

## D.7.5 Computer Aided Tariff Collection System

### D.7.5.2 Master Plans and Feasibility Analysis

#### (1) Questionnaires

Table D.7.5.1 Questionnaire for Staffs

City	Tashkent	Chirchik	Total
<b>1. Meter Reading</b>			
<b>1.1 How long does it take you to prepare data to input the computer (10 data, average)?</b>			
(1) I do not prepare data (0 minute)	0	0	0
(2) 5 minutes or less	4	1	5
(3) about 10 minutes	0	0	0
(4) about 20 minutes	6	0	6
(5) about 30 minutes	1	0	1
(6) more than 30 minutes	2	0	2
Others, No Answer	0	0	0
<b>TOTAL</b>	<b>13</b>	<b>1</b>	<b>14</b>

<b>1.2 How long does it take you to input the data into the computer system (10 data, average)?</b>			
1 min. - 5 min.	0	0	0
6 min. - 10 min.	6	1	7
11 min. - 20 min.	5	1	6
21 min. -	2	0	2
Others, No Answer	0	0	0
<b>TOTAL</b>	<b>13</b>	<b>2</b>	<b>15</b>
<b>Average (min.)</b>	<b>15.4</b>	<b>12.5</b>	<b>15.0</b>

<b>1.3 How long do you estimate to reduce the time of inputting data if a format which specifies data?</b>			
(1) No time to be reduced.	0	0	0
(2) To be reduced.			
1 min. - 5 min.	13	1	14
6 min. - 10 min.	0	0	0
11 min. - 20 min.	0	0	0
21 min. -	0	0	0
Others, No Answer	0	1	1
<b>TOTAL</b>	<b>13</b>	<b>2</b>	<b>15</b>
<b>Average (min.)</b>	<b>1.3</b>	<b>1.0</b>	<b>1.3</b>

City	Tashkent	Chirchik	Total
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2 Billing

2.1 How long does it take to check the amount of water tariff (10 data, average)?			
1 min. - 5 min.	0	0	0
6 min. - 10 min.	8	1	9
11 min. - 20 min.	1	1	2
21 min. -	4	0	4
Others, No Answer	0	0	0
TOTAL	13	2	15
Average (min.)	18.5	14.0	17.9

2.2 How long is it longer to spend for billing to meter users than to norm users (10 data, average)?			
(1) not longer	6	0	6
(2) 1 minute	0	0	0
(3) 2 minutes	0	0	0
(4) 5 minutes	2	0	2
(5) 10 minutes	0	1	1
(6) more than 10 minutes	5	1	6
Others, No Answer	0	0	0
TOTAL	13	2	15

City	Tashkent	Chirchik	Total
3 Collection			
3.1 How long does it take to gather the whole information of tariff collection(e.g., from bank,			
(1) 2, 3 days	4	0	4
(2) 1 week	8	0	8
(3) 2 weeks	0	0	0
(4) 3 weeks	1	0	1
(5) 4 weeks	0	0	0
(6) 1 month	0	2	2
Others, No Answer	0	0	0
TOTAL	13	2	15

3.2 How long does it take to arrange the data of collection (10 data, average, e.g., check, copy.			
(1) 5 minutes or less	0	0	0
(2) about 10 minutes	0	0	0
(3) about 15 minutes	0	0	0
(4) about 20 minutes	1	0	1
(5) about 30 minutes	3	0	3
(6) more than 30 minutes	8	1	9
Others, No Answer	0	1	1
TOTAL	12	2	14

3.3 How long does it take to input the tariff collection data into the computer system (10 data,			
1 min. - 5 min.	0	0	0
6 min. - 10 min.	0	1	1
11 min. - 20 min.	0	0	0
21 min. -	0	0	0
Others, No Answer	13	1	14
TOTAL	13	2	15
Average (min.)	#DIV/0!	10.0	10.0

Table D.7.5.2 Questionnaire for Controllers

City	Tashkent	Chirchik	Total
<b>1. General Matters</b>			
<b>1.1 What kind of users do you take in charge?</b>			
(1) Industry	2	0	2
(2) Communal Services Sector	2	0	2
(3) House	2	0	2
(4) Apartment	1	3	4
Others, No Answer	0	3	3
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>
<b>1.2 How many users do you take in charge?</b>			
1 users - 50 users	1	0	1
51 users - 200 users	2	0	2
201 users - 1000 users	3	0	3
1001 users -	0	3	3
Others, No Answer	1	3	4
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>
Average (users)	287.7	1,278.7	618.0
<b>1.3 How often do you come to the Vodokanal Office?</b>			
(1) Several times a day	0	0	0
(2) Once a day	4	6	10
(3) Once a few days	1	0	1
(4) Once a week	2	0	2
Others, No Answer	0	0	0
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>
<b>1.4 What do you usually do at the Vodokanal Office?</b>			
(1) Meeting	0	0	0
(2) Reporting	0	0	0
(3) Arranging data	0	0	0
(4) Surveying	0	1	1
(5) Other	0	1	1
Other, No Answer	7	4	11
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>
<b>1.5 Have you ever used a personal computer?</b>			
(1) Yes, usually	1	1	2
(2) Yes, sometimes	0	0	0
(3) Yes, but a few times	0	0	0
(4) No	6	4	10
Others, No answer	0	1	1
<b>TOTAL</b>	<b>7</b>	<b>6</b>	<b>13</b>

City	Tashkent	Chirchik	Total
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2 Meter Reading

2.1 What percentage of your total working time do you spend for meter reading?			
0 %	0	0	0
1 % - 20 %	5	0	5
21 % - 50 %	1	3	4
51 % -	0	0	0
Others, No Answer	1	3	4
TOTAL	7	6	13
Average (%)			

2.2 What percentage of your total working time do you spend for compiling meter reading data?			
0 %	0	0	0
1 % - 20 %	5	3	8
21 % - 50 %	1	0	1
51 % -	0	0	0
Others, No Answer	1	3	4
TOTAL	7	6	13
Average (%)			

2.3 How many sites do you visit for meter reading every day on average?			
1 sites - 10 sites	4	0	4
11 sites - 50 sites	1	3	4
51 sites - 100 sites	1	0	1
101 sites -	0	0	0
Others, No Answer	1	3	4
TOTAL	7	6	13
Average (sites)	24.3	17.3	22.0

2.4 How long does it take you to complete the meter reading for one site on average?			
1 min. - 5 min.	0	0	0
6 min. - 10 min.	1	3	4
11 min. - 20 min.	3	0	3
21 min. -	2	0	2
Others, No Answer	1	3	4
TOTAL	7	6	13
Average (min.)	20.3	10.0	16.9

2.5 Do you conduct meter reading on weekends?			
(1) Yes, often.	0	0	0
(2) Yes, sometimes.	3	0	3
(3) No, almost not.	2	1	3
(4) Never.	2	5	7
Others, No Answer	0	0	0
TOTAL	7	6	13

	City	Tashkent	Chirchik	Total
2.6	If a format is used for meter reading, do you think that the time for preparation of compiling meter reading data is reduced?			
(1)	No time to be reduced.	0	0	0
(2)	To be reduced.			
	1 min. - 5 min.	3	3	6
	6 min. - 10 min.	0	0	0
	11 min. - 30 min.	1	0	1
	31 min. -	0	0	0
	Others, No Answer	3	3	6
	TOTAL	7	6	13
	Average (min.)	4.5	1.0	3.0

### 3. Billing

3.1	What percentage of your total working time do you spend for billing (excluding meter reading)?			
	0 %	0	0	0
	1 % - 20 %	3	2	5
	21 % - 50 %	0	0	0
	51 % -	0	0	0
	Others, No Answer	4	4	8
	TOTAL	7	6	13
	Average (%)			

3.2	For how many users do you usually bring the new Customer Book to their houses at the			
	1 user - 10 users	0	0	0
	11 users - 50 users	0	0	0
	51 users - 100 users	0	0	0
	101 users -	1	6	7
	Others, No Answer	6	0	6
	TOTAL	7	6	13
	Average (users)	700.0	601.5	615.6

3.3	How long is it longer to spend for billing to meter users than to norm users (10 data, average)?			
(1)	not longer	2	0	2
(2)	1 minute	0	0	0
(3)	2 minutes	0	0	0
(4)	5 minutes	0	3	3
(5)	10 minutes	1	0	1
(6)	more than 10 minutes	0	3	3
	Others, No Answer	4	0	4
	TOTAL	7	6	13

City	Tashkent	Chirchik	Total
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4. Collection

4.1 What percentage of your total working time do you spend for tariff collection?			
0 %	0	0	0
1 % - 20 %	2	0	2
21 % - 50 %	0	3	3
51 % -	1	3	4
Others, No Answer	4	0	4
TOTAL	7	6	13
Average (%)			

4.2 What percentage of your total working time do you spend for arranging data of tariff			
0 %	0	0	0
1 % - 20 %	2	1	3
21 % - 50 %	1	5	6
51 % -	0	0	0
Others, No Answer	4	0	4
TOTAL	7	6	13
Average (%)			

4.3 How long does it take to arrange the data of collection (10 data, average)?			
(1) I do not arrange data (0 minute).	1	0	1
(2) 5 minutes or less	0	0	0
(3) about 10 minutes	0	1	1
(4) about 20 minutes	0	4	4
(5) about 30 minutes	1	0	1
(6) more than 30 minutes	1	1	2
Others, No Answer	4	0	4
TOTAL	7	6	13

4.4 Have you ever received part (not full amount) of water tariff from users?			
(1) Yes, often.	0	6	6
(2) Yes, sometimes.	3	0	3
(3) No, almost not.	0	0	0
(4) Never.	4	0	4
Others, No Answer	0	0	0
TOTAL	7	6	13

City	Tashkent	Chirchik	Total
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5. Unpaid Control

5.1 What percentage of your total working time do you spend for controlling overdue users?

0 %	0	0	0
1 % - 20 %	4	2	6
21 % - 50 %	2	4	6
51 % -	0	0	0
Others, No Answer	0	0	0
TOTAL	6	6	12
Average (%)			

5.2 How many overdue users do you usually have on average?

1 user - 10 users	1	0	1
11 users - 50 users	2	5	7
51 users - 100 users	2	1	3
101 users -	2	0	2
Others, No Answer	0	0	0
TOTAL	7	6	13
Average (users)	92.1	36.7	66.5

5.3 How many unpaid users do you visit every day on average?

1 user - 10 users	4	3	7
11 users - 20 users	0	0	0
21 users - 50 users	3	3	6
51 users -	0	0	0
Others, No Answer	0	0	0
TOTAL	7	6	13
Average (users)	13.1	17.0	#DIV/0!

5.4 How long does it take to visit an overdue user on average?

1 min. - 5 min.	0	3	3
6 min. - 10 min.	1	3	4
11 min. - 30 min.	4	0	4
31 min. -	2	0	2
Others, No Answer	0	0	0
TOTAL	7	6	13
Average (Min.)	28.6	7.2	18.7

5.5 Have you ever suspended the water supply actually?

(1) Yes, often.	2	2	4
(2) yes, sometimes.	2	4	6
(3) No, almost not.	1	0	1
(4) Never.	2	0	2
Others, No Answer	0	0	0
TOTAL	7	6	13



Table D.7.5.3 Questionnaire at Tariff Collection Seminar

City	Tashkent	Chirchik	Total
<b>1. Meter Reading</b>			
<b>1.1 Do you think that it is possible to use handy terminal for meter reading?</b>			
(1) Yes, absolutely.	4	20	24
(2) Yes, maybe.	2	4	6
(3) No, a little difficult.	4	1	5
(4) Never.	0	0	0
Others, No Answer.	0	0	0
<b>TOTAL</b>	<b>10</b>	<b>25</b>	<b>35</b>

<b>1.2 Do you think that controllers can operate personal computers to input the data of meter reading by themselves?</b>			
(1) Yes, absolutely.	3	20	23
(2) Yes, maybe.	6	5	11
(3) No, a little difficult.	1	0	1
(4) Never.	0	0	0
Others, No Answer.	0	0	0
<b>TOTAL</b>	<b>10</b>	<b>25</b>	<b>35</b>

<b>1.3 Suppose that a controller reads the water meter without users' witnessing and issue the bill he brings (not Customer's Book). What percentage of the time for meter reading do you think will be reduced on average?</b>			
<b>1) For enterprise users</b>			
0 %	0	0	0
1 % - 10 %	0	0	0
11 % - 20 %	2	7	9
21 % -	6	14	20
Others, No Answer.	2	4	6
<b>TOTAL</b>	<b>10</b>	<b>25</b>	<b>35</b>

<b>2) For population users</b>			
0 %	0	0	0
1 % - 10 %	0	1	1
11 % - 20 %	1	6	7
21 % -	7	17	24
Others, No Answer.	2	1	3
<b>TOTAL</b>	<b>10</b>	<b>25</b>	<b>35</b>

City	Tashkent	Chirchik	Total
1.4	Suppose that a controller uses handy terminal for meter reading. What percentage of the time for meter reading do you think will be reduced on average?		
1)	For enterprise users		
0 %	0	0	0
1 % - 10 %	0	0	0
11 % - 20 %	0	0	0
21 % -	8	22	30
Others, No Answer.	2	3	5
TOTAL	10	25	35

2)	For population users		
0 %	0	0	0
1 % - 10 %	0	0	0
11 % - 20 %	0	3	3
21 % -	7	22	29
Others, No Answer.	3	0	3
TOTAL	10	25	35

## 2. Billing

2.1	Suppose that the formula of water tariff is more complex than the current one. Do you think it appropriate to calculate the tariff not at the site but at the office later, and send the bill to user?			
(1)	Yes.	10	21	31
(2)	No.	0	4	4
	Others, No Answer.	0	0	0
	TOTAL	10	25	35

2.2	Without user's witnessing the meter reading, do you think that the user pay appropriately according to the bill?			
(1)	Yes, absolutely.	2	11	13
(2)	Yes, maybe.	5	11	16
(3)	No, almost not.	3	3	6
(4)	Never.	0	0	0
	Others, No Answer.	0	0	0
	TOTAL	10	25	35

## 3. Collection

3.1	What percentage of population users do you think will agree to pay by withdrawing from their bank accounts, if they are requested to do so by Vodokanal?			
	0 %	1	0	1
	1 % - 10 %	4	2	6
	11 % - 50 %	3	13	16
	51 % -	1	10	11
	Others, No Answer.	1	0	1
	TOTAL	10	25	35

City	Tashkent	Chirchik	Total
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4. Unpaid Control

4.1 Do you think it appropriate to send notification several times and then to visit the unpaid users for the first time?

(1) Yes.	8	20	28
(2) No.	2	5	7
Others, No Answer.	0	0	0
TOTAL	10	25	35

4.2 Do you think that unpaid user settles the bill according to notification instead of visiting him?

(1) Yes, absolutely.	3	12	15
(2) Yes, maybe.	7	5	12
(3) No, almost not.	0	8	8
(4) Never.	0	0	0
Others, No Answer	0	0	0
TOTAL	10	25	35

4.3 How do you think that some controllers only read meters while others only collect tariff?

1) (1) Efficient	2	9	11
(2) Inefficient	1	1	2
Others, No Answer	7	15	22
TOTAL	10	25	35

2) (1) Good.	5	11	16
(2) Bad.	0	0	0
Others, No Answer.	5	14	19
TOTAL	10	25	35

3) (1) Easy	1	2	3
(2) Difficult	1	2	3
Others, No Answer.	8	21	29
TOTAL	10	25	35

5. Other

5.1 If controllers are grouped by task functions, meter reading, unpaid user control, etc, do you (if you were a controller) want to belong to the section for operating the computer systems?

(1) Yes, pleased.	1	18	19
(2) Yes, want to try.	9	7	16
(3) No, if it can.	0	0	0
(4) Never.	0	0	0
Others, No Answer.	0	0	0
TOTAL	10	25	35





