9)	Included in 1.9 RTU					
Network Sector Kentron 5 (Ter-Mosc) (1.12)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector Kentron 7 (1.9)	Included in 1.9 RTU					
Network Sector Kentron 8 (Charentc) (1.14)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Sector Kentron 8/1 (Charentc) (1.14)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Erebuni hraprak (erebuni) (1.5.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Erebuni hraprak (Ayvazovski) (1.5.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		

3.3.4. REMOTE PROCESSING EQUIPMENT FOR KATNAGHBYUR NETWORK (NETWORK N°2)

The Garni Katnaghbyur is constituted by a field of drillings equipped with 13 pumps feeding 8 tanks.

The project includes the control and the command of the field of drillings, the 8 tanks, the 4 points on the main line as well as of 24 points (sectors) on the distribution network.

3.3.4.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Katnaghbyur network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Katnaghbyur (2.0)	13	3 + (14*)			(2)	(3)	(3)	14 U&I	Yes	Yes
Main Line	Abelyan shit (2.1.1)					(2)				No	Yes
	Borman (2.1.2)		3	(3)						Yes	Yes
	Marash Araz (2.1.3)		2							Yes	Yes
	Katn-Arzak (2.4.2)		1	(1)		(1)				Yes	Yes
	Katn Kentron (2.1.2.A)					(1)				Yes	Yes
Tanks	Dzoraghbyur (2.2.1)		3		1	(3)	1			Yes	Yes
	Jrvejh (2.1.4)		2 + (3)		2	(6)	2			Yes	Yes
	Marash (2.1.5)		3	(1)	1	(3)	1			Yes	Yes
	Sari Tagh (2.1.6)		2 + (2)	(1)	1	(5)	1			Yes	Yes
	Zeytun Jramb (2.3.1)		2 + (1)	(1)	1	3	1			Yes	Yes
	Qanaqer Nerqin (2.3.2)		2		1	2	1			Yes	Yes
	Mhub (2.4.1)		1 + (3)		(2)	(4)	1			Yes	Yes
	Qanaqer Verin (2.4.3)		2 + (2)		1	5	1			Yes	Yes
Network	Narekaci (Ekexeci) (2.1.7)		1	(1)						Yes	Yes

REPUBLIC OF ARMENIA – MUNICIPALITY OF YEREVAN
YEREVAN RPE PROJECT
SCADA WORKS
DETAILED DESIGN REPORT

Babajanyan77/7 (2.1.8)									Yes	Yes
Avan-Arinj (2.1.9)		1							Yes	Yes
Hovhannisyan24/2 (2.1.10)		1							Yes	Yes
Duryan (Safaryan st) (2.1.11)		1	(1)						Yes	Yes
1 Masiv (Mersedes)(2.1.12)		1	(1)						Yes	Yes
1 Masiv (Gayi ardzan) (2.1.13)		1							Yes	Yes
1 Masiv (Lvovyan) (2.1.14)		1							Yes	Yes
2 Masiv (Gayi-Moldovakan) (2.1.15)		1	(1)						Yes	Yes
2 Masiv (Harkajini dimac) (2.1.16)		2	(1)						Yes	Yes
2 Masiv (Bagrevandi skzbnamas) (2.1.17)		1							Yes	Yes
3 Masiv (Ojazi dzor) (2.1.18)		1	(1)						Yes	Yes
4 Masiv (Sigaroni mot) (2.2.2)		1	(1)						Yes	Yes
5 Masiv (27 shenqi mot)(2.2.3)		1	(1)						Yes	Yes
6 Masiv (Ancumi mot)(2.1.18)		1	(1)						Yes	Yes
7 Masiv (Pioner palat)(2.1.20)		1	(1)						Yes	Yes
7 Masiv (D.Bek Avetisyan)(2.1.21)		1							Yes	Yes
8 Masiv (Tevosyan PRV)(2.2.4)		1	(1)						Yes	Yes
9 Masiv (34 Shenqi mot)(2.1.22)		1	(1)						Yes	Yes

	Marash- 1 sektor (Ortopetiki hetevum)(2.1.23)		1	(1)					Yes	Yes
	Marash- 2 sektor (El-canci dimac)(2.1.24)		1						Yes	Yes
	Marash- 3 sektor (AHK-i mot)(2.1.25)		1	(1)					Yes	Yes
	Marash- 4 sektor (Ortopetiki araj)(2.1.26)		1						Yes	Yes
	Mushakan (D.Bek chor xuc)(2.1.27)								Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

(14*) corresponds to mechanical flowmeters.

3.3.4.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Katnaghbyur network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Katnaghbyur (2.0)	Pump	13	52		13	
	Flowmeter	17	17	17		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Dosimeter	3		3		
	Chlorine Injector	3				3
	Power Meter	14		28		
	Evolutionary RTU 1	1	30	18	6	
	Evolutionary RTU 2	1	25	15	5	

	Evolutionary RTU 3	1	10	6	4	
	Evolutionary RTU 4	1	10	11		5
Main Line Abelyan shit (2.1.1)	Flow Regulation Valve	2	6	2	2	2
	Evolutionary RTU	1	6	2	2	2
Main Line Borman (2.1.2)	Flowmeter	3	3	3		
	Pressure Sensor	3		3		
	Evolutionary RTU	1	3	6		
Main Line Marash Araz (2.1.3)	Flowmeter	2	2	2		
	Simplified RTU	1	2	2		
Main Line Katr-Arzak (2.4.2)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Flow Regulation Valve	1	3	1	1	1
	Evolutionary RTU	1	4	3	1	1
Main Line Katr-Kentron (2.1.2A)	Flow Regulation Valve	1	3	1	1	1
	Evolutionary RTU	1	3	1	1	1
Tank Dzoraghbyur (2.2.1)	Flowmeter	3	3	3		
	Level Meter	1		1		
	Flow Regulation Valve	3	9	3	3	3
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	12	8	3	3
Tank Jrvehj (2.1.4)	Flowmeter	5	5	5		

	Level Meter	2		2		
	Flow Regulation Valve	6	18	6	6	6
	Chlorine Dosimeter	2		2		
	Evolutionary RTU	1	23	15	6	6
Tank Marash (2.1.5)	Flowmeter	3	3	3		
	Pressure Sensor	1		1		
	Level Meter	1		1		
	Flow Regulation Valve	3	9	3	3	3
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	12	9	3	3
Tank Sari Tagh (2.1.6)	Flowmeter	4	4	4		
	Pressure Sensor	1		1		
	Level Meter	1		1		
	Flow Regulation Valve	5	15	5	5	5
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	19	12	5	5
Tank Zeytun Jramb (2.3.1)	Flowmeter	3	3	3		
	Pressure Sensor	1		1		
	Level Meter	1		1		
	Flow Regulation Valve	3	9	3	3	3
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	12	9	3	3
Tank Qanaqer Nerqin (2.3.2)	Flowmeter	2	2	2		

	Level Meter	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	8	6	2	2
Tank Mhub (2.4.1)	Flowmeter	4	4	4		
	Level Meter	2		2		
	Flow Regulation Valve	4	12	4	4	4
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	16	11	4	4
Tank Qanaqer Verin (2.4.3)	Flowmeter	4	4	4		
	Level Meter	1		1		
	Flow Regulation Valve	5	15	5	5	5
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	19	11	5	5
Network Narekaci (Ekexeci) (2.1.7)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Avan-Arinj (2.1.9)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Hovhannisyan24/2 (2.1.10)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Duryan (Safaryan st) (2.1.11)	Flowmeter	1	1	1		

	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 1 Masiv (Mersedes)(2.1.12)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 1 Masiv(Gayi ardzan) (2.1.13)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network 1 Masiv (Lvovyan) (2.1.14)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network 2 Masiv (Gayi-Moldovakan) (2.1.15)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 2 Masiv (Harkajini dimac) (2.1.16)	Flowmeter	2	2	2		
	Pressure Sensor	1		1		
	Simplified RTU	1	2	3		
Network 2 Masiv (Bagrevandi skzbnamas) (2.1.17)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network 3 Masiv (Ojazi dzor) (2.1.18)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 4 Masiv (Sigaroni mot) (2.2.2)	Flowmeter	1	1	1		

	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 5 Masiv (27 shenqi mot)(2.2.3)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 6 Masiv (Ancumi mot)(2.1.18)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 7 Masiv (Pioner palat)(2.1.20)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 7 Masiv (D.Bek Avetisyan)(2.1.21)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network 8 Masiv (Tevosyan PRV)(2.2.4)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network 9 Masiv (34 Shenqi mot)(2.1.22)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Marash- 1 sektor (Ortopetiki hetevum)(2.1.23)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		

	Simplified RTU	1	1	2		
Network Marash- 2 sektor (El-canci dimac)(2.1.24)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Marash- 3 sektor (AHK-i mot)(2.1.25)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Marash- 4 sektor (Ortopetiki araj)(2.1.26)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		

3.3.5. REMOTE PROCESSING EQUIPMENT FOR ARARATYAN NETWORK (NETWORK N°3)

The Araratyan network is constituted by a pumping station equipped with 10 pumps feeding 1 tank.

The project includes the control and the command of the pumping station, the 1 tank, the 1 point on the main line as well as of 3 points (sectors) on the distribution network.

3.3.5.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Araratyan network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Araratyan (3)	2 x 5	3	(3)					10	Yes	Yes
Main Line	Noragavit (3.1)									Yes	Yes
Tanks	Kharberd (3.2)		5	(1)	1	(7)	1			Yes	Yes

Network	JEK (3.2.1)		2	(1)						Yes	Yes
	Maqur erkat (3.2.2)		1							Yes	Yes
	Artcakh (3.1.1)		1							Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.5.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Araratyan network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Araratyan (3)	Pumps	10	40		10	
	Flowmeter	3	3	3		
	Pressure Sensor	3		3		
	Power Meter	10		20		
	Evolutionary RTU	1	43	26	10	
Tank Kharberd (3.2)	Flowmeter	5	5	5		
	Pressure Sensor	1		1		
	Level Meter	1		1		
	Flow Regulation Valve	7	21	7	7	7
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	26	15	7	7

Network JEK (3.2.1)	Flowmeter	2	2	2		
	Pressure Sensor	1		1		
	Simplified RTU	1	2	3		
Network Maqur erkat (3.2.2)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Artcakh (3.1.1)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		

3.3.6. REMOTE PROCESSING EQUIPMENT FOR DZORAGHBYUR-YERGES NETWORK (NETWORK N°4)

The Dzoraghbyur-Yerges network is constituted by a spring.

The project includes the control and the command of the spring.

3.3.6.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Dzoraghbyur-Yerges network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Spring	DZORAGHBYUR-YERGES (4)		3			(1)	(1)			Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.6.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Dzoraghbyur-Yerges network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Spring DZORAGHBYUR-YERGES (4)	Flowmeter	3	3	3		
	Flow Regulation Valve	1	3	1	1	1
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	6	5	1	1

3.3.7. REMOTE PROCESSING EQUIPMENT FOR TSARAVAGHBYUR NETWORK (NETWORK N°5)

The Tsaravaghbyur network is constituted by a spring feeding 1 tank.

The project includes the control and the command of the spring, the tank as well as of 4 points (sectors) on the distribution network.

3.3.7.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Tsaravaghbyur network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Spring	Tsaravaghbyur (5)		3			(1)	(1)	1		Yes	Yes
Tanks	Tsitshernakaberd (5.1)		(2)		1	(1)	1			Yes	Yes
Network	Sector 12 Kilikia (5.2)									Yes	Yes
	Kilikia (5.3)									Yes	Yes

	Haghtanaki Kamurj (5.4)		1							Yes	Yes
	Boiler (1.13)		(3)	(1)						Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.7.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Tsaravaghbyur network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Spring Tsaravaghbyur (5)	Flowmeter	3	3	3		
	Flow Regulation Valve	1	3	1	1	1
	Chlorine Dosimeter	1		1		
	Chlorine Injector	1				
	Evolutionary RTU	1	6	5	1	1
Tank Tsitshernakaberd (5.1)	Flowmeter	2	2	2		
	Level Meter	1		1		
	Flow Regulation Valve	1	3	1	1	1
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	5	5	1	1
Network Haghtanaki Kamurj (5.4)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		

Network Boiler (1.13)	Flowmeter	3	3	3		
	Pressure Sensor	1		1		
	Simplified RTU	1	3	4		

3.3.8. REMOTE PROCESSING EQUIPMENT FOR SHOR-SHOR NETWORK (NETWORK N°6)

The Shor-Shor network is constituted by a pumping station equipped with 6 pumps feeding 1 tank.

The project includes the control and the command of the pumping station, the tank and the 2 points on the main line.

3.3.8.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Shor-Shor network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Shor-Shor (6)	6	2	(2)			(1)	(1)	6U&I	Yes	Yes
Main Line	Cloratun (6.1)		(1)			(2)				Yes	Yes
	Karmir khachShor-Shor (6.2)									No	Yes
Tanks	Kati Kombinat (6.3)		(2)		1	(2)	1			Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.8.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Shor-Shor network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Shor-Shor (6)	Pumps	6	24		6	
	Flowmeter	2	2	2		
	Pressure Sensor	2		2		
	Chlorine Dosimeter	1		1		
	Chlorine Injector	1				
	Power Meter	6		12		
	Evolutionary RTU	1	26	17	6	
Main Line Cloratun (6.1)	Flowmeter	1	1	1		
	Flow Regulation Valve	2	6	2	2	2
	Evolutionary RTU	1	7	3	2	2
Tank Kati Kombinat (6.3)	Flowmeter	2	2	2		
	Level Meter	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	8	6	2	2

3.3.9. REMOTE PROCESSING EQUIPMENT FOR APARAN NETWORK (NETWORK N°7)

The Aparan network is constituted by a field of drillings equipped with 13 pumps feeding 3 tanks.

The project includes the control and the command of the field of drillings, the 3 tanks, the 1 point on the main line as well as of 13 points (sectors) on the distribution network.

3.3.9.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Aparan network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Aparan (7)	13	1 + (14*)				(1)	1	14	Yes	Yes
Main Line	Karmir Khach Aparan (6.2)					(3)				Yes	Yes
Tanks	Qasakh (7.1)		2 + (2)		2	(3)	2			Yes	Yes
	Davtashen verin (7.2)		(1)	(2)	1	(4)	1			Yes	Yes
	Fizaka (7.3)		1 + (1)	(1)	1	(2)	1			Yes	Yes
Network	Sector - Mashtoc 5 (Shiraz) (7.1.1)		1	(1)						Yes	Yes
	Sector - Mashtoc 7 bloc (Shiraz) (7.1.1)		1	(1)						Yes	Yes
	Sector - Mashtoc 15 (Fuchik-Margaryan)(7.2.1)		1	(1)						Yes	Yes
	Sector - Mashtoc 1 Davt-I (near the cemetery)(7.1.2)		1	(1)						Yes	Yes
	Sector - Mashtoc 1 (near the Davt-I 21 building)(7.1.3)		1							Yes	Yes
	Sector - Mashtoc 1 (near the Davt-I 33 building) (7.1.4)		1							Yes	Yes
	Sector - Mashtoc 3 (near the Davt-I 33 building)(7.1.4)		1							Yes	Yes
	Sector - Mashtoc 2 (near the Davt-I 9 building)(7.1.5)		1	(1)						Yes	Yes

	Sector - Mashtoc 2 (near the Davtll 22 building) (7.1.6)		1						Yes	Yes
	Sector - Mashtoc 2 (near the Davt III 6 building) (7.1.7)		1						Yes	Yes
	Sector - Mashtoc 2 (for Mashtoc Davt 4) (7.1.8)		1						Yes	Yes
	Sector - Mashtoc 4 (near Davt IV Arazen building)(7.1.9)		1	(1)					Yes	Yes
	Sector - Mashtoc 4 (near the Davt IV 45 building)(7.1.10)		1	(1)					Yes	Yes
	Fizaka Cross (7.1.11)		1	(1)		(1)			Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.9.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Aparan network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Aparan (7)	Pumps	13	52		13	
	Flowmeter	15	15	15		
	Chlorine Dosimeter	1		1		
	Chlorine Injector	1				1
	Power Meter	14		28		
	Evolutionary RTU 1	13	5	3	1	
	Evolutionary RTU 2	1	2	5		1
		1				

Main Line Karmir Khach Aparan (6.2)	Flow Regulation Valve	3	9	3	3	3
	Evolutionary RTU	1	9	3	3	3
Tank Qasakh (7.1)	Flowmeter	4	4	4		
	Level Meter	2		2		
	Flow Regulation Valve	3	9	3	3	3
	Chlorine Dosimeter	2		2		
	Evolutionary RTU	1	13	11	3	3
Tank Davtashen verin (7.2)	Flowmeter	1	1	1		
	Pressure Sensor	2		2		
	Level Meter	1		1		
	Flow Regulation Valve	4	12	4	4	4
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	13	9	4	4
Tank Fizaka (7.3)	Flowmeter	2	2	2		
	Pressure Sensor	1		1		
	Level Meter	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	8	7	2	2
Network Sector - Mashtoc 5 (Shiraz) (7.1.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		

Network Sector - Mashtoc 7 bloc (Shiraz) (7.1.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Sector - Mashtoc 15 (Fuchik-Margaryan)(7.2.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Sector - Mashtoc 1 Davt-I (near the cemetery)(7.1.2)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Sector - Mashtoc 1 (near the Davt-I 21 building)(7.1.3)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector - Mashtoc 1 (near the Davt-I 33 building) (7.1.4)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector - Mashtoc 3 (near the Davt-I 33 building)(7.1.4)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector - Mashtoc 2 (near the DavtII 9 building)(7.1.5)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Sector - Mashtoc 2 (near the DavtII 22 building) (7.1.6)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector - Mashtoc 2 (near the Davt III 6 building) (7.1.7)	Flowmeter	1	1	1		

	Simplified RTU	1	1	1		
Network Sector - Mashtoc 2 (for Mashtoc Davt 4) (7.1.8)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Network Sector - Mashtoc 4 (near Davt IV Arazen building)(7.1.9)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Sector - Mashtoc 4 (near the Davt IV 45 building)(7.1.10)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
Network Fizika Cross (7.1.11)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Pressure Regulation Valve	1		1		
	Simplified RTU	1	1	3		

3.3.10. REMOTE PROCESSING EQUIPMENT FOR ARZaqAN-GYUMUSH NETWORK (NETWORK N°8)

The Arzaqan-Gyumush network is constituted by two pumping stations equipped each with 1 pump feeding a lifting pumping station on the network (Kharberg) and 4 tanks.

The project includes the control and the command of the 2 pumping stations, the lifting pumping station, the 4 tanks, the 7 points on the main line as well as of 13 points (sectors) on the distribution network.

3.3.10.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Arzaqan-Gyumush network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Arzaqan (8)	1	1				(1)	1		Yes	Yes
	Gyumush (8.1)	1	3	2 + (3)		(1)	(1)		2	Yes	Yes
Main Line	Nor hachn (8.2)			(1)		(2)				Yes	Yes
	Zovuni Arz (8.3)		1							Yes	Yes
	Davtasheni Kamurj (8.3.1)			(1)		(1)				Yes	Yes
	Malakan (8.3.2)									Yes	Yes
	Leningradyan (8.3.3) 16str (8.3.3A)		1							Yes	Yes
	Qanaqer Arz (8.4)		1							Yes	Yes
	Lamperi Lich (8.4.1)		1	(1)						Yes	Yes
Tanks	Kilikia (8.3.4)									Yes	Yes
	Lamper (8.4.2)		6		1	(4)	1			Yes	Yes
	Jambul (8.3.5)		1 + (2)		1	(2)	1			Yes	Yes
	Lukashin (8.3.6)		2		3	(4)	1			Yes	Yes
Network	Sector Shahumyan 8 (Tichina) (8.3.7)		1	(1)						Yes	Yes
	Sector Shahumyan 8 (Sheram) (8.3.8)		1	(1)						Yes	Yes
	Sector Shahumyan 8 (Z.Andranik) (8.3.9)		1	(1)						Yes	Yes
	Sector Shahumyan 2 (Raffi)(8.3.10)		1	(1)						Yes	Yes

	Sector Shahumyan 1 (Babajanyan)(8.3.11)		1	(1)						Yes	Yes
	Sector Shahumyan 11 (for Isakov)(8.3.12)		1							Yes	Yes
	Sector Shahumyan 11 (for Tairov)(8.3.12)		1							Yes	Yes
	Sector Shahumyan (for v. Haxtanak most)(8.3.13)		1							Yes	Yes
	Sector Shahumyan (for v. Haxtanak tser) (8.3.14)		1	(1)						Yes	Yes
	Sector Shahumyan (near rob. Factory for Tairov)(8.3.15)		1	(1)						Yes	Yes
	Sector Shahumyan 5 (Shrjanajin)(8.3.16)		1	(1)						Yes	Yes
	Sector Shahumyan 6 (Kurxinyan)(8.3.17)		1	(2)						Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.10.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Arzaqan-Gyumush network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Arzaqan (8)	Pumps	1	4		1	
	Flowmeter	1	1	1		
	Chlorine Dosimeter	1		1		
	Chlorine Injector	1				1
	Evolutionary RTU	1	5	2	1	1

		1				
Pumping Station Gyumush (8.1)	Pumps	1	4		1	
	Flowmeter	3	3	3		
	Pressure Sensor	5		5		
	Flow Regulation Valve	1	3	1	1	1
	Chlorine Dosimeter	1		1		
	Power Meter	2		4		
	Evolutionary RTU	1	10	14	2	1
		1				
Main Line Nor hachn (8.2)	Pressure Sensor	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Evolutionary RTU	1	6	3	2	2
		1				
Main Line Zovuni Arz (8.3)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
		1				
Main Line Davtasheni Kamurj (8.3.1)	Pressure Sensor	1		1		
	Flow Regulation Valve	1	3	1	1	1
	Evolutionary RTU	1	3	2	1	1
		1				
Main Line Leningradyan (8.3.3)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
		1				
Main Line Qanaqer Arz (8.4)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
		1				
Main Line Lamperi Lich (8.4.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		

	Simplified RTU	1	1	2		
Tank Lamper (8.4.2)	Flowmeter	6	6	6		
	Level Meter	1		1		
	Flow Regulation Valve	4	12	4	4	4
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	18	12	4	4
		1				
Tank Jambul (8.3.5)	Flowmeter	3	3	3		
	Level Meter	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	9	7	2	2
		1				
Tank Lukashin (8.3.6)	Flowmeter	2	2	2		
	Level Meter	3		3		
	Flow Regulation Valve	4	12	4	4	4
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	14	10	4	4
Network Sector Shahumyan 8 (Tichina) (8.3.7)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				
Network Sector Shahumyan 8 (Sheram) (8.3.8)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				

Network Sector Shahumyan 8 (Z.Andranik) (8.3.9)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				
Network Sector Shahumyan 2 (Raffi)(8.3.10)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				
Network Sector Shahumyan 1 (Babajanyan)(8.3.11)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				
Network Sector Shahumyan 11 (for Isakov)(8.3.12)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
		1				
Network Sector Shahumyan 11 (for Tairov)(8.3.12)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
		1				
Network Sector Shahumyan (for v. Haxtanak most)(8.3.13)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
		1				
Network Sector Shahumyan (for v. Haxtanak tser) (8.3.14)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				
Network Sector Shahumyan (near rob. Factory for Tairov)(8.3.15)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				

Network Sector Shahumyan 5 (Shrjanajin)(8.3.16)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		
		1				
Network Sector Shahumyan 6 (Kurxinyan)(8.3.17)	Flowmeter	1	1	1		
	Pressure Sensor	2		2		
	Simplified RTU	1	1	3		

3.3.11. REMOTE PROCESSING EQUIPMENT FOR ARZNI NETWORK (NETWORK N°9)

The Arzni network is constituted by a pumping station equipped with 2 pumps feeding 2 tanks.

The project includes the control and the command of the pumping station, the 2 tanks, the 2 points on the main line as well as of 1 point (sector) on the distribution network.

3.3.11.1. EQUIPMENTS TO BE MANAGED

Equipments to be managed on the Arzni network are listed in the board following according to their feature.

Installation Type	Identification	Pump	Flowmeter	Pressure sensor	Level sensor	Motorized valves	Chlorination dosimeter	Chlorination injector	Voltage and intensity measurement	On-site power supply	GSM signal coverage
Pumping Station	Arzni (9)	2	2 + (1)	1 + (2)		(6)	(1)	2	2	Yes	Yes
Main Line	Moris (9.1)		1							Yes	Yes
	Andoy domik (9.1.1)					(2)				Yes	Yes
Tanks	Dinamo (9.1.2)		1	(1)		(1)	1			Yes	Yes
	Kovkasyan (9.2)		2 + (1)		1	(2)	1			Yes	Yes
Network	Sector 1 Qochar Kulpenk(9.2.1)		1	(1)						Yes	Yes

Noted: on indication in board of the type(x), (The number enters bracket) specifies the number of the type of envisaged equipment but who does not exist at present.

3.3.11.2. REMOTE PROCESING EQUIPMENTS

Equipments allowing the remote processing of the Arzni network are defined in the following board.

Installation Location	Type of Instrumentation and Equipment	Quantity	Digital Input (DI)	Analog Input (AI)	Digital Output (DO)	Analog Output (AO)
Pumping Station Arzni (9)	Pumps	2	8		2	
	Flowmeter	3	3	3		
	Pressure Sensor	3		3		
	Flow Regulation Valve	6	18	6	6	6
	Chlorine Dosimeter	1		1		
	Chlorine Injector	2				2
	Power Meter	2		4		
	Evolutionary RTU	1	29	17	8	8
Main Line Moris (9.1)	Flowmeter	1	1	1		
	Simplified RTU	1	1	1		
Main Line Andoy domik (9.1.1)	Flow Regulation Valve	2	3	1	1	1
	Evolutionary RTU	1	6	2	2	2
Tank Dinamo (9.1.2)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		

	Flow Regulation Valve	1	3	1	1	1
	Chlorine Dosimeter	1		1		
	Evolutionary RTU	1	4	4	1	1
		1				
Tank Kovkasyan (9.2)	Flowmeter	3	3	3		
	Level Meter	1		1		
	Flow Regulation Valve	2	6	2	2	2
	Chlorine Meter	1		1		
	Evolutionary RTU	1	9	7	2	2
Network Sector 1 Qochar Kulpenk(9.2.1)	Flowmeter	1	1	1		
	Pressure Sensor	1		1		
	Simplified RTU	1	1	2		

3.3.12. SUMMARY OF THE REMOTE PROCESSING EQUIPMENTS

Equipments allowing the remote processing of all the drinking water networks feeding the city of Yerevan are synthesized in the board below.

Drinking Water System	Identification or Location	Simplified RTU With GSM + 8 DI + 4 AI	Evolutionary RTU	SCADA Work Station
n°1	GARNI	11	9	
n°2	KATNAGHBYUR	23	16	
n°3	ARARATYAN	3	2	
n°4	DZORAGHBYUR-YERGES		1	
n°5	TSARAVAGHBYUR	2	2	

n°6	SHOR-SHOR		3	
n°7	APARAN	14	18	
n°8	ARZAKAN-GYUMUSH	16	7	
n°9	ARZNI	2	4	
Yerevan Djur Technical Office	YEREVAN			1
Total		71	62	1

3.4. NEW EQUIPMENTS FOR INSTRUMENTATION

3.4.1. FLOW METER

Flowmeters envisaged within the framework of the implementation of the remote processing system are listed in the board below.

Drinkable Water Distribution System	Installation Location	Quantity	Pipe Size (mm)	Comments
GARNI (1)	Main Line Noubarashen Petrol (1.2.A)	1		Transducer for Sensus Mechanical Flow meter
	Tank Abovian Purak (1.9)	2	300	Ultrasonic Flow meter for Two Channels
KATNAGHBYUR (2)	Pumping Station Katnaghbyur (2.0)	14		Transducer for Sensus Mechanical Flow meter
	Tank Jrvejh (2.1.4)	2	400	Ultrasonic Flow meter
		1	700	Ultrasonic Flow meter
	Tank Sari Tagh (2.1.6)	1	200	Ultrasonic Flow meter
		1	300	Ultrasonic Flow meter
	Tank Zeytun Jramb (2.3.1)	1	300	Ultrasonic Flow meter

	Tank Mhub (2.4.1)	1	300	Ultrasonic Flow meter
		1	500	Ultrasonic Flow meter
		1	800	Ultrasonic Flow meter
	Tank Qanaqer Verin (2.4.3)	2	400	Ultrasonic Flow meter
TSARAVAGHBYUR (5)	Tank Tsitshernakaberd (5.1)	2	300	Ultrasonic Flow meter for Two Channels in the Same Chamber
	Network Boiler (1.13)	1	150	Ultrasonic Flow meter for Three Channels in the Same Chamber
		1	200	
		1	300	
SHOR – SHOR (6)	Main Line Cloratun (6.1)	1	500	Ultrasonic Flow meter
	Tank Kati Kombinat (6.3)	1	200	Ultrasonic Flow meter
APARAN (7)	Pumping Station Aparan (7)	14		Transducer for Sensus Mechanical Flow meter
	Tank Qasakh (7.1)	1	300	Ultrasonic Flow meter for Two Channels in the Same Chamber
	Tank Davtashen verin (7.2)	1	400	Ultrasonic Flow meter for Three Channels in the Same Chamber
	Tank Fizaka (7.3)	1	200	Ultrasonic Flow meter
ARZAQAN-GYUMUSH (8)	Tank Jambul (8.3.5)	1	250	Ultrasonic Flow meter
		1	500	Ultrasonic Flow meter
ARZNI (9)	Pumping Station Arzni (9)	1	500	Ultrasonic Flow meter
	Tank Kovkasyan (9.2)	1	300	Ultrasonic Flow meter

3.4.2. PRESSURE SENSOR

Pressure sensors envisaged within the framework of the implementation of the remote processing system are listed in the board below.

Drinkable Water Distribution System	Installation Location	Quantity
GARNI (1)	Pumping Station Garni (1.1)	3
	Chlorination Station Garni (1.A)	2
	Main Line Noubarashen Petrol (1.2.A)	1
	Main Line Sari tax (1.7)	1
	Tank Arin-Berd (1.5)	1
	Tank Araratyan (1.6)	1
	Network Sector Kentron 2 (mosc-abov) (1.10)	1
	Network Sector Kentron 8 (Charentc) (1.14)	1
	Network Sector Kentron 8/1 (Charentc) (1.14)	1
	Network Erebuni hraprak (erebuni) (1.5.1)	1
	Network Erebuni hraprak (Ayvazovski) (1.5.1)	1
GARNI (1)	Sub-total	14
KATNAGHBYUR (2)	Main Line Borman (2.1.2)	3
	Main Line Katn-Arzak (2.4.2)	1
	Tank Marash (2.1.5)	1
	Tank Sari Tagh (2.1.6)	1
	Tank Zeytun Jramb (2.3.1)	1
	Network Narekaci (Ekexeci) (2.1.7)	1
	Network Duryan (Safaryan st) (2.1.11)	1
	Network 1 Masiv (Mersedes)(2.1.12)	1
	Network 2 Masiv (Gayi-Moldovakan) (2.1.15)	1

	Network 2 Masiv (Harkajini dimac) (2.1.16)	1
	Network 3 Masiv (Ojaxi dzor) (2.1.18)	1
	Network 4 Masiv (Sigaroni mot) (2.2.2)	1
	Network 5 Masiv (27 shenqi mot)(2.2.3)	1
	Network 6 Masiv (Ancumi mot)(2.1.18)	1
	Network 7 Masiv (Pioner palat)(2.1.20)	1
	Network 8 Masiv (Tevosyan PRV)(2.2.4)	1
	Network 9 Masiv (34 Shenqi mot)(2.1.22)	1
	Network Marash- 1 sektor (Ortopetiki hetevum)(2.1.23)	1
	Network Marash- 3 sektor (AHK-i mot)(2.1.25)	1
	KATNAGHBYUR (2)	Sub-total
ARARATYAN (3)	Pumping Station Araratyan (3)	3
	Tank Kharberd (3.2)	1
	Network JEK (3.2.1)	1
ARARATYAN (3)	Sub-total	5
TSARAVAGHBYUR (5)	Network Boiler (1.13)	1
TSARAVAGHBYUR (5)	Sub-total	1
SHOR – SHOR (6)	Pumping Station Shor-Shor (6)	2
SHOR – SHOR (6)	Sub-total	2
APARAN (7)	Tank Davtashen verin (7.2)	2
	Tank Fizaka (7.3)	1
	Network Sector - Mashtoc 5 (Shiraz) (7.1.1)	1
	Network Sector - Mashtoc 7 bloc (Shiraz) (7.1.1)	1
	Network Sector - Mashtoc 15 (Fuchik-Margaryan)(7.2.1)	1
	Network Sector - Mashtoc 1 Davt-I (near the cemetery)(7.1.2)	1
	Network Sector - Mashtoc 2 (near theDavtII 9 building)(7.1.5)	1
	Network Sector - Mashtoc 4 (near Davt IV Arazen building)(7.1.9)	1

	Network Sector - Mashtoc 4 (near the Davt IV 45 building)(7.1.10)	1
	Network Fizika Cross (7.1.11)	1
APARAN (7)	Sub-total	11
ARZAN-GYUMUSH (8)	Pumping Station Gyumush (8.1)	3
	Main Line Nor hachn (8.2)	1
	Main Line Davtasheni Kamurj (8.3.1)	1
	Main Line Lamperi Lich (8.4.1)	1
	Network Sector Shahumyan 8 (Tichina) (8.3.7)	1
	Network Sector Shahumyan 8 (Sheram) (8.3.8)	1
	Network Sector Shahumyan 8 (Z.Andranik) (8.3.9)	1
	Network Sector Shahumyan 2 (Raffi) (8.3.10)	1
	Network Sector Shahumyan 1 (Babajanyan) (8.3.11)	1
	Network Sector Shahumyan (for v. Haxtanak tser) (8.3.14)	1
	Network Sector Shahumyan (near rob. Factory for Tairov)(8.3.15)	1
	Network Sector Shahumyan 5 (Shrjanajin)(8.3.16)	1
	Network Sector Shahumyan 6 (Kurxinyan)(8.3.17)	2
ARZAN-GYUMUSH (8)	Sub-total	16
ARZNI (9)	Pumping Station Arzni (9)	2
	Tank Dinamo (9.1.2)	1
	Network Sector 1 Qochar Kulpenk(9.2.1)	1
ARZNI (9)	Sub-total	4
TOTAL		74

3.4.3. CHLORINATION DOSIMETER

Chlorination dosimeter envisaged within the framework of the implementation of the remote processing system are listed in the board below.

Drinkable Water Distribution System	Installation Location	Quantity	Comments
GARNI (1)	Pumping Station Garni (1.1)	1	For Residual Chlorine
KATNAGHBYUR (2)	Pumping Station Katnaghbyur (2.0)	3	For Residual Chlorine
DZORAGHBYUR- YERGES (4)	Spring DZORAGHBYUR-YERGES (4)	1	For Residual Chlorine
TSARAVAGHBYUR (5)	Spring Tsaravaghbyur (5)	1	For Residual Chlorine
SHOR – SHOR (6)	Pumping Station Shor-Shor (6)	1	For Residual Chlorine
APARAN (7)	Pumping Station Aparan (7)	1	For Residual Chlorine
ARZAQAN-GYUMUSH (8)	Pumping Station Arzaqan (8)	1	For Residual Chlorine
	Pumping Station Gyumush (8.1)	1	For Residual Chlorine
ARZNI (9)	Pumping Station Arzni (9)	1	For Residual Chlorine
TOTAL		11	For Residual Chlorine

3.4.4. CHLORINE INJECTOR

Chlorine injectors envisaged within the framework of the implementation of the remote processing system are listed in the board below.

Drinkable Water Distribution System	Installation Location	Quantity
KATNAGHBYUR (2)	Pumping Station Katnaghbyur (2.0)	3
SHOR – SHOR (6)	Pumping Station Shor-Shor (6)	1
TOTAL		4

3.5. NEW HYDRAULICS EQUIPMENTS

Motorized regulation valves envisaged within the framework of the implementation of the remote processing system are listed in the board below.

Drinkable Water Distribution System	Installation Location	Quantity	Pipe Size (mm)	Type
GARNI (1)	Pumping Station Garni (1.1)	1	200	Motorized Flow Control Valve
	Main Line Noubarashen Petrol (1.2.A)	1		Motor for existing Flow Control Valve
	Tank Arin-Berd (1.5)	2	300	Motorized Flow Control Valve
		4	400	Motorized Flow Control Valve
	Tank Araratyan (1.6)	2	500	Motorized Flow Control Valve
	Tank Abovian Purak (1.9)	2	200	Motorized Flow Control Valve
		8	300	Motorized Flow Control Valve

		2	400	Motorized Flow Control Valve
KATNAGHBYUR (2)	Pumping Station Katnaghbyur (2.0)	1	250	Motorized Flow Control Valve
		1	300	Motorized Flow Control Valve
	Main Line Abelyan shit (2.1.1)	2		Motor for existing Flow Control Valve
	Main Line Katn-Arzak (2.4.2)	1	200	Motorized Flow Control Valve
	Main Line Katn-Kentron (2.1.2A)	1	300	Motorized Flow Control Valve
	Tank Dzoraghbyur (2.2.1)	2	300	Motorized Flow Control Valve
		1	600	Motorized Section Valve
	Tank Jrvejh (2.1.4)	2	300	Motorized Flow Control Valve
		2	400	Motorized Flow Control Valve
	Tank Marash (2.1.5)	1	200	Motorized Flow Control Valve
		2	300	Motorized Flow Control Valve
	Tank Sari Tagh (2.1.6)	3	200	Motorized Flow Control Valve
		2	300	Motorized Flow Control Valve
	Tank Mhub (2.4.1)	1	300	Motorized Flow Control Valve
		1	400	Motorized Flow Control Valve
		1	600	Motorized Flow Control Valve
		1	800	Motorized Flow Control Valve
	Tank Qanaqer Verin (2.4.3)	1	100	Motorized Flow Control Valve
		1	150	Motorized Flow Control Valve
		1	300	Motorized Flow Control Valve
		2	400	Motorized Flow Control Valve
ARARATYAN (3)	Tank Kharberd (3.2)	1	100	Motorized Flow Control Valve
		1	200	Motorized Flow Control Valve

		2	300	Motorized Flow Control Valve
		2	600	Motorized Flow Control Valve
		1	1000	Motorized Flow Control Valve
DZORAGHBYUR-YERGES (4)	Spring DZORAGHBYUR-YERGES (4)	1	200	Motorized Flow Control Valve
TSARAVAGHBYUR (5)	Spring Tsaravaghbyur (5)	1	200	Motorized Flow Control Valve
	Tank Tsitshernakaberd (5.1)	1	300	Motorized Flow Control Valve
SHOR – SHOR (6)	Main Line Cloratun (6.1)	1	400	Motorized Flow Control Valve
		1	700	Motorized Flow Control Valve
	Tank Kati Kombinat (6.3)	1	200	Motorized Flow Control Valve
		1	200	Motorized Section Valve
APARAN (7)	Main Line Karmir Khach Aparan (6.2)	1	300	Motorized Flow Control Valve
		1	200	Motorized High Pressure Regulation Valve with Cones
		2	300	Motorized High Pressure Regulation Valve with Cones
	Tank Qasakh (7.1)	1	400	Motorized Flow Control Valve
		2	500	Motorized Flow Control Valve
	Tank Davtashen verin (7.2)	4	400	Motorized Flow Control Valve
	Tank Fizaka (7.3)	2	300	Motorized Flow Control Valve
	Network Fizika Cross (7.1.11)	1	300	Inlet Pressure Regulation Valve
ARZAQAN-GYUMUSH (8)	Pumping Station Gyumush (8.1)	1	400	Motorized Flow Control Valve
	Main Line Nor hachn (8.2)	2		Motor for existing Flow Control Valve
	Main Line Davtasheni Kamurj (8.3.1)	1	400	Inlet Pressure Regulation Valve
	Tank Lamper (8.4.2)	4		Motor for existing Flow Control Valve

	Tank Jambul (8.3.5)	2	500	Motorized Flow Control Valve
	Tank Lukashin (8.3.6)	2	300	Motorized Flow Control Valve
		2	500	Motorized Flow Control Valve
ARZNI (9)	Pumping Station Arzni (9)	1	200	Motorized Flow Control Valve
		1	500	Motorized Flow Control Valve
		4	400	Motorized Section Valve
	Main Line Andoy domik (9.1.1)	2	600	Motorized Flow Control Valve
	Tank Dinamo (9.1.2)	1	200	Motorized Flow Control Valve
	Tank Kovkasyan (9.2)	1	200	Motorized Flow Control Valve
		1	300	Motorized Flow Control Valve

3.6. SCOPE OF WORKS

3.6.1. REMOTE PROCESSING EQUIPMENTS

The contractor will owe the supply, the transport, the installation, the connectings and the putting into service of the following equipments of remote processing:

- 1 Central Post of Supervision (SCADA), constituted by 2 workstations.
- 71 Simplified Remote Terminal Unit (RTU).
- 62 Evolutionary Remote Terminal Unit (RTU).

The contractor also have to plan in his service all the necessary equipments for the installation and for the supply of the remote processing equipments, for the minima:

- The control/command cupboards allowing the interfacing of all the concerned equipments. (IP68 for the outside)
- The addition of protections (circuit breakers) in the electric cupboards for the supply of equipments including cablings.
- The supply of the protections against the surges and the lightning of the remote processing equipments .
- The supply of uninterrupted power systems or batteries for the preservation in permanent functioning of remote processing the equipments.

- As well as all the necessary accessories to assure a smooth running of the remote processing system.

The entrepreneur will also have to plan in his offer the staff training.

3.6.1.1. CENTRAL POST OF REMOTE PROCESSING SYSTEM (SCADA)

The Central Post of Remote processing will be installed in the offices of Yérévan Djur, it will be constituted by two workstations, the technical characteristics of which are described in the chapter 3.6.3, as well as of a wall big screen.

Both workstations will have to be able to be centralized in the same place either be used in master / slave mode with a deported post.

3.6.1.2. REMOTE TERMINAL UNIT (RTU)

The Remote Terminal Units described previously for each of the sites will be installed locally on every corresponding site.

3.6.2. INSTRUMENTATION EQUIPEMENTS

The whole drinkable water distribution system of Yerevan requires to assure a smooth running a number of equipment and instrumentation which does not exist forcing but the presence of which is useful.

All these equipments and instrumentation was listed in the " chapter 3.3"

To assure at best this development, the contractor will owe the supply, the transport, the installation, the connectings and the putting into service of equipments and instrumentation in the respect for the following order:

- 74 Pressure sensors including transducers.
- 1 Set of solar cells for power supply the Abelyan shit (2.1.1) site.
- 2 chlorine injector.
- 11 Chlorination dosimeters including transducers.
- 27 Flowmeter including transducers.
- 29 Transducers for Sensus mechanical flowmeters.
- 75 Motorised Regulation Valves including transducers.

3.6.3. COMPUTER HARDWARE

The computer hardware will be constituted according to necessary caratéristiques for the smooth running of the SCADA, but for the minima for a workstation of:

- 1 Central unit.
Type : Intel Core 2 Duo 3,0 GHz.
2 Go de RAM.
2 DD SATA de 160 Go unitary.
XP Pro SP3 + Office PME 2007.
Engraver DVD + RW DL SATA.
Integrated sound card + microcomputing and Loudspeaker..
1 Ethernet port.
3 RS232 ports.
2 LPT ports.
10 USB ports.
Integrated remote maintenance modem.
- 1 Armenian QWERTY keyboard.
- 1 LCD 24" Full HD screen.
- 1 A4 color printer.
- 1 Current Black & White printer.
- 1 optical mouse with programmable buttons and thumb wheel of navigation.

As a supplement to the material for every workstation, he will have to be supplies:

- 1 Wall screen LCD 42" Full HD.

4. WORKS EXECUTION

4.1. PLANNING

4.1.1. EXECUTION WORKS SCHEDULE

The schedule of realization of the works of installation of the system of supervision and remote processing of the network of drinking water of Yérévan is envisaged over a period of 11 months and is detailed in the following board:

It's to note than the works on site are scheduled for 5 months, the tests for two months.

5 Months are planned for fabrication and transport to Yerevan. (this period willbe specified by the contractor)

Tasks	Months										
	1	2	3	4	5	6	7	8	9	10	11
Manufacturing and supply of the imported equipments											
Transport and customs clearance of the imported equipments											
Installation and assembly of equipments											
Put in functioning of the installation											

4.2. WORKS COST

4.2.1. ESTIMATED COST

The cost of the implementation of the system of supervision and remote processing of the network of drinking water of Yérévan is indicated by item and area in the Bill of Quantities (see annex 2):

4.2.2. SUMMARY OF THE ESTIMATED COST

Remote processing equipments	1 002 465,17 €
Instrumentation equipments	275 875,00 €
Electromechanical equipments	1 716 550,00 €
Solar Power supply	17 500,00 €
Total of Electromechanical équipements	3 012 390,17 €

The global amount assigned to this project being 1,77 M€ (with a local part of 80 k€), it will be advisable to define axes of priority in the choice of equipments to be planned for the tender document.

5.ANNEX 1

Bill Of Quantities

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
TOTAL (contrat)								3 012 390,17		2 924 601,00	87 789,17
										97,1%	2,9%
b) SCADA SYSTEM											
Lot b,1	GARNI NETWORK										
		Garni Pumping Station (1.1)									
	1-1	Supply of the evolutory RTU.	Base	No.	1	14 000,00		14 000,00		14 000,00	-
	1-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	1 400,00	238,00	1 638,00		1 400,00	238,00
	1-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		280,00	280,00		-	280,00
	1-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		420,00	420,00		-	420,00
		Garni Chlorination Station (1.A)								-	-
	1-5	Supply of the evolutory RTU.	Base	No.	1	5 040,00		5 040,00		5 040,00	-
	1-6	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	504,00	85,68	589,68		504,00	85,68
	1-7	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		100,80	100,80		-	100,80
	1-8	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		151,20	151,20		-	151,20
		Nubar Main FI Main Line (1.2)								-	-
	1-9	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Noubarashen Petrol Main Line (1.2.A)								-	-
	1-13	Supply of the evolutory RTU.	Base	No.	1	5 950,00		5 950,00		5 950,00	-
	1-14	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	595,00	101,15	696,15		595,00	101,15
	1-15	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		119,00	119,00		-	119,00
	1-16	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		178,50	178,50		-	178,50
		Arinberd Main Line (1.4)								-	-
	1-17	Supply of the simplified RTU.	Base	No.	1	3 150,00		3 150,00		3 150,00	-
	1-18	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	315,00	53,55	368,55		315,00	53,55
	1-19	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		63,00	63,00		-	63,00
	1-20	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		94,50	94,50		-	94,50
		Sari Tax Main Line (1.7)								-	-
	1-21	Supply of the simplified RTU.	Base	No.	1	3 250,00		3 250,00		3 250,00	-
	1-22	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	325,00	55,25	380,25		325,00	55,25
	1-23	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		65,00	65,00		-	65,00
	1-24	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		97,50	97,50		-	97,50
		Nardos Khoren Main Line (1.8)								-	-
	1-25	Supply of the simplified RTU.	Base	No.	1	3 350,00		3 350,00		3 350,00	-
	1-26	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	335,00	56,95	391,95		335,00	56,95
	1-27	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		67,00	67,00		-	67,00
	1-28	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		100,50	100,50		-	100,50
		Arin-Berd Tank (1.5)								-	-
	1-29	Supply of the evolutory RTU 1.	Base	No.	1	6 300,00		6 300,00		6 300,00	-
	1-30	Installation of the RTU 1 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	630,00	107,10	737,10		630,00	107,10
	1-31	Connecting of the cupboard RTU 1 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		126,00	126,00		-	126,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	1-32	Connecting in the RTU 1 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		189,00	189,00		-	189,00
	1-33	Supply of the evolatory RTU 2.	Base	No.	1	6 860,00		6 860,00		6 860,00	-
	1-34	Installation of the RTU 2 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	686,00	116,62	802,62		686,00	116,62
	1-35	Connecting of the cupboard RTU 2 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		137,20	137,20		-	137,20
	1-36	Connecting in the RTU 2 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		205,80	205,80		-	205,80
		Araratyan Tank (1.6)								-	-
	1-37	Supply of the evolatory RTU.	Base	No.	1	6 930,00		6 930,00		6 930,00	-
	1-38	Installation of the RTU 1 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	693,00	117,81	810,81		693,00	117,81
	1-39	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		138,60	138,60		-	138,60
	1-40	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		207,90	207,90		-	207,90
		Abovian Purak Tank (1.9)								-	-
	1-41	Supply of the evolatory RTU 1.	Base	No.	1	10 290,00		10 290,00		10 290,00	-
	1-42	Installation of the RTU 1 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	1 029,00	174,93	1 203,93		1 029,00	174,93
	1-43	Connecting of the cupboard RTU 1 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		205,80	205,80		-	205,80
	1-44	Connecting in the RTU 1 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		308,70	308,70		-	308,70
	1-45	Supply of the evolatory RTU 2.	Base	No.	1	4 900,00		4 900,00		4 900,00	-
	1-46	Installation of the RTU 2 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	490,00	83,30	573,30		490,00	83,30
	1-47	Connecting of the cupboard RTU 2 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		98,00	98,00		-	98,00
	1-48	Connecting in the RTU 2 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		147,00	147,00		-	147,00
	1-49	Supply of the evolatory RTU 3.	Base	No.	1	5 390,00		5 390,00		5 390,00	-
	1-50	Installation of the RTU 3 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	539,00	91,63	630,63		539,00	91,63
	1-51	Connecting of the cupboard RTU 3 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		107,80	107,80		-	107,80
	1-52	Connecting in the RTU 3 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		161,70	161,70		-	161,70
		Sector Kentron 2 (Mosc-Abov) Distribution Network (1.10)								-	-
	1-53	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-54	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-55	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-56	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Sector Kentron 3 (Ter-Isahak) Distribution Network (1.11)								-	-
	1-57	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-58	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-59	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-60	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Sector Kentron 5 (Ter-Mosc) Distribution Network (1.12)								-	-
	1-61	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-62	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-63	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-64	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Sector Kentron 8 (Charentc) Distribution Network (1.14)								-	-
	1-65	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	1-66	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-67	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-68	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Sector Kentron 8/1 (Charentc) Distribution Network (1.14)								-	-
	1-69	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-70	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-71	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-72	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Erebuni Hraprak (Erebuni) Distribution Network (1.5.1)								-	-
	1-73	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-74	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-75	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-76	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
		Erebuni Hraprak (Ayvazovski) Distribution Network (1.5.1)								-	-
	1-77	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	1-78	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15
	1-79	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	1-80	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
Lot b,2	KATNAGHBYUR NETWORK									-	-
		Katnaghbyur Pumping Station (2.0)								-	-
	2-1	Supply of the evolutive RTU 1.	Base	No.	1	7 910,00		7 910,00		7 910,00	-
	2-2	Installation of the RTU 1 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	791,00	134,47	925,47		791,00	134,47
	2-3	Connecting of the cupboard RTU 1 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		158,20	158,20		-	158,20
	2-4	Connecting in the RTU 1 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		237,30	237,30		-	237,30
	2-5	Supply of the evolutive RTU 2.	Base	No.	1	7 490,00		7 490,00		7 490,00	-
	2-6	Installation of the RTU 2 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	749,00	127,33	876,33		749,00	127,33
	2-7	Connecting of the cupboard RTU 2 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		149,80	149,80		-	149,80
	2-8	Connecting in the RTU 2 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		224,70	224,70		-	224,70
	2-9	Supply of the evolutive RTU 3.	Base	No.	1	5 880,00		5 880,00		5 880,00	-
	2-10	Installation of the RTU 3 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	588,00	99,96	687,96		588,00	99,96
	2-11	Connecting of the cupboard RTU 3 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		117,60	117,60		-	117,60
	2-12	Connecting in the RTU 3 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		176,40	176,40		-	176,40
	2-13	Supply of the evolutive RTU 4.	Base	No.	1	6 720,00		6 720,00		6 720,00	-
	2-14	Installation of the RTU 4 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	672,00	114,24	786,24		672,00	114,24
	2-15	Connecting of the cupboard RTU 4 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		134,40	134,40		-	134,40
	2-16	Connecting in the RTU 4 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		201,60	201,60		-	201,60
		Abelyan Shit Main Line (2.1.1)								-	-
	2-17	Supply of the evolutive RTU.	Base	No.	1	4 900,00		4 900,00		4 900,00	-
	2-18	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	490,00	83,30	573,30		490,00	83,30
	2-19	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		98,00	98,00		-	98,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	2-20	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		147,00	147,00		-	147,00
		Borman Main Line (2.1.2)								-	-
	2-21	Supply of the evolutive RTU.	Base	No.	1	4 900,00		4 900,00		4 900,00	-
	2-22	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	490,00	83,30	573,30		490,00	83,30
	2-23	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		98,00	98,00		-	98,00
	2-24	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		147,00	147,00		-	147,00
		Marash Araz Main Line (2.1.3)								-	-
	2-25	Supply of the simplified RTU.	Base	No.	1	2 800,00		2 800,00		2 800,00	-
	2-26	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	280,00	47,60	327,60		280,00	47,60
	2-27	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		56,00	56,00		-	56,00
	2-28	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		84,00	84,00		-	84,00
		Kath Arzak Main Line (2.4.2)								-	-
	2-29	Supply of the evolutive RTU.	Base	No.	1	4 830,00		4 830,00		4 830,00	-
	2-30	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	483,00	82,11	565,11		483,00	82,11
	2-31	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		96,60	96,60		-	96,60
	2-32	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		144,90	144,90		-	144,90
		Katn-Kentron Main Line (2.1.2,A)								-	-
	2-33	Supply of the evolutive RTU.	Base	No.	1	4 830,00		4 830,00		4 830,00	-
	2-34	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	483,00	82,11	565,11		483,00	82,11
	2-35	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		96,60	96,60		-	96,60
	2-36	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		144,90	144,90		-	144,90
		Dzoraghbyur Tank (2.2.1)								-	-
	2-37	Supply of the evolutive RTU.	Base	No.	1	5 810,00		5 810,00		5 810,00	-
	2-38	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	581,00	98,77	679,77		581,00	98,77
	2-39	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		116,20	116,20		-	116,20
	2-40	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		174,30	174,30		-	174,30
		Jrvejh Tank (2.1.4)								-	-
	2-41	Supply of the evolutive RTU.	Base	No.	1	8 190,00		8 190,00		8 190,00	-
	2-42	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	819,00	139,23	958,23		819,00	139,23
	2-43	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		163,80	163,80		-	163,80
	2-44	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		245,70	245,70		-	245,70
		Marash Tank (2.1.5)								-	-
	2-45	Supply of the evolutive RTU.	Base	No.	1	5 880,00		5 880,00		5 880,00	-
	2-46	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	588,00	99,96	687,96		588,00	99,96
	2-47	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		117,60	117,60		-	117,60
	2-48	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		176,40	176,40		-	176,40
		Sari Tagh Tank (2.1.6)								-	-
	2-49	Supply of the evolutive RTU.	Base	No.	1	7 140,00		7 140,00		7 140,00	-
	2-50	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	714,00	121,38	835,38		714,00	121,38
	2-51	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		142,80	142,80		-	142,80
	2-52	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		214,20	214,20		-	214,20

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
		Zeytun Jramb Tank (2.3.1)								-	-
	2-53	Supply of the evoluntary RTU.	Base	No.	1	5 880,00		5 880,00		5 880,00	-
	2-54	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	588,00	99,96	687,96		588,00	99,96
	2-55	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		117,60	117,60		-	117,60
	2-56	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		176,40	176,40		-	176,40
		Qanaqer Nerqin Tank (2.3.2)								-	-
	2-57	Supply of the evoluntary RTU.	Base	No.	1	5 320,00		5 320,00		5 320,00	-
	2-58	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	532,00	90,44	622,44		532,00	90,44
	2-59	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		106,40	106,40		-	106,40
	2-60	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		159,60	159,60		-	159,60
		Mhub Tank (2.4.1)								-	-
	2-61	Supply of the evoluntary RTU.	Base	No.	1	6 020,00		6 020,00		6 020,00	-
	2-62	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	602,00	102,34	704,34		602,00	102,34
	2-63	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		120,40	120,40		-	120,40
	2-64	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		180,60	180,60		-	180,60
		Qanaqer Verin Tank (2.4.3)								-	-
	2-65	Supply of the evoluntary RTU.	Base	No.	1	7 140,00		7 140,00		7 140,00	-
	2-66	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	714,00	121,38	835,38		714,00	121,38
	2-67	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		142,80	142,80		-	142,80
	2-68	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		214,20	214,20		-	214,20
		Narekaci (Ekexeci) Distribution Network (2.1.7)								-	-
	2-69	Supply of the simplified RTU.	Base	No.	1	2 850,00		2 850,00		2 850,00	-
	2-70	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	285,00	48,45	333,45		285,00	48,45
	2-71	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		57,00	57,00		-	57,00
	2-72	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		85,50	85,50		-	85,50
		Avan-Arinj Distribution Network (2.1.9)								-	-
	2-73	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-74	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-75	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-76	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Hovhannisyan Distribution Network (2.1.10)								-	-
	2-77	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-78	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-79	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-80	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Duryan (Safaryan St.) Distribution Network (2.1.11)								-	-
	2-81	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-82	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-83	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-84	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		1 Masiv (Mercedes) Distribution Network (2.1.12)								-	-
	2-85	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	2-86	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-87	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-88	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		1 Masiv (Gayi Ardzan) Distribution Network (2.1.13)								-	-
	2-89	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-90	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-91	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-92	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		1 Masiv (Lvovyan) Distribution Network (2.1.14)								-	-
	2-93	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-94	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-95	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-96	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		2 Masiv (Gayi-Moldovakan) Distribution Network (2.1.15)								-	-
	2-97	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-98	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-99	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-100	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		2 Masiv (Harkajini Dimac) Distribution Network (2.1.16)								-	-
	2-101	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-102	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-103	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-104	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		2 Masiv (Bagrevandi Skzbnamas) Distribution Network (2.1.17)								-	-
	2-105	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-106	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-107	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-108	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		3 Masiv (Ojaxi Dzor) Distribution Network (2.1.18)								-	-
	2-109	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-110	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-111	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-112	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		4 Masiv (Sigaroni Mot) Distribution Network (2.2.2)								-	-
	2-113	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-114	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-115	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-116	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		5 Masiv (27 Shenqi Mot) Distribution Network (2.2.3)								-	-
	2-117	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-118	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	2-119	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-120	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		6 Masiv (Ancumi Mot) Distribution Network (2.1.18)								-	-
	2-121	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-122	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-123	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-124	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		7 Masiv (Pioner Palat) Distribution Network (2.1.20)								-	-
	2-125	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-126	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-127	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-128	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		7 Masiv (D. Bek Avetisyan) Distribution Network (2.1.21)								-	-
	2-129	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-130	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-131	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-132	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		8 Masiv (Tevosyan PRV) Distribution Network (2.2.4)								-	-
	2-133	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-134	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-135	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-136	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		9 Masiv (34 Shenqi Mot) Distribution Network (2.1.22)								-	-
	2-137	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-138	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-139	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-140	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Marash 1 Sektor (Ortopetiki Hetevum) Distribution Network (2.1.23)								-	-
	2-141	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-142	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-143	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-144	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Marash 2 Sektor (EI-Canci Dimac) Distribution Network (2.1.24)								-	-
	2-145	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-146	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-147	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-148	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Marash 3 Sektor (AHK-I Mot) Distribution Network (2.1.25)								-	-
	2-149	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-150	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-151	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	2-152	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Marash 4 Sektor (Ortopetiki Araj) Distribution Network (2.1.26)								-	-
	2-153	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	2-154	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	2-155	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	2-156	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
Lot b,3	ARARATYAN NETWORK									-	-
		Araratyan Pumping Station (3)								-	-
	3-1	Supply of the evolutive RTU.	Base	No.	1	10 290,00		10 290,00		10 290,00	-
	3-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	1 029,00	174,93	1 203,93		1 029,00	174,93
	3-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		205,80	205,80		-	205,80
	3-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		308,70	308,70		-	308,70
		Kharberd Tank (3.2)								-	-
	3-5	Supply of the evolutive RTU.	Base	No.	1	8 400,00		8 400,00		8 400,00	-
	3-6	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	840,00	142,80	982,80		840,00	142,80
	3-7	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		168,00	168,00		-	168,00
	3-8	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		252,00	252,00		-	252,00
		Jek Distribution Network (3.2.1)								-	-
	3-9	Supply of the simplified RTU.	Base	No.	1	2 850,00		2 850,00		2 850,00	-
	3-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	285,00	48,45	333,45		285,00	48,45
	3-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		57,00	57,00		-	57,00
	3-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		85,50	85,50		-	85,50
		Maqur Erkat Distribution Network (3.2.2)								-	-
	3-13	Supply of the simplified RTU.	Base	No.	1	2 850,00		2 850,00		2 850,00	-
	3-14	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	285,00	48,45	333,45		285,00	48,45
	3-15	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		57,00	57,00		-	57,00
	3-16	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		85,50	85,50		-	85,50
		Artcakh Distribution Network (3.1.1)								-	-
	3-17	Supply of the simplified RTU.	Base	No.	1	2 850,00		2 850,00		2 850,00	-
	3-18	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	285,00	48,45	333,45		285,00	48,45
	3-19	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		57,00	57,00		-	57,00
	3-20	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		85,50	85,50		-	85,50
Lot b,4	DZORAGHBYUR-YERGES NETWORK									-	-
		Dzoraghbyur-Yerges Spring (4)								-	-
	4-1	Supply of the evolutive RTU.	Base	No.	1	5 040,00		5 040,00		5 040,00	-
	4-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	504,00	85,68	589,68		504,00	85,68
	4-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		100,80	100,80		-	100,80
	4-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		151,20	151,20		-	151,20
Lot b,5	TSARAGHBYUR NETWORK									-	-
		Tsaraghbyur Pumping Station (5)								-	-
	5-1	Supply of the evolutive RTU.	Base	No.	1	5 320,00		5 320,00		5 320,00	-
	5-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	532,00	90,44	622,44		532,00	90,44

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	5-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		106,40	106,40		-	106,40
	5-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		159,60	159,60		-	159,60
		Tsitshernakaberd Tank (5.1)								-	-
	5-5	Supply of the evoluntary RTU.	Base	No.	1	5 180,00		5 180,00		5 180,00	-
	5-6	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	518,00	88,06	606,06		518,00	88,06
	5-7	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		103,60	103,60		-	103,60
	5-8	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		155,40	155,40		-	155,40
		Haghtanaki Kamurj Distribution Network (5.4)								-	-
	5-9	Supply of the simplified RTU.	Base	No.	1	2 800,00		2 800,00		2 800,00	-
	5-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	280,00	47,60	327,60		280,00	47,60
	5-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		56,00	56,00		-	56,00
	5-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		84,00	84,00		-	84,00
		Boiler Distribution Network (1.13)								-	-
	5-13	Supply of the simplified RTU.	Base	No.	1	2 850,00		2 850,00		2 850,00	-
	5-14	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	285,00	48,45	333,45		285,00	48,45
	5-15	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		57,00	57,00		-	57,00
	5-16	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		85,50	85,50		-	85,50
Lot b,6	SHOR-SHOR NETWORK									-	-
		Shor-Shor Pumping Station (6)								-	-
	6-1	Supply of the evoluntary RTU.	Base	No.	1	8 330,00		8 330,00		8 330,00	-
	6-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	833,00	141,61	974,61		833,00	141,61
	6-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		166,60	166,60		-	166,60
	6-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		249,90	249,90		-	249,90
		Cloratun Main Line (6.1)								-	-
	6-5	Supply of the evoluntary RTU.	Base	No.	1	4 830,00		4 830,00		4 830,00	-
	6-6	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	483,00	82,11	565,11		483,00	82,11
	6-7	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		96,60	96,60		-	96,60
	6-8	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		144,90	144,90		-	144,90
		Kati Kombinat Tank (6.3)								-	-
	6-9	Supply of the evoluntary RTU.	Base	No.	1	4 970,00		4 970,00		4 970,00	-
	6-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	497,00	84,49	581,49		497,00	84,49
	6-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		99,40	99,40		-	99,40
	6-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		149,10	149,10		-	149,10
Lot b,7	APARAN NETWORK									-	-
		Aparan Pumping Station (7)								-	-
	7-1	Supply of the evoluntary RTU 1.	Base	No.	13	7 280,00		94 640,00		94 640,00	-
	7-2	Installation of the RTU 1 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	13	728,00	123,76	11 072,88		9 464,00	1 608,88
	7-3	Connecting of the cupboard RTU 1 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	13		145,60	1 892,80		-	1 892,80
	7-4	Connecting in the RTU 1 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	13		218,40	2 839,20		-	2 839,20
	7-5	Supply of the evoluntary RTU 2.	Base	No.	1	5 460,00		5 460,00		5 460,00	-
	7-6	Installation of the RTU 2 including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	546,00	92,82	638,82		546,00	92,82

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	7-7	Connecting of the cupboard RTU 2 in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		109,20	109,20		-	109,20
	7-8	Connecting in the RTU 2 of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		163,80	163,80		-	163,80
		Karmir Khach Aparan Main Line (6.2)								-	-
	7-9	Supply of the evolutory RTU.	Base	No.	1	5 880,00		5 880,00		5 880,00	-
	7-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	588,00	99,96	687,96		588,00	99,96
	7-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		117,60	117,60		-	117,60
	7-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		176,40	176,40		-	176,40
		Qasakh Tank (7.1)								-	-
	7-13	Supply of the evolutory RTU.	Base	No.	1	6 440,00		6 440,00		6 440,00	-
	7-14	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	644,00	109,48	753,48		644,00	109,48
	7-15	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		128,80	128,80		-	128,80
	7-16	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		193,20	193,20		-	193,20
		Davtashen Verin Tank (7.2)								-	-
	7-17	Supply of the evolutory RTU.	Base	No.	1	6 440,00		6 440,00		6 440,00	-
	7-18	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	644,00	109,48	753,48		644,00	109,48
	7-19	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		128,80	128,80		-	128,80
	7-20	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		193,20	193,20		-	193,20
		Fizaka Tank (7.3)								-	-
	7-21	Supply of the evolutory RTU.	Base	No.	1	6 020,00		6 020,00		6 020,00	-
	7-22	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	602,00	102,34	704,34		602,00	102,34
	7-23	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		120,40	120,40		-	120,40
	7-24	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		180,60	180,60		-	180,60
		Sector Mashtoc 5 (Shiraz) Distribution Network (7.1.1)								-	-
	7-25	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-26	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-27	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-28	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 7 Bloc (Shiraz) Distribution Network (7.1.1)								-	-
	7-29	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-30	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-31	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-32	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 15 (Fuchik Margaryan) Distribution Network (7.2.1)								-	-
	7-33	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-34	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-35	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-36	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 1 Davt-I (near the cemetery) Distribution Network (7.1.2)								-	-
	7-37	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-38	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-39	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	7-40	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 1 (near the Davt-I 21 building) Distribution Network (7.1.3)								-	-
	7-41	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-42	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-43	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-44	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 1 (near the Davt-I 33 building) Distribution Network (7.1.4)								-	-
	7-45	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-46	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-47	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-48	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 3 (near the Davt-I 33 building) Distribution Network (7.1.4)								-	-
	7-49	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-50	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-51	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-52	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 2 (near the Davt-II 9 building) Distribution Network (7.1.5)								-	-
	7-53	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-54	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-55	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-56	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 2 (near the Davt-II 22 building) Distribution Network (7.1.6)								-	-
	7-57	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-58	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-59	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-60	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 2 (near the Davt-III 6 building) Distribution Network (7.1.7)								-	-
	7-61	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-62	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-63	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-64	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 2 (for Mashtoc Davt IV) Distribution Network (7.1.8)								-	-
	7-65	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-66	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-67	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-68	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Sector Mashtoc 4 (near Davt IV Arazen) Distribution Network (7.1.9)								-	-
	7-69	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-70	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-71	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-72	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
		Sector Mashtoc 4 (near the Davt IV 45 building) Distribution Network (7.1.10)								-	-
	7-73	Supply of the simplified RTU.	Base	No.	1	2 600,00		2 600,00		2 600,00	-
	7-74	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	260,00	44,20	304,20		260,00	44,20
	7-75	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		52,00	52,00		-	52,00
	7-76	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		78,00	78,00		-	78,00
		Fizika Cross Distribution Network (7.1.11)								-	-
	7-77	Supply of the simplified RTU.	Base	No.	1	2 650,00		2 650,00		2 650,00	-
	7-78	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	265,00	45,05	310,05		265,00	45,05
	7-79	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		53,00	53,00		-	53,00
	7-80	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		79,50	79,50		-	79,50
Lot b,8	ARZAQAN-GYUMUSH NETWORK									-	-
		Arzaqan Pumping Station (8)								-	-
	8-1	Supply of the evolutive RTU.	Base	No.	1	5 040,00		5 040,00		5 040,00	-
	8-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	504,00	85,68	589,68		504,00	85,68
	8-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		100,80	100,80		-	100,80
	8-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		151,20	151,20		-	151,20
		Gyumush Pumping Station (8.1)								-	-
	8-5	Supply of the evolutive RTU.	Base	No.	1	6 720,00		6 720,00		6 720,00	-
	8-6	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	672,00	114,24	786,24		672,00	114,24
	8-7	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		134,40	134,40		-	134,40
	8-8	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		201,60	201,60		-	201,60
		Nor Hachn Main Line (8.2)								-	-
	8-9	Supply of the evolutive RTU.	Base	No.	1	4 900,00		4 900,00		4 900,00	-
	8-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	490,00	83,30	573,30		490,00	83,30
	8-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		98,00	98,00		-	98,00
	8-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		147,00	147,00		-	147,00
		Zovuni Arz Main Line (8.3)								-	-
	8-13	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-14	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-15	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-16	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Davtasheni Kamurj Main Line (8.3.1)								-	-
	8-17	Supply of the evolutive RTU.	Base	No.	1	4 900,00		4 900,00		4 900,00	-
	8-18	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	490,00	83,30	573,30		490,00	83,30
	8-19	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		98,00	98,00		-	98,00
	8-20	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		147,00	147,00		-	147,00
		Leningradyan Main Line (8.3.3)								-	-
	8-21	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-22	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-23	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-24	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Qanaker Arz Main Line (8.4)								-	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	8-25	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-26	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-27	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-28	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Lamperi Lich Main Line (8.4.1)								-	-
	8-29	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-30	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-31	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-32	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Lamper Tank (8.4.2)								-	-
	8-33	Supply of the evolutive RTU.	Base	No.	1	6 440,00		6 440,00		6 440,00	-
	8-34	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	644,00	109,48	753,48		644,00	109,48
	8-35	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		128,80	128,80		-	128,80
	8-36	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		193,20	193,20		-	193,20
		Jambul Tank (8.3.5)								-	-
	8-37	Supply of the evolutive RTU.	Base	No.	1	5 880,00		5 880,00		5 880,00	-
	8-38	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	588,00	99,96	687,96		588,00	99,96
	8-39	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		117,60	117,60		-	117,60
	8-40	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		176,40	176,40		-	176,40
		Lukashin Tank (8.3.6)								-	-
	8-41	Supply of the evolutive RTU.	Base	No.	1	6 090,00		6 090,00		6 090,00	-
	8-42	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	609,00	103,53	712,53		609,00	103,53
	8-43	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		121,80	121,80		-	121,80
	8-44	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		182,70	182,70		-	182,70
		Sector Shahumyan 8 (Tichina) Distribution Network (8.3.7)								-	-
	8-45	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-46	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-47	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-48	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 8 (Sheram) Distribution Network (8.3.8)								-	-
	8-49	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-50	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-51	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-52	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 8 (Z. Andranik) Distribution Network (8.3.9)								-	-
	8-53	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-54	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-55	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-56	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 2 (Raffi) Distribution Network (8.3.10)								-	-
	8-57	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	8-58	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-59	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-60	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 1 (Babajanyan) Distribution Network (8.3.11)								-	-
	8-61	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-62	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-63	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-64	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 11 (for Isakov) Distribution Network (8.3.12)								-	-
	8-65	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-66	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-67	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-68	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 11 (for Tairov) Distribution Network (8.3.12)								-	-
	8-69	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-70	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-71	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-72	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan (for V. Haxtanak Most) Distribution Network (8.3.13)								-	-
	8-73	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-74	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-75	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-76	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan (for V. Haxtanak Tser) Distribution Network (8.3.14)								-	-
	8-77	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-78	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-79	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-80	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan (near Rob. Factory for Tairov) Distribution Network (8.3.15)								-	-
	8-81	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-82	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-83	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-84	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 5 (Shrjanajin) Distribution Network (8.3.16)								-	-
	8-85	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	8-86	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	8-87	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	8-88	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
		Sector Shahumyan 6 (Kurbinyan) Distribution Network (8.3.17)								-	-
	8-89	Supply of the simplified RTU.	Base	No.	1	2 950,00		2 950,00		2 950,00	-
	8-90	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	295,00	50,15	345,15		295,00	50,15

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	8-91	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		59,00	59,00		-	59,00
	8-92	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		88,50	88,50		-	88,50
Lot b,9	ARZNI NETWORK									-	-
		Arzni Pumping Station (9)								-	-
	9-1	Supply of the evolatory RTU.	Base	No.	1	10 500,00		10 500,00		10 500,00	-
	9-2	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	1 050,00	178,50	1 228,50		1 050,00	178,50
	9-3	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		210,00	210,00		-	210,00
	9-4	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		315,00	315,00		-	315,00
		Moris Main Line (9.1)								-	-
	9-5	Supply of the simplified RTU.	Base	No.	1	3 000,00		3 000,00		3 000,00	-
	9-6	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	300,00	51,00	351,00		300,00	51,00
	9-7	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		60,00	60,00		-	60,00
	9-8	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		90,00	90,00		-	90,00
		Andoy Domik Main Line (9.1.1)								-	-
	9-9	Supply of the evolatory RTU.	Base	No.	1	4 900,00		4 900,00		4 900,00	-
	9-10	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	490,00	83,30	573,30		490,00	83,30
	9-11	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		98,00	98,00		-	98,00
	9-12	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		147,00	147,00		-	147,00
		Dinamo Tank (9.1.2)								-	-
	9-13	Supply of the evolatory RTU.	Base	No.	1	4 970,00		4 970,00		4 970,00	-
	9-14	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	497,00	84,49	581,49		497,00	84,49
	9-15	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		99,40	99,40		-	99,40
	9-16	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		149,10	149,10		-	149,10
		Kovkasyan Tank (9.2)								-	-
	9-17	Supply of the evolatory RTU.	Base	No.	1	5 530,00		5 530,00		5 530,00	-
	9-18	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	553,00	94,01	647,01		553,00	94,01
	9-19	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		110,60	110,60		-	110,60
	9-20	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		165,90	165,90		-	165,90
		Sector 1 Qochar Kulpenk Distribution Network (9.2.1)								-	-
	9-21	Supply of the simplified RTU.	Base	No.	1	2 900,00		2 900,00		2 900,00	-
	9-22	Installation of the RTU including, the putting in cupboard, the supply of the electric protections, the cabling and all the necessary accessories.	Base	No.	1	290,00	49,30	339,30		290,00	49,30
	9-23	Connecting of the cupboard RTU in the electric general cupboard including, the electric protection of the departure, the cabling, and all the necessary accessories.	Base	No.	1		58,00	58,00		-	58,00
	9-24	Connecting in the RTU of all the equipments including, the cabling, the trenches and all the necessary accessories.	Base	No.	1		87,00	87,00		-	87,00
Lot b,10	SUPERVISION SYSTEM									-	-
	10-1	Supply of the Software including GSM Modems.	Base	No.	1	30 000,00		30 000,00		30 000,00	-
	10-2	Supply of the operator station	Base	No.	2	20 000,00		40 000,00		40 000,00	-
	10-3	Maintenance equipment	Base	No.	1	20 000,00		20 000,00		20 000,00	-
	10-4	Execution studies, configuration of the RTU's, putting into service, training, etc...	Base	No.	1	200 000,00		200 000,00		200 000,00	-
										-	-
b) SCADA SYSTEM - Total						845 465,00	35 051,05	1 002 465,17		961 561,00	40 904,17
										95,9%	4,1%
c) INSTRUMENTATION EQUIPMENT											
Lot c,1	GARNI NETWORK									-	-
		Garni Pumping Station (1.1)								-	-
Press. S.	1-1	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	3	800,00		2 400,00		2 400,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	1-2	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3	160,00	40,00	600,00		480,00	120,00
	1-3	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	1-4	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
		Garni Chlorination Station (1.A)								-	-
Press. S.	1-5	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	2	800,00		1 600,00		1 600,00	-
	1-6	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	160,00	40,00	400,00		320,00	80,00
		Noubaradhen Petrol Main Line (1.2.A)								-	-
Press. S.	1-7	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-8	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
	1-9	Supply of the transducer for Sensus Mechanical Flowmeter.	Base	No.	1	2 000,00		2 000,00		2 000,00	-
	1-10	Installation of transducer including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		200,00	200,00		-	200,00
		Sari Tax Main Line (1.7)								-	-
Press. S.	1-11	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-12	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Arind Berd Tank (1.5)								-	-
Press. S.	1-13	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-14	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Araratyan Tank (1.6)								-	-
Press. S.	1-15	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-16	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Abovian Purak Tank (1.9)								-	-
300	1-17	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	2	3 500,00		7 000,00		7 000,00	-
	1-18	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	500,00	200,00	1 400,00		1 000,00	400,00
		Sector Kentron 2 (Mosc-Abov) Distribution Network (1.10)								-	-
Press. S.	1-19	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-20	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Kentron 8 (Charentc) Distribution Network (1.14)								-	-
Press. S.	1-21	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-22	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Kentron 8/1 (Charentc) Distribution Network (1.14)								-	-
Press. S.	1-23	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-24	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Erebuni Hraprak (Erebuni) Distribution Network (1.5.1)								-	-
Press. S.	1-25	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-26	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Erebuni Hraprak (Ayvazovski) Distribution Network (1.5.1)								-	-
Press. S.	1-27	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	1-28	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
Lot c,2	KATNAGHBYUR NETWORK									-	-
		Katnaghbyur Pumping Station (2.0)								-	-
	2-1	Supply of the transducer for Sensus Mechanical Flowmeter.	Base	No.	14	2 000,00		28 000,00		28 000,00	-
	2-2	Installation of transducer including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	14		200,00	2 800,00		-	2 800,00
	2-3	Supply of the Chlorination Dosimeter.	Base	No.	3	2 500,00		7 500,00		7 500,00	-
	2-4	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3		125,00	375,00		-	375,00
	2-5	Supply of the Chlorine injector.	Base	No.	3	2 000,00		6 000,00		6 000,00	-
	2-6	Installation of the Chlorine injector including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3		100,00	300,00		-	300,00
		Borman Main Line (2.1.2)								-	-
Press. S.	2-7	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	3	800,00		2 400,00		2 400,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	2-8	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3	160,00	40,00	600,00		480,00	120,00
		Kath Arzak Main Line (2.4.2)								-	-
Press. S.	2-9	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-10	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Jrvejh Tank (2.1.4)								-	-
400	2-11	Supply of the Ultrasonic Flowmeter for DN400.	Base	No.	2	3 500,00		7 000,00		7 000,00	-
700	2-12	Supply of the Ultrasonic Flowmeter for DN700.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-13	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3	500,00	200,00	2 100,00		1 500,00	600,00
		Marash Tank (2.1.5)								-	-
Press. S.	2-14	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-15	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sari Tagh Tank (2.1.6)								-	-
Press. S.	2-16	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-17	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
200	2-18	Supply of the Ultrasonic Flowmeter for DN200.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-19	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
300	2-20	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-21	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Zeytun Jramb Tank (2.3.1)								-	-
Press. S.	2-22	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-23	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
300	2-24	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-25	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Mhub Tank (2.4.1)								-	-
300	2-26	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-27	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
500	2-28	Supply of the Ultrasonic Flowmeter for DN500.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-29	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
800	2-30	Supply of the Ultrasonic Flowmeter for DN800.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	2-31	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Qanaqer Verin Tank (2.4.3)								-	-
400	2-32	Supply of the Ultrasonic Flowmeter for DN400.	Base	No.	2	3 500,00		7 000,00		7 000,00	-
	2-33	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	500,00	200,00	1 400,00		1 000,00	400,00
		Narekaci (Ekexeci) Distribution Network (2.1.7)								-	-
Press. S.	2-34	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-35	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Duryan (Safaryan St.) Distribution Network (2.1.11)								-	-
Press. S.	2-36	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-37	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		1 Masiv (Mercedes) Distribution Network (2.1.12)								-	-
Press. S.	2-38	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-39	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		2 Masiv (Gayi-Moldovakan) Distribution Network (2.1.15)								-	-
Press. S.	2-40	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-41	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		2 Masiv (Harkajini Dimac) Distribution Network (2.1.16)								-	-
Press. S.	2-42	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	2-43	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		3 Masiv (Ojaxi Dzor) Distribution Network (2.1.18)								-	-
Press. S.	2-44	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-45	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		4 Masiv (Sigaroni Mot) Distribution Network (2.2.2)								-	-
Press. S.	2-46	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-47	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		5 Masiv (27 Shenqi Mot) Distribution Network (2.2.3)								-	-
Press. S.	2-48	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-49	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		6 Masiv (Ancumi Mot) Distribution Network (2.1.18)								-	-
Press. S.	2-50	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-51	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		7 Masiv (Pioner Palat) Distribution Network (2.1.20)								-	-
Press. S.	2-52	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-55	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		8 Masiv (Tevosyan PRV) Distribution Network (2.2.4)								-	-
Press. S.	2-56	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-57	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		9 Masiv (34 Shenqi Mot) Distribution Network (2.1.22)								-	-
Press. S.	2-58	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-59	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Marash 1 Sektor (Ortopetiki Hetevum) Distribution Network (2.1.23)								-	-
Press. S.	2-60	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-61	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Marash 3 Sektor (AHK-I Mot) Distribution Network (2.1.25)								-	-
Press. S.	2-62	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	2-63	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
Lot c,3	ARARATYAN NETWORK									-	-
		Araratyan Pumping Station (3)								-	-
Press. S.	3-1	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	3	800,00		2 400,00		2 400,00	-
	3-2	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3	160,00	40,00	600,00		480,00	120,00
		Kharberd Tank (3.2)								-	-
Press. S.	3-3	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	3-4	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Jek Distribution Network (3.2.1)								-	-
Press. S.	3-5	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	3-6	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
Lot c,4	DZORAGHBYUR-YERGES NETWORK									-	-
		Dzoraghbyur-Yerges Spring (4)								-	-
	4-1	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	4-2	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
Lot c,5	TSARAGHBYUR NETWORK									-	-
		Tsaraghbyur Pumping Station (5)								-	-
	5-1	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	5-2	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
		Tsitshernakaberd Tank (5.1)								-	-
300	5-3	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	5-4	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Boiler Distribution Network (1.13)								-	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
Press. S.	5-5	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	5-6	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
300	5-7	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	5-8	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
Lot c,6	SHOR-SHOR NETWORK									-	-
	Shor-Shor Pumping Station (6)									-	-
Press. S.	6-1	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	2	800,00		1 600,00		1 600,00	-
	6-2	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	160,00	40,00	400,00		320,00	80,00
	6-3	Supply of the Chlorine injector.	Base	No.	1	2 000,00		2 000,00		2 000,00	-
	6-4	Installation of the Chlorine injector including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		100,00	100,00		-	100,00
	6-5	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	6-6	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
	Cloratum Main Line (6.1)									-	-
500	6-7	Supply of the Ultrasonic Flowmeter for DN500.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	6-8	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
	Kati Kombinat Tank (6.3)									-	-
200	6-9	Supply of the Ultrasonic Flowmeter for DN200.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	6-10	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
Lot c,7	APARAN NETWORK									-	-
	Aparan Pumping Station (7)									-	-
Press. S.	7-1	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	2	800,00		1 600,00		1 600,00	-
	7-2	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	160,00	40,00	400,00		320,00	80,00
	7-3	Supply of the transducer for Sensus Mechanical Flowmeter.	Base	No.	14	2 000,00		28 000,00		28 000,00	-
	7-4	Installation of transducer including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	14		200,00	2 800,00		-	2 800,00
	7-5	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	7-6	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
	Qasakh Tank (7.1)									-	-
300	7-7	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	7-8	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
	Davtashen Verin Tank (7.2)									-	-
400	7-9	Supply of the Ultrasonic Flowmeter for DN400.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	7-10	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
	Fizaka Tank (7.3)									-	-
Press. S.	7-11	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-12	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
200	7-13	Supply of the Ultrasonic Flowmeter for DN200.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	7-14	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
	Sector Mashtoc 5 (Shiraz) Distribution Network (7.1.1)									-	-
Press. S.	7-15	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-16	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
	Sector Mashtoc 7 Bloc (Shiraz) Distribution Network (7.1.1)									-	-
Press. S.	7-17	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-18	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
	Sector Mashtoc 15 (Fuchik Margaryan) Distribution Network (7.2.1)									-	-
Press. S.	7-19	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-20	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
	Sector Mashtoc 1 Davt-I (near the cemetery) Distribution Network (7.1.2)									-	-
Press. S.	7-21	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	7-22	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Mashtoc 2 (near the Davt-II 9 building) Distribution Network (7.1.5)								-	-
Press. S.	7-23	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-24	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Mashtoc 4 (near Davt IV Arazen) Distribution Network (7.1.9)								-	-
Press. S.	7-25	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-26	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Mashtoc 4 (near the Davt IV 45 building) Distribution Network (7.1.10)								-	-
Press. S.	7-27	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-28	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Fizika Cross Distribution Network (7.1.11)								-	-
Press. S.	7-29	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	7-30	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
Lot c,8	ARZAQAN-GYUMUSH NETWORK									-	-
		Arzaqan Pumping Station (8)								-	-
	8-1	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	8-2	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
		Gyumush Pumping Station (8.1)								-	-
Press. S.	8-3	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	3	800,00		2 400,00		2 400,00	-
	8-4	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3	160,00	40,00	600,00		480,00	120,00
	8-5	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	8-6	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
		Nor Hachn Main Line (8.2)								-	-
Press. S.	8-7	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-8	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Davtasheni Kamurj Main Line (8.3.1)								-	-
Press. S.	8-9	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-10	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Lamperi Lich Main Line (8.4.1)								-	-
Press. S.	8-11	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-12	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Jambul Tank (8.3.5)								-	-
250	8-13	Supply of the Ultrasonic Flowmeter for DN250.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	8-14	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
500	8-15	Supply of the Ultrasonic Flowmeter for DN500.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	8-16	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Sector Shahumyan 8 (Tichina) Distribution Network (8.3.7)								-	-
Press. S.	8-17	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-18	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan 8 (Sheram) Distribution Network (8.3.8)								-	-
Press. S.	8-19	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-20	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan 8 (Z. Andranik) Distribution Network (8.3.9)								-	-
Press. S.	8-21	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-22	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan 2 (Raffi) Distribution Network (8.3.10)								-	-
Press. S.	8-23	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-24	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan 1 (Babajanyan) Distribution Network (8.3.11)								-	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
Press. S.	8-25	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-26	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan (for V. Haxtanak Tser) Distribution Network (8.3.14)								-	-
Press. S.	8-27	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-28	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan (near Rob. Factory for Tairov) Distribution Network (8.3.15)								-	-
Press. S.	8-29	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-30	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan 5 (Shrjanajin) Distribution Network (8.3.16)								-	-
Press. S.	8-31	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	8-32	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Sector Shahumyan 6 (Kurxinyan) Distribution Network (8.3.17)								-	-
Press. S.	8-33	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	2	800,00		1 600,00		1 600,00	-
	8-34	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	160,00	40,00	400,00		320,00	80,00
Lot c,9	ARZNI NETWORK									-	-
		Arzni Pumping Station (9)								-	-
Press. S.	9-1	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	2	800,00		1 600,00		1 600,00	-
	9-2	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	160,00	40,00	400,00		320,00	80,00
500	9-3	Supply of the Ultrasonic Flowmeter for DN500.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	9-4	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
	9-5	Supply of the Chlorination Dosimeter.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
	9-6	Installation of the Chlorination Dosimeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1		125,00	125,00		-	125,00
		Dinamo Tank (9.1.2)								-	-
Press. S.	9-7	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	9-8	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
		Kovkasyan Tank (9.2)								-	-
300	9-9	Supply of the Ultrasonic Flowmeter for DN300.	Base	No.	1	3 500,00		3 500,00		3 500,00	-
	9-10	Installation of the Ultrasonic Flowmeter including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Sector 1 Qochar Kulpenk Distribution Network (9.2.1)								-	-
Press. S.	9-11	Supply of the Pressure Sensor and the Paddle Clamp.	Base	No.	1	800,00		800,00		800,00	-
	9-12	Installation of the Paddle Clamp and the Pressure Sensor including, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	160,00	40,00	200,00		160,00	40,00
										-	-
c) INSTRUMENTATION EQUIPMENT Total								275 875,00		260 540,00	15 335,00
										94,4%	5,6%
d) SOLAR POWER SUPPLY											
Lot d,2	KATNAGHBYUR NETWORK									-	-
		Abelyan Shit Main Line (2.1.1)								-	-
	2-1	Supply of the Solar power supply system.	Base	No.	1	15 000,00		15 000,00		15 000,00	-
	2-2	Installation of the Solar power supply including, the protections, the cabling and all the necessary accessories.	Base	No.	1	2 500,00		2 500,00		2 500,00	-
										-	-
d) SOLAR POWER SUPPLY - Total								17 500,00		17 500,00	-
										100,0%	0,0%
e) MOTORISED VALVES											
Lot e,1	GARNI NETWORK									-	-
		Garni Pumping Station (1.1)								-	-
200	1-1	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	1-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Noubarashen Petrol Main Line (1.2.A)								-	-
Motor	1-3	Supply of the Motor for existing Valve.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	1-4	Installation of the Motor including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	3 000,00	200,00	3 200,00		3 000,00	200,00
		Arin-Berd Tank (1.5)								-	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
300	1-5	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	1-6	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
400	1-7	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	4	13 000,00		52 000,00		52 000,00	-
	1-8	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	4	650,00	260,00	3 640,00		2 600,00	1 040,00
		Araratyan Tank (1.6)								-	-
500	1-9	Supply of the Motorised Flow Control Valve for DN500, including pipe-flange junctions.	Base	No.	2	23 000,00		46 000,00		46 000,00	-
	1-10	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	1 150,00	460,00	3 220,00		2 300,00	920,00
		Abovian Purak Tank (1.9)								-	-
200	1-11	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	2	10 000,00		20 000,00		20 000,00	-
	1-12	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	500,00	200,00	1 400,00		1 000,00	400,00
300	1-13	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	8	11 500,00		92 000,00		92 000,00	-
	1-14	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	8	575,00	230,00	6 440,00		4 600,00	1 840,00
400	1-15	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	2	13 000,00		26 000,00		26 000,00	-
	1-16	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	650,00	260,00	1 820,00		1 300,00	520,00
Lot e,2	KATNAGHBYUR NETWORK									-	-
		Katnaghbyur Pumping Station (2.0)								-	-
250	2-1	Supply of the Motorised Flow Control Valve for DN250, including pipe-flange junctions.	Base	No.	1	10 500,00		10 500,00		10 500,00	-
	2-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	525,00	210,00	735,00		525,00	210,00
300	2-3	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	2-4	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
		Abelyan Shit Main Line (2.2.1)								-	-
Motor	2-5	Supply of the Motor for existing Valve.	Base	No.	2	10 000,00		20 000,00		20 000,00	-
	2-6	Installation of the Motor including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	3 000,00	200,00	6 400,00		6 000,00	400,00
		Katn-Arzak Main Line (2.4.2)								-	-
200	2-7	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	2-8	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Katn-Kentron Main Line (2.1.2.A)								-	-
300	2-9	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	2-10	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
		Dzoraghbyur Tank (2.2.1)								-	-
300	2-11	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	2-12	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
600	2-13	Supply of the Motorised Section Valve for DN600, including pipe-flange junctions.	Base	No.	1	32 000,00		32 000,00		32 000,00	-
	2-14	Installation of the Motorised Section Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	1 600,00	640,00	2 240,00		1 600,00	640,00
		Jrvejh Tank (2.1.4)								-	-
300	2-15	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	2-16	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
400	2-17	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	2	13 000,00		26 000,00		26 000,00	-
	2-18	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	650,00	260,00	1 820,00		1 300,00	520,00
		Marash Tank (2.1.5)								-	-
200	2-19	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	2-20	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
300	2-21	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	2-22	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
		Sari Tagh Tank (2.1.6)								-	-
200	2-23	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	3	10 000,00		30 000,00		30 000,00	-
	2-24	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	3	500,00	200,00	2 100,00		1 500,00	600,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
300	2-25	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	2-26	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
		Mhub Tank (2.4.1)								-	-
300	2-27	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	2-28	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
400	2-29	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	1	13 000,00		13 000,00		13 000,00	-
	2-30	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	650,00	260,00	910,00		650,00	260,00
600	2-31	Supply of the Motorised Flow Control Valve for DN600, including pipe-flange junctions.	Base	No.	1	32 000,00		32 000,00		32 000,00	-
	2-32	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	1 600,00	640,00	2 240,00		1 600,00	640,00
800	2-33	Supply of the Motorised Flow Control Valve for DN800, including pipe-flange junctions.	Base	No.	1	65 000,00		65 000,00		65 000,00	-
	2-34	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	3 250,00	1 300,00	4 550,00		3 250,00	1 300,00
		Qanaqer Verin Tank (2.4.3)								-	-
100	2-35	Supply of the Motorised Flow Control Valve for DN100, including pipe-flange junctions.	Base	No.	1	8 500,00		8 500,00		8 500,00	-
	2-36	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	425,00	170,00	595,00		425,00	170,00
150	2-37	Supply of the Motorised Flow Control Valve for DN150, including pipe-flange junctions.	Base	No.	1	9 000,00		9 000,00		9 000,00	-
	2-38	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	450,00	180,00	630,00		450,00	180,00
300	2-39	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	2-40	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
400	2-41	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	2	13 000,00		26 000,00		26 000,00	-
	2-42	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	650,00	260,00	1 820,00		1 300,00	520,00
Lot e,3	ARARATYAN NETWORK									-	-
		Kharberd Tank (3.2)								-	-
100	3-1	Supply of the Motorised Flow Control Valve for DN100, including pipe-flange junctions.	Base	No.	1	8 500,00		8 500,00		8 500,00	-
	3-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	425,00	170,00	595,00		425,00	170,00
200	3-3	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	3-4	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
300	3-5	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	3-6	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
600	3-7	Supply of the Motorised Flow Control Valve for DN600, including pipe-flange junctions.	Base	No.	2	32 000,00		64 000,00		64 000,00	-
	3-8	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	1 600,00	640,00	4 480,00		3 200,00	1 280,00
1000	3-9	Supply of the Motorised Flow Control Valve for DN1000, including pipe-flange junctions.	Base	No.	1	79 000,00		79 000,00		79 000,00	-
	3-10	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	3 950,00	1 580,00	5 530,00		3 950,00	1 580,00
Lot e,4	DZORAGHBYUR-YERGES NETWORK									-	-
		Dzoraghbyur-Yerges Spring (4)								-	-
200	4-1	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	4-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
Lot e,5	TSARAGHBYUR NETWORK									-	-
		Tsaraghbyur Pumping Station (5)								-	-
200	5-1	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	5-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Tsishernakaberd Tank (5.1)								-	-
300	5-3	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	5-4	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
Lot e,6	SHOR-SHOR NETWORK									-	-
		Cloratun Main Line (6.1)								-	-
400	6-1	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	1	13 000,00		13 000,00		13 000,00	-
	6-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	650,00	260,00	910,00		650,00	260,00

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
700	6-3	Supply of the Motorised Flow Control Valve for DN700, including pipe-flange junctions.	Base	No.	1	48 000,00		48 000,00		48 000,00	-
	6-4	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	2 400,00	960,00	3 360,00		2 400,00	960,00
		Kati Kombinat Tank (6.3)								-	-
200	6-5	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	6-6	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
200	6-7	Supply of the Motorised Section Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	6-8	Installation of the Motorised Section Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
Lot e,7	APARAN NETWORK									-	-
		Kamir Khach Aparan Main Line (6.2)								-	-
300	7-1	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	7-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
200*	7-3	Supply of the Motorised High Pressure Flow Control Valve with Cones for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	7-4	Installation of the Motorised High Pressure Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
300*	7-5	Supply of the Motorised High Pressure Flow Control Valve with Cones for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	7-6	Installation of the Motorised High Pressure Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
		Qasakh Tank (7.1)								-	-
400	7-7	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	1	13 000,00		13 000,00		13 000,00	-
	7-8	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	650,00	260,00	910,00		650,00	260,00
500	7-9	Supply of the Motorised Flow Control Valve for DN500, including pipe-flange junctions.	Base	No.	2	23 000,00		46 000,00		46 000,00	-
	7-10	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	1 150,00	460,00	3 220,00		2 300,00	920,00
		Davtashen Verin Tank (7.2)								-	-
400	7-11	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	4	13 000,00		52 000,00		52 000,00	-
	7-12	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	4	650,00	260,00	3 640,00		2 600,00	1 040,00
		Fizaka Tank (7.3)								-	-
300	7-13	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-
	7-14	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
		Fizaka Cross Distribution Network (7.1.11)								-	-
300	7-15	Supply of the Inlet Pressure Regulation Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	7-16	Installation of the Inlet Pressure Regulation Valve including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	3 450,00	230,00	3 680,00		3 450,00	230,00
Lot e,8	ARZAQAN-GYUMUSH NETWORK									-	-
		Gyumush Pumping Station (8.1)								-	-
400	8-1	Supply of the Motorised Flow Control Valve for DN400, including pipe-flange junctions.	Base	No.	1	13 000,00		13 000,00		13 000,00	-
	8-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	650,00	260,00	910,00		650,00	260,00
		Nor Hachn Main Line (8.2)								-	-
Motor	8-3	Supply of the Motor for existing Valve.	Base	No.	2	10 000,00		20 000,00		20 000,00	-
	8-4	Installation of the Motor including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	3 000,00	200,00	6 400,00		6 000,00	400,00
		Davtasheni Kamurj Main Line (8.3.1)								-	-
400**	8-5	Supply of the Inlet Pressure Regulation Valve for DN400, including pipe-flange junctions.	Base	No.	1	13 000,00		13 000,00		13 000,00	-
	8-6	Installation of the Inlet Pressure Regulation Valve including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	3 900,00	260,00	4 160,00		3 900,00	260,00
		Lamper Tank (8.4.2)								-	-
Motor	8-7	Supply of the Motor for existing Valve.	Base	No.	4	10 000,00		40 000,00		40 000,00	-
	8-8	Installation of the Motor including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	4	3 000,00	200,00	12 800,00		12 000,00	800,00
		Jambul Tank (8.3.5)								-	-
500	8-9	Supply of the Motorised Flow Control Valve for DN500, including pipe-flange junctions.	Base	No.	2	23 000,00		46 000,00		46 000,00	-
	8-10	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	1 150,00	460,00	3 220,00		2 300,00	920,00
		Lukashin Tank (8.3.6)								-	-
300	8-11	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	2	11 500,00		23 000,00		23 000,00	-

Yerevan Scada System			Base / Option	Unit Միավոր	Quantity	French items Unit rate Ֆրանսիական ապրանք (€)	Local items unit rate [in EUR] Տեղական	TOTAL [in EUR] Ընդամենը		French items total Ֆրանսիական ապրանք (€)	Local items total [in EUR] Տեղական
	8-12	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	575,00	230,00	1 610,00		1 150,00	460,00
500	8-13	Supply of the Motorised Flow Control Valve for DN500, including pipe-flange junctions.	Base	No.	2	23 000,00		46 000,00		46 000,00	-
	8-14	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	1 150,00	460,00	3 220,00		2 300,00	920,00
Lot e,9	ARZNI NETWORK									-	-
		Arzni Pumping Station (9)								-	-
200	9-1	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	9-2	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
500	9-3	Supply of the Motorised Flow Control Valve for DN500, including pipe-flange junctions.	Base	No.	1	23 000,00		23 000,00		23 000,00	-
	9-4	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	1 150,00	460,00	1 610,00		1 150,00	460,00
400	9-5	Supply of the Motorised Section Valve for DN400, including pipe-flange junctions.	Base	No.	4	13 000,00		52 000,00		52 000,00	-
	9-6	Installation of the Motorised Section Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	4	650,00	260,00	3 640,00		2 600,00	1 040,00
		Andoy Domik Main Line (9.1.1)								-	-
600	9-7	Supply of the Motorised Flow Control Valve for DN600, including pipe-flange junctions.	Base	No.	2	32 000,00		64 000,00		64 000,00	-
	9-8	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	2	1 600,00	640,00	4 480,00		3 200,00	1 280,00
		Dinamo Tank (9.1.2)								-	-
200	9-9	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	9-10	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
		Kovkasyan Tank (9.2)								-	-
200	9-11	Supply of the Motorised Flow Control Valve for DN200, including pipe-flange junctions.	Base	No.	1	10 000,00		10 000,00		10 000,00	-
	9-12	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	500,00	200,00	700,00		500,00	200,00
300	9-13	Supply of the Motorised Flow Control Valve for DN300, including pipe-flange junctions.	Base	No.	1	11 500,00		11 500,00		11 500,00	-
	9-14	Installation of the Motorised Flow Control Valves including, the resumption of the conduct, the power supply and protection, the cabling and all the necessary accessories.	Base	No.	1	575,00	230,00	805,00		575,00	230,00
e) MOTORISED VALVES - Total								1 716 550,00		1 685 000,00	31 550,00
										98,2%	1,8%

6. ANNEX 2

Some existing equipments



Mechanical Flowmeter (Sensus)



Flowmeter Converter on batterie.



Flowmeter Converter on network with inverter and transmitter of data



Level indicator in a reservoir.





Data Logger for Flowmeter.



Transmitter GSM



Transmitter antenna GSM



Clorine injector



Chlorination dosimeter



Chlorination dosimeter



Gaseous Chlorine Detector



Existing Sensus Mechanical Flowmeter



Chlorination Dosimeter with Locator Datalogger



Flowmeter Transducer with Locator Datalogger

7. ANNEX 3

Repère	Intitulé	Rév.
AP 01 001	Ville de Yérévan - Synoptique Télégestion – Réseau n°1 Garni	A
AP 01 002	Ville de Yérévan - Synoptique Télégestion – Réseau n°2 Katnaghbyur	A
AP 01 003	Ville de Yérévan - Synoptique Télégestion – Réseau n°3 Araratyan	A
AP 01 004	Ville de Yérévan - Synoptique Télégestion – Réseau n°4 Dzoraghbyur-Yerges	A
AP 01 005	Ville de Yérévan - Synoptique Télégestion – Réseau n°5 Tsaravaghbyur	A
AP 01 006	Ville de Yérévan - Synoptique Télégestion – Réseau Réseau n°6 Shor-Shor	A
AP 01 007	Ville de Yérévan - Synoptique Télégestion – Réseau n°7 Aparan	A
AP 01 008	Ville de Yérévan - Synoptique Télégestion – Réseau n°8 Arzaqan Gyumush	A
AP 01 009	Ville de Yérévan - Synoptique Télégestion – Réseau n°9 Arzni	A
AP 01 010	Ville de Yérévan - Réseau d'alimentation en eau potable	A
AP 01 011	Ville de Yérévan - Réseau d'alimentation en eau potable	A

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