“AZERENERJI” JSC

Azerbaijan Scaling-Up Renewable Energy Project

Environmental and Social Impact Assessment Report

Part 2: Annexes

Client: **“AzerEnerji” OJSC**

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Annex 1. Fieldwork and Laboratory Analysis Results: Surface Water Resources

Table 1.1. Coordinates and characteristics of surface water sampling stations

№	Station	Coordinates	Note	Illustrative picture
1	**WQ1**	40°42'48.46" 47° 0'18.51"	Kurakchay river, 0.3 km to the west of Huruushaghi village	
2	**WQ2**	40°42'27.60" 47° 3'56.33"	Kur river, 4 km to the southwest of Huruushaghi village	
3	**WQ 3**	40°45'19.09" 47°13'3.85"	Alijanchay river, 1.3 km to the north of Yukhari Bujag village, 2 km to the north of Arabbasra village	

№	Station	Coordinates	Note	Illustrative picture
4	**WQ 4**	40°45'39.00" 47°13'42.93"	Upper Shirvan canal, 2 km to the south of Shilyan village, 2 km to the northeast of Arabbasra village	
5	**WQ 5**	40°42'2.82" 47°32'46.26"	Turyanchay river, 0.2 km to the north of Turyanchay village	
6	**WQ6**	40°40'5.71" 47°45'40.77"	Goychay river, northeastern suburbs of Goychay town	

№	Station	Coordinates	Note	Illustrative picture
7	**WQ7**	40°35'51.94" 47°59'56.12"	Davabatanchay river, 1.5 km to the southwest of Garamaryam settlement	
8	**WQ8**	40°34'40.20" 48°11'57.15"	Girdimanchay river, 2.6 km to the southwest of Padar village	
9	**WQ9**	40°32'28.80" 48°23'47.57"	Aghsuchay river, 1 km to the southeast of Ulguj village, 1.5 km to the northwest of Arabushaghi village	

№	Station	Coordinates	Note	Illustrative picture
10	**WQ10**	40° 4'31.00" 49° 3'43.19"	Pirsaatchay river, 0.7 km to the south of Ranjbar village	

Table 1.2. Physical parameters of water samples

#	Station ID	Sampling date	Sampling time	DO	Temp.	Turb.	Eh/re. poten	pH	TDS	Conduct.
				mg/l	℃	ntu	mV		mg/l	µS/cm
1	WQ1	26.07.24	09:00	9.7	19.5	45.47	-64.2	8.17	256	531
2	WQ2	25.07.24	09:00	9.5	20.6	3.25	-93.5	8.64	632	1270
3	WQ3	26.07.24	09:40	8.3	17.2	>999.00	-52.3	7.95	321	645
4	WQ4	26.07.24	10:00	10.2	22.1	10.31	-59.9	8.03	490	980
5	WQ5	25.07.24	10:00	8.6	18.6	>999.00	-41.1	7.75	423	850
6	WQ6	25.07.24	11:30	8.2	19.3	>999.00	-73.8	8.28	386	775
7	WQ7	26.07.24	11:40	10.1	22.7	77.21	-36.4	7.67	377	755
8	WQ8	26.07.24	12:00	9.3	23.5	73.05	-56.3	7.99	335	670
9	WQ9	25.07.24	13:00	10.2	19.1	>999.00	-9.6	7.16	552	1105
10	WQ10	25.07.24	15:00	8.9	25.8	94.56	3.4	6.94	1145	2298

Table 1.3. Sample analysis results

Standards		Parameter	Sampling locations									
AZE	EU		WQ-1	WQ-2	WQ-3	WQ-4	WQ-5	WQ-6	WQ-7	WQ-8	WQ-9	WQ-10
6.5-9.5	6.5-8.5	pH [1)]	8.17	8.64	7.95	8.03	7.75	8.28	7.67	7.99	7.16	6.94
<20	-	Temperature, ^oC [1)]	19.5	20.6	17.2	22.1	18.6	19.3	22.7	23.5	19.1	25.8
<3	2.6	Turbidity, NTU [1)]	45.47	3.25	>999.00	10.31	>999.00	>999.00	77.21	73.05	>999.00	94.56
		Dissolved oxygen, mg/l O_2 [1)]	9.7	9.5	8.3	10.2	8.6	8.2	10.1	9.3	10.2	8.9
1000(1500)	500	TDS, mg/l [1)]	256	632	321	490	423	386	377	335	552	1145
<2500	2500	Conductivity, µS/cm [1)]	531	1270	645	980	850	775	755	670	1105	2298
-	-	Eh / redox potential, mV [1)]	-64.2	-93.5	-52.3	-59.9	-41.1	-73.8	-36.4	-56.3	-9.6	3.4
500	250	Sulphates, mg/l SO4	48	106	93	125	75	54	68	112	253	589
0.5	0.2	Ammonium, mg/l NH4-N#	<0,03	<0.03	<0,03	<0,03	<0.03	<0.03	<0,03	<0,03	<0.03	0.1
3.5	1	Phosphates, mg/l PO4-P	<0,002	<0.002	<0,002	<0,002	0.017	0.015	<0,002	<0,002	<0.002	0.011
1.3	-	Barium (Ba), mg/l	0.039	0.043	0.048	0.027	0.054	0.055	0.066	0.031	0.044	0.062
0.001	0.005	Cadmium (Cd), mg/l	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
1	2	Copper (Cu), mg/l	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
0.01	0.01	Lead (Pb), mg/l	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
5	5	Zinc (Zn), mg/l	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
0.1	0.01	Cobalt (Co), mg/l	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
0.07	0.02	Nickel (Ni), mg/l	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Standards		Parameter	Sampling locations									
AZE	EU		WQ-1	WQ-2	WQ-3	WQ-4	WQ-5	WQ-6	WQ-7	WQ-8	WQ-9	WQ-10
0.1	-	Vanadium (V), mg/l	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
0.05	0.05	Chromium (Cr), mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
0.01	0.01	Arsenic (As), mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
0.0005	0.001	Mercury (Hg), mg/l	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
0.1	100	TPH, mg/l #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
-	100	BOD, mg/l	<1	<1	<1	1.2	<1	<1	<1	<1	<1	2.6
-	10	COD, mg/l	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
0	0	Total Coliforms, cfu/100ml#	2400	4200	$12*10^3$	3800	$11*10^3$	300	1500	4100	$13*10^3$	4700
0	0	E-Col, cfu/100ml i#	80	100	150	65	200	100	32	23	1700	16

Method is not accredited under ISO 17025, accreditation number AB-1685-T

Annex 2. Fieldwork and Laboratory Analysis Results: Soils

Table 2.1. Coordinates and characteristics of surface soil sampling stations

№	Station	Coordinates	Note	Illustrative picture
1	**SQ1**	40°45'37.57" 46°57'42.22"	1.2 km west of Secondary School No. 5 in Mingachevir city, cultivated field	
2	**SQ2**	40°44'58.98" 47°11'52.95"	Northeast of Gulovsha village, 0.1 km west of the brick production area	
3	**SQ 3**	40°40'7.78" 47°36'24.99"	0.8 km east of Arab village Pasture	

№	Station	Coordinates	Note	Illustrative picture
4	**SQ4**	40°34'7.74" 48°13'55.14"	1.2 km north of Beyimly village, 1.7 km southwest of Padar village Cultivated field	
5	**SQ5**	40°11'38.69" 48°48'11.43"	0.6 km east of the Hajigabul-Poladly road, 4 km southwest of the mud volcano Winter pasture	
6	**SQ6**	39°57'31.95" 49°20'26.22"	1.3 km south of the Baku-Alat-Gazakh-Georgia highway Pasture	
7	**SQ7**	40°13'51.16" 49°18'46.38"	0.16 km south of the Papaqdag, Sangachal-Jeyildag road Pasture next to the winter farm	

№	Station	Coordinates	Note	Illustrative picture
8	**SQ8**	40°27'25.85" 49°29'1.07"B	2.2 km southeast of the Baku-Shamakhi-Yevlakh road, 0.9 km south of AzerSpace	

Table 2.2. Soil sample analysis results

Azerbaijan MACs	EU Standards	Parameter	SQ-1	SQ-2	SQ-3	SQ-4	SQ-5	SQ-6	SQ-7	SQ-8
	5-8,5	pH (1:1)	8.1	7.3	6.9	7	8.6	8.2	7.8	8.3
	-	Sulphates in soil (acid extractable) #	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
-	-	Nitrates, mg/kg NO_3 #	4.5	8.2	11.3	14	14	7.5	6.9	5.2
	-	Phosphates, mg/kg PO_4 #	341	99	135	48	21	76	126	43
	-	Ammonium, mg/kg NH4#	6.9	7.1	8.1	8.7	6.2	7.7	8.3	7.1
500	-	TPH, mg/kg #	19	22.8	14.8	21.7	13.5	18.3	20.7	21.8
	200	Barium (Ba), mg/kg	92	117	126	187	80	114	98	119
0.5	1	Cadmium (Cd), mg/kg	0.17	0.25	0.33	0.3	0.46	0.19	0.16	0.34
500	100	Copper (Cu), mg/kg	33	26	34	39	32	23	31	29
32	40	Lead (Pb), mg/kg	4.9	4.2	5.1	5.7	5.9	4.6	5.3	4.8
500	300	Zinc (Zn), mg/kg	49	41	46	47	37	33	42	41
5	-	Cobalt (Co), mg/kg	11	13	9	15	11	14	13	7
30	30	Nickel (Ni), mg/kg	21	26	34	32	39	38	24	18
6	2000	Chromium (Cr), mg/kg	23	22	28	36	31	32	42	25
2	40	Arsenic (As), mg/kg	1	3.4	2.2	1.3	4.8	1.9	3.1	2.6
2.1	0,1	Mercury (Hg), mg/kg#	0.4	0.029	0.016	0.013	0.019	0.028	0.012	0.033
-	55000	Iron (Fe), mg/kg	27467	31477	27589	37070	28478	34384	30251	26435
1500	-	Manganese (Mn), mg/kg	764	834	1042	1017	1065	975	889	1017

Annex 3. Fieldwork and Laboratory Analysis Results: Air quality, Noise & Vibration

Table 3.1. Coordinates and characteristics of surface air quality, noise & vibration monitoring stations

№	Station	Coordinates	Note	Illustrative picture
1	**AP1**	40°46'15.58" 46°59'18.67"	Mingachevir: pasture area 0.25 km south of Azerbaijan TPP, north of Yeni Hayat settlement	
2	**AP2**	40°46'4.30" 46°58'0.75"	Mingachevir: 1 km west of Yeni Hayat settlement, near private farm buildings	
3	**AP3**	40°42'55.06" 47° 0'32.95"	0.08 km east of Mingachevir highway, private farm at the entrance of Huruushagi village	

№	Station	Coordinates	Note	Illustrative picture
4	**AP4**	40°44'1.31" 47° 6'28.90"	Havarli village: mowing area 1.1 km south of Mingachevir highway	
5	**AP5**	40°44'49.54" 47° 9'4.60"	Agsham village: private farm 1.4 km north of Khaldan-Mingachevir road	
6	**AP6**	40°44'46.87" 47°12'10.89"	Gulovshe village: unused land 0.09 km west of Yevlakh-Zagatala-Georgia highway	
7	**AP7**	40°42'6.20" 47°32'29.85"	Turyanchay village: mowing area 0.013 km east of Aghdash-Zaraghan road	

№	Station	Coordinates	Note	Illustrative picture
8	AP8	40°40'20.40" 47°35'42.97"	Arab village: private farm 4 km west of Baku-Shamakhi-Yevlakh highway	
9	AP9	40°40'8.45" 47°45'24.19"	Goychay town: riverside pasture area 3.7 km north of Baku-Shamakhi-Yevlakh highway	
10	AP10	40°32'11.28" 48°25'58.95"	Dashdemirbeyli village: pasture area 1.1 km west of Aghsu-Bijo road	
11	AP11	40°29'8.10" 48°33'47.29"	Gashad village: private farm 0.035 km north of Aghsu-Bijo road	

№	Station	Coordinates	Note	Illustrative picture
12	**AP12**	40°27'48.10" 48°36'14.58"	Baghirli village: private farm 1.5 km northeast of Aghsu-Bijo road	
13	**AP13**	40° 2'44.65" 49° 6'33.82"	Navahi settlement: pasture area 2.0 km north of Baku-Alat-Gazakh-Georgia highway	
14	**AP14**	40° 0'8.29" 49°13'14.42"	Qizilburun village: private farm 2.1 km north of Baku-Alat-Gazakh-Georgia highway	
15	**AP15**	40°13'44.82" 49°19'9.90"	Mt. Papagdagh: winter pasture 0.4 km south of Sangachal-Jeyildagh road	

№	Station	Coordinates	Note	Illustrative picture
16	**AP16**	40°25'14.76" 49°30'47.76"	7.5 km west of Sahil-Mushfigabad road	
17	**AP17**	40°25'43.33" 49°40'6.05"	Gobu PP area: 3.0 km south of Baku-Shamakhi-Yevlakh highway	

Table 4.2. Air quality, noise and vibration monitoring results

Station: AP-1 40°46'15.58" 46°59'18.67"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
24/07/2024	09:00	54.7	52.3	52.6	60.1	<0,1	9	21	44	20.9	2.12	585	0.49	<0,01	<0,01	0.06	0.31
24/07/2024	14:30	58.5	54.8	61.4	66.7	<0,1	8	22	47	20.9	1.24	592	0.03	0.15	<0,01	0.08	0.27
24/07/2024	20:30	52.4	55.8	53.5	59.4	<0,1	10	17	37	20.9	1.95	621	0.24	0.19	0.02	0.09	0.15
25/07/2024	03:00	33.5	38.9	33.1	34.8	<0,1	9	14	28	20.9	1.22	566	0.18	<0,01	<0,01	0.08	0.12
Maximum		**58.5**	**55.8**	**61.4**	**66.7**	**<0,1**	**10**	**22**	**47**	**20.9**	**2.12**	**621**	**0.49**	**0.19**	**0.02**	**0.09**	**0.31**
Minimum		**33.5**	**38.9**	**33.1**	**34.8**	**<0,1**	**8**	**14**	**28**	**20.9**	**1.22**	**566**	**0.03**	**<0,01**	**<0,01**	**0.06**	**0.12**
Average		**49.8**	**50.5**	**50.2**	**55.3**	**<0,1**	**9**	**19**	**39**	**20.9**	**1.63**	**591**	**0.24**	**0.17**	**0.02**	**0.08**	**0.21**
Station: AP-2 40°46'4.30" 46°58'0.75"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
24/07/2024	09:40	51.1	48.8	49.9	52.7	<0,1	10	19	41	20.9	1.14	467	0.29	0.27	0.01	0.08	0.16
24/07/2024	15:10	48.6	49.4	52.7	50.3	<0,1	8	21	45	20.9	1.05	512	0.22	0.38	0.02	0.07	0.18
24/07/2024	21:10	48.2	47.5	50.6	53.5	<0,1	7	14	30	20.9	1.12	489	0.18	0.37	<0,01	0.05	0.17
25/07/2024	03:40	36.5	34.9	33.5	41.1	<0,1	11	12	25	20.9	1.26	476	0.15	0.12	0.02	0.08	0.18
Maximum		**51.1**	**49.4**	**52.7**	**53.5**	**<0,1**	**11**	**21**	**45**	**20.9**	**1.26**	**512**	**0.29**	**0.38**	**0.02**	**0.08**	**0.18**
Minimum		**36.5**	**34.9**	**33.5**	**41.1**	**<0,1**	**7**	**12**	**25**	**20.9**	**1.05**	**467**	**0.15**	**0.12**	**0.01**	**0.05**	**0.16**
Average		**46.1**	**45.2**	**46.7**	**49.4**	**<0,1**	**9**	**17**	**35**	**20.9**	**1.14**	**486**	**0.21**	**0.29**	**0.02**	**0.07**	**0.17**
Station: AP-3 40°42'55.06" 47° 0'32.95"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
24/07/2024	10:25	64.3	70.6	77.2	78.8	<0,1	8	21	40	20.9	1.21	526	0.31	0.17	0.04	0.06	0.35
24/07/2024	15:55	63.7	77.5	75.4	60.2	<0,1	10	24	48	20.9	0.99	519	0.23	0.23	0.03	0.04	0.28
24/07/2024	21:55	59.9	60.1	80.1	76.3	<0,1	7	14	30	20.9	1.15	521	0.17	0.12	0.04	0.05	0.31
25/07/2024	04:25	55.7	64.2	66.9	51.3	<0,1	8	11	23	20.9	1.18	529	0.35	0.06	0.01	0.08	0.29
Maximum		**64.3**	**77.5**	**80.1**	**78.8**	**<0,1**	**10**	**24**	**48**	**20.9**	**1.21**	**529**	**0.35**	**0.23**	**0.04**	**0.08**	**0.35**
Minimum		**55.7**	**60.1**	**66.9**	**51.3**	**<0,1**	**7**	**11**	**23**	**20.9**	**0.99**	**519**	**0.17**	**0.06**	**0.01**	**0.04**	**0.28**
Average		**60.9**	**68.1**	**74.9**	**66.7**	**<0,1**	**8**	**18**	**35**	**20.9**	**1.1**	**524**	**0.27**	**0.15**	**0.03**	**0.06**	**0.31**

Station: AP-4 40°44'1.31" 47° 6'28.90"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
24/07/2024	11:20	49.2	52.8	46.5	43.3	<0,1	11	12	26	20.9	1.73	346	0.22	0.05	0.01	0.09	0.62
24/07/2024	16:50	53.2	55.6	49.7	52.8	<0,1	8	16	35	20.9	1.82	339	0.16	0.12	0.04	0.05	0.39
24/07/2024	22:50	39.4	38.9	41.5	46.1	<0,1	9	9	20	20.9	0.67	342	0.07	0.14	0.01	0.06	0.53
25/07/2024	05:20	36.8	39.1	38.7	42.7	<0,1	12	7	15	20.9	1.16	323	0.18	0.09	0.02	0.05	0.42
Maximum		**53.2**	**55.6**	**49.7**	**52.8**	**<0,1**	**12**	**16**	**35**	**20.9**	**1.82**	**346**	**0.22**	**0.14**	**0.04**	**0.09**	**0.62**
Minimum		**36.8**	**38.9**	**38.7**	**42.7**	**<0,1**	**8**	**7**	**15**	**20.9**	**0.67**	**323**	**0.07**	**0.05**	**0.01**	**0.05**	**0.39**
Average		**44.7**	**46.6**	**44.1**	**46.2**	**<0,1**	**10**	**11**	**24**	**20.9**	**1.35**	**338**	**0.16**	**0.10**	**0.02**	**0.06**	**0.49**
Station: AP-5 40°44'49.54" 47° 9'4.60"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
24/07/2024	12:00	50.6	49.8	41.2	45.3	<0,1	7	19	57	20.9	1.43	368	0.06	0.35	0.03	0.07	0.45
24/07/2024	17:30	68.2	69.1	73.4	52.3	<0,1	11	25	46	20.9	1.65	376	0.03	0.48	0.01	0.09	0.57
24/07/2024	23:30	39.9	37.6	38.2	40.1	<0,1	10	23	35	20.9	1.25	377	0.09	0.36	0.03	0.02	0.52
25/07/2024	06:00	36.2	37.5	41.3	39.6	<0,1	8	19	42	20.9	1.34	365	0.07	0.14	0.01	0.04	0.41
Maximum		**68.2**	**69.1**	**73.4**	**52.3**	**<0,1**	**11**	**25**	**57**	**20.9**	**1.65**	**377**	**0.09**	**0.48**	**0.03**	**0.09**	**0.57**
Minimum		**36.2**	**37.5**	**38.2**	**39.6**	**<0,1**	**7**	**19**	**35**	**20.9**	**1.25**	**365**	**0.03**	**0.14**	**0.01**	**0.02**	**0.41**
Average		**48.7**	**48.5**	**48.5**	**44.3**	**<0,1**	**9**	**22**	**45**	**20.9**	**1.42**	**372**	**0.06**	**0.33**	**0.02**	**0.06**	**0.49**
Station: AP-6 40°44'46.87" 47°12'10.89"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
24/07/2024	12:45	66.4	62.3	60.4	69.2	<0,1	11	22	44	20.9	1.13	469	0.13	0.42	0.03	0.12	0.52
24/07/2024	18:15	63.8	63.4	66.2	68.5	<0,1	8	23	47	20.9	0.49	477	0.11	0.45	0.02	0.09	0.61
25/07/2024	00:15	61.2	58.9	62.9	61.8	<0,1	11	15	33	20.9	0.99	472	0.09	0.42	0.02	0.11	0.46
25/07/2024	06:45	64.8	69.5	65.6	63.3	<0,1	9	17	34	20.9	1.12	476	0.07	0.19	0.01	0.12	0.58
Maximum		**66.4**	**69.5**	**66.2**	**69.2**	**<0,1**	**11**	**23**	**47**	**20.9**	**1.13**	**477**	**0.13**	**0.45**	**0.03**	**0.12**	**0.61**
Minimum		**61.2**	**58.9**	**60.4**	**61.8**	**<0,1**	**8**	**15**	**33**	**20.9**	**0.49**	**469**	**0.07**	**0.19**	**0.01**	**0.09**	**0.46**
Average		**64.1**	**63.5**	**63.8**	**65.7**	**<0,1**	**10**	**19**	**40**	**20.9**	**0.93**	**474**	**0.10**	**0.37**	**0.02**	**0.11**	**0.54**

Station: AP-7 40°42'6.20" 47°32'29.85"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
23/07/2024	12:35	71.8	73.3	62.7	76.9	<0,1	9	27	61	20.9	1.69	549	0.12	0.27	0.01	0.08	0.36
23/07/2024	17:35	73.2	74.9	75.1	68.5	<0,1	10	26	56	20.9	1.28	553	0.14	0.35	0.02	0.11	0.29
24/07/2024	00:05	63.7	70.1	62.5	59.6	<0,1	9	16	35	20.9	1.12	551	0.08	0.12	0.01	0.05	0.31
24/07/2024	04:35	70.6	73.2	71.9	67.4	<0,1	9	20	42	20.9	1.16	548	0.11	0.23	0.02	0.09	0.42
Maximum		**73.2**	**74.9**	**75.1**	**76.9**	**<0,1**	**10**	**27**	**61**	**20.9**	**1.69**	**553**	**0.14**	**0.35**	**0.02**	**0.11**	**0.42**
Minimum		**63.7**	**70.1**	**62.5**	**59.6**	**<0,1**	**9**	**16**	**35**	**20.9**	**1.12**	**548**	**0.08**	**0.12**	**0.01**	**0.05**	**0.29**
Average		**69.8**	**72.9**	**68.1**	**68.1**	**<0,1**	**9**	**22**	**49**	**20.9**	**1.31**	**550**	**0.11**	**0.24**	**0.02**	**0.08**	**0.35**
Station: AP-8 40°40'20.40" 47°35'42.97"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
23/07/2024	11:50	38.5	40.6	41.2	35.4	<0,1	7	12	26	20.9	1.11	422	0.21	0.09	<0,01	0.05	0.27
23/07/2024	16:50	45.7	51.8	53.9	44.3	<0,1	8	15	35	20.9	0.97	416	0.19	0.05	0.01	0.04	0.16
23/07/2024	23:20	40.1	33.5	35.2	42.7	<0,1	8	14	31	20.9	0.56	411	0.09	0.14	0.02	0.04	0.22
24/07/2024	03:50	38.7	39.9	40.6	35.1	<0,1	9	9	22	20.9	0.92	423	0.13	0.08	<0,01	0.07	0.25
Maximum		**45.7**	**51.8**	**53.9**	**44.3**	**<0,1**	**9**	**15**	**35**	**20.9**	**1.11**	**423**	**0.21**	**0.14**	**0.02**	**0.07**	**0.27**
Minimum		**38.5**	**33.5**	**35.2**	**35.1**	**<0,1**	**7**	**9**	**22**	**20.9**	**0.56**	**411**	**0.09**	**0.05**	**<0,01**	**0.04**	**0.16**
Average		**40.8**	**41.5**	**42.7**	**39.4**	**<0,1**	**8**	**13**	**29**	**20.9**	**0.89**	**418**	**0.16**	**0.09**	**0.02**	**0.05**	**0.23**
Station: AP-9 40°40'8.45" 47°45'24.19"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
23/07/2024	11:00	51.3	55.9	61.2	49.9	<0,1	10	13	27	20.9	0.76	519	0.03	0.07	<0,01	0.13	0.15
23/07/2024	16:00	50.6	52.4	49.9	54.2	<0,1	8	22	46	20.9	1.23	523	0.07	0.19	0.03	0.08	0.23
23/07/2024	22:30	56.8	48.7	53.7	61.6	<0,1	10	15	34	20.9	1.39	512	0.02	0.05	0.02	0.12	0.15
24/07/2024	03:00	39.1	38.6	36.6	43.7	<0,1	7	9	20	20.9	1.12	514	0.11	0.08	0.01	0.03	0.18
Maximum		**56.8**	**55.9**	**61.2**	**61.6**	**<0,1**	**10**	**22**	**46**	**20.9**	**1.39**	**523**	**0.11**	**0.19**	**0.03**	**0.13**	**0.23**
Minimum		**39.1**	**38.6**	**36.6**	**43.7**	**<0,1**	**7**	**9**	**20**	**20.9**	**0.76**	**512**	**0.02**	**0.05**	**<0,01**	**0.03**	**0.15**
Average		**49.5**	**48.9**	**50.4**	**52.4**	**<0,1**	**9**	**15**	**32**	**20.9**	**1.13**	**517**	**0.06**	**0.10**	**0.02**	**0.09**	**0.18**

Station: AP-10 40°32'11.28" 48°25'58.95"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
22/07/2024	12:30	44.2	46.7	45.1	39.8	<0.1	7	12	26	20.9	1.23	569	0.02	0.05	0.05	0.11	0.09
22/07/2024	17:30	51.6	53.9	49.7	46.7	<0.1	9	11	26	20.9	1.52	587	0.01	0.07	0.02	0.07	0.16
22/07/2024	23:50	41.1	35.4	33.8	46.6	<0.1	10	13	29	20.9	1.15	576	0.03	0.11	0.03	0.04	0.11
23/07/2024	04:20	35.8	39.7	33.2	35.5	<0.1	7	7	15	20.9	0.96	573	0.02	0.08	0.02	0.06	0.21
Maximum		**51.6**	**53.9**	**49.7**	**46.7**	**<0.1**	**10**	**13**	**29**	**20.9**	**1.52**	**587**	**0.03**	**0.11**	**0.05**	**0.11**	**0.21**
Minimum		**35.8**	**35.4**	**33.2**	**35.5**	**<0.1**	**7**	**7**	**15**	**20.9**	**0.96**	**569**	**0.01**	**0.05**	**0.02**	**0.04**	**0.09**
Average		**43.2**	**43.9**	**40.5**	**42.2**	**<0.1**	**8**	**11**	**24**	**20.9**	**1.22**	**576**	**0.02**	**0.08**	**0.03**	**0.07**	**0.14**
Station: AP-11 40°29'8.10" 48°33'47.29"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
22/07/2024	12:50	72.5	73.8	68.6	75.8	<0.1	10	15	31	20.9	1.42	563	0.09	0.03	<0,01	0.06	0.48
22/07/2024	16:50	74.2	71.9	79.2	73.6	<0.1	8	14	30	20.9	0.88	562	0.05	<0,01	0.01	0.09	0.36
22/07/2024	23:10	61.5	75.2	71.5	55.4	<0.1	10	11	24	20.9	1.13	549	0.12	0.01	<0,01	0.05	0.42
23/07/2024	03:40	60.9	73.3	59.7	62.2	<0.1	11	12	26	20.9	0.76	531	0.03	0.01	0.01	0.08	0.33
Maximum		**74.2**	**75.2**	**79.2**	**75.8**	**<0.1**	**11**	**15**	**31**	**20.9**	**1.42**	**563**	**0.12**	**0.03**	**0.01**	**0.09**	**0.48**
Minimum		**60.9**	**71.9**	**59.7**	**55.4**	**<0.1**	**8**	**11**	**24**	**20.9**	**0.76**	**531**	**0.03**	**<0,01**	**<0,01**	**0.05**	**0.33**
Average		**67.3**	**73.6**	**69.8**	**66.8**	**<0.1**	**10**	**13**	**28**	**20.9**	**1.05**	**551**	**0.07**	**0.02**	**0.01**	**0.07**	**0.40**
Station: AP-12 40°27'48.10" 48°36'14.58"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
22/07/2024	11:00	52.4	56.6	63.1	54.7	<0.1	7	15	31	20.9	0.15	561	0.08	0.31	0.01	0.19	0.21
22/07/2024	16:00	58.1	61.3	59.8	62.4	<0.1	12	13	27	20.9	0.11	559	0.06	0.24	0.03	0.15	0.32
22/07/2024	22:30	45.3	39.9	43.5	50.1	<0.1	8	8	18	20.9	0.07	573	0.12	0.09	0.02	0.21	0.19
23/07/2024	03:00	38.6	35.7	40.2	33.9	<0.1	10	9	21	20.9	0.16	566	0.05	0.16	0.01	0.12	0.25
Maximum		**58.1**	**61.3**	**63.1**	**62.4**	**<0.1**	**12**	**15**	**31**	**20.9**	**0.16**	**573**	**0.12**	**0.31**	**0.03**	**0.21**	**0.32**
Minimum		**38.6**	**35.7**	**40.2**	**33.9**	**<0.1**	**7**	**8**	**18**	**20.9**	**0.07**	**559**	**0.05**	**0.09**	**0.01**	**0.12**	**0.19**
Average		**48.6**	**48.4**	**51.7**	**50.3**	**<0.1**	**9**	**11**	**24**	**20.9**	**0.12**	**565**	**0.08**	**0.20**	**0.02**	**0.17**	**0.24**

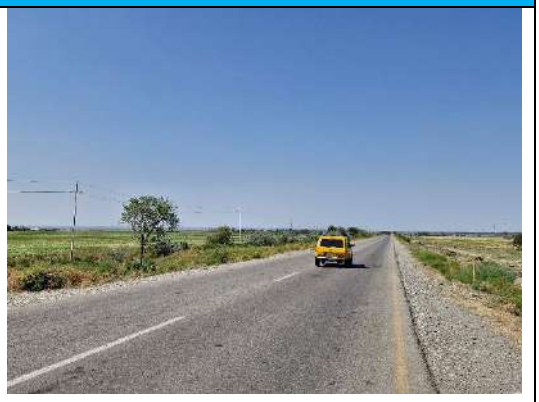
Station: AP-13 40° 2'44.65" 49° 6'33.82"																	48°25'58.95"
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
21/07/2024	12:45	48.9	56.9	46.7	39.7	<0.1	7	21	43	20.9	0.39	405	0.08	0.03	0.03	0.09	0.41
21/07/2024	18:35	51.4	53.2	42.3	73.1	<0.1	10	14	30	20.9	0.41	439	0.09	0.03	0.01	0.08	0.26
22/07/2024	01:20	33.7	31.5	36.3	45.5	<0.1	9	8	16	20.9	0.26	422	0.06	0.02	0.01	0.12	0.15
22/07/2024	08:20	44.8	40.6	51.1	37.9	<0.1	12	11	25	20.9	0.22	428	0.07	0.05	<0,01	0.06	0.31
Maximum		**51.4**	**56.9**	**51.1**	**73.1**	**<0.1**	**12**	**21**	**43**	**20.9**	**0.41**	**439**	**0.09**	**0.05**	**0.03**	**0.12**	**0.41**
Minimum		**33.7**	**31.5**	**36.3**	**37.9**	**<0.1**	**7**	**8**	**16**	**20.9**	**0.22**	**405**	**0.06**	**0.02**	**<0,01**	**0.06**	**0.15**
Average		**44.7**	**45.6**	**44.1**	**49.1**	**<0.1**	**10**	**14**	**29**	**20.9**	**0.32**	**424**	**0.08**	**0.03**	**0.02**	**0.09**	**0.28**
Station: AP-14 40° 0'8.29" 49°13'14.42"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
21/07/2024	12:10	62.4	61.7	54.8	65.5	<0.1	7	20	41	20.9	1.12	481	0.07	0.06	0.01	0.13	0.41
21/07/2024	17:50	65.1	68.9	63.1	52.3	<0.1	8	18	40	20.9	0.76	469	0.12	0.05	<0,01	0.12	0.48
22/07/2024	00:30	34.5	36.9	30.8	31.1	<0.1	12	7	15	20.9	0.84	470	0.11	0.14	0.02	0.15	0.26
22/07/2024	07:30	36.8	31.5	34.4	40.6	<0.1	7	10	24	20.9	0.25	475	0.08	0.08	<0,01	0.08	0.32
Maximum		**65.1**	**68.9**	**63.1**	**65.5**	**<0.1**	**12**	**20**	**41**	**20.9**	**1.12**	**481**	**0.12**	**0.14**	**0.02**	**0.15**	**0.48**
Minimum		**34.5**	**31.5**	**30.8**	**31.1**	**<0.1**	**7**	**7**	**15**	**20.9**	**0.25**	**469**	**0.07**	**0.05**	**<0,01**	**0.08**	**0.26**
Average		**49.7**	**49.8**	**45.8**	**47.4**	**<0.1**	**9**	**14**	**30**	**20.9**	**0.74**	**474**	**0.10**	**0.08**	**0.02**	**0.12**	**0.37**
Station: AP-15 40°13'44.82" 49°19'9.90"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
21/07/2024	11:10	45.9	52.3	44.8	42.5	<0.1	7	12	25	20.9	1.32	461	0.13	0.05	0.01	0.12	0.12
21/07/2024	16:50	51.1	42.9	50.3	65.7	<0.1	8	19	42	20.9	0.96	476	0.09	0.11	<0,01	0.15	0.21
21/07/2024	23:10	33.2	31.1	35.6	32.4	<0.1	10	9	20	20.9	1.14	458	0.11	0.12	0.02	0.12	0.15
22/07/2024	06:10	32.9	3.6	31.7	30.5	<0.1	8	6	13	20.9	0.68	452	0.08	0.09	<0,01	0.08	0.14
Maximum		**51.1**	**52.3**	**50.3**	**65.7**	**<0.1**	**10**	**19**	**42**	**20.9**	**1.32**	**476**	**0.13**	**0.12**	**0.02**	**0.15**	**0.21**
Minimum		**32.9**	**3.6**	**31.7**	**30.5**	**<0.1**	**7**	**6**	**13**	**20.9**	**0.68**	**452**	**0.08**	**0.05**	**<0,01**	**0.08**	**0.12**
Average		**40.8**	**32.5**	**40.6**	**42.8**	**<0.1**	**8**	**12**	**25**	**20.9**	**1.03**	**462**	**0.10**	**0.09**	**0.02**	**0.12**	**0.16**

Station: AP-16 40°25'14.76" 49°30'47.76"																
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
21/07/2024	09:50	41.2	35.8	40.6	50.6	<0.1	7	20	44	20.9	1.23	482	0.06	0.01	<0,01	0.15	0.49
21/07/2024	15:30	43.6	47.4	39.9	41.3	<0.1	8	25	49	20.9	1.16	491	<0,01	<0,01	<0,01	0.12	0.51
21/07/2024	21:40	34.2	33.1	35.8	30.5	<0.1	10	12	27	20.9	0.96	476	0.04	<0,01	0.01	0.11	0.33
22/07/2024	04:20	30.5	32.6	30.1	30.7	<0.1	9	8	19	20.9	0.82	479	0.02	0.06	0.02	0.14	0.34
Maximum		**43.6**	**47.4**	**40.6**	**50.6**	**<0.1**	**10**	**25**	**49**	**20.9**	**1.23**	**491**	**0.06**	**0.06**	**0.02**	**0.15**	**0.51**
Minimum		**30.5**	**32.6**	**30.1**	**30.5**	**<0.1**	**7**	**8**	**19**	**20.9**	**0.82**	**476**	**<0,01**	**<0,01**	**<0,01**	**0.11**	**0.33**
Average		**37.4**	**37.2**	**36.6**	**38.3**	**<0.1**	**9**	**16**	**35**	**20.9**	**1.04**	**482**	**0.04**	**0.04**	**0.02**	**0.13**	**0.42**
Station: AP-17 40°25'43.33" 49°40'6.05"																	
Date	Time	Noise (db)				Vibration	Radiation	Dust		O2	CO	CO2	H2S	SO2	NO2	O3	VOC
								PM2.5	PM10								
		LeqA	L90A	L50A	L10A	m/sec²	µr/h	µg/m³	µg/m³	%	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³	mg/m³
21/07/2024	09:00	51.3	59.9	67.2	50.8	<0.1	8	15	31	20.9	1.24	592	0.01	0.02	<0,01	0.11	0.15
21/07/2024	14:40	60.7	71.1	56.4	71.3	<0.1	10	12	26	20.9	0.86	589	<0,01	0.05	<0,01	0.12	0.14
21/07/2024	20:40	35.3	37.5	31.4	33.6	<0.1	12	13	30	20.9	1.12	576	0.02	0.02	0.01	0.09	0.25
22/07/2024	03:00	31.9	32.8	31.5	30.8	<0.1	8	8	18	20.9	1.13	585	<0,01	0.01	<0,01	0.12	0.16
Maximum		**60.7**	**71.1**	**67.2**	**71.3**	**<0.1**	**12**	**15**	**31**	**20.9**	**1.24**	**592**	**0.02**	**0.05**	**0.01**	**0.12**	**0.25**
Minimum		**31.9**	**32.8**	**31.4**	**30.8**	**<0.1**	**8**	**8**	**18**	**20.9**	**0.86**	**576**	**0.01**	**0.01**	**0.01**	**0.09**	**0.14**
Average		**44.8**	**50.3**	**46.6**	**46.6**	**<0.1**	**10**	**12**	**26**	**20.9**	**1.09**	**586**	**0.02**	**0.03**	**0.01**	**0.11**	**0.18**

Annex 4. Traffic Intensity Monitoring

Table 4.1. Coordinates and characteristics of traffic monitoring stations

№	Station	Coordinates	Note	Illustrative picture
1	**TP1**	40°45'37.57" 46°57'42.22"	Sahil-Mushfigabad road – crossing point with “Gobustan-Gobu” OHL	
2	**TP2**	40°44'58.98" 47°11'52.95"	Aghsu-Kurdamir road - crossing point with “Azerbaijan TPP-Navahi SS” and “Mingachevir HPP – Navahi SS” OHLs	
3	**TP3**	40°40'7.78" 47°36'24.99"	Garamaryam-Mususlu road – crossing point with “Azerbaijan TPP-Navahi SS” and “Mingachevir HPP – Navahi SS” OHLs	

№	Station	Coordinates	Note	Illustrative picture
4	**TP4**	40°34'7.74" 48°13'55.14"	Garamaryam-Goychay segment of Baku-Shamakhi-Yevlakh highway – crossing point with “Azerbaijan TPP-Navahi SS” and “Mingachevir HPP – Navahi SS” OHLs	
5	**TP5**	40°11'38.69" 48°48'11.43"	Aghdash-Zaraghan road – crossing point with “Azerbaijan TPP-Navahi SS” and “Mingachevir HPP – Navahi SS” OHLs	
6	**TP6**	39°57'31.95" 49°20'26.22"	Yevlakh-Zagatala-Georgia highway – crossing point with “Azerbaijan TPP-Navahi SS” and “Mingachevir HPP – Navahi SS” OHLs	
7	**TP7**	40°13'51.16" 49°18'46.38"	Khaldan-Mingachevir highway – crossing point with “Azerbaijan TPP-Navahi SS” and “Mingachevir HPP – Navahi SS” OHLs	

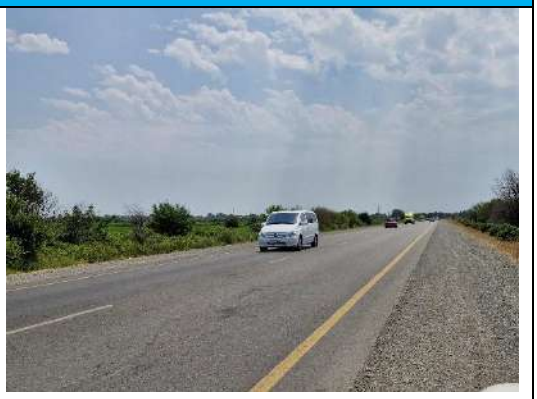
№	Station	Coordinates	Note	Illustrative picture
8	**TP8**	40°27'25.85" 49°29'1.07"B	Mingachevir highway – crossing point with "Azerbaijan TPP-Navahi SS" OHL	

Table 4.2. Completed Vehicle Registration Forms

1. TP1 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		10	16			26
07:15 – 07:30		17	20	1		38
07:30 – 07:45		15	25			40
07:45 – 08:00		15	23			38
08:00 – 08:15		34	20		1	55
08:15 – 08:30		25	27	2	2	56
08:30 – 08:45		26	21		1	48
08:45 – 09:00		22	22			44
09:00 – 09:15		21	20	1		42
09:15 – 09:30		17	17		2	36
09:30 – 09:45		18	13			31
09:45 – 10:00		16	16	2		34
10:00 – 10:15		13	20	1		34
10:15 – 10:30		16	26			42
10:30 – 10:45		20	19		3	42
10:45 – 11:00		16	20	1		37
11:00 – 11:15		15	18			33
11:15 – 11:30		14	19		1	34
11:30 – 11:45		17	17	1		35
11:45 – 12:00		17	20		1	39
12:00 – 12:15		19	26		1	46
12:15 – 12:30		15	23	1		39
12:30 – 12:45		17	20		1	38
12:45 – 13:00		16	21			37
13:00 – 13:15		18	24		2	44
13:15 – 13:30		16	29			45
13:30 – 13:45		15	25	2		42
13:45 – 14:00		18	24			42
14:00 – 14:15		18	18		1	37
14:15 – 14:30		19	16		2	37
14:30 – 14:45		20	14			34
14:45 – 15:00		23	16			40
15:00 – 15:15		26	20	1		47
15:15 – 15:30		37	14			51
15:30 – 15:45		30	16		2	48

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:45 – 16:00		25	12	1		38
16:00 – 16:15		24	17			41
16:15 – 16:30		17	13		1	31
16:30 – 16:45		18	18			36
16:45 – 17:00		19	14	1		34
17:00 – 17:15		18	16		2	36
17:15 – 17:30		17	20			37
17:30 – 17:45		20	21			41
17:45 – 18:00		26	18	1		45
18:00 – 18:15		19	16		1	36
18:15 – 18:30		24	14	2	1	41
18:30 – 18:45		25	22			47
18:45 – 19:00		20	14	1		35
19:00 – 19:15		22	16			38
19:15 – 19:30		18	15		1	34
19:30 – 19:45		19	17		1	37
19:45 – 20:00		16	23	2		41
Total		**1018**	**991**	**21**	**27**	**2059**

2. TP1 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		7	18			25
07:15 – 07:30		12	17	1		30
07:30 – 07:45		17	21			38
07:45 – 08:00		15	22			37
08:00 – 08:15		19	23			42
08:15 – 08:30		21	25			46
08:30 – 08:45		18	21			39
08:45 – 09:00		17	20			37
09:00 – 09:15		21	23	1		45
09:15 – 09:30		19	16		1	36
09:30 – 09:45		16	15	1		32
09:45 – 10:00		16	14			30
10:00 – 10:15		15	15	1		31
10:15 – 10:30		16	21			37
10:30 – 10:45		18	26	1	1	46
10:45 – 11:00		16	19			35
11:00 – 11:15		15	18			33
11:15 – 11:30		14	18	1	1	34
11:30 – 11:45		17	17			34
11:45 – 12:00		18	18		1	37
12:00 – 12:15		19	26	1		46
12:15 – 12:30		15	17			32
12:30 – 12:45		17	20		1	38
12:45 – 13:00		16	21			37
13:00 – 13:15		18	26		2	46
13:15 – 13:30		16	25			41
13:30 – 13:45		15	32	1		48
13:45 – 14:00		18	21			39
14:00 – 14:15		18	19		1	38
14:15 – 14:30		19	16	1	2	38
14:30 – 14:45		20	14			34
14:45 – 15:00		23	24			47
15:00 – 15:15		18	21	1		40
15:15 – 15:30		20	14			34

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		23	28		2	53
15:45 – 16:00		25	19	1		45
16:00 – 16:15		26	17			43
16:15 – 16:30		25	15		1	41
16:30 – 16:45		24	18			42
16:45 – 17:00		23	27	1		51
17:00 – 17:15		28	22		2	52
17:15 – 17:30		29	20			49
17:30 – 17:45		27	21			48
17:45 – 18:00		37	26	1		64
18:00 – 18:15		31	21	1	2	55
18:15 – 18:30		24	18	1	1	44
18:30 – 18:45		26	16		1	43
18:45 – 19:00		20	18	1		39
19:00 – 19:15		25	15			40
19:15 – 19:30		27	20		1	48
19:30 – 19:45		22	23	1	1	47
19:45 – 20:00		25	20	1		46
Total		**1046**	**1047**	**18**	**21**	2132

3. TP2 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		8				8
07:15 – 07:30		10		1		11
07:30 – 07:45		15				15
07:45 – 08:00		28				29
08:00 – 08:15		18				19
08:15 – 08:30		25				26
08:30 – 08:45		21		1		22
08:45 – 09:00		22				22
09:00 – 09:15		21				23
09:15 – 09:30	1	19				19
09:30 – 09:45		20		1		21
09:45 – 10:00		23				24
10:00 – 10:15		30		1		31
10:15 – 10:30		16				16
10:30 – 10:45		25	1			26
10:45 – 11:00		28				28
11:00 – 11:15		25				29
11:15 – 11:30		19				19
11:30 – 11:45		22				23
11:45 – 12:00	1	20		1		21
12:00 – 12:15		19				19
12:15 – 12:30		20				21
12:30 – 12:45		15				15
12:45 – 13:00		16				16
13:00 – 13:15		13		1		16
13:15 – 13:30		15	1			16
13:30 – 13:45		18				18
13:45 – 14:00		18				18
14:00 – 14:15		26				26
14:15 – 14:30		19		1		21
14:30 – 14:45		20				20
14:45 – 15:00		23				23
15:00 – 15:15		29				29
15:15 – 15:30		31				31

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		25				26
15:45 – 16:00		21		1		22
16:00 – 16:15	1	24		1		25
16:15 – 16:30		22				22
16:30 – 16:45		18				18
16:45 – 17:00		19				19
17:00 – 17:15		18				20
17:15 – 17:30		17				17
17:30 – 17:45		20				20
17:45 – 18:00		26				26
18:00 – 18:15		25				26
18:15 – 18:30		24		1		25
18:30 – 18:45	1	21				21
18:45 – 19:00		23				26
19:00 – 19:15		22				23
19:15 – 19:30		26				26
19:30 – 19:45		22				22
19:45 – 20:00		28				28
Total	**4**	**1098**	**2**	**10**	**0**	**1137**

4. TP2 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		12				12
07:15 – 07:30		15		1		16
07:30 – 07:45	1	14				14
07:45 – 08:00		19				22
08:00 – 08:15		21				21
08:15 – 08:30		16				16
08:30 – 08:45		25		1		28
08:45 – 09:00		19				20
09:00 – 09:15		23				23
09:15 – 09:30		14				15
09:30 – 09:45		15		1		16
09:45 – 10:00		21				21
10:00 – 10:15		28		1		29
10:15 – 10:30		24				24
10:30 – 10:45		25	1			26
10:45 – 11:00		23				23
11:00 – 11:15		22				25
11:15 – 11:30		16				16
11:30 – 11:45		13				14
11:45 – 12:00		22		1		23
12:00 – 12:15		19				19
12:15 – 12:30		15				15
12:30 – 12:45	1	16				23
12:45 – 13:00		19				19
13:00 – 13:15		25		1		26
13:15 – 13:30		18	1			19
13:30 – 13:45		19				19
13:45 – 14:00		21				21
14:00 – 14:15		22				22
14:15 – 14:30		19		1		22
14:30 – 14:45		20				25
14:45 – 15:00		23				23
15:00 – 15:15		29				29
15:15 – 15:30		21				21

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		26				29
15:45 – 16:00		25		1		26
16:00 – 16:15		14		1		15
16:15 – 16:30		21				21
16:30 – 16:45		17				17
16:45 – 17:00		20				20
17:00 – 17:15		18				20
17:15 – 17:30		17				17
17:30 – 17:45		20				20
17:45 – 18:00		18				18
18:00 – 18:15		25				26
18:15 – 18:30		16		1		17
18:30 – 18:45		21				21
18:45 – 19:00		14				17
19:00 – 19:15		15				16
19:15 – 19:30		9				9
19:30 – 19:45		18				18
19:45 – 20:00		17				17
Total	**2**	**1004**	**2**	**10**		1052

5. TP3 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		2				2
07:15 – 07:30		1		2		3
07:30 – 07:45		2	1			3
07:45 – 08:00		5				7
08:00 – 08:15		3				3
08:15 – 08:30	1	4				5
08:30 – 08:45		5		1		6
08:45 – 09:00		6				6
09:00 – 09:15		2				4
09:15 – 09:30	1	3				3
09:30 – 09:45		2				2
09:45 – 10:00		6				6
10:00 – 10:15		2				2
10:15 – 10:30		8				8
10:30 – 10:45		2	1	2		5
10:45 – 11:00		9				9
11:00 – 11:15		8				10
11:15 – 11:30		1				1
11:30 – 11:45		6				6
11:45 – 12:00		1		1		2
12:00 – 12:15		2				2
12:15 – 12:30		2				2
12:30 – 12:45	1	4				4
12:45 – 13:00		12				12
13:00 – 13:15		8				9
13:15 – 13:30		9	1			10
13:30 – 13:45		8				8
13:45 – 14:00		6				6
14:00 – 14:15		4				4
14:15 – 14:30		5		2		8
14:30 – 14:45		10				10
14:45 – 15:00		5				5
15:00 – 15:15		3				3
15:15 – 15:30		4				4

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		6				6
15:45 – 16:00		7				7
16:00 – 16:15		8				8
16:15 – 16:30		6		1		7
16:30 – 16:45		5	1			6
16:45 – 17:00		5				5
17:00 – 17:15	1	7				10
17:15 – 17:30		6				6
17:30 – 17:45	1	4	1			5
17:45 – 18:00		3				3
18:00 – 18:15		9		1		10
18:15 – 18:30		7				7
18:30 – 18:45		4				4
18:45 – 19:00		6				8
19:00 – 19:15		8				9
19:15 – 19:30	1	9	1			10
19:30 – 19:45		6				6
19:45 – 20:00		10				10
Total	**6**	**276**	**6**	**10**	**0**	**312**

6. TP3 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		1				1
07:15 – 07:30	1	3		1		4
07:30 – 07:45		5				5
07:45 – 08:00		5				5
08:00 – 08:15	1	3				3
08:15 – 08:30		8				8
08:30 – 08:45		5		1		6
08:45 – 09:00		6	1			7
09:00 – 09:15		5	1			6
09:15 – 09:30		3				3
09:30 – 09:45		2				2
09:45 – 10:00		6				6
10:00 – 10:15		6		1		7
10:15 – 10:30		8				8
10:30 – 10:45		2	1			3
10:45 – 11:00		9				9
11:00 – 11:15		8				8
11:15 – 11:30		7	1	1		9
11:30 – 11:45		6				6
11:45 – 12:00		1				1
12:00 – 12:15		2				2
12:15 – 12:30		5				5
12:30 – 12:45	1	4				5
12:45 – 13:00		10				10
13:00 – 13:15		5		1		6
13:15 – 13:30		9	1			10
13:30 – 13:45		8				8
13:45 – 14:00		6				6
14:00 – 14:15		4				4
14:15 – 14:30		5		1		6
14:30 – 14:45		4				4
14:45 – 15:00		5				5
15:00 – 15:15		6				6
15:15 – 15:30	1	5				5

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		6				8
15:45 – 16:00		7		1		8
16:00 – 16:15		8				8
16:15 – 16:30		6	1			7
16:30 – 16:45		5				5
16:45 – 17:00		5	1			6
17:00 – 17:15		7				8
17:15 – 17:30	1	4				4
17:30 – 17:45		4				4
17:45 – 18:00		3				3
18:00 – 18:15		9				10
18:15 – 18:30		8		1		9
18:30 – 18:45	1	8	1			9
18:45 – 19:00		5				5
19:00 – 19:15		6				7
19:15 – 19:30		4	2			6
19:30 – 19:45	1	7				7
19:45 – 20:00		6				6
Total	**7**	**285**	**10**	**8**		322

7. TP4 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		9	2		1	12
07:15 – 07:30		15	4	3		22
07:30 – 07:45		19	1	1		21
07:45 – 08:00	1	23	2		1	29
08:00 – 08:15		15	8	1	1	25
08:15 – 08:30		25	5	2		33
08:30 – 08:45		20	5	1		26
08:45 – 09:00	1	22	4	1		27
09:00 – 09:15		21	3	2	1	28
09:15 – 09:30		23	5	1	1	30
09:30 – 09:45		26	4			30
09:45 – 10:00		29	3	2		34
10:00 – 10:15		38	5	1	1	45
10:15 – 10:30		34	3	4		41
10:30 – 10:45		27	1	2	1	31
10:45 – 11:00		30	2	3		35
11:00 – 11:15		43	1	5		49
11:15 – 11:30		28	7	1	1	37
11:30 – 11:45		47	5	2	1	55
11:45 – 12:00	1	32	5	1		38
12:00 – 12:15		35	2			37
12:15 – 12:30		33	4	2	1	40
12:30 – 12:45		48	6	1		55
12:45 – 13:00	2	36	4			40
13:00 – 13:15		45	5	2	1	54
13:15 – 13:30		53	8	2		63
13:30 – 13:45		38	6	4		48
13:45 – 14:00		41	4			45
14:00 – 14:15		29	2	3	2	36
14:15 – 14:30		50	1	2		54
14:30 – 14:45		44	6	1	1	52
14:45 – 15:00		37	4			41
15:00 – 15:15		32	3	5		40
15:15 – 15:30	2	26	2	2	1	31

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45	1	34	5			40
15:45 – 16:00	1	27	2	2	1	32
16:00 – 16:15		45	3	3		51
16:15 – 16:30		36	1	1		38
16:30 – 16:45		54	4	1		59
16:45 – 17:00		38	3	2	1	44
17:00 – 17:15		35	4		1	42
17:15 – 17:30		30	1	3		34
17:30 – 17:45	1	46	1	4		51
17:45 – 18:00		37	4	2	2	45
18:00 – 18:15		51	6	1		58
18:15 – 18:30		40	4	2	1	47
18:30 – 18:45		36	2	5		43
18:45 – 19:00	1	57	2	3	1	66
19:00 – 19:15		44	5	1		51
19:15 – 19:30		38	4	2	1	45
19:30 – 19:45		35	3		2	40
19:45 – 20:00		23	1	1		25
Total	**11**	**1779**	**187**	**90**	**25**	**2111**

8. TP4 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		11	1		1	13
07:15 – 07:30		13	3	1	1	18
07:30 – 07:45		12	2	2		16
07:45 – 08:00	1	23	5		1	32
08:00 – 08:15		29	2	1		32
08:15 – 08:30		21	2	1		24
08:30 – 08:45	1	32	1	1	1	35
08:45 – 09:00		35	3	2	2	42
09:00 – 09:15		23	5			29
09:15 – 09:30	1	24	2	2		28
09:30 – 09:45		21	6		1	28
09:45 – 10:00		35	5			40
10:00 – 10:15		32		1	1	34
10:15 – 10:30		37	8	1		46
10:30 – 10:45		29	2	3	1	35
10:45 – 11:00		25	4			29
11:00 – 11:15		36	2	3		42
11:15 – 11:30		26	2	2		30
11:30 – 11:45		32			2	34
11:45 – 12:00	1	43	6	1		50
12:00 – 12:15		35	1	2	1	39
12:15 – 12:30		33	4			37
12:30 – 12:45		43	2	1	1	47
12:45 – 13:00		37	2	4		43
13:00 – 13:15		48			1	49
13:15 – 13:30		42	7	3		52
13:30 – 13:45		36	3			39
13:45 – 14:00		40	5			45
14:00 – 14:15		37	1	5	2	45
14:15 – 14:30		27	3	2		32
14:30 – 14:45		34	2			36
14:45 – 15:00		45	3	3		51
15:00 – 15:15		40	1	1		42
15:15 – 15:30	1	31	6	1	1	39

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		33	2	2		37
15:45 – 16:00	1	27		1	2	30
16:00 – 16:15		32	1	1		34
16:15 – 16:30		45	1	2	1	49
16:30 – 16:45		34	4	2		40
16:45 – 17:00		32	2	1		35
17:00 – 17:15		48	3	2	2	55
17:15 – 17:30		49	8	2		59
17:30 – 17:45	1	36	3		1	40
17:45 – 18:00		47	1	1		49
18:00 – 18:15		30	4	4		38
18:15 – 18:30		45	5	1	1	52
18:30 – 18:45		52	4	3		59
18:45 – 19:00	1	37	2	1	1	42
19:00 – 19:15		44	2	4		51
19:15 – 19:30		31	3	6	2	42
19:30 – 19:45	1	25	4	3		32
19:45 – 20:00		31	6	2		39
Total	**9**	**1745**	**156**	**81**	**27**	**2031**

9. TP5 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		10				10
07:15 – 07:30		16	3	2		21
07:30 – 07:45		14	2			16
07:45 – 08:00	1	20	1	1		24
08:00 – 08:15		18	5	3		26
08:15 – 08:30		25	3		1	30
08:30 – 08:45	2	20	10	2		32
08:45 – 09:00	1	22	7			29
09:00 – 09:15		27	3	1		32
09:15 – 09:30		23	1	2		26
09:30 – 09:45		16		1		17
09:45 – 10:00		24	3			29
10:00 – 10:15		25	3	1		29
10:15 – 10:30		19	5	3		27
10:30 – 10:45		23	8	2		33
10:45 – 11:00		20	2			22
11:00 – 11:15		28	1	1		33
11:15 – 11:30		23	4			27
11:30 – 11:45	1	27	1		1	30
11:45 – 12:00	1	19	5	3		27
12:00 – 12:15		32	2			34
12:15 – 12:30		23	4	1		28
12:30 – 12:45		20	7	4		31
12:45 – 13:00		22	2	2		26
13:00 – 13:15	1	24	6	1		34
13:15 – 13:30	1	20	4	1		25
13:30 – 13:45		37		1		38
13:45 – 14:00		26	3	3		32
14:00 – 14:15		20	2			22
14:15 – 14:30		26	1			28
14:30 – 14:45	1	24		1		25
14:45 – 15:00		23	4			27
15:00 – 15:15		28	3	1		32
15:15 – 15:30	1	26	8	2		36

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		30	2	2		35
15:45 – 16:00	1	37	2	1		40
16:00 – 16:15		25	3	5		33
16:15 – 16:30		23	1	2		26
16:30 – 16:45		24	2			26
16:45 – 17:00		20	6	4		30
17:00 – 17:15		24	2			27
17:15 – 17:30	1	35	10	2		47
17:30 – 17:45		28	4			32
17:45 – 18:00		31	2	1	2	36
18:00 – 18:15		27	7	1		35
18:15 – 18:30		20	3			23
18:30 – 18:45		38	12	2	1	53
18:45 – 19:00	1	24	4	1		32
19:00 – 19:15		33	2			35
19:15 – 19:30		25	5	2		32
19:30 – 19:45		21	3		2	26
19:45 – 20:00		27	2	1		30
Total	**13**	**1262**	**185**	**63**	**7**	**1573**

10. TP5 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		6				6
07:15 – 07:30	1	11	3	1		15
07:30 – 07:45		16	2	1		19
07:45 – 08:00		25	3			30
08:00 – 08:15		26	5	1	1	33
08:15 – 08:30	1	30	3			34
08:30 – 08:45	1	24	2	2		28
08:45 – 09:00		25	2	1		28
09:00 – 09:15		21	3	2		29
09:15 – 09:30		35	6	1		42
09:30 – 09:45		28	2			30
09:45 – 10:00		24	2	3		31
10:00 – 10:15	1	25	3			28
10:15 – 10:30		24	5			29
10:30 – 10:45	1	25	1	2		28
10:45 – 11:00		26	2			28
11:00 – 11:15		22	9	1		32
11:15 – 11:30		21	3			24
11:30 – 11:45		27	11	1		39
11:45 – 12:00		23	4	2		29
12:00 – 12:15		21	2			23
12:15 – 12:30		34	4	1		39
12:30 – 12:45	1	23	7			30
12:45 – 13:00		31	5	3		39
13:00 – 13:15		24	3		1	28
13:15 – 13:30		32	4	1		37
13:30 – 13:45		19	3			22
13:45 – 14:00		26	2	2		30
14:00 – 14:15	1	25	2			27
14:15 – 14:30		26	5			32
14:30 – 14:45		24	2	1		27
14:45 – 15:00		27	4			31
15:00 – 15:15		41	9	3		53
15:15 – 15:30		29	6			35

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		25	5	1		32
15:45 – 16:00		18	2	2	1	23
16:00 – 16:15	1	25	4	2		31
16:15 – 16:30	1	23	3			26
16:30 – 16:45		28	7	5		40
16:45 – 17:00		25	6			31
17:00 – 17:15		24	6		1	31
17:15 – 17:30		35	9	4		48
17:30 – 17:45		21	2			23
17:45 – 18:00		39	3	2		44
18:00 – 18:15		27	5	1		33
18:15 – 18:30		29	12		1	42
18:30 – 18:45	1	43	4	3		50
18:45 – 19:00		30	8			38
19:00 – 19:15	1	23	11	4		40
19:15 – 19:30		25	5			30
19:30 – 19:45		18	3	1	1	23
19:45 – 20:00		23	6			29
Total	**11**	**1327**	**230**	**54**	**6**	**1665**

11. TP6 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		12	5			17
07:15 – 07:30		26	7	2		35
07:30 – 07:45	1	23	5	2		30
07:45 – 08:00		30	3	2		35
08:00 – 08:15		41	5	1		47
08:15 – 08:30		34	10	2	1	47
08:30 – 08:45	1	53	5	4		62
08:45 – 09:00		55	3	2		60
09:00 – 09:15		43	3			46
09:15 – 09:30		29	3	3		35
09:30 – 09:45		25	2	1	1	29
09:45 – 10:00		43	4	5		52
10:00 – 10:15		40	3	1	1	45
10:15 – 10:30		46	11	4	1	62
10:30 – 10:45		42	6	2		50
10:45 – 11:00	1	30	14	5	2	51
11:00 – 11:15		32	5	2		40
11:15 – 11:30		51	7	1		59
11:30 – 11:45		55	1	6		62
11:45 – 12:00		43	9	2		54
12:00 – 12:15		38	2			40
12:15 – 12:30		61	5	1	1	68
12:30 – 12:45		56	2	3		61
12:45 – 13:00		40	10	2		52
13:00 – 13:15		45	2	3		50
13:15 – 13:30		41	13	7		61
13:30 – 13:45		45	8	2		55
13:45 – 14:00		40	6	5		51
14:00 – 14:15	1	27	12			39
14:15 – 14:30		35	11	4		50
14:30 – 14:45		43	4	2	1	50
14:45 – 15:00		56	5	3	1	65
15:00 – 15:15		21	8	2		31
15:15 – 15:30		38	2	6		46

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		45	12	1	2	60
15:45 – 16:00		43	7	4		54
16:00 – 16:15		47	3	5	1	56
16:15 – 16:30		41	11	2		54
16:30 – 16:45		46	4	9		59
16:45 – 17:00		29	6	1	1	37
17:00 – 17:15		35	2	4		41
17:15 – 17:30		42	4	2	3	51
17:30 – 17:45	1	39	2	3		44
17:45 – 18:00		51	5	2	1	59
18:00 – 18:15		48	5	5	2	60
18:15 – 18:30		43	9		1	53
18:30 – 18:45		46	5	2		53
18:45 – 19:00	2	42	12	2	1	61
19:00 – 19:15		47	8	5	1	61
19:15 – 19:30		37	6			43
19:30 – 19:45		29	14	4		47
19:45 – 20:00		25	5	2	1	33
Total	**7**	**2074**	**321**	**140**	**23**	**2582**

12. TP6 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		9	2			11
07:15 – 07:30	1	19	4	2	1	26
07:30 – 07:45		22	5	1		28
07:45 – 08:00		18	3	1		23
08:00 – 08:15		36	5		1	42
08:15 – 08:30		38	2	2		42
08:30 – 08:45	2	48	2			50
08:45 – 09:00		33	7	4		44
09:00 – 09:15		43	3	5		53
09:15 – 09:30		39	5	1	2	47
09:30 – 09:45	1	32	9			41
09:45 – 10:00		40	4	3		47
10:00 – 10:15		29	3	1		33
10:15 – 10:30		34	2	3		39
10:30 – 10:45		46	11	2		59
10:45 – 11:00	1	35	1	2	1	39
11:00 – 11:15		28	3			32
11:15 – 11:30		42	7	3		52
11:30 – 11:45		36	4	2	1	43
11:45 – 12:00		46		1	1	48
12:00 – 12:15		31	2	2		35
12:15 – 12:30		45	1	1		47
12:30 – 12:45		48	3	2		53
12:45 – 13:00		45	4	2		51
13:00 – 13:15		35	2	7	2	46
13:15 – 13:30	1	50	9	1		60
13:30 – 13:45		39	6	2		47
13:45 – 14:00		45	5	4	1	55
14:00 – 14:15		38	4			42
14:15 – 14:30		42	7	2		51
14:30 – 14:45		48	6	5	1	60
14:45 – 15:00		50	8	3		61
15:00 – 15:15		37	3	2	1	43
15:15 – 15:30		48	10	4		62

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45	1	42	3	2		48
15:45 – 16:00		34	5	3		42
16:00 – 16:15	1	41		5	1	47
16:15 – 16:30		28	2	6		36
16:30 – 16:45		40	8	3		51
16:45 – 17:00		36	6	3	1	46
17:00 – 17:15		53	3	5	1	62
17:15 – 17:30		41	4	5		50
17:30 – 17:45		58	11			69
17:45 – 18:00		44	2	1		47
18:00 – 18:15		47	5	5		57
18:15 – 18:30		53	3	2	1	59
18:30 – 18:45		51	2	2		55
18:45 – 19:00		47	5	5		59
19:00 – 19:15		37	3	1		41
19:15 – 19:30		45	2	1	1	49
19:30 – 19:45	1	38	2	2		42
19:45 – 20:00		32	4	3		39
Total	**9**	**2041**	**222**	**124**	**17**	**2430**

13. TP7 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		7	2			9
07:15 – 07:30		15	3	1		19
07:30 – 07:45		22	3	1		26
07:45 – 08:00	1	24	4		1	31
08:00 – 08:15		30	2	2		34
08:15 – 08:30		25	7	1		33
08:30 – 08:45		25	1			26
08:45 – 09:00		29	4	2		35
09:00 – 09:15	1	35	2	1		39
09:15 – 09:30		26	3	3		32
09:30 – 09:45		24	1	2	1	28
09:45 – 10:00		20	4	2		26
10:00 – 10:15		21	2	1		24
10:15 – 10:30		25	2	2		29
10:30 – 10:45		37	3	1		41
10:45 – 11:00		26	1			27
11:00 – 11:15		27	5	3		35
11:15 – 11:30		26	1	1		28
11:30 – 11:45		25	2	2		29
11:45 – 12:00		28	3	1		32
12:00 – 12:15		31	2	2	1	36
12:15 – 12:30		15	1	1		17
12:30 – 12:45		23		1		24
12:45 – 13:00		24	4	3		31
13:00 – 13:15		22		2		24
13:15 – 13:30		25	3	2		30
13:30 – 13:45		18	2			20
13:45 – 14:00		25	2	1		28
14:00 – 14:15	1	26	9	3		38
14:15 – 14:30		18	2	2		22
14:30 – 14:45		23	5	4		32
14:45 – 15:00		17	2	1	2	22
15:00 – 15:15		19	4	2		25
15:15 – 15:30		18	7	6		31

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		27	2	5		34
15:45 – 16:00		19	1	2		22
16:00 – 16:15		18	3	3	1	25
16:15 – 16:30		20	2	5		27
16:30 – 16:45		26	1	2	1	30
16:45 – 17:00		21	5	1		27
17:00 – 17:15		28	8			36
17:15 – 17:30		14	2	2		18
17:30 – 17:45		18	4	3	1	26
17:45 – 18:00		22	2	1	2	27
18:00 – 18:15		20	6	1		27
18:15 – 18:30		23	5	4		32
18:30 – 18:45	1	18	3	1	2	24
18:45 – 19:00		19	3			23
19:00 – 19:15		21	7	2	2	32
19:15 – 19:30		18	3	1		22
19:30 – 19:45		22	5	1	1	29
19:45 – 20:00		21	3			24
Total	**4**	**1176**	**163**	**90**	**15**	**1459**

14. TP7 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		5			1	6
07:15 – 07:30		11	2	2	1	16
07:30 – 07:45		20		2	2	24
07:45 – 08:00		23	1	1		25
08:00 – 08:15		19	3	2	1	25
08:15 – 08:30		15	2	1		18
08:30 – 08:45		18		3		21
08:45 – 09:00		18	1	1	1	21
09:00 – 09:15		16	1			17
09:15 – 09:30		12	1	3		16
09:30 – 09:45		14	1	2	1	18
09:45 – 10:00		18	3			21
10:00 – 10:15		21		1	1	23
10:15 – 10:30		23	2	2	1	28
10:30 – 10:45		17	1	2		20
10:45 – 11:00		20			2	22
11:00 – 11:15		23	2	2		27
11:15 – 11:30		15	1	1		17
11:30 – 11:45		18	1	1	1	21
11:45 – 12:00		13		1		14
12:00 – 12:15		26	2	4		32
12:15 – 12:30		15	1	1		17
12:30 – 12:45		21	1		1	23
12:45 – 13:00		24		2		26
13:00 – 13:15		22	3	1		26
13:15 – 13:30		17	2	3		22
13:30 – 13:45		15		1		16
13:45 – 14:00		13	2	1		16
14:00 – 14:15		20	1	1		22
14:15 – 14:30		18	1	2		21
14:30 – 14:45		28	4	1		33
14:45 – 15:00		17	2	1	1	21
15:00 – 15:15		16	3	2	2	23
15:15 – 15:30		18	4	1		23

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		21	3		1	25
15:45 – 16:00	1	16	1	3		20
16:00 – 16:15		18	3	1		22
16:15 – 16:30		21	1	1		23
16:30 – 16:45		22	4			26
16:45 – 17:00		31	2	2		35
17:00 – 17:15		25	3	1		29
17:15 – 17:30		24	2	1	1	28
17:30 – 17:45		27	3	4		34
17:45 – 18:00	2	26	2	1		29
18:00 – 18:15		27	5	4		36
18:15 – 18:30		31	2			33
18:30 – 18:45		28	6	2	2	38
18:45 – 19:00	1	32	1	2		37
19:00 – 19:15	1	26	4	3	1	35
19:15 – 19:30		27	1	5		33
19:30 – 19:45		20	5	1		26
19:45 – 20:00		22	2	3		27
Total	**5**	**1053**	**98**	**82**	**21**	**1270**

15. TP8 (A)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		13	2			15
07:15 – 07:30		21		2		23
07:30 – 07:45	1	22	3	5	1	31
07:45 – 08:00		33	2	1		36
08:00 – 08:15		45	3	2	1	51
08:15 – 08:30		56	4			61
08:30 – 08:45		43	5	3		51
08:45 – 09:00		46	7	2		55
09:00 – 09:15		42	8	4		55
09:15 – 09:30		49	5	1		55
09:30 – 09:45		39	2	2	1	44
09:45 – 10:00		63	7	1		71
10:00 – 10:15	1	55	1	2	1	59
10:15 – 10:30		53	3	1		57
10:30 – 10:45		57	9	2		68
10:45 – 11:00		51	4	2		57
11:00 – 11:15		56	5	2		65
11:15 – 11:30		58	3	3	1	65
11:30 – 11:45	1	55	7	5		68
11:45 – 12:00		43	5	1		49
12:00 – 12:15		38	4	2		44
12:15 – 12:30		61	3	1	1	66
12:30 – 12:45		56	5	2		63
12:45 – 13:00		42	1	2		45
13:00 – 13:15	1	45	2			49
13:15 – 13:30		41	5	3		49
13:30 – 13:45		45	7	4		56
13:45 – 14:00		40	7			47
14:00 – 14:15		52	8	1		61
14:15 – 14:30		52	4	5		61
14:30 – 14:45		41	13	1		55
14:45 – 15:00		53	8	2		63
15:00 – 15:15		63	9	3		75
15:15 – 15:30		42	12	2		56

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		61	7			68
15:45 – 16:00	1	54	10	2		66
16:00 – 16:15		56	8	2		66
16:15 – 16:30		55	4	1		60
16:30 – 16:45		47	7	3		57
16:45 – 17:00		59	9		1	69
17:00 – 17:15		48	4	3		55
17:15 – 17:30		63	2	2		67
17:30 – 17:45	1	48	4		2	54
17:45 – 18:00		51	7	4	1	63
18:00 – 18:15		52	5	3		60
18:15 – 18:30		68	8	5	1	82
18:30 – 18:45		65	9		2	76
18:45 – 19:00	1	58	5	2	1	69
19:00 – 19:15		60	10	4		74
19:15 – 19:30		49	4	2		55
19:30 – 19:45		53	1	3	1	58
19:45 – 20:00		49	2	3		54
Total	**7**	**2567**	**279**	**108**	**15**	**3002**

16. TP8 (B)

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
07:00 – 07:15		10			1	11
07:15 – 07:30		19	1	1		21
07:30 – 07:45		23	1	2	1	27
07:45 – 08:00		35	2	1	2	40
08:00 – 08:15		51		5	1	57
08:15 – 08:30		50	2	1		53
08:30 – 08:45		48	1	4		53
08:45 – 09:00		42	1	3		46
09:00 – 09:15		50	3	2	1	57
09:15 – 09:30	1	49	6	6		61
09:30 – 09:45		51	4	3		58
09:45 – 10:00		63	2			66
10:00 – 10:15		55	2	2		59
10:15 – 10:30		53	3	1	1	58
10:30 – 10:45		57	1	2		60
10:45 – 11:00		51	3	2		56
11:00 – 11:15		56	2	2		60
11:15 – 11:30		58	5	4		67
11:30 – 11:45		53	2			55
11:45 – 12:00		43		5		48
12:00 – 12:15		52	4	2		58
12:15 – 12:30		62	5	3		70
12:30 – 12:45		56	2		1	59
12:45 – 13:00		42	3	5		50
13:00 – 13:15		45	2	4		52
13:15 – 13:30		41		4		45
13:30 – 13:45		45	4			49
13:45 – 14:00		40	2	2		44
14:00 – 14:15	1	52	3	3		58
14:15 – 14:30		52	1		1	54
14:30 – 14:45		41	2	2		45
14:45 – 15:00		53	5	5		63
15:00 – 15:15		38	4			42
15:15 – 15:30		42	5	2		49

Time interval	Agricultural vehicles	Cars	Trucks	Minibuses	Buses	Total
15:30 – 15:45		45	11	3		59
15:45 – 16:00		51	8	2		61
16:00 – 16:15		50	7	5		62
16:15 – 16:30		55	4	1		60
16:30 – 16:45		47	8			55
16:45 – 17:00	1	59	12	2	1	74
17:00 – 17:15		48	5		1	54
17:15 – 17:30		63	9	2		74
17:30 – 17:45		45	2	2		49
17:45 – 18:00		51	5	3	1	60
18:00 – 18:15		52	8	1	1	62
18:15 – 18:30		43	2	2		47
18:30 – 18:45		57	4	1		62
18:45 – 19:00	1	56	3			61
19:00 – 19:15		53	5	1		59
19:15 – 19:30		51	7	2		60
19:30 – 19:45		40	2		1	43
19:45 – 20:00		42	4	1		47
Total	**4**	**2486**	**189**	**106**	**14**	**2813**

Annex 5. Stakeholder Engagement: Focus Group Consultatons

FOCUS GROUP DISCUSSION (September 2024)

Region: Hajigabul

Villages: Navai settlement, Ranjbar, Qizilburun, Pirsaat, Atbulak villages

Meeting Location: Secondary School No. 2

Date: September 30, 2024

Time: 12:00

Number of Participants: 24 (8 women)

#	QUESTIONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. We have heard 2. Azerenergy has already confirmed this 3. Obtaining renewable energy
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. Most of the local population is unemployed, so we are waiting for it as a source of work 2. Job opportunities are interesting as the living wage is low 3. The expectations of the residents of Navahi settlement are mainly the opening of workplaces and the construction of roads. 4. In contrast to the settlement, there is an industrial park, a poultry factory, and a brick factory in 4 villages of Hajigabul district.
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. The project will not have such an effect on us. 2. The only downside we've heard is that it prevents precipitations 3. We want to be protected from radiation if such an effect is expected.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. Our lifestyle will not be negatively affected; we hope that there will be job opportunities 2. There is no noise because it is outside the village
5	Are there any private or communal lands that could be affected by the	1. No

#	QUESTIONS	ANSWERS
	project's infrastructure development?	
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. No. There are no big companies around. Please fill in the excavated land areas left over from previous project activities.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. The complaints of the village population mainly stem from the roads, and their fears are primarily related to the damage to roads during construction and operation. 2. Since the project is located outside the village, they hope that those risks will not occur.
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. There are concerns, it will only be temporary
9	Are there any important cultural or heritage sites that could be affected by the project?	1. The sacred place is located on the side where the station will be installed. It is called "Marjan piri" 2. There is a martyr's spring behind Navai village school 3. There are mosques and cemeteries in the villages of Ranjbar, Atbulag and Gizilburun
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. There are no recreational facilities or parks in these settlements and villages
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. They engage in gardening and livestock farming here. They practice gardening and livestock farming in their backyards. Since the project area

#	QUESTIONS	ANSWERS
		is located outside the village, there will be no impact on these activities.
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	1. There are no wetlands or forests in these areas.
		From the meeting with women: - The road in the settlement is very difficult (it is in a bad condition), it is impossible to cross, it is difficult to come and go - Other villages are better developed, the roads are good, there are no big problems there - There is no bus stop in Navahi settlement - Until now, there has been no enterprise to provide employment to the population - Maybe you can also open a sewing factory so that women can also be involved to any work outside as long as the station will only involve men work.

FOCUS GROUP DISCUSSION (September 2024)

Region: Shamakhi
Village: Chol Goylar
Meeting Location: Chol Goylar secondary school
Date: 30.09.2024
Time: 14:30
Number of Participants: 15 (6 women)

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. Detailed information about the project was given at the meeting.
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. Alternative energy will be positive, but what benefit will it bring to us? Answer: Employment, road infrastructure, and electricity supply will be improved. 2. Most of the people here are participants of the Second Karabakh War. They need to be employed. Please provide us with jobs. 3. For example, we have water, but it's expensive. 4. Please ensure that people whose lands (500 sq.m) have been damaged receive compensation. 5. One respondent - Are you going to remove the electricity meters? Since this is renewable energy, why do we have to pay for it? Will that be removed? How will the electricity tariffs be determined?
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. Our concern is whether the lines will pass through the farmland? Answer: If the lines are likely to pass through your farmland, an agreement will be reached with you in accordance with state legislation, and compensation will be provided. 2. When any organization implements a project in the village, during the construction works, roads are dug up, and the machinery damages both the roads and the farmlands. Answer: This is a different project, and the outcome will be positive. If any unsatisfactory

#	QUESTİONS	ANSWERS
		incident occurs, you can address it on-site or call the hotline.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. In previous years, other organizations have carelessly installed poles and laid pipelines, which has ruined the aesthetic appearance of the village.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. The proposed project area overlaps with the villagers' parcels. It would be good if property rights are not violated.
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. The access road to our parcels may be damaged.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. If the machinery does not pass through the village during the construction of the project, there will be no impact. Ensure electrical safety.
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. We have no concerns. 2. There is only an elderly woman living alone in the village.
9	Are there any important cultural or heritage sites that could be affected by the project?	1. There is a cemetery in the village, a place with ancient stones and pots, and also there is a sacred place
<u>To link the focus group discussions (FGDs) to ecosystem services</u>		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. No

#	QUESTİONS	ANSWERS
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. Fishing and grazing areas are not available. The population is engaged in dryland farming
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	1. No wetlands or forest areas
		From the meeting with women: - In our village, both men and women suffer from unemployment. We are willing to accept any job, whether cleaning or cooking. - In this project, we expect to be provided with job opportunities. - We, women, also do men's work here. Among us, there are married women, widows, and those who take care of the sick. Our financial situation is low.

FOCUS GROUP DISCUSSION (September 2024)

Region: Shamakhi
Village: Ovchulu
Meeting Location: Ovchulu village Secondary School named B. Aliyev
Date: 30.09.2024
Time: 16:00
Number of Participants: 30 (14 women)

#	QUESTIONS	ANSWERS
1	What do you know about the AZURE project and its games?	1. We are not aware of it. Detailed information about the project was provided during the meeting.
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. Job opportunities are expected by the public. 2. They want compensation for their parcels.
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. Usually, construction work causes damage to roads and agricultural fields due to the movement and activities of machinery. These roads and lands are not restored afterward. 2. We hope this project will implement restoration work after construction. 3. Vibrations are felt due to the movement and activity of machinery. It is recommended that machinery operate away from the village
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	• 1. Economic development, reduction of environmental impacts.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. There is a concern that our parcels may fall into the project area.
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. Employment is expected.
7	Are there any safety or health risks you foresee	1. We hope there won't be any risks.

#	QUESTIONS	ANSWERS
	as a result of the project's activities (e.g., during construction or operation)?	
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. In the village, there are disabled, sick, and martyr families who belong to vulnerable groups.
9	Are there any important cultural or heritage sites that could be affected by the project?	1. No here. There is a cemetery and martyr springs by the roadside (considered sacred).
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	• No
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. There is no fishing. The community is primarily engaged in livestock farming and gardening (in their homestead areas).
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	• No
	Discussion with Women: • The primary concern for women is employment. • We have school children, and we want to know how their safety will be ensured. • We are afraid of the power lines. We are concerned about livestock and children's commute to school. • We need compensation for the affected areas. • Most women want their children to be employed, as they currently have to move to Baku and other places for work.	

#	QUESTIONS	ANSWERS
		NOTE: There is a cemetery near the asphalt road. There are martyr springs and alleys.

FOCUS GROUP DISCUSSION (September 2024)

Region: Agsu

Village: Gegali, Dashdamirbayli

Meeting Place: In the yard of the medical center

Date: 01.10.2024

Time: 11.30

Number of Participants: 43 (4 women)

#	QUESTIONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. We have heard, now you have given detailed information. Let's see the map, it will be clearer
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. It would be beneficial for the village population. There would be job opportunities. 2. Although I don't have an education, I have experience in electricity and am familiar with modern technologies. If there is a job, I will work with pleasure. (Response: You should be proactive and apply to the contractor managing the project for job opportunities).
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. The existing electrical lines in the village run low, making noise in windy and rainy weather. They are generally in a dilapidated condition, and no one is looking after them. Please convey this to Azerenergy. 2. There are places where the old electrical lines have been removed, but the concrete from the poles remains. This falls into the agricultural area, and we cannot utilize that land. 3. The movement and operation of the machinery are destroying the grazing areas. 4. The top layer of the soil is disturbed. 5. The grazing areas for the animals are limited.
4	What social impacts (positive or negative) do you think this project might have on you	1. The lights in our village go out frequently. The lines are damaged. Electrical appliances in the house burn out.

#	QUESTIONS	ANSWERS
	(e.g., displacement, noise, visual changes)?	2. Will there be a similar situation in this project? This project involves electricity lines built with new technology, and in the future, electricity will be supplied to you from higher-quality energy sources. 3. There will likely be noise when it rains.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. May fall into the project area 2. We are worried about our parcels
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. Our main needs are met by the lands of the agricultural fields. We grow pomegranates, alfalfa, and grains in these fields. A few years ago, we sold a significant portion of our lands to another company due to necessity. We only have 30 acres of land left. If we lose these lands, our economic situation may worsen. 2. We propose that the electricity lines do not pass through the agricultural fields; instead, if they are drawn close to the main road, it would be better for us.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. We do not see any impact risks. The new cemetery of Dashdemirbeyli village is located where the line will cross. This worries us. 2. The issue of radiation also makes us think
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. We have 13 families of martyrs. 2. There is 1 lonely woman living here. 3. The concern is that these families should be taken into account.
9	Are there any important cultural or heritage sites that could be affected by the project?	1. In Gəgəli village, there is 1 martyrs' alley. They do not allow the construction of a mosque in the village, and we do not know the reason for this.
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How	1. There are no areas for resting or walking.

#	QUESTIONS	ANSWERS
	might the project impact these activities?	
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. The main source of income for the population is agricultural land. Power lines can have negative effects when they fall close to these areas.
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	1. Since there are no forests, wetlands and lakes in these areas, we do not expect any negative effects
		From meeting women - The main concern of women is unemployment and low wages - 2 of the women we met live alone, and they mentioned that the wages they receive (300 AZN) are not enough for a living.

FOCUS GROUP Discussion (October 2024)

Region: Agsu

Village: Garagoyunlu, Ulguj

Meeting Place: Representative Office of the Executive Power of Aghsu District in the Administrative Territorial District of Qarqaoyunlu Village

Date: 01.10.2024

Time: 13:30

Number of Participants: 29 people (15 women)

#	QUESTIONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. No, we don't know. Accurate information was given at the meeting
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. Having job opportunities is definitely a positive aspect for us. 2. The main concern is that the contractors usually do not provide jobs for the local population. (Response: This project is different from others, and involving the local population in the workforce is essential.)
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. How will compensation be given when the project area falls on land (Answer: it was clarified at the meeting. Additional information will be given to the public on-site during the construction and implementation of the project) 2. It would be better to allocate land plots in other places instead of the affected land plots
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. It goes without saying that there is noise and dust when such projects are carried out. However, when talking about the project, you emphasized that the noise levels will not exceed the limits and the areas will be irrigated by special machines.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. There is a possibility of passing through areas with non-residential lands
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	Agriculture and local businesses can develop as a result of the project. During the project's team activities in the village, the demand for agricultural products will increase, which will also contribute to the development of local businesses.

#	QUESTIONS	ANSWERS
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. Serious attention must be paid to safety issues in this project.
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. **In Ulguj village, there are 2 physically disabled individuals and 2 martyr families.** 2. **In Qaraqoyunlu village, there lives a neglected single woman and 4 martyr families.**
9	Are there any important cultural or heritage sites that could be affected by the project?	1. There is 1 mosque and 1 cemetery in the village of Ulguc, and a place named "Ruined Town". 2. There is a historical monument called the Red and White Dome in the village of Garagoyunlu.
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. No areas for hiking, fishing and family activities
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. The local population is mainly engaged in agriculture and livestock farming in their own plots. Since the project area is far from villages, there will be no negative impact on our agriculture.
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	1. No impacts
	In a meeting with women - We said our questions that concern us in the general meeting, we have no additional questions - our main desire is to have jobs.	

FOCUS GROUP DISCUSSION (October 2024)

Region: Agsu

Village: Bico, Langabiz, Gashad

Meeting Place: Bico village secondary school named after Arif Jabiyev

Date: 01.10.2024

Time: 10:00

Number of Participants: 28 people (9 women)

#	QUESTİONS	ANSWERS
1	What do you know about the Azure Project and its goals?	1. There may be opposite effects of this project. In this regard can we look at the conceptual layout of the project? • Answer: You can take a look at the map. Just for your information, this project will be far from your private home, yard, or any of your properties. Detailed information on the design and construction will be shared with you well in advance during future meetings. İt is our first meeting. 2. Hope the project could be beneficial for people.
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. The opening of new jobs would be good
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. We hope that during the implementation of the AZURE project, unlike other projects, no damage will be done to the land areas and roads. 2. We are both happy and concerned about this project. Our main concern is the potential destruction of the roads used by schoolchildren and adults. In previous projects, the roads were left in poor condition after the work was completed. İt is my opinion I worked as a teacher for a long time in the village of Bijo, now I am retired.

#	QUESTİONS	ANSWERS
		You will see for yourself that this project is different from the others. You will be provided with detailed information, and there may be temporary roads as well.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. We are concerned about the noise generated by the operation and movement of technical equipment. The noise levels should not exceed the permissible limits. 2. We are worried about potential forced displacement. The project does not involve the relocation of residents. If there are concerns related to land, then you will have relevant proposals.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. Our parcels might fall under the electric lines. 2. Our main request is that the lines do not pass through the village.
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. You mentioned that workers will be hired. Who is the contractor for this project? No contractor hires local people. Give people the right information, so their expectations are realistic. Response: Contractors will be instructed to hire local people, and this will be monitored.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. With the laying of high voltage lines, human health will be impacts. I am an electrician by trade, so I am raising this issue. All this should be taken into account. OHL lines will be radiant, as well as the effect of electricity. (Answer. The new power lines are different from the old ones. These lines are crossing out of settlements and modern technologies will be used)

#	QUESTİONS	ANSWERS
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. No concern
9	Are there any important cultural or heritage sites that could be affected by the project?	1. Rashidbulag ancient cemetery in Bijo 2. We also have a cemetery on the mountain
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. no special areas for hiking, fishing and family activities
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. Hope there will be no negative effects
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	1. No
		• In a meeting with women: • Our main concern is that the power lines do not pass through the center of the village.

FOCUS GROUP DISCUSSION (October 2024)

Region: Goychay, Ismayilli

Village: Garamaryam and Garabaggal villages (Goychay), Gubakhalili (İsmayilli)

Meeting Place: Election division

Date: 01.10.2024

Time: 15.00

Number of Participants: 32 (9 women)

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. Thank you very much for providing information about the project. 2. There is a proverb that says: "I have read a lot, but I didn't understand this." (Response: We gave you initial information, please take a look at the map.)
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. Garabaqqal and Garamaryam villages are large and developed villages of Göyçay. I believe that with the implementation of this project, the well-being of the population will improve further. 2. The benefit for our people is the job opportunities. 3. It would be good if local residents are employed.
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. In other projects, people's land was damaged and not restored afterward. For example, when Azeravtoyol constructed the Baku-Shamakhi-Yevlakh road, agreements were signed with several village representatives, but the terms were not followed. To this day, those individuals don't know whom to address. One of these individuals is currently leasing land for farming. 2. Contractor companies do not follow the rules and regulations.

#	QUESTİONS	ANSWERS
		3. Landowners should be compensated for the pole locations. This is my personal opinion.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. During the implementation of the project, large areas are used for placing machinery and equipment, and those areas get damaged. 2. After the work is completed, the land is not leveled. This affects both the soil layer and the visual appearance.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. Our parcels fall in this area
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. Positive effects on local businesses are expected. 2. If the demand for the product increases, then local businesses will develop.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. Safety must be strictly followed.
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. During the project, special attention should be paid to the vulnerable group. •
9	Are there any important cultural or heritage sites that could be affected by the project?	1. There is a graveyard.
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. There are almond and walnut orchards, the project site may be close to them.
2	Are there any specific natural resources in the area that you rely on for your livelihood	No

#	QUESTİONS	ANSWERS
	(e.g., agriculture, fishing, grazing)?	
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	No
	From the meeting with women: If there are job opportunities, we women and our children could be involved. We bought land and planted pomegranate trees. What will happen if the electric lines pass through that area now? Generally, it would be better if the lines pass far from the village.	

FOCUS GROUP DISCUSSION (October 2024)

Region: Goychay

Village: Arabjabirli, Mirzahuseynli

Meeting Place: Arabjabirli secondary school

Date: 01.10.2024

Time: 16.30

Number of Participants: 27 (6 women)

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. You provided information; we understood. 2. Please show us on the map where this project is located.
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. New jobs are opening 2. Power supply improves
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. Entrance and exit roads to the villages should not be destroyed 2. The project area will most likely fall into the part of the population's parcels. Then how will people work there
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. Such projects generate dust and noise. 2. When providing information, you mentioned that noise regulations would be adhered to and that water would be sprinkled on the roads with special machines. It would be good if that happens.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. The movement of machinery and heavy vehicles during the project's development damages the roads
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	• 1. Local businesses can develop. 2. The demand for agricultural products may increase.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g.,	1. The number of heavy machinery and vehicles passing through the village area will increase.

#	QUESTİONS	ANSWERS
	during construction or operation)?	2. There will be air pollution and noise.
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. Depending on weather conditions, it can be difficult to pass through destroyed roads 2. Sick and elderly people should be more careful
9	Are there any important cultural or heritage sites that could be affected by the project?	1. There is a Martyr's Spring on the roadside.
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. For recreation, we use the gardens in our yard. 2. The project area is outside
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	No
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	No
	From a meeting with women: Our main desire is to have jobs. As soon as we reach the age of 65, they send us to retirement and we can no longer find work. Our financial situation is low.	

FOCUS GROUP DİSCUSSİON (October, 2024)

Region: Agdash region

Village: Yukhari Aghcayazi, Goshagovag, Arabojaghi, Hushun

Meeting place: Yukhari Agcayazi village club

Date: 02.10.2024

Time: 16.00

Number of participants: 24 people (5 women)

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	1. We have no information about the project. 2. Detailed information was given in this meeting
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. How will compensation be provided for the parts of the project that fall on the residents' lands, and in what form will it be paid? 2. During other projects, they compensated our 5-year-old tree, only 5.60 AZN. This is not correct.
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. The population in the villages is mainly engaged in livestock farming, gardening, and crop cultivation. The areas where the lines pass are agricultural fields and pastures. 2. During the implementation of the project, access for the population to their agricultural fields and the pastures for livestock may become difficult. It would be better to construct roads to those areas. 3. Currently, a new asphalt covering has been laid on the village roads. Additionally, the bridges in the village are old and have low load-bearing capacity. The village roads should not be used by high-tonnage vehicles. Alternative routes should be created around the village for those vehicles, and this should be coordinated with the local population.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. The project area is located far from the villages, so there will be no noise and no displacement.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. The electric lines cross agricultural fields and grazing lands.

#	QUESTİONS	ANSWERS
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. The areas crossed by electric lines may only affect the lands of the population. There may be soil layer disturbances and failure to restore the land. 2. There are adjacent lands of the population and the state. The population recommends that the electric lines be routed through state lands. (Response: The state is also interested in having the lines pass through its own lands, but currently, this is not possible, so they will pass through the mentioned area.)
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. There is anxiety. 2. Generally, it would be better if the power lines pass through the foot of the mountain, away from the villages.
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. The vulnerable group should be given attention and help during the project
9	Are there any important cultural or heritage sites that could be affected by the project?	1. There is a historical monument in the area - an old cemetery (Hushun village)
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. There are no places for walking, fishing and family events in the villages.
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	1. Agriculture and grazing areas
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	1. There are no forests or wetlands in the areas where the power lines pass
	From a meeting with women: When you gave information about the project, you said that there would be waste during the implementation of the project. Will it affect health? It is probably advisable to collect chemicals separately. (Answer: you will be informed about this in detail, but you should be careful and proactive)	

FOCUS GROUP DİSCUSSİON (October 2024)

Region: Yevlakh District

Villages: Arash, Akhsham, Gulovsha

Meeting Place: Arash village secondary school

Date: October 2, 2024

Time: 17:30

Number of Participants: 21

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	It's a state project, it's good
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	1. It would be good for us to have jobs. 2. Mainly local people should be given jobs
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. If our lands fall within the project area, how will compensation be provided 2. If the poles are placed in the neighbor's yard but the power lines pass through my land, who will be considered as affected and how will compensation be determined?
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. You mentioned that there will be control over dust and noise. 2. We are villagers and are used to dust and dirt, but it would be better for our families if measures are taken to prevent it.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	1. The project might pass through our parcels.
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. It can be beneficial for local businesses and agriculture. 2. During the project, temporary camps set up in the area may require a workforce. In any case, it would

#	QUESTİONS	ANSWERS
		be better to involve the local community rather than bringing workers from the city or other villages.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	1. We want safety rules to be observed
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. The disabled, families of martyrs and the elderly should be monitored during the project.
9	Are there any important cultural or heritage sites that could be affected by the project?	No
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	1. We don't have special places too rest.
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	Xeyir
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	No

FOCUS GROUP DISCUSSION (October, 2024)

Region: Yevlakh District

Villages: Havarlı, Hajısəlli, Salahlı

Meeting Place: Havarlı Municipality

Date: October 2, 2024

Time: 14:00

Number of Participants: 20 (5 women)

#	QUESTİON	ANSWERS
1	What do you know about the AZURE project and its goals?	3. Thank you for your information about the project
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	3. Both job opportunities and energy supply are very important for us •
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. The main thing is that it should not affect personal lands and parcels. 4. The Ministry of Emergency Situations does not allow agricultural activities in areas where poles are located (due to the expansion and lowering of electrical lines) during hot weather. 5. Compensation has not been provided to farmers in areas where the existing electric poles are located. (These issues will be agreed upon in accordance with the Easement document) 6. How will it be in this project? Will compensation and subsidies be provided? 7. Is there a possibility of providing land in another area if the landowner refuses cash compensation?
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. The project is a great initiative. 2. It will be thoroughly positive. 3. If precautionary measures are taken, the effects of dust and noise will be minimal.

#	QUESTİON	ANSWERS
		4. If consultations are held with the population during the construction of the project and respect is shown to the people, it will have positive effects.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	2. The project may have an impact only on the lands where agricultural fields are located 3. The main condition will be to control the height of the trees
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. It could have a positive impact on local businesses. There may be a demand for the population's products. 2. On the other hand, if the poles of the electric lines fall on our agricultural lands, it will occupy a part of that area, meaning the farmer will not be able to use it. 3. Villagers mainly grow grain and alfalfa. Our livelihood is from this field.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	• 1. We experienced a number of difficulties during the implementation of other projects. • 2. You say this is a different project. We would like safety to be strictly observed
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. We think there will be no difficulties.
9	Are there any important cultural or heritage sites that could be affected by the project?	• There are cemeteries in our villages
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How	• No

#	QUESTİON	ANSWERS
	might the project impact these activities?	
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	2. The population is primarily engaged in agriculture and livestock farming. Any impact on agricultural land or grazing areas could significantly affect the livelihoods and living conditions of the people living there.
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	2. No forests or wetlands
	During a meeting with women Our wages are very low, it is difficult to make a living. We cannot pay utility bills on time. It is true that the supply (water, gas) is uninterrupted, but there are those among us who did not pay last year.	

FOCUS GROUP MEETING (October, 2024)

District: Yevlakh

Village: Tanrıgulular, Boshchali, Huruushagi

Meeting place: Representation of Tanrıgulular village administrative area

Date: 02.10.2024

Time: 12.30

Number of participants: 29 people (6 women)

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	4. Thank you for your information. 5. We have questions. These are related to village roads and livelihood • (Ask your questions, we will answer them)
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	8. There is no hospital in the village, I have a sick mother at home. The ambulance does not arrive in time. 9. Opening a workplace in the village 10. Providing compensation
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. Poles may fall on the territory of Tanrıgulular village 2. The project area may fall under agricultural fields 3. Poles of power lines fall into grass fields. These areas are usually neglected and not cleaned. Those parts of the land are overtaken by reeds and thorny trees. Most of the time, various (unnecessary) seeds are spread by wind in these areas. 4. Raspberry tree seeds fall on cultivated fields and are spread by wind, causing damage to grain fields.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. After completing work in the agricultural fields, the machinery often remains on-site for a long time. 2. We request detailed information in advance about the parts of the project that will affect our areas.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	4. We don't want power lines to cross our private lands •

#	QUESTİONS	ANSWERS
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. It would be great if there were job opportunities; we would gladly work. 2. Even if we don't have education, we will work as laborers.
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	3. Do not destroy our roads during the project period 4. After the work is done, the area should be restored
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. We have families of veterans and martyrs 2. They need special attention
9	Are there any important cultural or heritage sites that could be affected by the project?	No
To link the focus group discussions (FGDs) to ecosystem services		
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	2. Unfortunately, aside from our personal yards, we don't have any parks or designated places to relax.
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	3. No
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	3. We hope the project will not have adverse effects.
	From a meeting with women: We have no work. Let's say that we are illiterate, we are old, but our young children do not find jobs either. We are dissatisfied with the Internet line; they raise the prices. I think that if the power lines pass over my house in this project, maybe they will give me monetary compensation.	

FOCUS GROUP DİSCUSSİON (October, 2024)

District: Mingachevir city

Meeting place: Mingachevir Regional Electricity Network

Date: 02.10.2024

Time: 10.30

Number of participants: 45 (12 women)

#	QUESTİONS	ANSWERS
1	What do you know about the AZURE project and its goals?	6. We know about the project. The goal of the project is to integrate the use of variable renewable energy sources into Azerbaijan's energy network.
2	How do you think this project can benefit your community in terms of job creation, energy access, or infrastructure?	11. The residents of the villages affected by the project should be given a proper explanation (by the municipality). 12. Objects are being built in the protected zones of the project's lines, areas are being occupied, and fences are being erected. 13. Parcels are being rented to other individuals, but they are not documented. We don't know to whom to address the application. 14. In what form will compensations be provided to the residents? İt should be explained in detail.
3	Do you have any concerns about the potential environmental impact of the project, such as on land, water, or local wildlife?	1. The residents' land plots are located under the lines. When people harvest their crops in those areas, there may be effects caused by electricity. 2. If the protective zones are observed during the construction of the line, these consequences will not occur.
4	What social impacts (positive or negative) do you think this project might have on you (e.g., displacement, noise, visual changes)?	1. The construction of the lines will require additional workers not only from Mingachevir city but also from other villages. Workers will be needed for repair work and inspections during the operational period of the lines.

#	QUESTİONS	ANSWERS
		2. Applications are being submitted for the installation of electricity lines in the districts. 3. There are applications for specialties in energy, but there are currently no vacancies for these specialties. 4. There are many applications in the labor category 5. Dust and noise will arise during the movement of heavy machinery.
5	Are there any private or communal lands that could be affected by the project's infrastructure development?	5. Contractor companies do not leave access roads after constructing the lines. The lack of access roads to the lines creates difficulties. 6. During inspections of the electricity lines, there is no connection between the poles. İt results in time loss as inspections may occur while crossing several villages, leading to delays in the work.
6	How do you think the project will affect local businesses, agriculture, or access to natural resources (e.g., water or land)?	1. Our parcels may fall into that area. 2. How much compensation will be provided for our lands that fall into the project area?
7	Are there any safety or health risks you foresee as a result of the project's activities (e.g., during construction or operation)?	5. Risks are always present. It is essential to strictly adhere to safety regulations as a result of the project's development
8	How should the project address potential health and safety risks for vulnerable groups like children and the elderly?	1. There are many martyr families belonging to vulnerable groups. It would be beneficial to involve them in employment opportunities
9	Are there any important cultural or heritage sites that could be affected by the project?	1. There is 1 cemetery, it may be near a power line.
To link the focus group discussions (FGDs) to ecosystem services		

#	QUESTİONS	ANSWERS
1	Do you use the natural environment for recreational activities, like hiking, fishing, or family gatherings? How might the project impact these activities?	3. Of course, we use nature for recreation. In our city, we have various places for this purpose. We believe that the project will not negatively impact these activities.
2	Are there any specific natural resources in the area that you rely on for your livelihood (e.g., agriculture, fishing, grazing)?	4. In Mingachevir, the local people rely primarily on agriculture and livestock farming for their livelihood. The fertile land in the region is suitable for growing a variety of crops, including grains and vegetables. Additionally, livestock farming is common, providing meat, milk, and other animal products. The presence of the Kura River also offers opportunities for fishing, although agriculture and animal husbandry are the main sources of income for most residents.
3	Do you think the project might affect biodiversity or habitats that are crucial for sustaining local species (e.g., forests, wetlands)?	4. We hope no.
	During the meeting with women: 1. It is possible that the new electricity lines may cross over someone's house, which is undesirable. 2. It is difficult for women to find jobs. For example, my daughter graduated from university but cannot find a job. 3. I have worked here for 42 years. They abolished the technical staff position and laid me off. I am currently an employee of DOST MMC. 4. The Mingachevir Regional Electric Network does not hire women. They say this is a man's job. 5. We are given jobs with documentation. We accept that, as long as there is work.	

Annex 6. Stakeholder Engagement: Document Templates

Table 6.1. Stakeholder Register Form

Name	Category
Project-Affected Parties for Component 1	
Property owners along the routes of OHLs	Project Site Stakeholder
People residing in the project areas	Project Site Stakeholder
Municipality and village representatives of the following municipalities/villages:	Project Site Stakeholder
Navahi settlement (Hajigabul) administrative representative	Project Site Stakeholder
Ranjbar village (Hajigabul) administrative representative	Project Site Stakeholder
Gizilburun village (Hajigabul) administrative representative	Project Site Stakeholder
Pirsaat village (Hajigabul) administrative representative	Project Site Stakeholder
Banka settlement (Neftchala) administrative representative	Project Site Stakeholder
Shirvanli village (Neftchala) administrative representative	Project Site Stakeholder
Yukhari Nokhudlu (Salyan) village administrative representative	Project Site Stakeholder
Salmanli village (Salyan) administrative representative	Project Site Stakeholder
Khurshud village (Salyan) administrative representative	Project Site Stakeholder
Chukhanli village (Salyan) administrative representative	Project Site Stakeholder
Abadkand village (Salyan) administrative representative	Project Site Stakeholder
Khalaj village (Salyan) administrative representative	Project Site Stakeholder
Shakarli village (Salyan) administrative representative	Project Site Stakeholder
Yenikand village (Salyan) administrative representative	Project Site Stakeholder
Goylar village (Aghsu) administrative representative	Project Site Stakeholder
Langabiz village (Aghsu) administrative representative	Project Site Stakeholder
Bico village (Aghsu) administrative representative	Project Site Stakeholder
Garagoyunlu village (Aghsu) administrative representative	Project Site Stakeholder
Gubakhalilli village (İsmayilli) administrative representative	Project Site Stakeholder

Name	Category
Garamaryam village (Goychay) administrative representative	Project Site Stakeholder
Garabaggal village (Goychay) administrative representative	Project Site Stakeholder
Mirzahuseynli village (Goychay) administrative representative	Project Site Stakeholder
Arak village (Goychay) administrative representative	Project Site Stakeholder
Hushun village (Goychay) administrative representative	Project Site Stakeholder
Yukhari Aghjayazi village (Aghdash) administrative representative	Project Site Stakeholder
Goshagovag village (Aghdash) administrative representative	Project Site Stakeholder
Arabojagi village (Aghdash) administrative representative	Project Site Stakeholder
Arash village (Yevlakh) administrative representative	Project Site Stakeholder
Aksham village (Yevlakh) administrative representative	Project Site Stakeholder
Gulovsha village (Yevlakh) administrative representative	Project Site Stakeholder
Havarli village (Yevlakh) administrative representative	Project Site Stakeholder
Hajiselli village (Yevlakh) administrative representative	Project Site Stakeholder
Salahli village (Yevlakh) administrative representative	Project Site Stakeholder
Huruushagi village (Yevlakh) administrative representative	Project Site Stakeholder
Tanrigulular village (Yevlakh) administrative representative	Project Site Stakeholder
Boshchali village (Yevlakh) administrative representative	Project Site Stakeholder
Businesses located in the project area who may be positively or negatively affected by the project	Project Site Stakeholder
Other Interested Parties for AZURE Project	
Executive power representative of the Hajigabul region	Governmental authorities at local level
Executive power representative of the Bilasuvar region	Governmental authorities at local level
Executive power representative of the Neftchala district region	Governmental authorities at local level
Executive power representative of the Salyan district region	Governmental authorities at local level
Executive power representative of the Aghsu region	Governmental authorities at local level

Name	Category
Executive power representative of the Yevlakh region	Governmental authorities at local level
Executive power representative of the Mingachevir city	Governmental authorities at local level
Executive power representative of the Aghdash district (region)	Governmental authorities at local level
Executive power representative of the Goychay region	Governmental authorities at local level
Executive power representative of the Gobustan region	Governmental authorities at local level
Executive power representative of the Absheron region	Governmental authorities at local level
Executive power representative of the Garadagh region	Governmental authorities at local level
Ministry of Energy	Governmental authorities at local level
Azerbaijan Railways JSC	Governmental authorities at local level
Health providers	Governmental authorities at local level
School representatives	Governmental authorities at local level
SEEA of Ministry of Ecology and Natural Resources	Governmental authorities at national level
Ministry of Digital Development and Transport	Governmental authorities at national level
Ministry of Culture	Governmental authorities at national level
State Tourism Agency of the Republic of Azerbaijan	Governmental authorities at national level
Center of Hygiene and Epidemiology	Governmental authorities at local level
Masdar Azerbaijan	Private sector representatives at local level
AZERENERJI personnel	Project Personnel
NGOs, Trade Unions and etc	NGO
Media representatives	Media
Project-Affected Parties for Component 2 & 3	
AZERENERJI personnel	Project Personnel
Consulting companies	Project Personnel
Other Interested Parties for Component 2 & 3	
Ministry of Energy	Governmental authorities at local level
Ministry of Emergency Cases	Governmental authorities at local level

Table 6.2. Stakeholder Engagement Activities Register Template

ID	Typology	Date	Location	Title of the meeting
1	Public meeting			
2	Public meeting			
3	Public meeting			
4	Public meeting			
5	Public meeting			

Table 6.3. Example of Stakeholder Engagement Activity Form

Number:	
Engagement Activity:	
Location and Date:	
Description of the activity or event	
Project Phase:	
Typology:	
Announcements and communication:	
Minutes of Meeting reference:	
Attendees Stakeholders	
Attendees AZERENERJI	
Activity Details	
Agenda:	
Presentation material used:	
Discussion points:	

Outcomes: **Summary of feedback provided**	
Follow up Actions/Next steps to be taken:	
Lesson learned	
Other notes	

Table 6.4. Grievance Mechanism Register Templates

No	Complainant	Grievance Description	Submission date	Receipt date	Submission Method	Closure date
1						
2						
3						
4						
5						

Table 6.5. Grievance Management Form

Grievance Information			
ID:			
Title:			
Submission method:			
Date of submission:			
Date of receipt:			
Complainant details			
Name:			
Organization:			
Address: Telephone/ Fax: Email:			
Details on the reported Grievance			
Location of the grievance Assets and Activities involves Any other party involves			
Grievance review			
Is grievance eligible for mechanism:	Y/N		
Date completed:			
Description of the review and result			
Grievance assessment and resolution			
Grievance category:			

Parties involved in assessment:			
Resolution and Corrective actions			
Description			
Resolution and Corrective actions			
Action to be Taken		**Responsible**	**Date/period**
1.			
2.			
3.			
Records of any meeting held during the process			
Date	**Attendees**	**Outcomes**	
Records of any other Communication			
Date	**Recipient**	**Type**	**Content**
Closure			
Was complainant satisfied:	Yes/No/Partially		
Description			
Date of closure:		**Signature :**	

Table 6.6. Monitoring and Reporting on the SEP

Key evaluation questions	Specific Evaluation questions	Potential Indicators	Data Collection Methods
GM. To what extent have project-affected parties been provided with accessible and inclusive means to raise issues and grievances? Has the implementing agency responded to and managed such grievances?	• Are project affected parties raising issues and grievances? • How quickly/effectively are the grievances resolved?	• Usage of GM and/or feedback mechanisms • Requests for information from relevant agencies. • Use of suggestion boxes placed in the villages/project communities. • Number of grievances raised by workers, disaggregated by gender of workers and worksite, resolved within a specified time frame. • Number of Sexual Exploitation, and Abuse/Sexual Harassment (SEA/SH) cases reported in the project areas, which were referred for health, social, legal and security support according to the referral process in place. (if applicable) • Number of grievances that have been (i) opened, (ii) opened for more than 30 days, (iii) resolved, (iv) closed, and (v) number of responses that satisfied the complainants, during the reporting period disaggregated by category of grievance, gender, age, and location of complainant.	Records from the implementing agency and other relevant agencies
Stakeholder engagement impact on project design and implementation. How have engagement	• Was there interest and support for the project? • Were there any adjustments made during project design and implementation based on the feedback received?	• Active participation of stakeholders in activities • Number of actions taken in a timely manner in response to feedback received during consultation	Stakeholder Consultation Attendance Sheets/Minutes Evaluation forms Structured surveys

Key evaluation questions	Specific Evaluation questions	Potential Indicators	Data Collection Methods
activities made a difference in project design and implementation?	• Was priority information disclosed to relevant parties throughout the project cycle? A.	sessions with project affected parties. • Number of consultation meetings and public discussions where the feedback and recommendation received is reflected in project design and implementation. • Number of disaggregated engagement sessions held, focused on at-risk groups in the project.	Social media/traditional media entries on the project results
Implementation effectiveness. Were stakeholder engagement activities effective in implementation?	• Were the activities implemented as planned? Why or why not? • Was the stakeholder engagement approach inclusive of disaggregated groups? Why or why not?	• Percentage of SEP activities implemented. • Key barriers to participation identified with stakeholder representatives. • Number of adjustments made in the stakeholder engagement approach to improve projects' outreach, inclusion and effectiveness.	Communication Strategy (Consultation Schedule) Periodic Focus Group Discussions Face-to-face meetings and/or Focus Group discussions with Vulnerable Groups or their representatives

Annex 7. Biodiversity Management Plan

1. INTRODUCTION

This document presents the first draft of the Biodiversity Management Plan (BMP) of the AZURE Project, developed for both construction and operation phases of the Project. The draft plan is developed based on the conclusions of EBS and EIA studies and must be further elaborated by the additional studies and monitoring works to be implemented within the span of the Project, including a Critical Habitat Assessment.

Additional studies will be conducted to determine if Turyanchay State Nature Reserve and other 'biodiversity hot spots' are likely to trigger the critical habitat provisions under Environmental and Social Standard 6 (ESS6) of the World Bank. Several key factors suggest that Turyanchay SNR (and potentially others) would meet the criteria for critical habitat as defined by ESS6, particularly due to its rich biodiversity and global importance for certain species, including:

1. Presence of Endangered and Vulnerable Species:

Two dendraflora (forest-like) species of the reserve – *Juniperus* and pomegranate are included in the Red Book. There are 24 species of mammals and 112 species of birds, 20 species of reptiles and 3 species of amphibians in the reserve. Among the birds there are partridge (*Alectoris kakelik*), pigeons, *Cercheneis tinnunculus*, griffon (*Gyps fulvus*), black vulture (*Aegypius monachus*) and others. Among mammals there are wild boar, brown bear, badger, stone marten, lynx, jackal, European wild cat, hare and others. Among reptiles there are amongst others *Macrovipera lebetina*. Along the former river- beds and channels the Caspian turtle can be found, and on the slopes of the mountain the spur-thighed tortoise can be observed, which, as well as the *Coluber caucasicus* is included in the Red Book, along with several bird species.

2. Significant Populations of Migratory Birds:

o The SNR likely serves as a crucial resting, breeding, and wintering site for large numbers of migratory birds, including species. This makes it a critical stopover for species that follow the Central Asian flyway, and it provides essential ecological services for migratory species.

3. Unique or Highly Threatened Ecosystems:

  - o Turyanchay SNR was established to protect rare assemblages of forest, including arid-arch light (Bozdagh) forest landscape complex.

4. Key Biodiversity Area (KBA):

  - o Turyanchay SNR could also be considered part of the Key Biodiversity Area (KBA) network. KBAs are explicitly referenced in ESS6 as areas likely to trigger critical habitat provisions.

Implications of Critical Habitat under ESS6:

If Turyanchay SNR is identified as a critical habitat under ESS6, any development project financed by the World Bank in or near the reserve would be subject to stringent requirements:

- Avoidance of impacts to the critical habitat would be the priority.
- Any unavoidable impacts would need to be minimized, and measures to restore or offset biodiversity losses would be required.
- Biodiversity management plans would need to be developed, and the project might be required to demonstrate a net positive gain in biodiversity.

- The project would require detailed stakeholder engagement, particularly with conservation groups, and continuous monitoring of biodiversity impacts.

The Critical Habitat Assessment (CHA) will commence in October/November, by collating relevant desktop data on biodiversity values and undertaking consultations with appropriate organisations, including ornithologists and international conservation organisations. It will also be informed by the field studies that are planned to collect additional data on bird migration routes in the autumn/winter of 2024 and the spring of 2025. The CHA will be a live document and will be updated accordingly, alongside the ESIA, which will informed by the CHA.

2. GLOSSARY OF TERMS

The following definitions are of relevance within this report:

Bird migration routes Bird migration routes are the paths birds take during their seasonal travels between breeding and wintering grounds. These routes can be vast, covering continents and oceans, often following geographical landmarks like coastlines, mountains, and rivers. They are influenced by food availability, climate, predation risks, and even genetics. The birds use visual cues, the Earth's magnetic field, and celestial navigation to stay on course, sometimes flying at night with the stars as their guide. Bird migration is a remarkable feat, vital for seed dispersal, pollination, and insect control, and it highlights their crucial role in the global ecosystem.

Biodiversity the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species (genetic diversity), between species and of ecosystems.

Biodiversity Offset conservation action designed to compensate for unavoidable harm caused to biodiversity by development projects. It aims to achieve no net loss and ideally a net gain of biodiversity. Offsets are a last resort, only considered after other mitigation measures like avoidance and minimization have been exhausted. They must have clear, measurable conservation outcomes and be implemented close to the impacted site to ensure ecological equivalence. Biodiversity offsets include actions like habitat restoration, species reintroduction, and land acquisition for conservation. Although controversial, when done right, they can balance development and conservation goals.

Modified Habitat according to ESF ESS 6, modified habitats are areas that may contain a large proportion of plant and/or animal species of non-native origin, and/or where human activity has substantially modified an area's primary ecological functions and species composition (this excludes habitat that has been converted in anticipation of the project). Modified habitats may include areas managed for agriculture, forest plantations, reclaimed coastal zones, and reclaimed wetlands.

Natural Habitat according to ESF ESS6, natural habitats are areas composed of viable assemblages of plant and/or animal species of largely native origin, and/or where human activity has not essentially modified an area's primary ecological functions and species composition.

Legally Protected areas according to ESF ESS 6, a clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. They provide essential benefits such as clean water, air purification, and climate regulation, while also protecting sites of historical, spiritual, or aesthetic importance. Examples include national parks, wildlife refuges, and marine protected areas. These protected areas are critical for biodiversity conservation, ecosystem services, climate change mitigation,

cultural heritage preservation, research, education, and recreation. They are essential for safeguarding our planet's natural heritage and ensuring a sustainable future.

Critical Habitat ESS 6 provides for the following definition of Critical Habitats (CH): :

Critical habitats are areas with high biodiversity value, including (i) habitat of significant importance to Critically Endangered and/or Endangered species, as listed in the IUCN Red List of threatened species or equivalent national approaches; (ii) habitat of significant importance to endemic or restricted-range species; (iii) habitat supporting globally or nationally significant concentrations of migratory or congregatory species; (iv) highly threatened or unique ecosystems; and (v) ecological functions or characteristics that are needed to maintain the viability of the biodiversity values described in (i) and (iv).

3. POLICY STATEMENT

The development of this BMP has been guided by the requirements of ESS6 of the WB ESF and certain aspects of the AzerEnerji's Health, Environment, Safety and Quality policies, as set out in Figure 1 below. This Policy is a high-level corporate statement of intent and establishes the principles to be followed in the management of environmental and health & safety issues.

COMPANY COMMITMENT

"AzerEnerji" OJSC, as a responsible corporate entity and a key stakeholder in the Azerbaijan Scaling-Up Renewable Energy Project, is fully committed to the effective implementation of the Biodiversity Management Plan. We recognize the importance of preserving the rich biodiversity of the project area and minimizing any potential negative impacts associated with the construction activities.

ENVIRONMENTAL POLICY STATEMENT

"AzerEnerji" OJSC will manage their business in a life cycle perspective. In its operations, "AzerEnerji" OJSC will contribute to eco-efficiency by continuously improving energy consumption and reducing waste, emissions and discharges. Waste that is generated will be handled and disposed if safely and responsibly. "AzerEnerji" OJSC will implement Azerbaijan Scaling-Up Renewable Energy Project to have the minimum adverse effect on the environment throughout their lifecycle.

Figure 7-1. Company Commitment and Environmental Policy Statement

WB ESF protects people and the environment from potential adverse impacts that could arise from Bank-financed

projects, and promotes sustainable development. The Environmental and Social Standard on Biodiversity Conservation & Sustainable Management of Living Natural Resources (ESS6) requires Borrowers to:

- Protect and conserve biodiversity and habitats

- Apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity
- Support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.

ESS6 addresses different types of habitats: modified habitat, natural habitat and critical habitat. It includes requirements for legally protected, designated or regionally/internationally recognized areas of high biodiversity value. It includes also provisions on invasive alien species and requirements on animal husbandry and large-scale commercial farming. ESS6 contains requirements relating to primary suppliers, where a project involves purchasing natural resource commodities, including food, timber and fiber. ESS6 promotes sustainable management of living natural resources, including primary production and harvesting.

4. PURPOSE AND SCOPE

BMP pursues the ultimate goal to minimize environmental footstep of the AZURE Project through proposing mitigation measures for all potentially adverse impacts upon the biological diversity, habitats, migration routes and protected nature areas detected within the geographic coverage of the AZURE Project AoI. The scope of this BMP covers the construction and operational phases of the AZURE Project.

Mitigation measures are presented to ensure that ecological processes are maintained and are not disrupted through the construction and maintenance activities of the AZURE Project. Specific measures relate to (i) minimizing the unavoidable loss or degradation of Natural Habitats associated with the Project footprint and the influx of people, (ii) to avoid the loss of species as a during erection of the OHL towers during the construction phase, and the OHL maintenance and energy transmission works during the operation phase, and (iii) to minimize negative cumulative effects to the greater conservation area.

BMP aims to fulfil the following objective:

1. Impact avoidance. This involves meticulously identifying delicate ecosystems and crucial habitats along the planned OHL routes and other Project facilities, enabling construction and operation activities to be carefully planned to protect these areas from any adverse impact, whenever feasible.

2. Impact mitigation. If an emergence of an adverse impact is unavoidable, development of detailed mitigation measures to be implemented to reduce disturbance, habitat loss and loss of biodiversity during construction and operation works of the Project.

3. Rehabilitation and enhancement. After construction, disturbed areas are rehabilitated to their original or even an improved ecological state. Habitat enhancement measures, such as planting native vegetation, are implemented to make up for any unavoidable habitat loss. Additionally, new habitats may be created, or fragmented habitats may be connected to improve biodiversity.

4. Compliance. The BMP ensures adherence of construction, operation and impact mitigation activities of the Project to all relevant national and international environmental laws, industry best practices, and standards for biodiversity conservation (especially ESS6), and encloses information that is necessary for acquiring permits and approvals from the relevant authorities.

5. Stakeholder engagement. Together with SEP and other management plans, the BMP forms a framework for consulting local communities, NGOs, and other stakeholders throughout the project lifecycle, and making sure that their concerns are addressed, and their feedback is incorporated into the BMP. This

fosters awareness and understanding of the project's potential impacts and the mitigation measures in place.

6. Monitoring and evaluation. The BMP sets up a comprehensive monitoring program tracking the project's impact on biodiversity. The effectiveness of mitigation measures is regularly assessed, with adjustments made as necessary. The project's biodiversity performance is reported to stakeholders and regulatory authorities, ensuring transparency and accountability.

This BMP should be considered to be a "living" document that is amended in light of the learning experienced during its implementation. In compliance to ESS6, a specific BMP would be required if potential significant adverse impacts are forecast.

5. LINKAGE TO OTHER ENVIRONMENTAL AND SOCIAL PLANS

This BMP should be read in the context of the Environmental and Social Management Plans discussed in Chapter 11 of the ESIA, developed and to be developed in the way that they address a broad range of social and environmental risks. It is recognized that all environmental and social management plans are living tools that will be constantly updated to accommodate changing circumstances. Details of the interlinkage of BMP with other management plans are described in Table 1 below.

Table 7-1. Links between Biodiversity Management Plan and other environmental and social management plans of the project

Management Plans	Linkage with Biodiversity Management Plan
Excavation Management Plan	**Habitat Protection and Restoration:** The excavation plan needs to identify areas of high biodiversity value that require protection or avoidance during construction. In cases where impacts are unavoidable, the biodiversity plan outlines restoration and rehabilitation measures to compensate for habitat loss or degradation. **Water Management:** Excavation activities can disrupt natural hydrological processes, impacting aquatic ecosystems and dependent species. Both plans need to address water management strategies to minimize impacts on biodiversity, such as controlling dewatering operations and preventing pollution of water bodies. **Wildlife Management:** Excavation can disturb wildlife populations through habitat loss, noise, and increased human activity. The biodiversity plan includes measures to minimize these impacts, such as creating wildlife corridors, implementing noise reduction measures, and timing construction activities to avoid sensitive breeding seasons. **Monitoring and Adaptive Management:** Both plans rely on ongoing monitoring to assess the effectiveness of mitigation measures and identify any unforeseen impacts. This information is crucial for adaptive management, allowing for adjustments to be made to both plans as needed to ensure the protection of biodiversity and successful excavation management.

Management Plans	Linkage with Biodiversity Management Plan
Soil Erosion and Sediment Control Plan	**Erosion Control and Habitat Protection:** Erosion control measures outlined in the SESCP, such as stabilizing slopes, establishing vegetative cover, and implementing proper drainage, directly contribute to habitat protection and biodiversity conservation. Preventing soil loss and sedimentation helps maintain the integrity of ecosystems and prevents the degradation of habitats crucial for various species. **Water Quality and Aquatic Biodiversity:** The SESCP's focus on preventing sediment runoff into water bodies is critical for protecting aquatic biodiversity. Sedimentation can smother aquatic habitats, impair water clarity, and reduce oxygen levels, adversely affecting fish, invertebrates, and other aquatic organisms. Effective sediment control measures support the objectives of the BMP in preserving water quality and aquatic ecosystems. **Sensitive Habitats:** The BMP identifies areas with high biodiversity value that require special protection during construction. The SESCP then incorporates measures to avoid or minimize soil disturbance and erosion in these sensitive areas, preserving their ecological integrity. **Riparian areas:** Riparian areas are crucial for aquatic and terrestrial biodiversity. The BMP emphasizes their protection, while the SESCP includes specific measures to prevent sedimentation and erosion near water bodies, safeguarding these vital habitats. **Revegetation and Habitat Restoration:** The BMP outlines strategies for revegetating disturbed areas with native species, promoting habitat recovery and biodiversity enhancement. The SESCP ensures that these revegetation efforts are successful by preventing soil erosion and establishing stable ground cover. **Rehabilitation and Restoration:** Both plans address the restoration of disturbed areas. The SESCP focuses on stabilizing soil and preventing further erosion, while the BMP emphasizes revegetation with native species, creating wildlife corridors, and enhancing habitat connectivity to promote biodiversity recovery. **Monitoring and Adaptive Management:** Both plans necessitate ongoing monitoring to assess the effectiveness of implemented measures and identify any unforeseen impacts. This information allows for adaptive management, enabling adjustments to be made to both plans to ensure continued environmental protection and biodiversity conservation throughout the project's lifecycle.

Management Plans	Linkage with Biodiversity Management Plan
Noise and Vibration Management Plan	**Wildlife Disturbance:** both plans address the potential impact of noise and vibration on wildlife. **Habitat Degradation:** both plans recognize the importance of maintaining habitat quality. While the BMP focuses on preserving natural habitats, the NVMP addresses the potential for noise and vibration to indirectly impact habitats. **Sensitive Areas:** both plans prioritize the protection of sensitive areas. These can include protected areas, breeding grounds, migration corridors, and areas with unique ecological value. The BMP identifies these areas, and the NVMP ensures that noise and vibration mitigation measures are specifically tailored to these sensitive locations. **Monitoring and Adaptive Management:** Both plans rely on continuous monitoring to assess the effectiveness of mitigation measures. Monitoring data on noise and vibration levels, as well as wildlife behavior and habitat condition, allows for adaptive management strategies to be implemented if necessary. **Mitigation Measures:** several mitigation measures can serve both biodiversity and noise/vibration management objectives. For example, using noise barriers or enclosures can reduce noise levels while also creating visual barriers that minimize disturbance to wildlife. Scheduling construction activities outside of sensitive periods, such as breeding and migration seasons, benefits both wildlife and noise management. **Cumulative Impact Assessment:** Both plans contribute to a comprehensive understanding of the project's potential cumulative impacts on the environment. By considering the combined effects of noise, vibration, and other construction activities on biodiversity, more effective mitigation and management strategies can be developed.
Emission Control Plan	**Air Quality & Habitat Degradation:** Emissions from construction activities, such as dust, exhaust fumes, and volatile organic compounds (VOCs), can negatively impact air quality, leading to habitat degradation. Poor air quality can affect plant health, reduce visibility, and harm wildlife, particularly sensitive species. Both plans address the need to minimize emissions and protect air quality to safeguard biodiversity. **Climate Change & Ecosystem Vulnerability:** Greenhouse gas emissions contribute to climate change, which poses a significant

Management Plans	Linkage with Biodiversity Management Plan
	threat to biodiversity. The BMP addresses the need to protect ecosystems and enhance their resilience to climate change impacts. The ECP focuses on reducing greenhouse gas emissions to mitigate climate change, indirectly benefiting biodiversity conservation. **Sensitive Habitats & Air Pollution:** Sensitive habitats, such as wetlands, forests, and protected areas, are particularly vulnerable to air pollution. The BMP identifies and prioritizes the protection of these sensitive areas. The ECP incorporates measures to minimize emissions and prevent air pollution from impacting these valuable ecosystems. **Data Sharing and Coordination:** Both plans rely on accurate data and information regarding the project's potential environmental impacts. The BMP provides insights into sensitive habitats and species, while the ECP focuses on emission sources and their potential impacts. Sharing this data ensures that both plans are aligned and mutually supportive. **Mitigation Measures:** Certain mitigation measures can serve both biodiversity and emission control objectives. For example, dust suppression techniques not only improve air quality but also prevent dust from settling on vegetation, which can impair plant health and reduce habitat quality. **Monitoring and Adaptive Management:** Both plans require ongoing monitoring to assess the effectiveness of mitigation measures. Monitoring air quality and biodiversity indicators allows for adaptive management strategies to be implemented if necessary, ensuring continuous environmental protection.
Traffic Management Plan	**Habitat Fragmentation & Wildlife Mortality:** Both plans aim to minimize these impacts. The BMP identifies critical habitats and wildlife corridors, while the TMP incorporates measures to reduce traffic speeds, provide safe crossing points for wildlife, and minimize habitat disturbance during road construction or expansion. **Noise & Air Pollution:** The BMP seeks to protect sensitive species and habitats from disturbance, while the TMP aims to manage traffic flow and promote the use of low-emission vehicles to reduce noise and air pollution levels. **Access to Natural Areas:** The BMP emphasizes maintaining access to critical habitats and wildlife corridors. The TMP ensures that access to natural areas is maintained or restored during and after

Management Plans	Linkage with Biodiversity Management Plan
	construction, considering both human needs and wildlife movement patterns. **Data Sharing and Coordination:** Effective implementation of both plans requires collaboration and data sharing between environmental and transportation planners. The BMP provides information on sensitive habitats and species, while the TMP incorporates this data into traffic routing and mitigation measures. **Mitigation Measures:** Several mitigation measures can serve both biodiversity and traffic management objectives. For example, creating wildlife underpasses or overpasses not only reduces wildlife mortality but also improves traffic safety by minimizing animal-vehicle collisions. **Monitoring and Adaptive Management:** Both plans rely on ongoing monitoring to assess the effectiveness of mitigation measures. Monitoring data on wildlife movement, roadkill incidents, traffic patterns, and noise/air pollution levels allow for adaptive management strategies to be implemented as needed.
Waste Management Plan	**Habitat Contamination & Degradation:** The BMP identifies sensitive habitats and species that require protection. The WMP implements measures to prevent waste from polluting soil, water bodies, and air, thus safeguarding these valuable ecosystems. **Wildlife Impacts:** The BMP focuses on minimizing wildlife disturbance. The WMP ensures that waste is stored and disposed of in a way that prevents attracting animals, reducing the risk of human-wildlife conflicts. **Resource Depletion & Pollution:** The BMP promotes the sustainable use of resources and the minimization of environmental impacts. The WMP focuses on waste reduction, reuse, and recycling to conserve resources and minimize pollution. **Data Sharing and Coordination.** The BMP provides information on sensitive habitats and species, while the WMP incorporates this data into waste management strategies to avoid impacts on biodiversity. **Mitigation Measures:** Several mitigation measures can serve both biodiversity and waste management objectives. For example, using biodegradable or reusable materials during construction can reduce waste generation and minimize the impact on the environment. **Monitoring and Adaptive Management:** Monitoring data on waste generation, disposal practices, and any potential impacts on

Management Plans	Linkage with Biodiversity Management Plan
	biodiversity allows for adaptive management strategies to be implemented as needed.
Labor Management Plan	**Habitat Disturbance and Wildlife Impacts:** The BMP identifies sensitive habitats and species that require protection. The LMP, through proper workforce management and training, can help minimize disturbance to these areas and reduce the impact on wildlife. **Waste Generation and Pollution:** The BMP aims to prevent pollution and habitat degradation. The LMP, by incorporating waste management practices and promoting responsible behavior among workers, can contribute to minimizing waste generation and ensuring proper disposal. **Invasive Species:** The BMP focuses on preventing the introduction and spread of invasive species. The LMP can include measures to educate workers about invasive species and implement protocols to clean equipment and vehicles to prevent their spread. **Training and Awareness:** The LMP can include training programs to raise awareness among workers about the importance of biodiversity conservation and the potential impacts of their activities on the environment. This can foster a sense of responsibility and encourage workers to adopt environmentally friendly practices. **Environmental Stewardship:** The LMP can promote environmental stewardship among the workforce by encouraging workers to report any observations of wildlife or potential environmental concerns. This can help identify and address any unforeseen impacts on biodiversity during the project. **Collaboration and Communication:** Effective communication and collaboration between the environmental and labor management teams are essential for ensuring that both plans are implemented successfully. Regular meetings and information sharing can help identify and address potential conflicts or overlaps between the two plans.
Community Health and Safety Plan	**Vector-Borne Diseases and Zoonoses:** The BMP focuses on minimizing habitat disturbance and controlling wildlife populations to reduce the risk of disease transmission. The CHSP outlines measures to prevent and manage vector-borne diseases, such as mosquito control and worker health education. **Air and Water Quality:** The BMP aims to protect air and water quality to safeguard ecosystems and biodiversity. The CHSP focuses on

Management Plans	Linkage with Biodiversity Management Plan
	minimizing exposure of workers and communities to pollutants through dust control measures, proper waste management, and air quality monitoring. **Noise and Vibration:** The BMP seeks to minimize disturbance to wildlife caused by noise and vibration. The CHSP addresses the potential health impacts of noise and vibration on workers and nearby communities, implementing measures to reduce noise levels and mitigate vibration. **Environmental Health:** The BMP and CHSP both contribute to environmental health, which encompasses the well-being of both humans and the natural environment. A healthy environment supports biodiversity and provides essential ecosystem services, such as clean air and water, which are vital for human health. **Community Engagement:** Both plans emphasize the importance of community engagement and communication. Involving local communities in the planning and implementation of both the BMP and CHSP fosters understanding, trust, and cooperation, leading to better outcomes for both biodiversity conservation and community health and safety. **Monitoring and Reporting:** Monitoring data on environmental parameters, such as air and water quality, as well as health and safety indicators, can help identify and address any potential risks to both biodiversity and human health.

6. SUMMARY OF LEGAL REQUIREMENTS

BMP ensures that the construction and maintenance works which will be implemented throughout the Project's lifespan will adhere to the following legal requirements accepted in Azerbaijan:

6.1. National Legislation:

- **Law on Environmental Protection:** This overarching law establishes the principles and framework for environmental protection in Azerbaijan, including the conservation of biodiversity.
- **Law on Specially Protected Natural Areas:** This law regulates the management and protection of national parks, reserves, and other protected areas, which are crucial for biodiversity conservation. Any project activities near or within these areas must comply with specific regulations.
- **Law on Geoparks:** this law regulates the establishment and operation principles of geoparks in Azerbaijan. Provided that OHL facilities in Gobustan region will pass near or through one of the

geoparks under organization, adhering to the law will be one of the key criteria of success for this project segment.

- **Law on Flora:** This law governs the protection and use of plant resources, including the prohibition of illegal collection, trade, and destruction of wild plants.
- **Law on Fauna:** This law regulates the protection and use of animal resources, including the prohibition of hunting, capturing, and trade of protected species.
- **Law on Environmental Impact Assessment:** Projects with potential significant environmental impacts, including those affecting biodiversity, must undergo an Environmental Impact Assessment (EIA) process. The EIA evaluates potential impacts and proposes mitigation measures.
- **Water Code:** In the context of current BMP, the Water Code of Azerbaijan provides crucial legal and regulatory guidance for protecting aquatic ecosystems and biodiversity.
- **Land Code**: the code establishes the legal framework for land ownership, use, and protection within the country. It plays a crucial role in ensuring that development projects, such as AZURE Project, are carried out in a manner that minimizes their impact on biodiversity and promotes sustainable land management practices.

6.2. International Agreements:

- **Convention on Biological Diversity (CBD):** Azerbaijan is a signatory to the CBD, which commits the country to conserve biodiversity, promote sustainable use of its components, and share benefits arising from the utilization of genetic resources.
- **Bern Convention on the Conservation of European Wildlife and Natural Habitats:** This convention focuses on protecting wild flora and fauna and their natural habitats, particularly those of European importance.
- **Bonn Convention on the Conservation of Migratory Species of Wild Animals:** This convention aims to conserve terrestrial, marine, and avian migratory species throughout their range. Projects should consider the potential impacts on migratory species and their habitats.

6.3. World Bank EHS Guidelines:

General EHS Guidelines: These guidelines provide a framework for managing environmental, health, and safety risks associated with projects. The BMP will consider relevant aspects of these guidelines, such as:

- **Environmental Assessment:** Conduct an environmental assessment to identify and assess potential impacts on biodiversity and ecosystems.
- **Natural Habitats:** Protect and conserve natural habitats, including critical habitats, protected areas, and areas of high biodiversity value.

- **Invasive Species:** Prevent the introduction and spread of invasive species that may threaten native biodiversity.
- **Pollution Prevention and Control:** Implement measures to prevent and control pollution of air, water, and soil, which can negatively impact biodiversity.
- **Monitoring and Reporting:** Establish monitoring programs to track environmental performance and biodiversity indicators, and report regularly on the project's impacts and mitigation efforts.

6.4. ESF Environmental and Social Standards (ESSs)

ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. is conservation and protection of biodiversity and living natural resources in reaching sustainable development. It is important to maintain ecological functions of habitats and the biodiversity they support. Biodiversity often underpins ecosystem services as well. Therefore, impacts on biodiversity can adversely impact ecosystem services as well. The World Bank addresses requirements related to ecosystem services in ESS1: Assessment and Management of Environmental and Social Risks and Impacts. The main objectives set out in ESS6 are as the following:

- To protect and conserve biodiversity and habitats.
- To apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity.
- To promote the sustainable management of living natural resources.
- To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.

ESS6 requires that biodiversity-related risks and impacts as such; ecosystems affected, species affected, ecosystems services affected, protection status, site ownership and control, baseline threats, and potential project-related risks and impacts, are described in the environmental and social impact assessment. This standard requires the project to avoid, minimize, and mitigate impacts on biodiversity, and to promote sustainable management of living natural resources. The BMP should address the following aspects:

- Biodiversity Assessment: Conduct a comprehensive assessment of biodiversity in the project area, including the identification of critical habitats, endangered species, and ecosystem services.
- Impact Assessment and Mitigation Hierarchy: Assess potential impacts of the project on biodiversity and apply the mitigation hierarchy (avoid, minimize, restore, offset) to address these impacts.
- Biodiversity Management and Monitoring: Develop and implement a biodiversity management plan with clear objectives, targets, and monitoring programs to track the effectiveness of mitigation measures.
- Stakeholder Engagement: Engage with relevant stakeholders, including local communities, indigenous peoples, and NGOs, in the development and implementation of the BMP.

6.5. Permitting and Licensing:

Environmental Permits: Construction and operation projects may require environmental permits from relevant authorities, such as the Ministry of Ecology and Natural Resources.

The list of permits are as follows:

A. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF CONSTRUCTION CAMP

1. Permission on establishment from local Executive Power
2. Contract with land owner
3. Conclusion on using of land for Camp installation with description of establishing facilities from Local Department of MENR
4. Permission on using of land for Camp installation with description of establishing facilities from State Ecological Expertise Department of MENR
5. Conclusion on exploitation of Construction Camp from Ministry of Emergency Situation
6. Agreement with local Municipal organization on transportation and utilization of domestic waste and sewage
7. Agreement with local department of "Azersu" on supply with potable quality water or (if domestic and/or drinking water is supplied from unofficial source) result of water analysis made in licensed laboratory with copy of laboratory certificate
8. Agreement with licensed organization on transportation and utilization of hazardous waste

B. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF PLANTS

1. Permission on establishment from local Executive Power
2. Contract with land owner
3. Conclusion on using of land for Camp installation with description of establishing facilities from Local Department of MENR
4. Permission on establishment from State Ecological Expertise Department of MENR
5. Ecological Passport
6. Inventory of exhaust to the atmosphere
7. Approved norms PDV (limit for allowed exhaust)

8. Special permission (Technical Passport on filter only for Asphalt Plant)
9. Passports for each Bitumen and Fuel (Diesel) Tanks
10. Conclusion on exploitation of Construction Camp from Fire Department of Ministry of Emergency Situation
11. Agreement with local Municipal organization on transportation and utilization of domestic waste and sewage (separate agreement if located outside the Construction Camp)
12. Agreement with licensed organization on transportation and utilization of hazardous waste

C. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF BORROW PITS

1. Permission on establishment from local Executive Power
2. Contract with land owner
3. Conclusion on using of land for Borrow Pit installation with description of establishing facilities from Local Department of MENR
4. Permission on establishment from State Ecological Expertise Department of MENR
5. Ecological Passport

D. LIST OF PERMITS NEEDED FOR ESTABLISHMENT AND EXPLOITATION OF STOCKPILES

1. Contract with land owner
2. Permission letter from land owner on this type of land use

Protected Area Permits: Activities within or near protected areas may require additional permits or authorizations from the relevant managing authorities.

6.6. Specific Considerations:

- **Endangered Species:** The BMP must include measures to protect endangered and threatened species listed in the Red Book of Azerbaijan and other relevant international lists.
- **Sensitive Habitats:** Particular attention should be given to the protection of sensitive habitats, such as wetlands, forests, and riparian zones, which are crucial for biodiversity.
- **Mitigation Hierarchy:** The BMP should follow the mitigation hierarchy, prioritizing avoidance, minimization, and then compensation for any unavoidable impacts on biodiversity.

7. ROLES AND RESPONSIBILITIES

With respect to the BMP, AzerEnerji will have the responsibility to provide Biodiversity management and to structure and coordinate Biodiversity management procedures for the Azerbaijan Scaling-Up Renewable Energy Project.

Furthermore, AzerEnerji has the responsibility for ensuring that specific ecological responsibilities allocated to them are organized and implemented. AzerEnerji has the responsibility to ensure that their employees and contracted third parties are trained and aware of all required ecological procedures. The roles and responsibilities within AzerEnerji and the contractors for the implementation of the BMP are presented in Table 2 below.

Table 7-2. Roles and responsibilities within the BMP implementation context

Responsible parties	Roles and responsibilities
PIU Coordinator	**Leading BMP Implementation:** Overseeing all aspects of the BMP, ensuring its goals are met and biodiversity is protected throughout the project. **Managing the Environmental Team:** Leading and guiding the team, assigning tasks, and ensuring they have the resources and training to fulfill their duties. **Coordinating with Contractors:** Ensuring contractors' activities align with the BMP and that they implement necessary mitigation measures. **Overseeing BMP Development:** Ensuring the BMP is comprehensive, compliant with regulations, and addresses the specific environmental context of the project. **Establishing Monitoring:** Setting up and overseeing a monitoring program to track mitigation effectiveness and identify any unforeseen impacts. **Facilitating Stakeholder Engagement:** Engaging with local communities and other stakeholders, ensuring their concerns are considered in the BMP. **Promoting Capacity Building:** Providing training and raising awareness about biodiversity conservation and the project's environmental commitments. **Ensuring Adaptive Management:** Regularly reviewing the BMP and monitoring data to assess effectiveness and implement adaptive strategies when needed.
Environmental Specialist	**Overseeing BMP Implementation:** Leading the execution of the BMP, ensuring its objectives are met, and biodiversity is protected throughout the project lifecycle. **Conducting Environmental Assessments:** Leading the environmental impact assessment process, identifying potential risks, and recommending mitigation measures to minimize harm to biodiversity.

	Developing & Implementing Mitigation Measures: Designing and implementing specific actions to avoid, minimize, and compensate for any adverse impacts on biodiversity, aligning with the BMP and regulatory requirements. **Monitoring & Reporting:** Establishing and overseeing environmental monitoring programs, collecting data on key indicators, and reporting on the project's environmental performance, including biodiversity-related aspects. **Coordinating with Stakeholders:** Collaborating with regulatory agencies, local communities, NGOs, and other stakeholders to ensure effective BMP implementation and address any emerging environmental concerns. **Promoting Environmental Awareness:** Conducting training and awareness programs for project staff and contractors, emphasizing the importance of biodiversity conservation and responsible environmental practices. **Ensuring Compliance:** Ensuring the project adheres to all relevant environmental laws, regulations, and permit conditions, particularly those concerning biodiversity protection. **Managing Environmental Incidents:** Developing and implementing contingency plans to address any unforeseen environmental incidents or emergencies that may impact biodiversity.
Occupational Health and Safety Specialist	**Risk Assessment & Mitigation**: Identify and assess potential health and safety hazards that could indirectly impact biodiversity (e.g., chemical spills, improper waste disposal). Develop and implement mitigation measures to prevent or minimize these risks, thus safeguarding both human health and the environment. **Emergency Preparedness & Response**: Establish procedures to respond to accidents or emergencies that could harm the environment, such as chemical spills or fires. Swift and effective response can help contain the impact and prevent further damage to biodiversity. **Worker Training & Awareness**: Educate workers on environmental protection measures outlined in the BMP, including proper waste disposal, handling of hazardous materials, and minimizing disturbance to wildlife and their habitats. Promote a culture of environmental responsibility among the workforce. **Waste Management Oversight**: Collaborate with the environmental team to ensure proper waste management practices are followed, minimizing the potential for pollution and harm to ecosystems. **Monitoring & Reporting**: Monitor health and safety performance, including any incidents with potential environmental implications, and report findings to

	relevant stakeholders. This helps identify and address any emerging risks to both human health and biodiversity.
Stakeholder Engagement Specialist	**Communication and Engagement:** Develop and implement communication strategies to inform stakeholders about the project's commitment to biodiversity. Facilitate open dialogue with communities and addresses their concerns. Proactively engage with local communities to address biodiversity concerns and build trust. **Media Relations:** Build relationships with media, providing accurate information about the project's environmental initiatives. Utilize media channels to highlight the project's commitment to sustainability. **Crisis Communication:** Prepare for and manages any negative publicity related to the project's environmental impact. Ensures transparent communication during a crisis. **Success Story Promotion:** Identify and promote positive outcomes related to biodiversity conservation, showcasing the project's environmental stewardship. **Transparency:** Maintain open communication about the project's environmental performance and mitigation efforts. **Cultural Sensitivity:** Adapt communication strategies to resonate with the local community's values and concerns.
Procurement Specialist	**Sustainable Procurement:** Prioritize environmentally responsible suppliers and materials to minimize impacts on biodiversity. **Supplier Due Diligence:** Assess suppliers' environmental performance and compliance. **Contractual Requirements:** Incorporate environmental clauses in contracts to ensure adherence to the BMP. **Waste Management:** Collaborate to minimize waste generation and promote recycling. **Monitoring and Reporting:** Track and report on suppliers' environmental performance. **Local Sourcing:** Prioritize local suppliers to reduce emissions and support the economy. **Environmentally Friendly Materials:** Favor recycled or biodegradable materials. **Sensitive Habitats:** Avoid sourcing materials from sensitive areas.

Contractors	**Comply with and implement the BMP:** All contractors working on the project must adhere to the guidelines and measures outlined in the Biodiversity Management Plan. **Minimize habitat disturbance:** employ techniques to minimize habitat disturbance and fragmentation, such as careful site selection, erosion control, and proper waste management. **Protect sensitive species:** take precautions to avoid harming or disturbing sensitive species, such as nesting birds or endangered plants. **Restore disturbed areas:** restore the areas disturbed during construction to their original state or enhancing them for biodiversity. **Train workers:** Contractors should provide training to their staff on the importance of biodiversity conservation and the specific procedures to follow on-site, including for non-lethal and safe relocation of slow-moving wildlife (such as snakes and turtles). **Report observations:** Workers should be encouraged to report any observations of rare or sensitive species or any potential environmental concerns. **Communicate and collaborate:** Effective communication and collaboration between all contractors, consultants, and the project team are vital for successful biodiversity management.

8. BIODIVERSITY BASELINE

8.1. Biodiversity and threatened species

Detailed information of biodiversity of the Project AoI is provided in Chapter 6.10 of the Environmental Baseline. Developed based on literature studies, the chapter sites about 1544 flora, 39 fish, 3 amphibian, 21 reptile, 79 bird and 29 mammal species spread to different extents along the entire AoI. According to the coverage, certain species have been listed in the 3rd Edition of the Red Book of Azerbaijan, and some have statuses of rare and endangered species according to IUCN.

The list of species under concern is provided in Table 3 below, summarizing the tables provided in the above chapter.

Table 7-3. Plant species under concern

Species	Abudance	Coordinate	IUCN	National Risk Categories
Rare plant species				
Astragalus eminus Maassoumi	One point	40.458379° 49.487275°	EN B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)	EN B1ab(i,ii,iii,iv)+2ab(i,ii,v)
Iris acutiloba C.A.Verz.	Occasionally	40.469920° 49.464311°		EN B2b(ii,iii,v)
Dianthus schemachensis Schischk	Occasionally	40.456019° 49.510438°	LC	EN B1ab(iii,iv,v)c(iii,iv)+2ab(ii)c(ii,iii)
Calligonum bakuense Lit.	One (A little out of line)	40.243740° 49.308499°		EN B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)
Punica granatum L.	One	40.667233° 47.593263°	LC	VU B1ab(i,ii,iii)
Juniperus foetidissima Willd	One	40.669993° 47.773821°	LC	NT
Sternbergia colchiciflora Waldst. & Kit	Not observed. But other scientists registered on the line (Rare Book)	Garamaryam, Bighir villages, Goychay		EN B2ab(ii,iii)

Species	Abudance	Coordinate	IUCN	National Risk Categories
Anacamptis coriophora (L.) R.M.Bateman, Pridgeon & M.W.Chase	Not observed. But other scientists registered on the line (Rare Book)	Goychay	LC	VU B1b(i,iii,v)
Iris schelkownicowii (Fomin) Fomin	Not observed. But other scientists registered on the line (Rare Book)	Khanabad, Yevlakh		EN B2ab(v)

Table 7-4. Fauna species under concern

#	Scientific name	Common name	AzRB	IUCN
Hydrofauna				
1	*Salmo fario*	River Trout	**LC**	**EN**
2	*Salmo caspius*	Caspian Trout	**LC**	**CR**
3	*Luciobarbus capito*	Bulatmai Barbel	**VU**	**VU**
4	*Luciobarbus brachycephalus caspius*	Caspian Barbell	**LC**	**VU**
5	*Ballerus sapa bergi*	White-eye Bream	**LC**	**CR**
6	*Pelecus cultratus*	Sichel	**LC**	**CR**
Reptiles				
1	*Emys orbicularis*	European Pond Turtle	**-**	**NT**
3	*Testudo graeca*	Common Tortoise	**NT**	**VU**
15	*Elaphe urartica*	Urartian Ratsnake	**VU**	**LC**
Birds				
1	*Ciconia nigra*	Black Stork	**EN**	**LC**
2	*Phoenicopterus ruber*	Greater Flamingo	**VU (Nesting Population)**	**LC**
3	*Cygnus olor*	Mute Swan	**CR (Nesting Population)**	**LC**
4	*Pandion haliaetus*	Osprey	**CR**	**LC**

#	Scientific name	Common name	AzRB	IUCN
5	*Milvus migrans*	Black Kite	**VU (Nesting Population)**	**LC**
6	*Hieraaetus pennatus*	Booted Eagle	**EN**	**LC**
7	*Aquila nipalensis*	Steppe Eagle	**EN**	**EN**
8	*Aquila heliaca*	Asian Imperial Eagle	**EN**	**VU**
9	*Neophron percnopterus*	Egyptian Vulture	**EN**	**EN**
10	*Gypaetus barbatus*	Bearded Vulture	**EN**	**NT**
11	*Aegypius monachus*	Black Vulture	**EN**	**NT**
12	*Gyps fulvus*	Griffon Vulture	**VU**	**LC**
13	*Falco cherrug*	Saker Falcon	**CR**	**EN**
14	*Falco biarmicus*	Lanner Falcon	**CR**	**LC**
15	*Falco subbuteo*	Hobby Falcon	**VU**	**LC**
16	*Falco vespertinus*	Red-footed Falcon	**CR**	**VU**
17	*Francolinus francolinus*	Black Francolin	**NT**	**LC**
18	*Antropoides virgo*	Demoiselle Crane	**NT**	**LC**
19	*Otis tarda*	Great Bustard	**CR**	**VU**
20	*Tetrax tetrax*	Little Bustard	**NT**	**NT**
21	*Vanellus vanellus*	Lapwing	**EN**	**NT**
22	*Pterocles orientalis*	Black-bellied Sandgrouse	**VU**	**LC**
23	*Streptopelia turtur*	European Turtle-Dove	**EN**	**VU**
Mammals				
1	*Rhinolophus hipposideros*	Lesser Horseshoe Bat	**CR**	**LC**
2	*Barbastella capsica*	Western Barbastelle	**VU**	**LC**
3	*Eptesicus ognevi*	Ognev´s serotine	**VU**	**LC**
4	*Vormela peregusna*	Marbled Polecat	**DD**	**VU**
5	*Gazella subgutturosa*	Goitered Gazelle	**VU**	**VU**

As the lists of total and endangered species spread in the Project AoI were developed relying on literature data, it is important to upgrade them throughout the project lifecycle, especially prior to the construction

phases. Upgrading biodiversity lists is a continuous process that requires ongoing monitoring, data collection, and collaboration. By taking a proactive and adaptive approach to biodiversity management, Azerenerji will ensure impacts on the environment are minimized and the project is sustainable in the long term. The upgrading will be a continuous process implemented through following regular activities:

1. Pre-construction phase:

- **Expert Consultation:** Consulting with relevant experts, such as local ornithologists or conservation biologists, to refine the biodiversity list. Experts can provide valuable insights on species distributions, habitat requirements, and potential impacts of the project.
- **Literature Review and Database Searches:** Conducting a thorough review of scientific literature and existing biodiversity databases can also help to update the list. This can reveal new information about species presence, distribution, or conservation status.
- **Predictive Modeling:** In some cases, predictive modeling tools may be used to estimate the potential presence of species in the project area based on habitat characteristics and known species distributions. This can help to identify species that may not have been detected during surveys.

2. Construction phase:

- **Ongoing Monitoring:** Regular monitoring of the construction sites and surrounding areas is crucial for updating the biodiversity list. This allows for the detection of new species, changes in species abundance or distribution, and potential impacts of the project on biodiversity.
- **Adaptive Management:** If new species or significant changes in biodiversity are detected during construction, the project design or mitigation measures may need to be adjusted. This adaptive management approach helps to minimize the impacts of the project on biodiversity.
- **Citizen Science and Community Engagement:** Engaging local communities and citizen scientists in biodiversity monitoring can provide valuable data and insights. This can help to identify new species, track changes in populations, and raise awareness about the importance of biodiversity conservation.
- **Collaboration with Regulatory Agencies and Conservation Organizations:** Working closely with regulatory agencies and conservation organizations is important for ensuring that the biodiversity list is accurate and up-to-date. These organizations can provide guidance on best practices for biodiversity monitoring and mitigation, and help to facilitate the sharing of data and information.

3. Operation phase:

- **Long-term Monitoring:** Regular monitoring of the project AoI should continue even after construction is finished. This helps to track changes in species populations, habitat conditions, and the effectiveness of any mitigation measures implemented.
- **Habitat Management and Restoration:** The maintenance phase may involve active management of the project site to maintain or enhance habitats for wildlife. This can include activities such as controlling invasive species, planting native vegetation, and creating or restoring wetlands.

- **Mitigation Measure Maintenance:** Any mitigation measures put in place to reduce the project's impact on biodiversity, such as wildlife crossings, bird diverters or artificial nesting sites, need to be maintained and their effectiveness evaluated.
- **Adaptive Management:** Monitoring data and observations during the maintenance phase can help to identify any unforeseen impacts on biodiversity. If needed, management practices can be adapted to address these impacts and ensure the long-term health of the ecosystem.
- **Community Engagement:** Continued engagement with local communities and stakeholders can be vital for gathering information about wildlife sightings and potential issues. This can contribute to ongoing updates of the biodiversity list and ensure that management practices are responsive to local observations.

8.2. Biodiversity hotspots

According to literature studies, the AZURE Project AoI crosses several key international bird migration routes, and runs along the direct vicinity of three protected nature areas, namely Turyanchay State Nature Reserve and the “Mud volcano group” State Nature Reserve. The Shirvan National Park is within a wider Project Area, in the vicinity to the Government funded OHL infrastructure which is an Associated Facility to the AZURE Project. Maps illustrating the OHL sections overlapping with the migration routes are provided in Figure 2 below. Table 5 provides for edge coordinates of each section.

Alike biodiversity patterns, the list and description of these hotspots was developed based solely on the literature sources. In order to minimize possible adverse impacts on these hotspots, it is highly important to upgrade the available information through implementing additional complex monitoring and data collection works.

A. Bird migration routes:

In addition to the conducted studies, thorough investigation of the bird migration routes must be implemented with different intensity throughout the entire Project lifecycle:

1. Pre-construction period:

- **Additional Desktop Studies and Literature Review:** Existing data on bird migration routes, important bird areas, and sensitive species in the project vicinity must be compiled and analyzed. This will help identify potential conflict areas and prioritize field surveys.
- **Field Surveys and Monitoring:** On-ground surveys must be conducted to validate and supplement desktop studies. These will include bird counts, observations of flight paths, and identification of nesting or roosting sites. With migration patterns and Project implementation schedule taken into consideration, the field studies organized by Azerenerji took place in October and November 2024 (during peak time of the migration period lasting from mid-August to late December), and will continue in March through May 2025 to cover migration and breeding and nestling seasons. Based on the findings of the field surveys and monitoring, this ESIA, including ESMP and BMP, will be updated respectively by end December 2024 and end June 2025. These studies will also feed into

the Critical Habitat Assessment (CHA) that will be undertaken in parallel, to be organised by Azerenerji to comply with ESS6.

- **Procurement of civil works/Construction Planning:** before the findings of the additional biodiversity studies/bird surveys are available and respective mitigation measures detailed in updated ESMP, BMP and C-ESMP, construction works can start in those sections of the OHL alignment which do not cross with the major migratory corridors, avoiding crossing areas as shown on Figure 6-22 above: km 47-68, km 99-121, km 168-188 and km 207 to the sea shore. The types of works which can be performed in the initial construction phase before the bird surveys are conducted, which would not introduce risks to migratory birds, are specified in Table 9-23. Two key bird nesting areas have been identified to date, both along the 500 kV Azerbaijan TPP to Navahi SS OHL: (i) Varvara Reservoir wetland, where numerous aquatic birds breed and (ii) Papadagh Hill, which is a long-used nest site for the rare Saker Falcon Falco cherrug. At these two sites, all construction activities are allowed only outside the nesting period of 1 April to 31 July. The OHL technical specifications included into the procurement package, envisage unit cost for the installation of the bird protection devices along the entire alignment; the total budget for the implementation of bird protection measures will reflect the quantities to be procured, based on the sensitive sites and bird migration corridors specified in ESIA Table 6.15.
- **Predictive Modelling:** Advanced tools like GIS and species distribution models may be used to predict bird movements and potential interactions with the proposed OHL.
- **Stakeholder Consultation:** Engaging with local communities, ornithological experts, and conservation organizations provides valuable local knowledge and insights into bird migration patterns.

2. Construction Phase:

- **Pre-construction Surveys:** As described above, before construction starts, additional surveys will be conducted to update the understanding of bird movements, particularly for species with seasonal variations in their migration patterns. Contractor's ESMP (C-ESMP) to be prepared prior to construction, will be revisited to incorporate findings of the field surveys, monitoring and additional biodiversity studies.
- **Construction Monitoring:** Trained observer/ornithologists will monitor bird activity during construction, particularly near sensitive areas to be defined through the additional studies. This helps to identify any unexpected impacts and allows for timely adjustments to construction practices.
- **Mitigation Implementation:** Specific mitigation measures specified in the respective section of ESIA, ESMP, BMP and C-ESMP must be implemented to reduce risks to birds and any other fauna or flora.

3. Operation Phase:

- **Post-construction Monitoring:** Regular monitoring shall continue after the OHL is operational to assess the long-term impacts on bird populations and the effectiveness of mitigation measures.

- **Mortality Monitoring:** Systematic searches for bird carcasses will be conducted to estimate collision rates and identify areas of high risk. This shall include bird collision fatality monitoring along sample OHL segments (with and without bird flight diverters), particularly in areas with wintering Little Bustards *Tetrax tetrax*, a species of special concern that is prone to power line collisions.

- **Adaptive Management:** Monitoring data can be used to inform adaptive management strategies. If any unforeseen impacts are observed, mitigation measures can be modified or new ones implemented.

The cited activities must be implemented in close cooperation with local and international bird conservation organizations, which can provide valuable expertise and support for assessing and mitigating impacts on migratory birds.

Initial map of the Project AoI sections to be covered by migration route studies is provided in Figure 2 below.

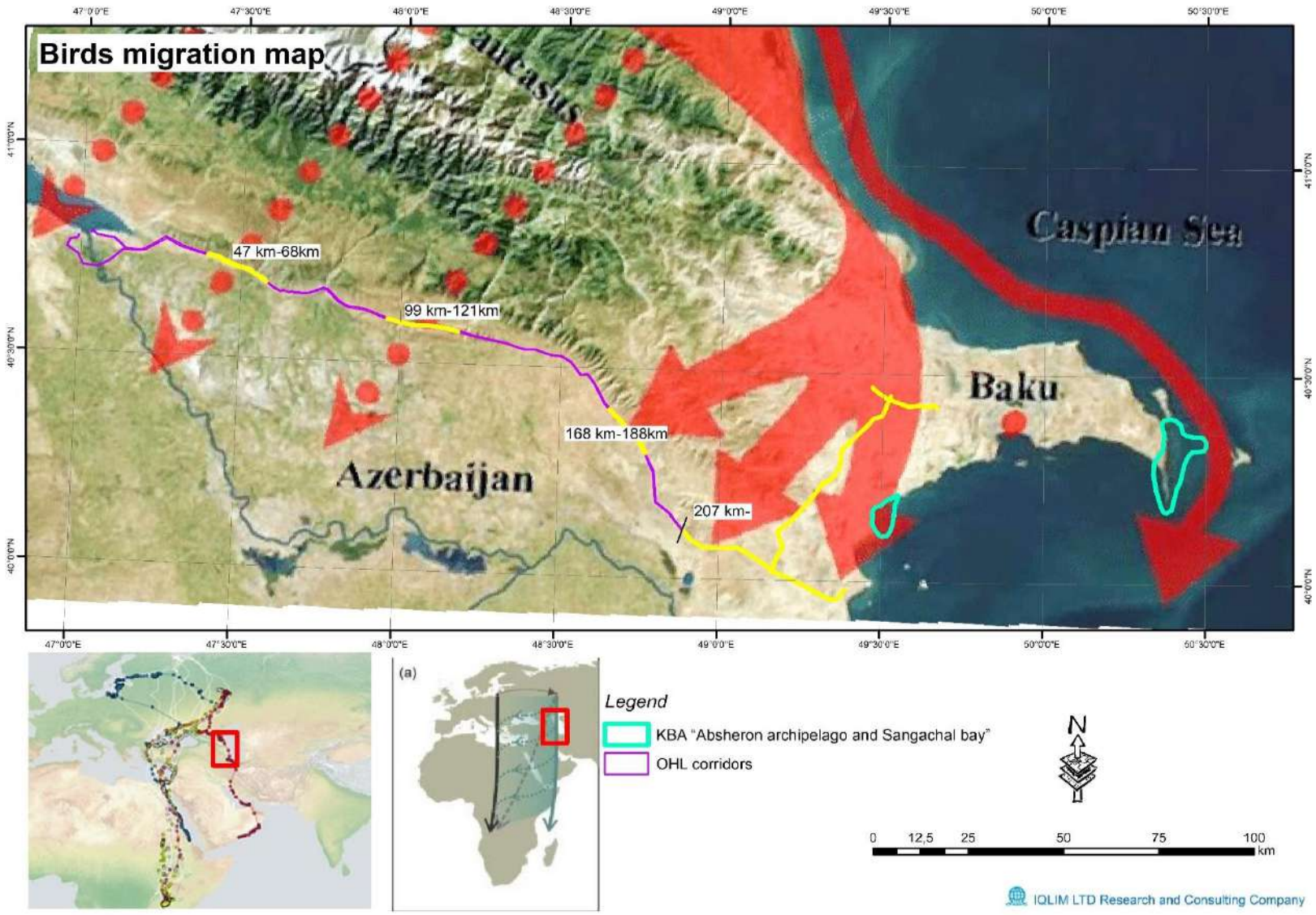


Figure 2. Sections of Project AoI to be covered by migration route studies

B. Critical habitats

It is very important to implement additional studies to identify and scope the critical habitats which might be affected by the AZURE Project. The studies will be arranged by Azerenerji starting October 2024 through May 2025, to cover migration, breeding and nesting seasons and focusing on the species listed in Table 3 above. These studies will include the following types of activities:

Identification and Delineation: Critical habitats will be identified based on scientific data and expert knowledge about the habitat requirements of the target species. Once identified, their boundaries will be clearly delineated to ensure their effective protection.

Management Plans: Management plans will be developed for each of the identified critical habitats to outline conservation objectives, strategies, and actions to ensure their long-term viability. The management plans will be then incorporated into the current BMP.

Mitigation Measures: measures like such as creating alternative habitats or enhancing existing ones, will be planned and implemented where impacts are unavoidable,

Monitoring and Adaptive Management: Regular monitoring of critical habitats will be implemented to assess their condition, track changes in species populations, and evaluate the effectiveness of management actions. Adaptive management allows for adjustments to conservation strategies based on new information and changing circumstances.

Should there be critical habitats identified in the vicinity of the AZURE Project AoI, special mitigation measures will be implemented, ensuring that no activities are conducted within or in the immediate vicinity of critical habitats, seasonal limitations are considered when planning the execution of physical works, any disturbance to critical habitat species is avoided, regular monitoring is conducted by biodiversity specialists to be mobilized by Azerenerji, and in coordination with MENR, during construction and operation of the energy infrastructure. The approach will also follow the Mitigation Hierarchy in accordance with ESS6, namely avoidance, minimisation, rehabilitation and restoration and biodiversity offsets if required.

9. IMPACT MITIGATION

9.1. Identified Impacts

Specific biodiversity impacts and mitigation measures will be further determined and detailed, based on the findings of additional biodiversity/bird survey studies to be organized by Azerenerji as described above. Surveys carried out in autumn 2024 have identified specific lengths of OHL for each sections that pose a higher risk to birds due to collision potential. The first steps of the ESIA study were be conducted using desk top data on migratory flight paths and available data on protected areas and wetlands in particular. This involved discussions with the relevant authorities in Azerbaijan. Discussions are also planned with conservation organisations, both national and international. The study will be expanded to include spring 2025 fieldwork and ground truthing to further refine the most important areas of OHL for specific mitigation to reduce collision, including the installation of bird flight diverters. This will inform the design and costings for the AZURE Project and adjustments can be made as necessary as the baseline data are fully established.

Possible adverse biodiversity impacts of the AZURE Project includes the following types of potential impacts.

1. Habitat Loss and Fragmentation

Overhead transmission line (OHL) projects can lead to significant habitat loss and fragmentation in forest and woodland areas. However, the AZURE-supported OHLs will pass almost entirely through open habitats: Grassy or shrubby steppe, semi-desert, and cultivated lands, along with the marshy Varvara wetland. Accordingly, few if any trees will need to be removed to accommodate the Project OHLs. Habitat loss under this Project will mostly be limited to the relatively small footprints of each pylon, the substations, any new (rather short) access roads and tracks, and construction staging areas.

2. Soil disturbance and erosion

Excavation and grading activities disrupt soil structure, sometimes leading to erosion and sedimentation in nearby water bodies, affecting aquatic biodiversity. Soil disturbance and erosion resulting from OHL construction can have negative impacts on biodiversity, sometimes including:

1. **Direct Habitat Loss:** Soil disturbance destroys the habitats of soil organisms such as bacteria, fungi, insects, and other invertebrates, which play crucial roles in nutrient cycling, decomposition, and soil fertility.
2. **Loss of Plant Diversity:** Erosion removes topsoil, which is rich in nutrients and organic matter necessary for plant growth. This loss of fertile soil can lead to the decline of native plant species and reduce overall plant diversity.
3. **Disruption of Food Webs:** The loss of soil organisms and plant diversity disrupts food webs and ecological relationships. For example, the decline of insect populations can impact birds and other animals that rely on them for food.

4. **Increased Vulnerability to Invasive Species:** Disturbed soils are more susceptible to invasion by non-native plant species, which can outcompete native plants and further alter ecosystems.
5. **Sedimentation of Water Bodies:** In the absence of adequate erosion control and/or sediment capture measures, soil erosion can lead to the sedimentation of rivers, lakes, and streams. This sedimentation can smother aquatic habitats, reduce light penetration, and harm fish and other aquatic organisms.
6. **Indirect Impacts on Wildlife:** Soil disturbance and erosion can indirectly impact wildlife by reducing the availability of food and shelter. For example, the loss of vegetation cover can expose animals to predators and reduce the availability of nesting sites.

3. Disturbance to wildlife

Noise, human presence, and machinery operation can displace wildlife, disrupt breeding cycles, and increase stress levels, potentially leading to mortality or reduced reproductive success. Construction activities can create noise pollution, disturbing wildlife behavior and communication. Additionally, artificial lights at substations can disrupt nocturnal animals and disorient migrating birds. However, aircraft warning lights are not required and will not be installed on the Project OHL pylons, except where adjacent to an airport.

The Project OHLs pass through or near several important bird nesting areas, including the marshy Varvara Wetland and several hills with nearby raptor nests; these power line segments are specifically noted in ESIA Table 6.15. To avoid disturbance to nesting raptors and waterfowl at sensitive sites, the Project will enforce time-of-year restrictions on construction activities, which will be prohibited during the main bird nesting season of 1 April to 31 July.

In the case of the Papadagh (Table Mountain) site (SA4 in ESIA Table 6.15), the new 500 kV OHL will pass about 100 meters from the base of a rocky hill with a long-used nest site of Saker Falcon *Falco cherrug* (globally Endangered)—one of only two known nests in Azerbaijan. The nest site is high on the hill (well above the height of the planned pylons). The new line will be on the opposite side of the existing paved road from the hill. To help ensure continued successful nesting at this site, the Project will (i) require that no pylons be placed in front of the hill (but rather, well to either side of the hill); (ii) prohibit construction there during the nesting season (1 April to 31 July); (iii) install bird flight diverters on both the conducting and grounding wires, in front of the hill and to the second pylon from either side of the hill (total 3 segments between 4 pylons); and (iv) periodically falcon nesting activity and success at the site.

4. Bird Collisions

Power lines (including the AZURE-supported new transmission lines) pose a fatal collision risk to birds that accidentally fly into them. Large, heavy-bodied birds are particularly vulnerable to such collisions. In Azerbaijan, the birds considered to be most vulnerable to power line collisions are (i) Little Bustards *Tetrax tetrax*, for which Azerbaijan is a globally significant wintering ground; (ii) large wetland birds such as storks, flamingos, cranes, pelicans, swans, geese, and ducks; and (iii) raptors including vultures, eagles, hawks, and falcons. However, bats (specifically the small, echolocating species found in Azerbaijan) are not known to collide with power lines, even though they collide frequently with wind turbine blades.

Power line collisions are especially problematic for migratory or resident bird species with slow reproductive rates, or those already facing population declines from other causes. These collisions have been found to cause significant mortality for some bird species, such as bustards. Collisions can further exacerbate the decline of threatened species, thereby hindering conservation efforts.

Factors influencing bird collision risks include the following:

- **Line Visibility:** OHLs that are difficult for birds to see, such as those in foggy areas or against a bright sky, pose a higher collision risk.
- **Flight Paths:** OHLs located in areas with high bird activity, such as migratory corridors or near wetlands, have a greater potential for collisions.
- **Bird Behavior:** Some bird species are more prone to collisions due to their flight patterns, foraging behaviors, or visual acuity.
- **Pylon Design:** The design of OHL pylons can influence collision risks. Such risks are lower when all the conducting wires are on one horizontal plane. This is the case for the AZURE-supported 500 kV line (Mingachevir-Navahi).
- **Line Markings.** In particular, marking wires with bird flight diverters (BFDs) makes them more visible to most birds (although generally not bustards), thereby reducing collisions. BFD models include flappers, spirals, and Fireflies (a brand name). BFDs are highly visible devices that rotate or flap in the wind and sometimes reflect sunlight, making them easier for birds to detect and avoid. BFDs often have bright colors (such as orange) that contrast with the natural background, further enhancing their visibility. They can also incorporate glow material that absorbs ultraviolet light, making them visible to birds that can see in the ultraviolet spectrum. BFD installation is planned in the more sensitive sections of the Project OHLs; these are listed in ESIA Table 6.15.

5. Electrocution risks

Larger birds—especially raptors such a vultures, eagles, hawks, falcons, and owls—are vulnerable to electrocution when they attempt to perch on power poles and simultaneously touch a grounded and an electrified element. This impact is much more common on lower-voltage distribution lines (where perched birds are often within easy contact of electrified wires) than on high-voltage transmission lines. One electrocution scenario that sometimes occurs with high-voltage transmission lines is when large birds (especially vultures) perched on a pylon defecate directly onto a conducting wire below them; these “streamers” of liquid excrement can conduct electricity, thereby electrocuting the bird. However, this impact is considered very unlikely with the specific pylon designs to be used for the AZURE transmission lines. This is because the distance from the possible perch area down to the underneath conducting wire will be about 6 meters for the 500 kV OTL and 4.5 meters for the 330 kV OTL—greater than the normal length of streamers.

7. Indirect Effects

Access roads created during construction can facilitate human encroachment into previously undisturbed areas, leading to poaching, habitat degradation, and introduction of invasive species.

9.2. Impact management measures

The impacts described above will need a number of mitigation measures to be implemented during different phases of the Project. Shortlist of the management measures is provided in Tables 11.1 and 11.2. Details of each management measure are given in the table below. From the PIU's side, ensuring implementation of the listed measures will be the responsibility of the environmental specialist.

Table 7-5. Activities required to implement biodiversity impact mitigation measures

Impact	Mitigation measure	Activities
Loss, fragmentation and alternation of habitats	Minimizing construction of new access roads	Wherever possible, utilize existing roads, trails, or utility corridors for access to construction sites. This reduces the need to build new roads, minimizing habitat disturbance and fragmentation. If other infrastructure projects are planned or underway in the vicinity, explore opportunities for shared access roads, further reducing the overall environmental footprint. In remote or challenging terrain, consider using helicopters for transporting equipment and personnel, eliminating the need for extensive road networks. Utilize temporary access solutions, such as modular bridges or matting systems, to cross sensitive areas or water bodies without constructing permanent roads. Utilize aerial surveys and LiDAR to create detailed 3D maps of the terrain, aiding in precise route planning and identifying areas where access roads can be avoided or minimized. Carefully plan tower locations to minimize the need for access roads, considering factors such as terrain, vegetation cover, and proximity to existing infrastructure. Implement just-in-time delivery strategies for construction materials, reducing the need for large storage areas and associated access roads.
	Avoiding clearing vegetation during nesting and breeding	Whenever possible, schedule vegetation clearing activities outside of the nesting and breeding season which typically runs from 1 April to 31 July. Be prepared to adjust the project timeline if unexpected nesting activity is observed during the construction phase.

Impact	Mitigation measure	Activities
Loss, fragmentation and alternation of habitats		Pay particular attention to areas known to be important for nesting and breeding, such as wetlands and protected areas. Establish buffer zones around identified nests to prevent disturbance during construction activities. Employ selective clearing techniques that minimize the removal of vegetation, focusing on areas that directly conflict with the OHL route. Utilize hand clearing methods in sensitive areas or around active nests to reduce noise and disturbance. Continue to monitor the project area during construction for signs of nesting activity or disturbance to bird populations. Be prepared to adjust clearing activities or implement additional mitigation measures if unexpected impacts on nesting birds are observed.
	Using selective clearing techniques to retain important vegetation features	Conduct thorough ecological surveys to identify and mark trees, shrubs, and other vegetation elements that are crucial for biodiversity, such as those providing food, nesting sites, or cover for wildlife, particularly birds. Adapt the OHL tower placement to avoid or minimize the removal of these key vegetation features whenever possible. Utilize hand tools or machinery with precision attachments to selectively remove only the necessary vegetation within the OHL right-of-way, leaving as much intact as possible. Instead of complete tree removal, prune branches or fell trees directionally away from the OHL route to reduce the width of the clearing required. Employ low-impact construction methods and machinery to minimize soil compaction and disturbance to the root systems of remaining vegetation. Implement a comprehensive revegetation plan to restore disturbed areas with native plant species, enhancing habitat connectivity and promoting biodiversity.

Impact	Mitigation measure	Activities
Loss, fragmentation and alternation of habitats		Consider creating additional habitat features, such as artificial nesting platforms or bird feeders, to compensate for any unavoidable vegetation loss. Consider bird nesting and breeding seasons when scheduling vegetation clearing activities to minimize disturbance to avian populations. Engage with local botanists and ecologists to identify and protect plant species of particular conservation concern in the region.
	Implementation of revegetation plans that prioritize native plant species	Conduct thorough botanical surveys and consultations with local experts to identify and select native plant species suitable for the project area, considering factors such as soil type, climate, and ecological function. Prioritize species that provide food and habitat for local wildlife, particularly those supporting bird migration, such as berry-producing shrubs and nectar-rich wildflowers. Choose a diverse mix of species to create resilient and self-sustaining plant communities. Collect seeds or cuttings from local populations of native plants to ensure genetic adaptation to the site's conditions. Collaborate with local nurseries and seed banks that specialize in native plant propagation to ensure high-quality and genetically appropriate planting material. Avoid the use of non-native or invasive species that could disrupt local ecosystems and outcompete native flora. Prepare the site by removing invasive species, controlling erosion, and improving soil conditions if necessary. Implement appropriate planting techniques, such as direct seeding, transplanting seedlings, or live staking, based on the selected species and site conditions. Consider planting density, spacing, and species composition to mimic natural plant communities and promote biodiversity. Establish a long-term monitoring and maintenance plan to track the success of revegetation efforts, control invasive species, and address any unforeseen challenges.

Impact	Mitigation measure	Activities
Loss and alteration of habitats		Conduct adaptive management, adjusting planting strategies and maintenance practices based on monitoring data and observed outcomes. Engage local communities and stakeholders in monitoring and maintenance activities to promote ownership and long-term stewardship of the restored areas. Prioritize revegetation efforts in critical habitats and ecosystems along bird migration routes, such as wetlands and riparian zones. Time planting activities to coincide with optimal growing seasons. Work closely with local conservation organizations and botanical experts to ensure that revegetation plans are aligned with the region's ecological needs and conservation goals.
Soil disturbance and erosion	Minimization of soil disturbance	Optimize OHL tower placement to minimize the area of soil disturbance. Implement erosion control measures such as silt fences, hay bales, and sediment traps to prevent soil loss and sedimentation of water bodies. Carefully strip and stockpile topsoil for reuse during site restoration, preserving valuable nutrients and microorganisms. Implement additional precautions to minimize soil disturbance and protect biodiversity near protected areas
	Soil Restoration and Revegetation	Re-establish vegetation cover as soon as possible after construction to stabilize soil, prevent erosion, and provide habitat for wildlife. Prioritize native plant species in revegetation efforts to support local biodiversity and ensure ecological compatibility. Consider the unique soil characteristics, such as salinity and aridity, when selecting appropriate revegetation species and soil amendments. Apply organic matter or soil amendments to improve soil structure and fertility, promoting healthy plant growth.

Impact	Mitigation measure	Activities
	Habitat Creation and Enhancement	Create microhabitats within the project area, such as rock piles, brush piles, or deadwood logs, to provide shelter and foraging opportunities for small animals. Incorporate pollinator-friendly plants into revegetation plans to support bees, butterflies, and other beneficial insects. Take special care to protect and restore habitats for endemic plant and animal species, which are particularly vulnerable to habitat loss
	Monitoring and Adaptive Management	Monitor soil quality and vegetation cover regularly to assess the effectiveness of restoration efforts. Track wildlife populations and habitat use to evaluate the project's impact on biodiversity. Adjust mitigation measures as needed based on monitoring data and observed outcomes.
Disturbance to wildlife	Thorough surveys to identify wildlife species present in the project area, their habitats, and any critical corridors or sensitive areas	Conduct comprehensive baseline surveys before project commencement to establish a clear understanding of the existing biodiversity and ecological conditions in the project AoI. Focus surveys on key bird migration routes, paying special attention to identifying important stopover sites and breeding areas. Prioritize surveys for endemic and threatened species, ensuring their habitats are adequately protected and any potential impacts are mitigated. Conduct surveys across different seasons to capture the full spectrum of wildlife presence and activity, especially for migratory birds, whose presence varies throughout the year. Employ a variety of survey methods tailored to different species groups Engage qualified ecologists and specialists with expertise in different taxonomic groups to ensure accurate species identification and habitat assessment. Identify and document all wildlife species present in the project area, including their abundance, distribution, and habitat preferences.

Impact	Mitigation measure	Activities
Disturbance to wildlife		Map and assess the various habitats within the project area, identifying their ecological value and potential sensitivity to disturbance. Identify and delineate critical wildlife corridors, such as migration routes, and sensitive areas, such as breeding or nesting sites, that require special protection. Partner with local and international conservation organizations to leverage their expertise and knowledge of Project AoI biodiversity.
	Designing OHL corridors and access roads with the smallest possible footprint	Utilize advanced modeling and terrain analysis to strategically place towers, maximizing span lengths and minimizing the number of towers required. Avoid placing towers in critical habitats, sensitive ecosystems, or areas with high bird activity. In the specific case of Papadagh Hill, to help ensure continued successful Saker Falcon nesting at this site, the Project will require that no pylons be placed in front of the hill (but rather, well to either side of the hill). Utilize existing infrastructure corridors or disturbed areas wherever possible to avoid clearing new vegetation. Utilize existing roads, trails, or utility corridors for access whenever feasible. Explore opportunities for shared access roads with other projects to reduce the overall environmental footprint. Employ temporary access solutions, such as modular bridges or matting systems, to cross sensitive areas or water bodies without constructing permanent roads. Consider using helicopters for transporting equipment and personnel in remote or challenging terrain, eliminating the need for extensive road networks. Design access roads with the narrowest possible width and minimal curves to reduce the area of disturbance. Utilize natural contours and avoid steep slopes to minimize the need for extensive grading and excavation.

Impact	Mitigation measure	Activities
Disturbance to wildlife	Scheduling construction activities outside of breeding and nesting periods	At designated sensitive sites, notably the Varvara Reservoir wetland (where numerous aquatic birds breed) and Papadagh Hill (Saker Falcon nesting area), construction activities will only be allowed outside the nesting period of 1 April to 31 July. Maintain flexibility in the project timeline to accommodate unforeseen nesting activities or delays caused by weather conditions that might affect bird behavior. Continue monitoring the project area during construction for signs of nesting activity or disturbance to bird populations. Be prepared to halt or modify construction activities if unexpected nesting is observed, or if other factors, such as adverse weather, increase the vulnerability of birds. Adhere to strict regulations and guidelines regarding construction activities within or near protected areas, which may have specific restrictions during breeding and nesting seasons. Work closely with local and international bird conservation organizations to ensure that construction schedules are aligned with the needs of avian populations and minimize disturbance to their breeding and nesting activities.
	Establishing buffer zones around sensitive habitats	Continue to identify and map sensitive habitats within the project AoI Consult with local experts and conservation organizations to ensure comprehensive identification of sensitive areas. Determine buffer zone width depending on the specific habitat type, species sensitivity, and potential project impacts. Consider factors like noise levels, dust, visual disturbance, and edge effects when determining the buffer zone width. Restrict or limit construction activities within the buffer zone to minimize disturbance to wildlife and t Implement erosion control measures to prevent sediment runoff and protect water quality within the buffer zone. Monitor the buffer zone regularly to assess its effectiveness and adjust management practices as needed.

Impact	Mitigation measure	Activities
		Where feasible, design buffer zones to connect fragmented habitats, creating wildlife corridors that allow for species movement and gene flow. Consider incorporating habitat features, such as native plantings or artificial structures, to enhance the ecological value of the buffer zone.
	Limiting construction activities to designated areas and minimizing noise and light pollution	Clearly define and mark construction zones and access routes to prevent encroachment into sensitive habitats or buffer zones. Implement access control measures to ensure that construction activities and personnel remain within designated areas. Confine storage and disposal of construction waste and hazardous materials to designated areas to prevent contamination of surrounding habitats. Implement protective measures, such as fencing or temporary barriers, around sensitive habitats to prevent accidental disturbance. Utilize quieter construction equipment and machinery whenever possible. Schedule noisy activities during daylight hours to minimize disturbance to nocturnal wildlife. Implement noise barriers or soundproofing measures in areas close to sensitive habitats. Monitor noise levels regularly to ensure compliance with environmental regulations and identify areas for improvement. Use shielded lighting fixtures and direct light downwards to minimize light spill and skyglow. Utilize motion sensors or timers to reduce unnecessary lighting during nighttime hours. At substations and other facilities requiring night lighting, use with warmer colored lighting that is less disruptive to nocturnal wildlife.

Impact	Mitigation measure	Activities
Disturbance to wildlife		During peak migration seasons, implement additional measures to minimize noise and light disturbance, particularly near critical stopover points. Adhere to strict regulations regarding noise and light pollution within or near protected areas to safeguard their ecological integrity. Communicate construction schedules and noise mitigation measures to local communities to minimize disruptions and address any concerns.
	Training construction personnel on wildlife awareness	Familiarize personnel with relevant environmental regulations and project-specific guidelines regarding wildlife protection and habitat conservation. Provide practical guidance on how to minimize disturbance to wildlife during construction activities, including non-lethal and safe relocation of slow-moving wildlife such as snakes and turtles, maintaining a safe distance from wildlife and their nests, avoiding loud noises and unnecessary movements near sensitive areas, properly disposing of waste and avoiding spills or contamination of habitats, and reporting any injured or distressed wildlife to appropriate authorities.
Collision risks	Bird flight path studies to identify areas with high bird activity	Bird baseline surveys to identify the species present in the project AoI, their abundance, and their habitat use Assess the quality and suitability of the habitat in the Project AoI to predict the impact of the project on bird populations

Impact	Mitigation measure	Activities
Collision risks		Bird fatality monitoring at selected power line segments after construction to assess the effectiveness of bird flight diverters as mitigation measures, with special focus on wintering Little Bustards.
		Using durable paint and marker types to withstand weather conditions and maintain its visibility over time.
	Installation of bird flight diverters on wires	Bird flight diverters (BFDs), of flapper, firefly, or spiral design, make the power lines easier for most flying birds to perceive, giving them more time to react and avoid collision. Use trained personnel to directly attach diverters to the wires, as part of the construction process. For each horizontal plane of installed grounding or conducting wires, one BFD should be evident every 5 meters, although the distance between diverters on each wire will be greater (e.g., 10, 15, or 20 meters, depending on the number of wires per horizontal plane. BFDs shall be installed in all of the OTL segments identified in ESIA Table 6.15.
	Other technical solutions	
Indirect impacts	Preventing the introduction and spread of invasive species through proper hygiene practices during construction and ongoing monitoring and control	Thoroughly clean construction equipment, vehicles, and tools before transporting them to the construction site to prevent the accidental introduction of invasive plant seeds, insects, or other organisms. Dispose of excavated soil and plant material responsibly, avoiding areas where it can spread invasive species. Consider on-site treatment or disposal methods to minimize the risk of contamination. Educate workers on the importance of hygiene practices, such as cleaning boots and clothing before entering and leaving the construction site, to avoid carrying invasive species seeds or propagules. Implement measures to prevent the spread of invasive aquatic species through construction water runoff or discharge. This may include sediment control, filtration, and disinfection procedures.

Impact	Mitigation measure	Activities
Indirect impacts		Conduct regular inspections of the OHL right-of-way and surrounding areas to identify any signs of invasive species establishment or spread. Implement early detection and rapid response protocols to address any invasive species incursions promptly. Carefully manage vegetation within the OHL right-of-way to prevent the establishment and spread of invasive plants. This may include selective herbicide application or mechanical removal. Implement targeted removal or control methods for any identified invasive species, using appropriate techniques such as manual removal, herbicide application, or biological control agents. Following the removal of invasive species, consider restoring native vegetation to enhance ecosystem resilience and prevent future invasions.
	Considering the potential indirect effects on local communities	Implement landscape restoration and planting programs to enhance the visual appeal of the project AoI. Fair and transparent compensation for affected landowners. Support for livelihood restoration and economic diversification programs. Community engagement and consultation throughout the project lifecycle. Minimize disruption to existing access routes and trails, provide alternative access routes or crossings where necessary. Ensure adequate communication and signage to inform the public about access restrictions. Establish clear and transparent communication channels with local communities. Conduct public information sessions and address community concerns proactively. Involve community members in decision-making processes where possible.

Impact	Mitigation measure	Activities
	Human encroachment into previously undisturbed areas	Conduct wildlife surveys to identify species present in the project area and their habitat use. Install temporary fencing to exclude wildlife from construction areas and sensitive habitats. Incorporate wildlife crossings or underpasses to maintain connectivity and facilitate safe movement of animals across the OHL right-of-way. Implement long-term monitoring programs to assess the project's impact on wildlife populations and habitats, and adjust management practices as needed. Enforce strict hygiene protocols for equipment and personnel to prevent the introduction of invasive plant seeds, insects, or other organisms. Conduct regular monitoring for invasive species and implement rapid response measures to control any incursions. Prioritize the use of native plant species in re-vegetation efforts to restore habitat and resist invasion. Consult with local communities to identify culturally significant areas and traditional ecological knowledge, incorporating this information into project planning and mitigation. Maintain open and transparent communication with local communities, addressing concerns and providing regular updates on the project's progress and environmental mitigation efforts. Provide opportunities for local communities to participate in the project through training and employment opportunities.

10. MONITORING AND EVALUATION

This section outlines a comprehensive monitoring and evaluation framework for the AZURE project. The primary purpose of this framework is to ensure the effective implementation of the BMP and to track the project's performance in achieving its biodiversity conservation objectives. The monitoring program will involve systematic collection and analysis of data on key biodiversity indicators, while the evaluation process will assess the effectiveness of mitigation and enhancement measures and inform adaptive management decisions. This section also delineates the responsibilities, resources, and contingency plans associated with monitoring and evaluation activities.

10.1. Monitoring Program

The monitoring will be implemented regularly based on the below key biodiversity indicators:

1. **Bird Collision Monitoring.** Monitoring of bird collision fatalities by species, in sample power line segments with and without BFDs, according to a standardized scientific protocol.
2. **Population Size and Distribution of Key Species:** Monitoring of the populations of key species, including threatened, endangered, or culturally significant species, to assess their response to the project and the effectiveness of mitigation measures. A key species to monitor in this regard is the Little Bustard Tetrax tetrax, because (i) it is believed to be highly vulnerable to power line collisions and (ii) Azerbaijan is a globally significant wintering ground for this species. Also, due to its proximity to an OTL, the Saker Falcon nest at Papadagh should also be periodically observed (from a non-intrusive distance) for evidence of breeding activity and success.
3. **Presence and Abundance of Invasive Species:** Tracking of the presence, abundance, and distribution of invasive species within the Project AoI, implementation of early detection and rapid response protocols to prevent their spread.
4. **Community Well-being and Perceptions:** Conducting surveys and interviews with local communities to gauge their perceptions of the project's impacts on their livelihoods, cultural values, and overall well-being.

The monitoring activities will be implemented using the methods below:

1. **Field Surveys and Observations:** Conducting regular field surveys and observations by qualified experts to collect data on habitat conditions, species presence and abundance, and other key indicators.
2. **Community-Based Monitoring:** Involving local communities in monitoring efforts through citizen science programs, empowering them to contribute to data collection and enhance their understanding of local biodiversity.

Monitoring frequency will depend on the findings of continuous studies, which will be implemented to supplement limited data produced through literature sources within the ESIA framework. In general, the monitoring activities will be implemented during the following timeframes:

1. **Pre-construction Baseline Surveys:** Establishment of detailed baseline data on key biodiversity indicators before construction begins to provide a reference point for assessing future changes.
2. **Construction Phase Monitoring:** Conducting regular monitoring throughout the construction phase at intervals determined by the sensitivity of the ecosystem and the potential for impacts. Special place in the monitoring will be occupied by onsite bird migration route studies, which were carried out in autumn 2024 and will be done again in spring 2025.
3. **Operation Phase Monitoring:** Implementation of long-term monitoring programs to track changes in biodiversity values and the effectiveness of mitigation measures over time. Continue migratory bird monitoring activities to trace possible impacts of the operation of Project facilities.

The Project will have an established robust system for collecting, storing, and managing the produced monitoring data. The system will be organized to meet data quality, accuracy and accessibility requirements. The monitoring data will be analyzed using appropriate software and databases. Analysis results will be summarized and included in regular monitoring reports for internal and external stakeholders. The monitoring data will be shared with relevant government agencies, research institutions, and local communities to promote transparency and collaboration.

10.3. Evaluation

The prepared monitoring reports will be regularly assessed. As part of the assessment, the produced monitoring data will be compared against baseline conditions and management objectives to identify trends, potential impacts, and areas for improvement. The assessment will evaluate the effectiveness of implemented mitigation and enhancement measures in achieving biodiversity conservation objectives. Assessment results will be reflected in the Evaluation Reports and, together with monitoring reports, communicated to all relevant stakeholders, including local communities, government agencies, and the general public.

Monitoring and evaluation results will be used for making adaptive management decisions and modifying management practices as needed to enhance biodiversity outcomes of the Project.

11. ADAPTIVE MANAGEMENT

11.1. Purpose and Principles

Adaptive management is a dynamic and iterative approach to managing biodiversity in the context of AZURE Project. It recognizes the inherent uncertainties and complexities of ecological systems and emphasizes learning and adapting based on ongoing monitoring and evaluation. The core principles of adaptive management include:

- **Explicit Objectives:** Clearly defined biodiversity management objectives serve as the foundation for adaptive management, providing direction and measurable targets for conservation efforts.
- **Uncertainty and Flexibility:** Acknowledge the uncertainties associated with predicting and managing ecological systems, and maintain flexibility in decision-making to respond to new information and changing circumstances.
- **Learning and Adaptation:** Emphasize continuous learning from monitoring and evaluation results, using this knowledge to inform adaptive management actions and improve biodiversity outcomes over time.
- **Collaboration and Engagement:** Foster collaboration and engagement with stakeholders, including local communities, scientists, and regulatory agencies, throughout the adaptive management process.

11.2. Adaptive Management Cycle

By embracing the principles of adaptive management and incorporating the iterative cycle of planning, implementation, evaluation, and adaptation, the Project can effectively respond to ecological uncertainties and maximize its contribution to biodiversity conservation. This approach will foster a continuous learning process, improve decision-making, and ensure the long-term sustainability of the project's environmental commitments.

The adaptive management process for the AZURE project will follow an iterative cycle, consisting of the following key steps:

1. **Planning:**

Development of clear and measurable biodiversity management objectives.

Designing mitigation and enhancement measures based on the best available scientific knowledge and local ecological understanding.

Identifying key assumptions and uncertainties underlying management decisions.

2. **Implementation:**

Implementation of the planned mitigation and enhancement measures.

Monitoring of key biodiversity indicators and the effectiveness of management actions.

Collection and analysis of the monitoring data.

3. **Evaluation:**

Assessment of the monitoring results against management objectives and identified assumptions.

Identification of successes, challenges, and any unforeseen impacts on biodiversity.

Evaluation of the effectiveness of implemented measures.

4. **Adaptation:**

Using the evaluation findings to inform adaptive management decisions.

Modifying management practices as needed to improve biodiversity outcomes and address any emerging issues.

Incorporating lessons learned into future planning and decision-making.

11.3. Adaptive Management Triggers

Specific triggers that may necessitate adaptive management actions include:

- Monitoring results indicating significant deviations from expected outcomes or management objectives.
- Unforeseen impacts on biodiversity or ecosystem health.
- Changes in environmental conditions or regulatory requirements.
- New scientific information or technological advancements.
- Community feedback or concerns regarding biodiversity impacts.

11.4. Roles and Responsibilities

Responsibility for the overall implementation and oversight of the adaptive management process will be levied upon Azerenerji PIU. The PIU will form a dedicated team, comprising environmental, social, stakeholder engagement and occupational health & safety specialists, as well as will engage with third-party experts in ecology, biodiversity conservation andornithology. . The team will work closely with stakeholders, including local communities, scientists, and regulatory agencies, to facilitate collaboration and information sharing.

12. CONTINGENCY PLANNING

In case the monitoring activities produce unexpected results or unforeseen impacts on biodiversity, outlining procedures for rapid response and adaptive management will be developed and included in the specially prepared contingency plans. These plans will be designed to address unexpected events or adverse impacts on biodiversity that may arise during the construction and operation of the Project facilities. They will provide a framework for rapid response and adaptive management to minimize negative consequences and ensure the project's commitment to environmental responsibility.

The scope the Contingency Plans will include but not be limited to the following potential contingencies:

- **Spills and Accidents:** Contamination of soil, water, or sensitive habitats as a result of accidental spills of hazardous materials (fuels, lubricants, chemicals) during construction or maintenance activities
- **Natural Disasters:** Damaging OHL infrastructure, disruption of ecosystems, changes in wildlife behaviour and populations as a result of natural disasters like floods, landslides, or wildfires.
- **Unexpected Impacts on Biodiversity:** Unanticipated adverse effects of the Project activities on specific species, habitats, or ecological processes.
- **Community Concerns:** Concerns or complaints of the affected communities and other stakeholders about unforeseen impacts on their livelihoods, health, or cultural values.

Below is the list of pre-installed contingency plans to be developed at the earliest stage of the Project:

- **Spill Response Plan:** Detailed procedures for containing and cleaning up spills of hazardous materials, including contact information for emergency responders and environmental cleanup contractors.
- **Natural Disaster Preparedness Plan:** Protocols for preparing for and responding to natural disasters, including evacuation procedures, communication plans, and strategies for protecting OHL infrastructure and sensitive habitats.
- **Biodiversity Impact Response Plan:** Procedures for addressing unexpected impacts on biodiversity, including additional monitoring, mitigation, and compensation measures.
- **Community Grievance Mechanism:** A clear and accessible process for local communities to raise concerns and seek redress for any perceived negative impacts of the project.

The contingency plans will provide for the following types of contingency response procedures:

12.1. Immediate Action:

Emergency Response: In the event of spills, accidents, or natural disasters, implementation of immediate emergency response procedures to contain and mitigate the situation, prioritizing human safety and environmental protection.

Notification: Notifying relevant authorities and stakeholders (environmental agencies, local communities, etc.) as soon as possible.

12.2. Assessment and Investigation:

Impact Assessment: Conducting a thorough assessment to determine the extent and severity of the impact on biodiversity and the environment.

Root Cause Analysis: Investigating the underlying causes of the incident to prevent recurrence.

12.3. Corrective Action:

Remediation: Implementation of appropriate remediation measures to address the environmental damage and restore affected ecosystems.

Mitigation and Compensation: Implementation of additional mitigation or compensation measures as necessary to offset any residual impacts on biodiversity.

The contingency plans will be implemented following the transparency and engagement principles, standing for maintaining open and transparent communication with affected communities and stakeholders throughout the response process, and **a**ctive involvement of the local communities in decision-making and restoration efforts.

Upon the completion of the incident response measures, they will be reviewed to identify lessons learned and improve future contingency plans and preparedness. New information obtained through contingency management, as well as the new experience gained will be integrated into the project's adaptive management framework to prevent similar incidents in the future.

Implementation of the contingency plan will be a responsibility of the emergency response teams led by health and safety manager, as well as the group of environmental and community liaison experts led by the environmental and PR managers.

13. FINANCIAL PROVISIONS

AzerEnerji will allocate sufficient financial resources to implement impact management activities included in the current BMP, as well as monitoring activities and contingency plans of the Project. AzerEnerji will cover all remediation and compensation costs arising from the BMP implementation.

14. REVIEW AND UPDATE

Biodiversity management is a continuous process, requiring regular updates to the approved BMP. Current BMP will be regularly updated to i) ensure its' effectiveness and relevance as the OHL project progresses and new information becomes available; ii) incorporate lessons learned from monitoring and evaluation, adaptive management, and contingency planning; iii) address any unforeseen impacts on biodiversity or changes in environmental conditions; iv) maintain stakeholder engagement and collaboration throughout the project lifecycle.

The BMP will be updated at least annually as a result of regular reviews by the respective expert teams. It also will be updated upon necessity **i**n response to significant monitoring results, unforeseen impacts, or changes in project circumstances.

The process of regular updates will involve reviewing monitoring data, evaluating mitigation effectiveness, and incorporating stakeholder feedback and new scientific information. The BMP will then be revised, with updated objectives, measures, and timelines as needed. Stakeholder consultation will ensure transparency and address any concerns. After necessary approvals, the updated BMP will be communicated and implemented, with revised monitoring protocols.

Out-of-schedule updates will be possible, for example, in the following cases:

- if monitoring reveals a decline in a key species population, the BMP may be updated to include additional habitat restoration or protection measures.
- If an invasive species is detected, the BMP may be revised to include specific control and eradication strategies.

By regularly reviewing and updating the BMP, the Project will demonstrate its commitment to adaptive management and ensure the long-term conservation of biodiversity in the Project AoI and compliance to ESS6.

15. CRITICAL HABITAT ASSESSMENT

15.1. INTRODUCTION

The Azerbaijan Scaling-Up Renewable Energy Project (AZURE Project) is a critical undertaking aimed at increasing Azerbaijan's renewable energy capacity and integrating it into the national grid. The project involves the construction of new transmission lines and substations to facilitate the power evacuation of the Absheron Wind IPP and enhance grid stability.

This document presents the first draft of the Critical Habitat Assessment (CHA) of the construction and operation phases of the AZURE Project. The CHA is developed based on the conclusions of EBS and EIA studies and must be further elaborated by the additional studies during spring and summer 2025, and monitoring works to be implemented within the span of the Project.

15.2. CRITICAL HABITAT CONCEPT

Critical habitat encompasses areas with high biodiversity importance or value, as defined by the World Bank's Environmental and Social Standard 6 (ESS6). These areas include:

- Habitats crucial for critically endangered or endangered species.
- Habitats crucial for endemic or restricted-range species.
- Habitats crucial for migratory or congregatory species.
- Highly threatened or unique ecosystems.
- Areas with key ecological functions.

Modified habitats, often resulting from human activities like agriculture, may require impact minimization. Natural habitats, composed mostly of native species with less human influence, necessitate mitigation measures to achieve no net loss of biodiversity. Critical habitats, regardless of modification level, hold high biodiversity value and are subject to specific criteria outlined in ESS6, including:

- The presence of critically endangered or endangered species.
- The presence of endemic or restricted-range species.
- The presence of migratory or congregatory species.
- The presence of highly threatened and/or unique ecosystems.
- The presence of key evolutionary processes.

In these areas, ESS6 prohibits project activities with potential adverse impacts unless strict conditions are met, such as:

- The absence of viable alternatives.
- Compliance with legal processes.
- Ensuring no net reduction of biodiversity values.

The project’s mitigation strategy must aim for net gains in biodiversity values. A long-term biodiversity monitoring program is essential. Critical Habitat Assessment is independent of a project's potential impacts on biodiversity. It serves to inform the applicability of WB ESS6 requirements. A mitigation hierarchy is applied to address project-related impacts, with measures defined for different project phases.

16. IDENTIFICATION OF CRITICAL HABITATS

As of February 2025, the studies to assess critical habitats remain incomplete, being limited to the main EBS studies implemented in August 2024, limited literature references available during the same period's desktop studies, and 1-season ornithological studies conducted in fall, 2024. Consequently, this CHA will present a preliminary overview of habitats which have been found sensitive and can potentially be classified as critical based on the results of further biodiversity studies planned for the period of spring and summer 2025. Azerenerji will prioritize the planning of supplementary studies to be finalized and inform the impacts and mitigation measures determined by ESIA, ESMP and BMP prior to start of civil works under the Project.

Literature studies indicate that Project AoI operates near the following state-protected areas and sites:

- **Turyanchay State Nature Reserve:** This reserve is located near the Project AoI and supports a diverse range of wildlife, including several rare and endangered species.
- **Shirvan National Park:** While not directly within the Project AoI, this park is a crucial point along avian migration routes, providing habitats for various waterbird species.
- **Mud Volcano Group State Nature Reserve:** This reserve protects a group of mud volcanoes, a unique geological feature that supports specialized ecosystems.
- **Key Ornithological Areas (KOAs):** The Project AoI is in a relative vicinity of several KOAs, including Gobustan, Alat Bay - Baku Archipelago, Sangachal Bay, and Gil Adasi. These areas are vital for bird migration, breeding, and wintering.

More detailed information on the nature of habitats present in the above protected nature areas, KOAs and other segments of the Project AoI will be obtained through the additional phase studies to be implemented by a team of experienced biodiversity experts. Critical habitat assessment will be implemented in parallel with detailed biodiversity studies, which will cover the Project AoI flora, terrestrial and aviafauna. Timeframe for the habitat studies is provided in the table below.

Table 7-6. Roadmap of desktop and fieldwork based critical habitat studies

#	Study type	Study duration
1	Birds	October 2024 (2 weeks) May 2025 (2 weeks)
2	Mammals	May 2025 (1 week)
3	Amphibians and reptiles	May 2025 (1 week)
4	Ichthyofauna	May 2025 (1 week)
5	Flora	May 2025 (1 week)
6	Data summarization and reporting	June 2025 (3 weeks)
7	Nesting and breeding	April – May 2025 (last 1 week in April + 2 weeks in May); June 2025 (2 weeks)-July 2025 (2 weeks)

Table 7-7. Breeding periods of mammals

#	Mammas's Orders	Breeding including Mating	New borns	Independance of newly borns
1	Insectivores	Hedgehogs Apr, shrews Apr-Oct	Hedgehogs in May-Jun,	5-7 weeks after born
2	Bats	Mating in Sep-Oct, pregnancy after hibernation in spring	Late May - June	July - Aug
3	Lagomorphs	Year round, mainly spring-early summer		
4	Rodents	Year round, two picks - spring and autumn. Some species only in summer, Most of the species from Apr to Oct.	year round	depends on species, small size rodents' new borns become independent after 5-7 weeks
5	Carnivores	Winter - early spring (Canidae). Some species in summer (Martes) - with long pregnancy (7-8 months). Ursus in June	July-Aug (Canidae), Sep (Martes), Ursus in	After 2-3 months of born
6	Artiodactyla	Mainly Nov-Dec	Mainly Apr-May	Depends on species - months

Findings of the additional studies will help finalize the CHA and subsequently inform ESIA, ESMP and BMP

17. STUDY METHODOLOGY

To determine the status of species identified based on literature data and assessed through field studies and expert judgment, the Azerenerji consultants will use the Red Book of Azerbaijan and IUCN Red List of Threatened Species to determine endangered and critically endangered species, as well as other criteria. In determining “highly threatened and unique ecosystems”, IUCN Red List categories for ecosystems will be used as the main reference.

Since international and European biodiversity assessments do not always cover habitats and species in Azerbaijan, local expert judgment will be detrimental to interpret data and draw conclusions on the current statuses of biodiversity components. The studies will be implemented based on the below criteria rived from the World Bank's Environmental and Social Standard 6 (ESS6) on Biodiversity Conservation and Sustainable Management of Living Natural Resources:

Criterion 1: Critical (CR) and/or Endangered (EN) Species

Species threatened with global extinction and listed as Critically Endangered (CR) and Endangered (EN) on the IUCN Red List will be considered as part of Criterion 1. Quantitative data on potential critical habitat triggering species’ populations will be assessed based on the Guidance Note (GN) 6 (2019) thresholds.

In determining CR and EN species at the Biodiversity Study Area, the IUCN Red List of Threatened Species, European Red Lists, and the Red Book of Azerbaijan will be utilized as the main references. Regional status of species, supported by expert judgment on species’ current population trends in Azerbaijan, will also be assessed.

Criterion 2: Endemic and/or Restricted-Range Species

The updated version of the WB ESF Guidance Note 6 (2019) defines the term endemic as restricted-range, which refers to a limited extent of occurrence (EOO). An area can be designated as critical habitat if it holds a significant portion of the global population size and reproductive units of an endemic and/or restricted-range species. Terrestrial species identified at the Project AoI will be assessed with respect to their EOOs and population sizes, based on the IUCN Red List, IUCN European assessments, and expert judgment.

Criterion 3: Migratory or Congregatory Species

The significant groups of migratory and congregatory species that are potential critical habitat triggers in the area are birds. Assessments for Criterion 3 will be made following detailed pre-construction migration surveys. These surveys will include migration and breeding period surveys.

Criterion 4: Highly Threatened or Unique Ecosystems

European Red List assessments for terrestrial habitats will be used in the assessments, where legally protected and internationally recognized areas will also be considered.

Criterion 5: Key Evolutionary Processes

The Biodiversity Study Area will not be associated with key evolutionary processes. Neither will it host flora and/or fauna species that have distinct evolutionary histories with populations that show proven phylogenetic divergence from other species' other known populations.

17.1 POTENTIAL IMPACTS ON CRITICAL HABITATS AND MITIGATION MEASURES

The AZURE Project's potential adverse biodiversity impacts are identified as follows:

- **Habitat Loss:** The construction of transmission lines and access roads can lead to the loss and fragmentation of natural habitats, affecting wildlife populations and ecological processes.
- **Disturbance to Wildlife:** Noise, human presence, and machinery operation during construction can disturb wildlife, disrupt breeding cycles, and increase stress levels.
- **Collision Risks:** Birds are at risk of colliding with power lines, particularly during migration or in low-visibility conditions.
- **Soil Erosion and Sedimentation:** Construction activities can lead to soil erosion and sedimentation in nearby water bodies, affecting aquatic ecosystems.

To minimize impacts on natural habitats, the AZURE Project will implement the following mitigation measures:

- **Avoidance:** Carefully selecting OHL routes to avoid sensitive areas, such as protected habitats, cultural heritage sites, and residential areas.
- **Mitigation:** Implementing measures to reduce impacts on biodiversity, such as wildlife-friendly tower designs, bird flight diverters, erosion control measures, and time-of-year restrictions on construction activities.
- **Management:** Continuous monitoring of environmental and social impacts, adaptive management strategies, and emergency response plans.
- **Rehabilitation:** Restoring disturbed or lost habitats to their pre-project conditions.
- **Compensation:** Providing financial or in-kind compensation for unavoidable impacts on critical habitats.

These mitigation measures will be amended and modified should any critical habitats be identified within the Projects AoI.

More detailed breakdown of the potential adverse impacts and their mitigation measures is provided in "Chapter 9. Impact Assessment" and "Attachment 7. Biodiversity Management Plan" of the ESIA Report. Division of responsibilities and reporting will be organized according to the requirements set in "Chapter 10. Environmental and Social Management Plans" and "Annex 7. Biodiversity Management Plan".

Annex 8. Labour Management Procedures

https://azerenerji.gov.az/site/assets/files/Azerenerjis_LMP_AZURE.pdf

Annex 9. Photos from Fieldwork

1. Surface water sampling	
	
WQ1	
	
WQ2	
	
WQ3	
	
WQ4	

1. Surface water sampling	
	
WQ5	
	
WQ6	
	
WQ7	
	
WQ8	

1. Surface water sampling	
	
WQ9	
	
WQ10	

2. Soil sampling	
	
SS1	
	
SS2	
	
SS3	
	
SS4	

2. Soil sampling	
	
SS5	
	
SS6	
	
SS7	
	
SS8	

3. Air monitoring	
	
AP1	
	
AP2	
	
AP3	
	
AP4	

3. Air monitoring	
	
AP5	
	
AP6	
	
AP7	
	
AP8	

3. Air monitoring	
	
AP9	
	
AP10	
	
AP11	
	
AP12	

3. Air monitoring	
	
AP13	
	
AP14	
	
AP15	
	
AP16	

3. Air monitoring	
	
AP17	

4. Traffic surveys	
	
TP1	
	
TP2	
	

4. Traffic surveys	
TP3	
	
TP4	
	
TP5	
	
TP6	
	
TP7	

4. Traffic surveys	
	
TP8	

Annex 10. HSE Norms and Standards

HSE Norms and Standards

- 1. General Requirements

Environmental legislation and mandates described in the previous sections are supported by a number of rules and standards that are listed below:

- According to the laws on *"Environmental Protection"*[1] *and "Ecological Security"*[2] and the requirements of the Presidential decrees on the application of these laws, it is important for each economic activity enterprise to have the following environmental normative documents:
    a) Ecological passport - legal document that includes a set of information expressed by a system of indicators reflecting the level of use of natural resources and the degree of impact on the environment;
    b) Inventory of the hazardous air emissions;
    c) Inventory of allowed hazardous substances
- The enterprise must determine waste generation and disposal norms of the activity, classify wastes according to the *Law "On industrial and household waste",* and, based on the "Rules for hazardous waste passportization" (approved by the Cabinet of Ministers decree # 31 from March 31, 2003), develop and coordinate with SEEA the hazardous waste passport of the activity;
- According to the *Law on Environmental Protection* (Article 18) and the Regulations on State Monitoring of the Environment and Natural Resources (approved by the Cabinet of Ministers on July 1, 2004), the enterprise must develop and ensure the enforcement of the environmental monitoring program for the activity;

Regulatory framework in the environmental management is supported by the following active state standards:

- 2. Lands
- AZS ISO 10381-1-2014 "Soil quality". Part 1: "Guidelines for sampling program development"
- International Standard GOST 17.4.2.01 – 81: "Nature protection. Soils. Nomenclature of sanitary indicators".

[1] http://www.e-qanun.az/framework/3852
[2] http://www.e-qanun.az/framework/3851

- International Standard GOST 17.4.3.02-85: “Nature protection. Soils. Requirements for protection of fertile soil layer during earthworks”.
- SanPiN 42-128-4433-87. Sanitary norms: "Sanitary norms for permissible soil concentrations of chemicals".
- 3. Air Quality
- AZS ISO 4225-2014: “Air quality. General aspects”
- GOST 17.2.3.02-78: “Environmental protection. Atmosphere. Permissible limits of harmful substances released into the atmosphere from industrial enterprises”
- GOST 17.2.4.02 – 81: “Environmental protection. Atmosphere. General requirements for pollutant detection methods”
- GOST 17.2.3.01 – 77: "Rules of air quality control in residential areas".

- 4. Surface and underground water resources
- AZS 929:2023. "Drinkable water. Hygienic requirements and quality control";
- GOST 17.1.3.07 – 82: “Environmental protection. Hydrosphere. Rules of water quality control in reservoirs and streams”
- GOST 17.1.5.04 – 84: “Environmental protection. Hydrosphere. Equipment for sampling, primary processing and storage of natural water samples. General technical conditions"
- GOST 17.1.5.05 – 85: “Environmental protection. Hydrosphere. General requirements for sampling of surface and sea water, ice and atmospheric precipitation”
- GOST 17.1.5.01 – 81: “Environmental protection. Hydrosphere. General requirements for sampling of bottom sediments in water basins for pollution analysis”;
- SanPiN 4630–88. Sanitary rules and standards. Protection of surface water from pollution”.

5. Water Quality

Problems of water pollution are regulated by the *Law on Environmental Protection* (№ 678-IQ, June 8, 1999) and the *Water Code*[3] (December 26, 1997, No. 418-IQ) of Azerbaijan. This Code is aimed at preventing the environmental degradation of water bodies that may affect the health of the population, and the reduction of commercial fish and other wildlife resources. Based on the principles of national water use

[3] http://www.e-qanun.az/framework/46940

legislation, water users are obliged to take measures to prevent water pollution. The main task of the water user is to minimize the pollution of water resources, which includes the mandatory treatment of industrial waste before it is released into the environment. Permission for water pollution is issued by SEEA as a single environmental permit.

- Project requirements

In accordance with the requirements of the *Water Code*, the following requirements will be accepted as the Project requirements:

- Compliance with established water use limits;
- Implementation of measures to protect water resources from pollution;
- Prevention of industrial wastewater discharge with above-the-limit pollutant concentrations;
- Obtaining of necessary pollutant discharge permits in accordance with the Law on Environmental Protection;
- Protection of water bodies from hazardous chemicals and toxic substances and their components, as well as from insoluble solids and other wastes;
- Ensuring reduction of the pollutants to an acceptable level, taking measures to neutralize them at the point of discharge.

6. Wastes

Regulatory requirements for waste management are reflected in the *Law of the Republic of Azerbaijan "On Industrial and Domestic Waste*"[4]. According to the Law, the waste is divided into three categories:

- Hazardous wastes - wastes containing radioactive, toxic or noxious materials, or substances that pose a threat to the environment and/or human health;
- Non-hazardous wastes - wastes that are not classified as hazardous or inert;
- Inert wastes - wastes that are not transformed and do not adversely affect the environment and/or human health.

Management of the hazardous wastes is strictly regulated. In order to manage them, the enterprises are required to obtain special licence from SEEA. In accordance with the "Rules for certification of hazardous waste" (approved by the decree of Cabinet of Ministers No. 41 from March 31, 2003), the enterprises must prepare a hazardous waste passport for the planned activity, and agree it with SEEA.

[4] http://www.e-qanun.az/framework/3186

No special permit or license is also required to work with non-hazardous or inert waste. Therefore, waste disposal regulations apply to all types of waste, including non-hazardous and inert waste.

Project requirements

AzerEnerji, being a state-owned energy company, has a comprehensive waste management plan in place that aligns with national environmental regulations and international best practices. The plan encompasses the following key elements:

1. **Waste Reduction and Minimization:**
    - Implementing measures to reduce waste generation at the source through process optimization, equipment maintenance, and resource recovery.
    - Promoting waste prevention practices among employees and contractors.
2. **Waste Segregation and Collection:**
    - Establishing a clear waste segregation system for different waste streams, such as hazardous waste, non-hazardous waste, recyclable materials, and organic waste.
    - Implementing efficient waste collection and transportation procedures to designated storage or treatment facilities.
3. **Waste Treatment and Disposal:**
    - Treating hazardous waste according to national regulations and international standards to minimize environmental impact.
    - Disposing of non-hazardous waste in designated landfills that comply with environmental requirements.
    - Promoting the recovery and recycling of valuable materials from waste streams to conserve resources and reduce landfill burden.
4. **Monitoring and Reporting:**
    - Implementing a comprehensive monitoring system to track waste generation, collection, treatment, and disposal.
    - Regularly reporting waste management performance to relevant authorities and stakeholders.
    - Conducting periodic audits and reviews to ensure compliance with regulations and continuous improvement of the waste management system.
5. **Employee Training and Awareness:**
    - Providing regular training to employees and contractors on proper waste management practices.

- Raising awareness about the importance of waste reduction, segregation, and responsible disposal.

6. **Community Engagement:**

- Engaging with local communities to promote waste reduction and recycling initiatives.
- Supporting community-based waste management projects to enhance environmental sustainability.

AzerEnerji's waste management plan aims to minimize the environmental impact of its operations, conserve resources, and promote a circular economy approach. The company continuously strives to improve its waste management practices by adopting innovative technologies, best practices, and engaging in collaborative efforts with stakeholders.

7. Land use

The following regulatory framework exists in Azerbaijan to regulate inventory, classification and assessment of the country's soil resources, as well as to manage local land-use and land protection activities:

- Law on Environmental Protection (1999)
- Law on Subsoil (1998)
- Land Code[5] (1999)
- Law on Soil Fertility (1999)
- Law on Acquisition of Land for State Needs (2010)
- Law on Lease of Land (1998)
- Regulations on State Control over Land Use and Protection (2000).

According to the Constitution of the Republic of Azerbaijan (Article 13), there are three types of property in Azerbaijan - state, municipal and private. The Constitution recognizes the right of citizens to own, use and dispose of property.

- State lands. These are lands where state authorities and state-run facilities are located. The list of such lands includes summer and winter pastures, lands of the forest, water and state reserve funds, specially protected areas, as well as the lands that are permanently use by research-education institutions, state authorities, departments and organizations.

[5] http://e-qanun.az/framework/46942

- Municipal lands. This includes public lands, the lands used by individuals and legal entities, and the reserve fund lands. Municipal lands also include lands of cities, settlements and rural settlements, and lands of pastures used by the population for livestock.
- Privately owned lands. This includes legally used houses and backyards, individual, collective and cooperative gardens, gardens under the management of the state horticulture, as well as privatized lands.

8. Land acquisition and resettlement

A. Regulatory framework

There is no special legislation on resettlement in Azerbaijan. Acquisition of privately owned lands/property for state purposes and compensation for this are regulated by the *Constitution of the Republic of Azerbaijan, Land and Civil Codes, the Law on Land Acquisition for State Needs*, as well as several decrees of the Cabinet of Ministers.

According to the Constitution of the Republic of Azerbaijan (Article 29), no one may be deprived of his property without his consent or a court decision, and the alienation of private property for state needs may be allowed only after the owner has been paid fair compensation.

Land Code (Article 101) of the Land Code stipulates that all losses incurred as a result of compulsory acquisition or temporary suspension of ownership over land for state needs, as well as restriction of the rights of owners, users and tenants to land, must be fully reimbursed to landowners or users. Disputes related to compensation shall be considered in court in accordance with the procedure established by law. At the same time, Articles 110 and 111 of the Code state that illegally used lands do not require compensation for their transfer to state use.

According to the **Civil Code** (Articles 246-249), a state enterprise wishing to purchase land must make an official statement and register it in the state property register. The Code also requires that land users be notified in advance of the planned act, that the amount of compensation to be paid be determined at market prices and paid within a maximum of 90 days from the date of the procurement contract, and that assistance be provided to relocated parties. According to the Code, different compensation options must be offered to each party whose land is acquired for state needs.

The Flat Code. The Code states that acquisition of residential lands and residential building on the land should be acquired by the provisions of the Land Acquisition Law.

The Law on Acquisition of Land for State Needs[6] Specifically address matters related to involuntary resettlement (IR), including the process and institutional arrangement for land acquisition, compensation and valuation, consultation requirements, entitlements of various categories of displaced persons and grievance mechanism. Pursuant to Article 6.1 of the Law, the authority acquiring land for state needs is determined by a decision on the existence of a state need requiring the acquisition of land, adopted in accordance with Article 9.1 of the Law, and the acquisition of land for state needs is actually carried out on behalf of the state. The law considers various categories of displaced persons, including those without state registration, renters, non-formal long-term users of land, and persons who have no legal rights on the land that they live in. The law entitles persons who have no legal rights on the land to resettlement assistance and compensation for their non-land assets. It includes provision of compensation for loss of business/income, transition allowance and transportation support, and compensation for loss assets based on replacement cost. As per the LAL, in case of physical displacement, the acquiring authority needs to send notification to PAPs at least 60 days before resettlement.

The Law on Land Lease (Article 16) stipulates that when renting land for state needs, the lessee may be provided with another plot of land of the same size and quality. Damage caused to the land shall be compensated in accordance with the legislation.

The Law on Appraisal Activity states that real estate appraisal is mandatory when land is acquired for state needs, and the results of the appraisal must be reflected in the appraisal report.

Law on Electricity (№ 858-VIQ, 11 April 2023). The Law applies to subjects of electric energy, consumers and state bodies (institutions) operating in the field of production, storage, transmission, distribution, supply, import, export and consumption of electric energy in accordance with Article 94, Part I, item 11 of the Constitution of the Republic of Azerbaijan. It regulates the relations between them and determines the legal, economic and organisational bases of the electric energy sector.

According to the **Presidential Decree No. 506-3 QD dated December 7, 2007**, additional compensation of 20% of the calculated market value of the property purchased for state needs is required.

Presidential decree on additional activities regarding to implementation of the Law on Acquisition of Land for State Needs (February 15, 2011) stipulates additional provisions for the implementation of the Land Expropriation Law. It also assigns government agencies for each case of relevant executive body.

Procedures for acquisition of lands for state needs were approved by the **Resolution of the Cabinet of Ministers "On some legal acts related to the Land Code of the Republic of Azerbaijan"** (Resolution

[6] http://www.e-qanun.az/framework/19613

No. 42 dated March 15, 2000**;** last edited on 13.06.2019). According to the Resolution, there are three options for compensation to be paid to legal landowners in Azerbaijan: (i) land in exchange for land, (ii) compensation at market prices, and (iii) settlement of a dispute over compensation under a court decision.

Legislation of Azerbaijan recognising the following two options for land acquisition:

- Providing the land owner with a plot of land of the same area and quality;
- Providing the land owner with material compensation, taking into account the current market rate.

Cabinet of Ministers' Resolution No.45 (February 24, 2012): It stipulates guidelines for preparation of resettlement plan, as well as shows sample content of a resettlement plan and resettlement guideline.

Cabinet of Ministers' Resolution No. 55 (April 21, 2011): It reflects guidelines and criteria for the selection of a planner (person or entity who prepares resettlement plan or guideline).

Cabinet of Ministers' Decree No 216 (May 16, 2024. It includes description of the width of protection corridor along electric lines, as well as shows restricted activities within the protection corridor. The right of way and restricted activities within the area is summarized in the Table 2 below.

Compensation procedures

The following procedures are used to determine compensation for different types of property acquired:

Land. Land compensation prices must be based on market rate[7]. In cases where market price cannot be determined replacement cost[8] is used. These rates are determined by a Valuation Commission established by a decree of the Cabinet of Ministers. An independent appraiser should be involved in valuation process by the Valuation Commission. If both market and replacement price are available, the higher one is used. Market price of land is the average of three highest land transaction prices, which were sold and bought in the same area for recent three months. Replacement price of land is calculated price including expenses with respect to enrichment of productivity, provision of basic facilities, as well as registration costs.

[7] **Land market value** is determined on the basis of mean value of the three highest recorded land sales in past 3 months from the census date. “Article 58: Market Value” of Law of the Republic of Azerbaijan on the Acquisition of Lands for State Needs, April 2010.

[8] The **replacement price** is determined based in ‘Article 59: Replacement Price’ of Law of the Republic of Azerbaijan on the Acquisition of Lands for State Needs, April 2010. This replacement price include expenses with respect to bringing the land or building the structure in same area and same size and production potential up to standard of acquired land/structure, and registration fee.

The bulk of the land impacted will be traversed by the OHL and an easement will be registered against the land and to Azerenerji as per provisions of the Land Code [9] but land will not be transferred from the current landholders. Currently no compensation is paid for the registration of an easement. An easement is accompanied by a restriction on land use that does not allow for structures to be built or for trees above a certain height[10]. The principle is that where no rights are diminished or impacted then compensation would not be due. This would apply to land gazetted as agricultural under which no current of future development rights of use is impacted. However, where an easement is registered where restrictions on land rights result in diminished value then compensation would be due.

Since land plots are not transferred to the ownership of "Azerenerji" JSC (they are transferred for permanent use), the use of new land plots for the implementation of projects related to the construction of OHLs is regulated by the relevant articles of the Civil Code and Land Code of the Republic of Azerbaijan on the basis of mutual agreement with the owners. Thus, in the projects implemented by Azerenerji JSC, Azerenerji JSC cooperates with the owners in accordance with the Decision of the Cabinet of Ministers of the Republic of Azerbaijan dated 16 May 2024 ¹ 261 on the approval of "Dimensions of protection zones of electric networks and requirements for carrying out economic works in these areas" and the corresponding provisions of the Land Code, which establish the conditions and terms of application of easements on land for, inter alia, "construction and repair of private, municipal, engineering, electric and other lines and networks". It obtains the permit for the installation of supports and laying of the line based on the consent (payment of compensation, notarised application for non-objection, obtaining the permit, concluding the contract).

As for the current projects for construction of the OHLS the routes will be agreed with the respective local Executive Power authorities. Subsequently, an agreement will be reached with the landowners concerned regarding the installation of pylons in the area (for compensation, etc.). Subsequently, a permit for the long-term use of the land will be obtained through a notarial procedure (annual payment or one-off payment according to the contract).

The amount of compensation is calculated on the basis of market prices according to the productivity and category of the land and the income indicator of the crops that can be grown in each region.

Currently the Project OHLs it is not planned to cross land belonging to residential areas. If such a situation is unavoidable, permission will be obtained in exchange for compensation for the use of the land areas necessary for the installation of the pylons, or, through local executive authorities and municipalities, land

[9] Land Code, Chapter 54. Easements on land
[10] An exception is the construction of buildings and installations that have a support in the adjacent area or that have a transition into the adjacent area at a certain height (Land Code, Chapter 54).

compensation will be provided to those owners in exchange for the dimensions of the affected land in the state or municipal fund.

Compensation will be paid in advance to landowners who have been granted permission to use their land for the project.

Annual Crops. Compensation payable for loss of annual crops is determined by the Valuation Commission in coordination with land acquisition group(s) based on certified data on the productivity of crops and the average price of produce issued by the district Department of Statistics.

Perennial Crops (Trees, Shrubs and Vines). Compensation for trees and shrubs (not included in the Forestry Fund of Azerbaijan Republic) expected to be cut or replanted within the project activity has to be conducted in agreement with the Rules for Use, Protection and Preservation of Trees and Bushes (19 September 2005). Perennial crops such as fruit trees, grape vines, and blackberry bushes growing on private yards and orchards are valued on a per tree or per shrub basis by applying a standard formula.

- Compensation for Immovable Assets and Land Attachments.

This covers a range of items such as fences, walls, animal enclosures, small irrigation channels, drains, wells, hand pumps, artesian bores, water pumps, hay sheds, animal shelters and roads. These items must be valued at full replacement cost by the Independent Appraiser hired by AzerEnerji.

- Compensation for Temporary Land Acquisition.

Upon the completion of works, the land must be restored to its pre-project condition and returned to the owner/user with compensation for the following items:

- Loss of annual crop production
- Potential crop yield reduction for three years
- Loss of any trees or perennial crops
- Loss of use of grazing land
- Loss of immovable assets and land attachments.

Compensation for Loss of Residence. In the event of loss of residences in the process of project planning and execution, the owner/user will be compensated additionally besides compensation for land, which include following items:

- Property owned by claimant;
- Possible expenses associated with execution of any juridical services, survey, assessment and other such compulsory measures with respect to land acquisition;

- Expenses related to safe and sound transportation of cattle of person affected by expropriation from their place to the place where person will be resettled;
- Loss of income associated with the expropriation of lands. Payments will be provided to these persons, till the income they get from new place of residence or land be equal to the income from his previous place and residence;
- Expenses associated with required training in order that the persons affected by expropriation be able to work in new place of residence according to its condition;
- If foodstuffs is provided from the land to fully or partially satisfy the needs of family of persons affected by expropriation, expenses for regular provision of the same type and expense food stuffs till they will get these food stuffs from the land in new place of residence or work in new place of residence;
- Other matters to be considered for fairness of paid compensation.

In accordance with the Law of the Republic of Azerbaijan ***"On Specially Protected Natural Areas and Objects"*** (Article 7), state nature reserves and sanctuaries, geological parks, natural monuments of national parks, zoological parks, botanical gardens and dendrological parks are prohibited from being given to individuals and legal entities for management, use and lease. Sanitary protection zone of specially protected natural areas is defined at a distance of up to 3000 meters along the entire perimeter of the land and water borders of specially protected natural areas. Private and municipal lands in the sanitary protection zones shall be used on the basis of easement right.

Project requirements

Land acquisition needs of the Project were identified according to the principles specified in the table below.

Table 10.1. Details of RoW defined by Decree-103 and Restricted Activities

Right of Way	Less than 1000 watt voltage	More than 1000 watt voltage
Overhead lines	2 meters from each side lines	<20 kw: 10 m from each side 35 kw: 15 m from each side 110 kw: 20 m from each side 150 kw: 25m from each side 220 kw: 25m from each side 330-500 kw: 30m from each side
Underground lines	1 meter from each side cable	1 meter from each side cable
Restricted Activity	Less than 1000 watt voltage	More than 1000 watt voltage
Underground lines	Construction, installation, explosion, irrigation activities, plant or cut trees, construction of sport grounds, collection of fuel, fertilizer and other materials. In case of underground cables, digging of ground with machinery for more than 0.3 m deep is prohibited	Construction, installation, rehabilitation and destructing of buildings; mining activities; soil digging; explosion; amelioration activities; planting and cutting of trees and bushes; fencing; placing of piles for vineyards and gardens. In case of underground cables, digging of ground with machinery for more than 0.3 m deep is prohibited. If the land is agricultural then till 0.45 m is allowed.

Under the Law of the Republic of Azerbaijan on Electricity, rights to land can be obtained in accordance with the requirements of land legislation for the purpose of constructing, expanding, reconstructing, repairing and operating electricity facilities. Land Code as a major legislative tool regulating land issues in Azerbaijan refers to application of Easements on land and stipulates main regulations and provisions of its application . As per definition provided in the Land Code Easement is the right to use one or more neighbouring (other) parcels of land for a limited period of time. It can be established by agreement between landowners, users and tenants, or by a court decision. The law requires that easements be exercised in such a way as to impose as few restrictions as possible on the land on which they are designated. Easements may be granted for a permanent or temporary term and may be paid for. In the event of a transfer of ownership of the land to another person, the right of easement will be preserved in accordance with the provisions of the law. The easement may be terminated at the request of the landowner if the basis for the easement is subsequently removed.

Further to this the Law contain cases allowing the application of the easement to land areas. They are listed below:

- The use of the land for the construction and repair of private, municipal, engineering, electrical and other lines and networks;

- The use of the land to drain or dewater the land;
- Extraction of water from the land for drinking (cattle drinking);
- Removing livestock from the land;
- Mowing grass and grazing cattle on a stranger's land in accordance with local conditions and customs;
- The temporary use of the land area for the purpose of exploration, research and other work;
- The construction of buildings and installations that have a support in the neighbouring area or that have a transition into the neighbouring area at a certain height;
- The prohibition of the construction of buildings and installations exceeding a certain height in the adjacent area;
- The planting of protective forest plantations and strips on the land area and the creation of other nature protection facilities

Detailed information on the principles and procedures of land acquisition are provided in the Resettlement Policy Framework (Annex 8)

9. Air protection

Prevention or restriction of air pollution is regulated by the Laws on Environmental Protection (1999) and the Protection of Atmospheric Air (2001). According to the both laws, compliance with hygienic and environmental air quality standards must be ensured during the design, location, construction, reconstruction and operation of facilities. The amount of air emissions must be based on permits issued in accordance with relevant regulations.

Azerbaijan acceded to the *UN Framework Convention on Climate Change in 1995*. As a full party not included in Annex 1 of the Framework Convention, the country has undertaken several obligations, including preparation and regular update of the national greenhouse gas inventory. Azerbaijan also signed the Paris Agreement on April 22, 2016, and ratified it in October of that year.

As its' contribution to the climate change prevention, Azerbaijan aims to reduce national emissions by 35% in 2030 as compared to the baseline 1990. Therefore. It is the responsibility of every industrial facility, including energy production and distribution companies, to take energy efficiency measures to reduce greenhouse gas emissions.

10. Project requirements

The following standards have been set for the project:

- Evaluation of project emissions and development of measures to reduce them;

- Adherence to the established limits of pollutant emissions into the atmosphere;
- Compliance with the requirements of the obtained environmental permits;
- Protection of the environment and workers from harmful emissions.

11. Biodiversity protection

According to the *Law on Especially Protected Natural Territories and Objects*[11] (2002), protected natural areas are the land areas and waters (water area) consisting of natural complexes and objects, places of distribution rare and being under the threat of the disappearance of types of vegetation and animals representing special ecological, scientific, cultural, aesthetic and improving value which fully or partially, constantly or are temporarily withdrawn from economic circulation, and atmospheric space over them.

The Law on Wildlife[12] (1999) regulates the protection, reproduction and use of wildlife in order to ensure its' safety and diversity.

The Forest Code[13] (1997) determines the legal basis of regulation of the forest relations, uses of the woods, their protection, protection, reproduction, increase in ecological and resource potential of the woods. Regulation of the forest relations is performed taking into account concept of the wood representing unity of forest vegetation, the soil, fauna and other components of the environment having important ecological, economic and social value.

Project requirements

Any work that may have a potential impact on wildlife and habitats must be carried out in accordance with the following requirements:

- protection of biodiversity and health of fauna communities in natural habitats;
- protection of fauna habitats, important reproduction areas, migration routes and areas with high concentration of fauna;
- establishment and observance of norms and rules for the protection of wildlife.

12. Occupational Health and Safety

[11] http://www.e-qanun.az/framework/617
[12] http://www.e-qanun.az/framework/3850
[13] http://e-qanun.az/framework/46955

The Constitution enshrines the right of "everyone to work in a safe and healthy environment." Each enterprise, department and organization, regardless of its form of ownership, shall comply with the norms, rules and principles of labour protection reflected in the relevant legal acts of the country. Legislation imposes certain obligations on employers and owners.

Owners and employers of the enterprises must follow the requirements set under the Labour Code of the Republic of Azerbaijan[14] (No. 618-IQ, February 1, 1999), decrees of the Cabinet of Ministers, as well as the rules, instructions and standards accepted by the Ministry of Labour and Social Protection. The parties are also responsible for fulfilling the requirements arising from international agreements to which the Republic of Azerbaijan has acceded or is a party.

The Law on Technical Safety[15] (November 2, 1999 № 733-IQ) defines the legal, economic and social basis for the safe operation of potentially hazardous facilities. The law regulates the activities aimed at prevention and response to the accidents that may occur on such facilities.

There are a number of legal acts in Azerbaijan that directly or indirectly regulate aspects of health and safety in the energy industry. The regulations require each business entity to have a designated health and safety officer or service. All employees directly involved in hazardous works must undergo various certifications on a regular basis.

Project requirements

AzerEnerji, as a major player in Azerbaijan's energy sector, places a high priority on Health, Safety, and Environment (HSE) in its operations. While the specific details of their HSE policy may not be publicly available, the general principles and commitments can be outlined as follows:

1. **Commitment to HSE Excellence:**
    - AzerEnerji is committed to achieving the highest standards of HSE performance in all its activities.
    - This commitment is integrated into the company's overall strategy and decision-making processes.
2. **Compliance with Regulations:**
    - AzerEnerji adheres to all applicable national and international HSE laws, regulations, and standards.

[14] http://e-qanun.az/framework/46943
[15] http://www.e-qanun.az/framework/21

- The company goes beyond compliance by implementing best practices and industry standards.

3. **Risk Management:**
    - AzerEnerji adopts a proactive approach to identify, assess, and manage HSE risks associated with its operations.
    - This involves implementing risk control measures, emergency preparedness, and incident investigation procedures.
4. **Employee Health and Safety:**
    - The company prioritizes the health and safety of its employees, contractors, and visitors.
    - This includes providing a safe working environment, training, personal protective equipment, and health monitoring programs.
5. **Environmental Protection:**
    - AzerEnerji is committed to minimizing the environmental impact of its operations.
    - This involves implementing environmental management systems, pollution prevention measures, and energy efficiency initiatives.
6. **Continuous Improvement:**
    - AzerEnerji strives for continuous improvement of its HSE performance through regular reviews, audits, and the implementation of corrective actions.
    - The company encourages employee feedback and participation in HSE initiatives.
7. **Transparency and Communication:**
    - AzerEnerji maintains open communication with employees, contractors, stakeholders, and the public on HSE matters.
    - The company regularly reports on its HSE performance and initiatives.

13. Public participation and stakeholder engagement

According to national regulations, information disclosure and dissemination, as well as public consultations are part of the project development process, especially if the project is expected to produce significant adverse environmental impacts.

Article 39 of the Azerbaijan Constitution confirms citizen's right to a life in healthy environment, an access to the environmental information to a compensation for damage to one's health or property due to violations of environmental requirements.

As stated by the Article 3 “EIA Goals & Principles”, ensuring transparency, public awareness and stakeholder participation in the EIA process constitutes one of the cornerstone principles of EIA process.

The other two important components of the relevant national regulatory framework are the Laws on “Access to Information” and “Public Administration”, both accepted in 2005 to form legal basis for public participation in the decision-making process.

Public participation in the decision-making process is regulated by the following legislative acts in Azerbaijan:

1. Law on Environmental Protection (1999);
2. Law on Environmental Impact Assessment (2018);
3. Law on Obtaining Environmental Information[16] (2002);
4. Law on Environmental Education and Awareness of the Population[17] (2002);
5. Law on Accession of the Republic of Azerbaijan to the UN Convention on Access to Information, Public Participation in Decision-Making and Open Judiciary[18] (2001);

Thus, the above-mentioned legislative acts provide a regulatory basis for the general public to receive information about the projects, to participate in the assessment of their environmental and social impacts. Public discussion and review of ESIA documents of projects is mandatory in Azerbaijan.

Project requirements

AzerEnerji, as a state-owned energy company in Azerbaijan, demonstrates a commitment to Corporate Social Responsibility (CSR) through various initiatives and programs. While detailed information might not be readily available in English, their CSR efforts typically focus on the following areas:

1. **Community Development:**
    - Supporting local communities through infrastructure development projects, such as schools, hospitals, and clubs.
    - Investing in educational programs and scholarships for students in the regions where they operate.
    - Promoting cultural and social events to enhance community well-being.
2. **Environmental Protection:**

[16] http://e-qanun.az/framework/1486
[17] http://e-qanun.az/framework/1880
[18] http://e-qanun.az/framework/5205

- Implementing energy efficiency projects to reduce carbon emissions and promote sustainable practices.
- Supporting environmental conservation efforts, such as reforestation and biodiversity protection.
- Raising awareness about environmental issues and promoting responsible energy consumption.

3. **Employee Well-being:**

- Providing a safe and healthy working environment for employees.
- Investing in employee development and training programs.
- Supporting employee health and wellness initiatives.

4. **Stakeholder Engagement:**

- Engaging with local communities, government agencies, and other stakeholders to understand their concerns and expectations.
- Collaborating with partners to implement CSR projects and programs that address local needs.
- Maintaining transparency and accountability in CSR activities.

AzerEnerji's CSR initiatives align with the United Nations Sustainable Development Goals (SDGs) and contribute to the socio-economic development of Azerbaijan. The company recognizes its responsibility to operate in a socially and environmentally responsible manner, and its CSR efforts aim to create shared value for all stakeholders.

14. Healthcare

In order to guarantee the constitutional rights of citizens to health protection, cooperation of any company with public organizations and individuals in the field of healthcare are regulated by the laws of the Republic of Azerbaijan "On Public Health"[19] (1997) and "On Sanitary and Epidemiological Safety"[20] (1992). According to the Law on Sanitary and Epidemiological Safety, sanitary and epidemiological opinions must be issued by the relevant state healthcare authorities for the operation of project facilities and workplaces.

Project requirements

One of the main tasks of AzerEnerji is to protect the health of employees at work and create working conditions in accordance with sanitary and hygienic rules. AzerEnerji, like many companies in Azerbaijan

[19] http://www.e-qanun.az/framework/4078
[20] http://www.e-qanun.az/framework/7916

and around the world, prioritizes employee well-being and aims to create a positive and supportive work environment. Although specific details of their internal standards might not be publicly available, they likely adhere to the following general principles and practices:

Health and Safety:

- **Compliance with regulations:** AzerEnerji ensures compliance with national and international health and safety regulations to provide a safe working environment for all employees.
- **Risk assessment and management:** They proactively identify and assess potential workplace hazards and implement measures to mitigate risks.
- **Safety training:** Employees receive regular training on safety procedures, emergency response, and the use of personal protective equipment.
- **Health promotion:** The company may offer health checkups, vaccinations, and other wellness programs to support employees' physical and mental health.

Work-Life Balance:

- **Flexible work arrangements:** AzerEnerji might offer flexible working hours, remote work options, or compressed workweeks to help employees balance their work and personal lives.
- **Leave policies:** They likely provide adequate leave entitlements for vacation, sick leave, and family care.
- **Stress management:** The company may offer resources and support for stress management, such as counselling or wellness programs.

Employee Development:

- **Training and development opportunities:** AzerEnerji invests in employee development through training programs, workshops, and mentoring to enhance their skills and knowledge.
- **Career advancement:** They provide opportunities for career growth and advancement within the company.
- **Performance recognition:** The company acknowledges and rewards employees for their contributions and achievements.

Diversity and Inclusion:

- **Equal opportunity:** AzerEnerji promotes equal opportunities for all employees regardless of gender, ethnicity, religion, or other personal characteristics.

- **Diversity initiatives:** They may implement initiatives to foster a diverse and inclusive workplace culture.
- **Harassment prevention:** The company has policies and procedures in place to prevent and address workplace harassment and discrimination.

Employee Engagement:

- **Open communication:** AzerEnerji encourages open communication and feedback from employees at all levels.
- **Employee involvement:** They involve employees in decision-making processes that affect their work.
- **Team building:** The company may organize team-building activities to foster collaboration and camaraderie among employees.

Corporate Social Responsibility:

- **Volunteering opportunities:** AzerEnerji might encourage employees to participate in volunteer activities that benefit the community.
- **Social initiatives:** They may support social causes and initiatives that align with the company's values and mission.

16. Protection of historical and cultural heritage

Goals, objectives and legal framework for the protection and use of historical and cultural heritage in Azerbaijan are set up by the Law “On Protection of Historical and Cultural Monuments”[21] (1998, 470-IQ). In particular, the law provides definition of cultural and historical monuments, forms basis for assessing their architectural and archaeological value, and regulates aspects of their protection and use. The law states that: “In the course of installation of basic public utilities (gas and oil pipelines etc.) and other construction works covering a territory of more than a hectare, the entity carrying out those works shall address the relevant executive authorities and the organization, established by the relevant executive authority at the stage of technical and economic substantiation on the forthcoming works to be carried out and allocate funds for preliminary search work of the monuments”.

[21] http://www.e-qanun.az/framework/3526

If an archaeological monument is found in a Project area, construction and economic works are not allowed unless the permission of the respective authority is received, and unless necessary scientific research is undertaken.

The following procedures are in place to protect archaeological and historical heritage during the implementation of construction projects in Azerbaijan:

1. Initial Assessment and Permit:

- **Archaeological Expertise:** Once a site is allocated for a construction project, an archaeological expertise is conducted to assess the project's impact on archaeological and historical heritage. This expertise determines the necessity of archaeological excavations on the site.
- **Obtaining a Permit:** A permit must be obtained from the Ministry of Culture for the construction project. The issuance of the permit depends on the results of the archaeological expertise and the project's impact on historical heritage.

2. Archaeological Excavations:

- **Conducting Excavations:** If the archaeological expertise determines the necessity of excavations, they must be carried out before construction begins. The excavations are conducted by qualified archaeologists under the supervision of the Ministry of Culture.
- **Registration and Preservation of Findings:** All archaeological findings discovered during excavations are registered, studied, and preserved appropriately.

3. Monitoring During Construction:

- **Archaeological Supervision:** Archaeological supervision is carried out during construction. This supervision aims to prevent damage to archaeological and historical heritage during the construction process.
- **Actions in Case of Discovery of Findings:** If archaeological findings are discovered during construction, work is stopped, and the Ministry of Culture is informed. The Ministry takes measures to study and protect the findings.

4. Post-Construction Measures:

15. **Study and Publication of Findings:** Archaeological findings discovered during excavations are studied, and the results are published in scientific publications.
16. **Exhibition of Findings:** In some cases, archaeological findings may be exhibited to the public.

Violation of legislation related to the protection of archaeological and historical heritage can result in administrative and criminal liability.

- The Project will also seek to comply with ERSS8 Cultural Heritage, namely:
- Avoidance of Adverse Impacts: The project should prioritize the avoidance of impacts on cultural heritage. If avoidance is not possible, the project must take measures to minimize and mitigate any potential harm.
- Chance Finds Procedures: Projects must include a Chance Finds Procedure to manage the discovery of cultural heritage items that were not previously identified. This procedure ensures that construction or other activities halt when such finds are made, allowing for proper assessment and management.
- Mitigation Measures: If cultural heritage will be affected by the project, mitigation measures must be developed, such as:
- Preservation in situ (leaving the heritage site or object in its original location).
- Documentation and recovery of cultural artifacts.
- Relocation or protection of cultural resources when necessary.

16. Licenses and permits

Below is a list of documents and conclusions (approvals) necessary for the development of design documentation and construction work of facilities to be built in Azerbaijan:

- Document on land allocation for the construction and operation of project facilities (including security zones). This document is prepared and agreed upon on the basis of an application from the customer or the owner of the project (to the relevant central executive authorities, the State Urban Planning and Architectural Committee, the district/city Executive Authority, the State Real Estate Service of the Ministry of Economy makes a decision on the ownership of the allocated land plot.
- If project objects (structures and pipelines) are connected to or intersect with transport routes (roads and railways), the construction of new roads is required, etc., then permits must be obtained from the Ministry of Digital Development and Transport of Azerbaijan.
- Power supply of the project. “Azerenergy” OJSC provides technical conditions and permits for the energy supply part of the project.
- The project’s compliance with sanitary and hygienic standards is confirmed by the permission of the Centre for Hygiene and Epidemiology of the Ministry of Health of the Republic of Azerbaijan.
- Conclusion (permission) of the State Environmental Expertise of the MENR based on the ESIA of the project. In addition to the ESIA, the following permits must also be obtained from DEEA regarding disposal at permanent sources of waste and emissions for the period of operation:
- Emissions into the environment, including air, wastewater discharges and waste disposal within permissible limits (MAC);

- Permit for transportation and storage of hazardous substances.
- Permission from the Ministry of Emergency Situations. Based on all design documentation, the underground part of the project (geology and geotechnics), technological part and structures, construction, labour protection and safety, organization of construction work, design estimates, etc. It is discussed in the Ministry of Emergency Situations, and permission is given to implement the project.

Annex 11. Responsibility of Parties

1. Project Implementation Unit

The Project Implementation Unit (PIU) established within the Client's structure, is a crucial entity responsible for the successful execution of the project. Its primary focus lies in the efficient and effective implementation of project activities within the defined scope, timeline, and budget. The PIU plays a critical role in ensuring the successful implementation of OHL projects by effectively managing various aspects of the project, from planning to execution, while ensuring compliance with technical, environmental, and social standards. Key roles and responsibilities of the PIU are as follows:

- PIU Director:
- Develop and implement the overall project implementation plan
- Monitor and control project progress
- Ensure adherence to timelines and milestones
- Manage project risks and issues
- Coordinate with various stakeholders, including contractors, consultants, and government agencies.
- Review and approve contractor and consultant invoices and payments
- Financial Specialist:
- Prepare and manage the project budget
- Monitor and control project expenditures
- Ensure compliance with financial regulations and procedures
- Prepare financial reports and statements
- Review and approve contractor and consultant invoices and payments
- Deputy PIU Director / Procurement Manager:
- Develop and manage implementation of the project procurement plan
- Administer and manage project contracts
- Prepare and manage tender documents and contracts
- Evaluate bids and select contractors and consultants
- Monitor and supervise contractor and consultant performance
- Review and approve contractor and consultant invoices and paymentsManage contract variations and claims

  Monitor and evaluate contractor and consultant performance

- Environmental Specialist / Environmental and Social Coordinator:
- Oversee the implementation of the Environmental and Social Management Plan (ESMP)
- Coordinate with environmental and social consultants
- Monitor compliance with environmental and social regulations and standards (National and WB ESSs)
- Coordination/supervision of contractors on ESMP

- HSE Coordinator
  - Oversee the health, safety, and environmental management for AZURE Project
  - Ensure regulatory compliance in the Project construction sites
  - Oversee site HSE support and guidance throughout all activities
  - Performs audits to measure the level of safety culture
- Stakeholder Engagement Specialist
  - Planning and implementation of the SEP;
  - Leading stakeholder engagement activities;
  - Communicate and coordinate with Disadvantaged and Vulnerable Groups in the Project Area
  - Ensure proper recording and tracking of logged grievances

- Gender Specialist
  - Support in preparation and implementation of GAP for AZURE Project
  - Conduct gender analyses and assessments to identify gender gaps and develop strategies for addressing them
  - Support GRM functions by providing timely, impartial, independent and fair investigations for all SEA and SH cases.
- Social Development Specialist
  - Monitor the proper implementation of the RAP and ensure that GRM are in place
  - Monitor the progress of the construction on its social aspect in accordance with the ESSs.
  - Provide relevant policy and other guidance at field level to the Contractor and Supervision Engineer team
- Coordinator on technical issues
  - Provide technical guidance and support to project staff and contractors
  - Review and approve technical designs and specifications

- Monitor and supervise the quality of construction works
- Ensure compliance with technical standards and regulations

Within the PIU, the responsibility for overseeing the Environmental and Social Management Plans (ESMPs) typically falls under the **Environmental and Social Specialist**. This individual is responsible for:

- **Implementation of the ESMP:** Ensuring that the mitigation measures and monitoring plans outlined in the ESMP are properly carried out during the project's construction and operation phases.
- **Coordination with consultants:** Working closely with environmental and social consultants to obtain expert advice and ensure that their recommendations are integrated into the project's implementation.
- **Compliance monitoring:** Verifying that the project adheres to all relevant environmental and social regulations and standards, both national and those set by any funding agencies.
- **Stakeholder engagement:** Addressing any environmental or social concerns raised by affected communities and other stakeholders, and ensuring their meaningful participation in the project.

While the Environmental and Social Specialist has the primary responsibility for the ESMP, the entire PIU team plays a role in its successful implementation. The **PIU Director** has overall responsibility for ensuring that environmental and social considerations are integrated into all aspects of project planning and management. Other PIU members, such as engineers and procurement specialists, must also be aware of the ESMP and their role in its implementation.

As part of its' Project related obligations, the PIU will develop the following specific management plans to facilitate proper consideration of the ESIA and ESMP requirements:

1. **Stakeholder Engagement Plan (SEP):** Outlines the strategies and mechanisms for effective communication and engagement with affected communities, local authorities, and other stakeholders throughout the project lifecycle. The SEP must be developed based on the recommendations set out in the "Chapter 10. Stakeholder Engagement" of the current ESIA.
2. **Grievance Redress Mechanism (GRM):** Establishes a transparent and accessible process for receiving, addressing, and resolving grievances from affected communities and individuals. The GRM must be developed based on the recommendations set out in the "Chapter 10. Stakeholder Engagement" of the current ESIA.

3. **Environmental and Social Monitoring Plan:** Details the parameters to be monitored, monitoring frequency, methods, and responsible parties for tracking the project's environmental and social performance. The Plan must build upon the initial monitoring program set out in the Monitoring Plan proposed in the current ESIA (Table 12.1).
4. **Capacity Building Plan:** Identifies training needs and outlines a program for building the capacity of PIU staff, contractors, environmental and social supervisors, as well as other stakeholders on environmental and social management aspects.
5. **Occupational Health and Safety (OHS) Plan:** Defines procedures and measures to ensure the health and safety of workers involved in the project, including risk assessments, safety training, and emergency response plans.
6. **Biodiversity Action Plan (BAP):** As the project AoI crosses the number of protected nature areas, key biodiversity sites, sensitive ecosystems and bird migration routes, it is important to developed a detailed BAP to outline measures to protect and conserve biodiversity during the construction and operation phases of the Project.

Within the AZURE Project framework, the following PIU members of AzerEnerji will be given the mandate to ensure compliance of the Project with the requirements set in the current ESIA, including ESMPs and Monitoring plan.

Project Director

The Project Director (PIU Director) is the central figure responsible for the overall planning, execution, monitoring, and successful completion of the project. His/her roles and responsibilities encompass a wide range of activities, ensuring the project is delivered on time, within budget, and to the required quality standards, while adhering to safety and environmental regulations. Key roles and responsibilities of the Project Manager are as follows:

- Project Planning and Scoping:
    - Define project scope, objectives, and deliverables in collaboration with stakeholders.
    - Develop a detailed project plan, including schedules, resource allocation, and cost estimates.
    - Secure necessary permits and approvals from relevant authorities.

- Team Management and Leadership:
    - Build and lead a high-performing project team, including engineers, technicians, and contractors.

- Assign tasks and responsibilities, provide guidance and support, and monitor performance.
- Foster effective communication and collaboration within the team and with external stakeholders.

- Project Execution and Monitoring:
  - Oversee the day-to-day execution of the project, ensuring that activities are carried out according to the plan.
  - Monitor progress against schedule, budget, and quality standards.
  - Identify and address any potential risks or issues that may impact the project.

- Cost and Budget Management:
  - Develop and manage the project budget.
  - Track and control project costs, ensuring they remain within the approved budget.
  - Identify and implement cost-saving measures when necessary.

- Quality Management:
  - Establish and maintain quality control procedures to ensure that the project meets all required standards and specifications.
  - Conduct regular quality inspections and audits.
  - Address any quality issues promptly and effectively.

- Stakeholder Management:
  - Maintain effective communication and relationships with all project stakeholders, including the client, contractors, regulatory bodies, and local communities.
  - Manage expectations and address concerns proactively.
  - Ensure stakeholder satisfaction and project acceptance.

- Health, Safety, and Environment (HSE) Compliance:
  - Ensure that the project adheres to all relevant HSE regulations and standards.
  - Collaborate with the HSE Manager to implement and monitor safety protocols and procedures.

- Promote a strong safety culture on the project site.

- ESMP implementation:
  - In collaboration with other staff member and Project stakeholders, upgrade and elaborate on the ESMP.
  - Monitor and ensure that all project activities adhere to the mitigation measures and guidelines outlined in the ESMP.
  - Conduct periodic reviews of the ESMP to assess its effectiveness and make necessary adjustments as the project progresses or conditions change.
  - Set up robust monitoring systems to track key environmental parameters, such as air quality, water quality, noise levels, and biodiversity.
  - Initiate and manage routine audits and inspections to verify compliance with the ESMP and identify any potential environmental issues.
  - Together with other staff members, analyze monitoring data and prepare reports on the project's environmental performance, sharing findings with stakeholders and regulatory bodies.
  - Oversee the implementation of mitigation measures to minimize environmental impacts, such as erosion control, waste management, and habitat restoration.
  - Take immediate corrective actions to address any instances of non-compliance with the ESMP or environmental regulations.
  - Investigate any environmental incidents or accidents, identify root causes, and implement preventive measures.
  - Foster positive relationships with local communities, NGOs, and other stakeholders to ensure their concerns are addressed and they are kept informed about the project's environmental performance.
  - Provide clear and transparent communication about the ESMP, monitoring results, and any environmental issues that may arise.
  - Establish a grievance redress mechanism to address community concerns and ensure their concerns are heard and resolved fairly.

- Contract and Procurement Management:
  - Oversee the procurement of materials, equipment, and services for the project.
  - Manage contracts with suppliers and contractors.

- Ensure timely delivery and quality of procured goods and services.

- Reporting:
  - Complete all project documentation and reports.
  - Conduct a final construction project review and evaluation.
  - Hand over the completed construction project to the client or operating entity.

The Project Manager should possess a strong understanding of OHL design, construction, and operation principles. He/she should prioritize safety throughout the project, given the inherent risks associated with Project activities work. The manager should ensure that the project adheres to environmental regulations and minimizes its ecological footprint, and effectively manage relationships with local communities impacted by the project.

2. EnvironmentalSpecialist / Environmental and Social Coordinator

The Environmental Specialist (E&S Coordinator) will play a crucial role in ensuring that the project is conducted in an environmentally and socially responsible manner, minimizing negative impacts and promoting sustainability. Key roles and responsibilities of the manager will include:

2.1. Environmental and Social Planning and Assessment:

- Ensuring the compliance of the Project design and activity plans with the requirements of the ESMP.
- Developing detailed environmental management plans outlining mitigation measures and monitoring programs to minimize environmental harm.
- Preparation of the environmental documents required under the project and ensuring that these documents comply with the requirements of the contract.
- Ensuring compliance with relevant environmental laws, regulations, and permits throughout the project lifecycle.

2.2. Environmental Monitoring and Reporting:

- Implementing and overseeing environmental monitoring programs to track and assess the project's environmental performance.
- Collecting and analyzing environmental data, including air quality, water quality, noise levels, and biodiversity.

- Taking measures to minimize the impacts on sensitive ecosystems, habitats, and wildlife corridors, especially bird migration routes.
- Overseeing the implementation of mitigation measures, such as bird flight diverters and soil/vegetation management activities.
- Preparing regular environmental reports for PIU, supervision consultants and external stakeholders, including regulatory agencies.

2.3. Pollution Prevention and Control:

- Monitor noise levels and electromagnetic field emissions to ensure compliance with relevant standards.
- Identifying and implementing measures to prevent or minimize pollution from project activities, such as waste management, spill prevention, and emissions control.
- Ensuring proper handling, storage, and disposal of hazardous materials and waste.
- Investigating and addressing any environmental incidents or non-compliance issues promptly.

2.4. Resource Management and Conservation:

- Promoting efficient use of natural resources, such as water, energy, and raw materials.
- Implementing waste reduction program to minimize environmental impact.
- Identifying and implementing opportunities for habitat restoration and biodiversity conservation.

2.5. Stakeholder Engagement and Communication:

- Engaging with local communities, government agencies, and other stakeholders on environmental matters.
- Addressing concerns and grievances related to the project's environmental impacts.
- Providing transparent and timely information about environmental performance and initiatives.

2.6. Continuous Improvement:

- Staying abreast of new environmental technologies, best practices, and regulatory developments.
- Continuously seeking opportunities to improve environmental performance and reduce the project's ecological footprint.
- Promoting a culture of environmental awareness and responsibility within the organization.
- Identifying environmental training needs and developing training programs.

- Making proposals for amendments to ESIA or work practices, ensuring the implementation of approved changes

3. Social Development Specialist

The Social Development Specialist will play a vital role in ensuring the social aspects of the Project are managed responsibly and ethically. Acting as an advocate for the affected communities and individuals, he/she will have the following key responsibilities:

3.1. Social Impact Assessment:

- Updating the list and assessing the potential social impacts of the Project on communities, vulnerable groups, and cultural heritage. This includes considering issues like land acquisition, resettlement, livelihoods, access to resources, and community health and safety.
- Based on the SIA, creating a plan that outlines mitigation measures, community engagement strategies, and grievance redress mechanisms to address the identified social risks and impacts.

3.2. Community Engagement:

- Together with stakeholder engagement specialist, facilitating open and transparent communication with affected communities and other stakeholders through various platforms (e.g., community meetings, public hearings, newsletters, websites).
- Creating opportunities for communities to actively participate in the project's decision-making process, providing feedback, and voicing their concerns.
- Developing strong relationships with communities based on respect, transparency, and cultural sensitivity.

3.3. Land Acquisition and Resettlement:

- Ensuring that land acquisition is conducted in accordance with national laws and international best practices, including fair compensation, and minimizing displacement.
- Tracking the long-term social and economic impacts of land acquisition and providing ongoing support as needed.

3.4. Vulnerable Groups:

- Paying special attention to the needs of marginalized and vulnerable groups (e.g., women, children, elderly, people with disabilities) and ensuring their concerns are addressed.

- Designing and implementing measures to protect and support vulnerable groups throughout the project lifecycle.
- Ensuring that vulnerable groups have equal access to project benefits and opportunities.

3.5. Labor and Working Conditions:

- Ensuring that the Project adheres to national labor laws and international standards regarding working conditions, wages, and occupational health and safety.
- Regularly inspecting worksites to ensure compliance with labor standards and addressing any violations.
- Encouraging the Project to hire local workers and provide training opportunities to enhance their skills.

3.6. Grievance Redress Mechanism:

- Together with stakeholder engagement specialist, providing a clear and accessible process for communities and individuals to raise concerns and seek resolution for project-related grievances.
- Investigating and addressing complaints in a transparent and impartial manner.
- Tracking grievance data to identify trends and improve the effectiveness of the mechanism.

3.7. Collaboration and Reporting:

- Working closely with environmental manager and stakeholder engagement specialist, as well as other project team members to ensure that social considerations are integrated into all aspects of the project.
- Documenting social performance, including community engagement activities, grievance resolution, and implementation of the social management plans.

4. Social Assistant

Social Assistant will provide crucial support to the Social Specialist in managing the social aspects of the Project. He/she will work closely with communities and individuals who may be affected by the project, ensuring their concerns are heard and addressed. The Social Assistant will have the following responsibilities:

4.1. Community Liaison and Engagement:

- Helping to organize and facilitate meetings, focus group discussions, and other engagement activities. This may involve preparing materials, taking notes, and managing logistics.
- Gathering information from community members about their needs, concerns, and perspectives.
- Distributing project updates, brochures, and other materials to keep communities informed about the project's progress and social initiatives.
- Assisting in the creation of culturally appropriate and accessible communication materials.

4.2. Grievance Redress Mechanism:

- Acting as the first point of contact for community members who wish to raise concerns or complaints about the project.
- Explaining the process for submitting and following up on grievances.
- Gathering information and supporting the Social Specialist in investigating and resolving grievances.
- Keeping accurate and confidential records of all grievances received and their resolution status.

4.3. Land Acquisition and Resettlement:

- Supporting the land acquisition team in conducting surveys and assessing the value of land and assets affected by the project.
- Explaining the land acquisition process and compensation policies.
- Conducting follow-up visits to assess the social and economic impacts of land acquisition.

4.4. Vulnerable Groups:

- Helping to identify and locate vulnerable households and individuals within the Project AoI.
- Conducting vulnerability assessments to understand the unique challenges faced by different groups.
- Assisting with the delivery of programs and services designed to address the needs of vulnerable groups.

4.5. Data Collection and Reporting:

- Gathering information on various social indicators, such as household income, access to services, and community perceptions.

- Assisting the Social Specialist in preparing reports and presentations on social performance, community engagement, and grievance resolution.
- Keeping organized records of social data, community engagement activities, and grievance redress processes.

4.6. Other Responsibilities:

- Assisting with the implementation of various social programs and initiatives, such as livelihood restoration programs, community development projects, and health and safety awareness campaigns.
- Acting as a bridge between the project and communities, fostering trust and understanding.
- Ensuring that all project activities are conducted in a culturally sensitive manner.

5. Stakeholder Engagement Specialist

Within the PIU, the Stakeholder Engagement Specialist will have a specific set of responsibilities to ensure effective communication and collaboration with various stakeholders throughout the project lifecycle. Here are some key responsibilities:

5.1. Stakeholder Identification and Analysis:

- Updating the list of Identified stakeholders: This includes affected communities, landowners, government agencies, NGOs, regulatory bodies, and other interested parties.
- Analysing stakeholder interests and concerns: Understanding their perspectives, potential impacts on them, and their influence on the project.
- Updating the stakeholder engagement plan.

5.2. Communication and Information Dissemination:

- Establishment and maintenance of clear communication channels: Ensure effective two-way communication with stakeholders through various platforms (e.g., meetings, website, newsletters, social media).
- Providing timely and accurate information: sharing project updates, impact mitigation results and other relevant information in a transparent and accessible manner.
- Addressing stakeholder inquiries and concerns: responding to questions and grievances promptly and effectively.

5.3. Consultation and Participation:

- Facilitating meaningful stakeholder consultations: organization of public meetings, focus group discussions, and other participatory approaches to gather feedback and address concerns.
- Incorporating stakeholder input into project decision-making: considering and integrating feedback received from stakeholders into project planning and implementation.
- Building consensus and fostering collaboration: working towards building trust and mutual understanding among stakeholders.

5.4. Grievance Redress Mechanism:

- Establishment and management of the GRM: Providing a clear and accessible process for stakeholders to raise concerns and seek resolution.
- Ensuring timely and fair resolution of grievances: investigating and addressing complaints in a transparent and impartial manner.
- Documenting and monitoring grievance resolution: Tracking and analysis of grievance data to identify trends and improve stakeholder engagement practices.

5.5. Monitoring and Evaluation:

- Monitoring of the effectiveness of stakeholder engagement activities: tracking progress against SEP and assessing the level of stakeholder satisfaction.
- Evaluating the outcomes of stakeholder engagement: analysis of the impact of stakeholder engagement on project acceptance and social license to operate.
- Adaptation of the stakeholder engagement strategies as needed: adjusting approaches based on monitoring and evaluation findings to ensure ongoing effectiveness.

The Stakeholder Engagement Specialist works closely with other members of the PIU to ensure that stakeholder perspectives are integrated into all aspects of the project.

Occupational Health and Safety Specialist

The Health and Safety Manager wil hold a critical role in safeguarding the well-being of workers, preventing accidents, and ensuring compliance with safety regulations. Specific responsibilities of the manager must include:

6.1. Risk Assessment and Management:

- Conduct comprehensive risk assessments to identify potential hazards specific to OHL projects, such as falls from height, electrical hazards, and equipment-related risks.
- Develop and implement effective control measures to mitigate or eliminate identified risks, including safe work procedures, personal protective equipment (PPE), and training programs.
- Regularly review and update risk assessments to ensure their ongoing relevance and effectiveness.

6.2. Safety Planning and Implementation:

- Develop and implement comprehensive health and safety plans for all stages of the Project, from construction to operation and maintenance.
- Ensure that safety plans adhere to relevant industry standards, regulations, and best practices.
- Collaborate with project managers and engineers to integrate safety considerations into all aspects of project design and execution.'

6.3. Training and Education:

- Develop and deliver targeted health and safety training programs for all workers involved in the Project, including line workers, electricians, and support staff.
- Provide specialized training on OHL-specific hazards, such as working at heights, electrical safety, and rescue procedures.
- Conduct regular refresher training to ensure ongoing awareness and compliance.

6.4. Inspections and Audits:

- Conduct regular internal inspections and audits of the construction sites and project facilities to assess compliance with safety protocols and identify potential hazards.
- Inspect work equipment, PPE, and other safety systems to ensure they are in good working order and meet regulatory requirements.
- Report findings to PIU management and recommend corrective actions to address any identified deficiencies.

6.5. Incident Investigation and Reporting:

- Thoroughly investigate all accidents, incidents, and near-misses to determine root causes and identify preventive measures.

- Prepare detailed incident reports and communicate findings to relevant stakeholders, including management, workers, and regulatory authorities.
- Implement corrective actions to prevent similar incidents from recurring and continuously improve safety performance.

6.6. Emergency Preparedness and Response:

- Develop and implement emergency response plans specifically tailored to the Project, including procedures for handling electrical accidents, falls, and other potential emergencies.
- Conduct regular emergency drills and exercises to ensure preparedness and test the effectiveness of response plans.
- Train workers on emergency procedures and ensure they understand their roles and responsibilities during an emergency.

6.7. Communication and Collaboration:

- Foster a strong safety culture through open communication, collaboration, and engagement with all project stakeholders.
- Conduct regular safety meetings to discuss safety concerns, share lessons learned, and promote best practices.
- Encourage workers to report any safety issues or concerns without fear of reprisal.

6.8. Regulatory Compliance:

- Stay up-to-date on all relevant health and safety regulations and standards applicable to the Project.
- Ensure compliance with all legal requirements and obtain necessary permits and certifications.
- Liaise with regulatory authorities and participate in inspections as required.

6.9. Continuous Improvement:

- Continuously monitor and evaluate health and safety performance, identifying areas for improvement and implementing corrective actions.
- Promote the adoption of new technologies, best practices, and innovative approaches to enhance safety in the Project.
- Champion a proactive approach to safety, striving for zero accidents and a healthy working environment for all involved in the construction and operation phases of the Project.

Procurement manager (PM)

The Procurement Manager will play a vital role in ensuring a company's operations are environmentally and socially responsible. He/she establishes sustainable procurement policies, carefully selecting suppliers who prioritize ethical practices and environmental consciousness. Through contract negotiations, he/she ensures these standards are upheld throughout the supply chain. Collaborating with stakeholders, both internally and externally, procurement manager identifies and mitigates environmental and social risks. He/she analyzes data to measure progress towards sustainability goals and constantly seek innovative solutions to improve the supply chain's sustainability. Promoting ethical sourcing, procurement manager prioritizes products that respect human rights and environmental protection. By managing risks and communicating the company's commitment to sustainability, procurement manager contributes significantly to building a more sustainable and equitable future.

5. Contractors

Contractors will play an important role in the successful implementation of both construction and operation phase ESMPs of the Project. Involvement of the contractors in ESMP implementation will cover various stages of the project lifecycle, and their active participation will be vital for ensuring that environmental and social impacts are mitigated effectively.

The Project contractors will make the following types of contribution to the ESMP Implementation:

Understanding and Adherence: Contractors must fully comprehend the ESMP and its requirements. They are responsible for incorporating the mitigation measures, monitoring plans, and reporting procedures outlined in the ESMP into their work processes.

Construction Phase Implementation: During construction, contractors are directly responsible for implementing the ESMP on the ground. This includes:

- **Emission Control:** ensuring that air emissions originating from the vehicles and construction equipment remain within the acceptable limits, and that required mitigation measures are undertaken.
- **Noise and Vibration Control:** implementing measures to minimize noise and vibration levels during construction works, including scheduling equipment operation, putting noise supressers, barriers, etc.
- **Erosion and Sediment Control:** Implementing measures to prevent soil erosion and sedimentation, such as installing silt fences, using erosion control blankets, and stabilizing slopes.

- **Waste Management:** Handling and disposing of construction waste and hazardous materials in an environmentally responsible manner, following proper waste segregation and disposal procedures.
- **Biodiversity Protection:** Minimizing impacts on flora and fauna by following designated access routes, avoiding sensitive areas, and implementing habitat restoration measures if required.
- **Community Engagement:** Communicating and collaborating with local communities, addressing their concerns, and providing information about the project and its potential impacts.
- **Worker Health and Safety:** Ensuring the health and safety of their workforce by providing appropriate training, protective equipment, and a safe working environment.

Operation phase: O&M contractors play a crucial role in maintaining the environmental and social performance of the OHL project during its operational life. Their responsibilities include:

- **Routine Inspections and Monitoring:** Conducting regular inspections of the Project facilities to identify any potential environmental or social issues, such as vegetation encroachment or soil erosion near tower foundations.
- **Maintenance and Repairs:** Carrying out maintenance and repair activities in a manner that minimizes environmental and social impacts.
- **Incident Response:** Responding promptly and effectively to any environmental or social incidents, such as oil spills or community complaints.
- **Reporting:** Providing regular reports to the PIU or relevant authorities on environmental and social performance, including any incidents and corrective actions taken.

Capacity Building: Contractors should invest in building the capacity of their workforce to understand and implement the ESMP. This includes providing training on environmental and social awareness, mitigation measures, and reporting procedures.

Collaboration and Communication: Maintaining open communication and collaboration with the PIU, environmental and social consultants, and other stakeholders is essential for successful ESMP implementation. Contractors should proactively share information and address any concerns that arise.

By actively fulfilling these roles, contractors will contribute significantly to the successful implementation of ESMPs and the Project's sustainability. Their commitment to environmental and social responsibility is crucial for minimizing the negative impacts of construction and operation activities and ensuring positive outcomes for both the environment and local communities.

To make their efforts effective, the contractors will develop the following management plans:

- Excavation Management Plan: ensures safe and eco-friendly excavation works during the construction phase of the Project. It describes the project and the excavation work involved, and provides for a detailed assessment of the excavation areas, including soil type and potential for archaeological finds. Based on the Project and baseline data, it proposes detailed excavation plans, considering safety and environmental protection. The plan outlines safety measures for workers and the public, as well as ways to minimize environmental impact. The plan also provides for a monitoring program to ensure compliance and a plan to communicate with the communities.
- Soil Erosion and Sediment Control Plan: aims to prevent soil erosion and sediment pollution during construction and maintenance works. It assesses the construction sites for potential erosion risks and identifying sensitive areas nearby. It then outlines specific measures to control erosion, like using silt fences and stabilizing slopes. It also details how to manage sediment, ensuring it doesn't pollute waterways. The plan sets a schedule for regular inspections to track the plan's effectiveness.
- Noise and Vibration Management Plan: outlines how to reduce noise and vibration during the project. The plan describes the baseline noise and vibration levels in the construction/operation areas and pinpoints any sensitive locations. It evaluates the potential impact of noise and vibration from construction and operation activities, suggests ways to minimize these impacts, such as using quieter equipment and scheduling noisy work at better times. It also provides for a monitoring program to check noise and vibration levels, and a plan to talk to the community about any concerns.
- Air Emissions Management Plan: aims to reduce air pollution from the Project. The plan provides data on the baseline air quality in the construction/operation areas and identifies any sensitive receptors. The it assesses the potential impact of emissions from construction and operation activities, suggests ways to minimize these emissions, and a plan to talk to the community about any concerns.
- Traffic Management Plan (TMP): Addresses the management of traffic flow and safety during construction, including measures to minimize disruptions to local communities and ensure the safety of workers and the public.
- Waste Management Plan (WMP): with an ultimate aim to reduce waste from the project, the plan details the types and amounts of waste expected during construction and operation. It outlines a strategy to prioritize waste prevention and recycling, provides specific measures for handling each waste type, including collection, storage, and disposal. WMP proposes a monitoring program to track waste and provides for responsibilities of each waste management party.
- Pollution Prevention Plan (PPP): covers all project phases and impacts on air, water, and soil. Measures covered by the plan include dust and emissions control, erosion prevention, spill management, waste management, and contaminated soil handling. The plan sets out the schedule of regular inspections, incident reporting, record keeping, as well as training and awareness programs.

- Labor Management Plan (LMP): Outlines how the contractor will comply with labor laws and standards, ensuring fair labor practices, adequate working conditions, and worker rights.
- Community Health and Safety Plan (CHSP): Addresses potential health and safety risks to communities near the project site, including measures to prevent accidents, manage hazardous materials, and respond to emergencies.
- Biodiversity Management Plan (BMP): aims to protect and enhance biodiversity affected by the project. It describes the biodiversity-related baseline and identifies protected areas or endangered species nearby. The plan evaluates how the project might impact biodiversity and suggests ways to avoid, minimize, and compensate for these impacts. It proposes a monitoring program to track the effectiveness of these actions, and a plan to involve the community in conservation efforts. Finally, the plan assigns responsibility for making sure everything works and highlights the importance of working together to protect biodiversity.
- Cultural Heritage Management Plan (CHMP): outlines how to identify, assess, protect, and preserve cultural heritage during the entire Project lifespan. The plan involves identifying heritage through assessments and surveys, then implementing protection measures like avoidance, minimization, preservation, or salvage.
- Emergency Response Plan (ERP): designed to effectively manage emergencies that may occur during construction and maintenance works. It aims to protect workers, the public, and the environment, while also minimizing property damage and business disruption. The plan outlines emergency procedures involving immediate reporting, evacuation, first aid, firefighting, spill response, security, and communication. ERP lists Important emergency contacts, including local emergency services and key project personnel. It sets out plans for training and drills for all workers to understand their roles and responsibilities during emergencies. Specific hazards addressed in the Project's ERP include electrical hazards, falls from height, heavy equipment accidents, and inclement weather. The plan will also consider site-specific hazards, communication barriers, and public safety.
- Instructions and recommendations set out in this ESIA, including obligation to develop the above mentioned management and mitigation plans, should be reflected in the tender documents to be prepared to ensure the implementation of the various Project components and in the relevant clauses of the contracts to be signed with the contractors. Contractors to be involved in the Project will be required to develop their own ESMPs and other similar procedures and policies to ensure that the recommendations set out in ESIA are properly implemented. All plans and procedures developed by the contractors shall be approved by the Client's PIU. In addition, the contractors must have the other plans and policy documents, including HSE Policy, Accident Prevention Plan, Quality Assurance Policy, PPE Policy, Environmental Policy, Drug and Alcohol Policy, Anti-Discrimination Policy and Audit Policy.
- Agreements to be signed with contractors should cover the requirements of this ESIA, and compliance with these requirements should be binding on all parties. Contractors shall be prepared to hire competent and trained environmental management personnel to review the effectiveness of impact management measures and to review the status of mitigation measures.

6. Supervision consultants

Supervision consultants, in the context of major energy infrastructure projects, are independent professionals or firms hired to oversee and monitor the execution of a project on behalf of the client or

project owner. Their primary role is to ensure that the project is implemented in accordance with the design specifications, quality standards, and contractual agreements.

Key Responsibilities of Supervision Consultants in OHL Construction and Operation Projects are as follows:

- Contract Administration:

- Review and interpret contract documents, including drawings, specifications, and bills of quantities.
- Monitor contractor compliance with contractual obligations.
- Administer variations, claims, and payment certifications.

- Quality Assurance and Quality Control:

- Establish and implement quality assurance and quality control procedures.
- Review and approve contractor's quality plans and procedures.
- Inspect materials, workmanship, and completed works to ensure compliance with standards.
- Conduct testing and sampling as required.

- Construction Supervision:

- Oversee construction activities on-site, ensuring adherence to design and specifications.
- Review and approve contractor's work plans and method statements.
- Monitor progress against schedule and identify potential delays.
- Coordinate with the contractor and other stakeholders to resolve technical issues.

- Health and Safety:

- Monitor compliance with health and safety regulations and standards.
- Review and approve contractor's health and safety plans.
- Conduct site inspections to identify and address safety hazards.

- Environmental and Social Management:

- Monitor compliance with the Environmental and Social Management Plan (ESMP).
- Review and approve contractor's environmental and social management plans.

- Conduct site inspections to assess environmental and social impacts.
- Liaise with relevant authorities and stakeholders on environmental and social matters.

- Reporting:

- Prepare regular progress reports for the client, highlighting key issues and recommendations.
- Maintain detailed records of construction activities, inspections, and test results.

Supervision consultants play a crucial role in ensuring that the project adheres to the environmental and social commitments outlined in the ESMPs. They work closely with the contractor and the PIU to:

- **Review and approve contractor's environmental and social management plans:** Ensuring they align with the ESMP and relevant regulations.
- **Conduct site inspections:** Monitoring compliance with environmental and social mitigation measures and identifying any potential issues.
- **Report on environmental and social performance:** Providing regular updates to the client and PIU on the project's environmental and social performance.
- **Address grievances:** Assisting in the resolution of any environmental or social grievances raised by affected communities.

Benefits of engaging Supervision Consultants include:

- **Independent oversight:** Provides the client with an objective assessment of project implementation and compliance.
- **Technical expertise:** Ensures that the project is constructed to a high standard and meets all technical requirements.
- **Risk mitigation:** Helps to identify and manage potential risks, including those related to environment and social impacts.
- **Improved project outcomes:** Contributes to the successful delivery of the project on time, within budget, and with minimal environmental and social impacts.

Overall, supervision consultants are essential partners in ensuring the successful and sustainable implementation of OHL construction and operation projects. Their expertise and oversight help to protect the interests of the client, the environment, and the communities affected by the project. Within the AZURE

Project framework, it is recommended to hire the following contractors and provide them with respective mandate in ensuring due implementation of the provision of the Project's ESIA, including ESMPs and monitoring plans:

ESIA Compliance Supervisor:

ESIA Compliance Supervisor will play a critical role in ensuring that the Project adheres to environmental and social regulations and commitments outlined in the current ESIA. The supervisor's main objective is to minimize negative impacts on the environment and communities while promoting sustainable practices throughout the project lifecycle. The supervisor will have the following roles and responsibilities:

10.1. Oversight and Monitoring:

- **ESIA Implementation**: Ensure that all mitigation measures and commitments outlined in the ESIA are implemented effectively during construction and operation phases.
- **Compliance Monitoring**: Conduct regular inspections and audits to monitor compliance with environmental permits, licenses, and other regulatory requirements.
- **Environmental Monitoring**: Oversee environmental monitoring programs (e.g., air quality, water quality, noise levels) to track project impacts and ensure compliance with environmental standards.
- **Social Monitoring**: Monitor social impacts (e.g., community relations, resettlement, livelihood restoration) and ensure compliance with social safeguards and commitments.

10.2. Reporting and Documentation:

- **Compliance Reporting**: Prepare regular compliance reports documenting monitoring results, identified non-compliances, and corrective actions taken.
- **Incident Reporting**: Report environmental and social incidents or accidents promptly to the environmental and health and safety managers and oversee the taken corrective and preventive actions.
- **Record Keeping**: Maintain accurate and up-to-date records of environmental and social monitoring data, compliance reports, and other relevant documentation.

10.3. Communication and Collaboration:

- **Internal Communication**: Coordinate with project teams (e.g., construction, engineering, environmental) to ensure environmental and social considerations are integrated into project planning and decision-making.

- **External Communication**: Liaise with regulatory agencies, stakeholders (e.g., communities, NGOs), and other relevant parties to address concerns and ensure transparency in project implementation.
- **Grievance Mechanism**: Manage and respond to grievances related to environmental and social impacts in a timely and effective manner.

10.4. Capacity Building and Training:

- **Team Training**: Provide training and guidance to project staff on environmental and social management procedures and best practices.
- **Awareness Raising**: Conduct awareness campaigns for workers and communities on environmental and social issues and promote responsible behaviour.

10.5. Continuous Improvement:

- **Identify Gaps**: Identify areas for improvement in environmental and social performance and propose corrective actions.
- **Lessons Learned**: Capture lessons learned from project implementation to inform future projects and contribute to organizational learning.

Environmental consultant

Roles and responsibilities of the environmental consultant will primarily focus on assessing and minimizing the potential environmental impacts associated with the construction and operation phases of the Project. Here are some of his/her key responsibilities:

11.1. Post-ESIA preparation phase:

- **Permitting and Compliance:** Assist in obtaining necessary environmental permits and ensure compliance with all relevant regulations.
- **Mitigation Planning:** Develop mitigation measures to minimize or avoid environmental damage during construction and operation.
- **Stakeholder Engagement:** Consult with local communities, environmental organizations, and other stakeholders to address concerns and ensure transparency.

11.2. Construction phase:

- **Environmental Monitoring:** Monitor construction activities to ensure compliance with environmental regulations and mitigation plans.
- **Erosion and Sediment Control:** Implement measures to prevent soil erosion, sedimentation, and water pollution.
- **Waste Management:** Develop and oversee waste management plans for construction and demolition debris.
- **Wildlife Protection:** Implement measures to protect wildlife and their habitats during construction.

11.3. Operation phase:

- **Ongoing Monitoring:** Conduct periodic environmental monitoring to assess the long-term impacts of the OHL project.
- **Remediation:** Address any unforeseen environmental issues and implement remediation measures if necessary.
- **Reporting:** Prepare environmental reports for regulatory agencies and project stakeholders.

Health and safety consultant

Health and Safety Consultant will play a crucial role in the Project, ensuring the well-being of workers, the public, and the environment. The consultant's expertise will contribute significantly to creating a safe working environment and minimizing associated risks. Here's a breakdown of his/her key responsibilities, implemented in close cooperation with health and safety manager and HSE staff of the contractors:

12.1. Post-ESIA preparation phase:

- **Risk Assessment and Hazard Identification:** Conduct comprehensive risk assessments to identify potential hazards associated with the project, including working at heights, electrical hazards, heavy machinery, and environmental factors.
- **Safety Planning and Procedures:** Develop detailed safety plans and procedures for all phases of the project.
- **Training and Education:** provide safety training and education to workers and project personnel, covering topics such as fall protection, electrical safety, first aid, and emergency response.

12.2. Construction Phase:

- **Safety Monitoring and Inspections:** Regularly inspect worksites to ensure compliance with safety protocols and identify any potential hazards.

- **Incident Investigation and Reporting:** Investigate accidents and near misses to determine root causes and recommend corrective actions.
- **Emergency Preparedness:** Develop and implement emergency response plans and ensure workers are trained to respond to various scenarios.

12.3. Operation Phase:

- **Safety Audits:** Conduct regular safety audits to assess ongoing compliance with safety standards and identify areas for improvement.
- **Continuous Improvement:** Work with project teams to implement continuous safety improvement initiatives based on lessons learned and industry best practices.
- **Safety Culture Promotion:** Foster a strong safety culture among workers and project stakeholders through communication, training, and leadership.

Overall, the health and safety consultant acts as a vital safeguard in OHL projects, ensuring that safety is prioritized at every stage. Their work contributes to preventing accidents and injuries, protecting workers and the public, and promoting a positive safety culture across the project.

Annex 12. Cultural Heritage Management Plan

1. SCOPE OF THE DOCUMENT:

The aim of the document is to identify how shall be managed if any archaeological objects will be discovered during substation construction or material excavation, the responsibilities and the monitoring that shall be issued for the activities performed.

2. APPLICATION FIELD:

The present document is applicable to the cultural – archaeological finds of AZURE project.

3. REFERENCE DOCUMENTS:

This document complies with the following state legislation documents:

- Law on the Protection of Historical and Cultural Monuments of Azerbaijan Republic, № 470-IQ 10 April 1998

4. OPERATIVE PROCEDURE

4.1. Description of the general archeological and historical potentials of the area

The ESIA includes the list of culturally important object in Project covered regions. As we can see from the list below, there are some villages that have culturally and historically important monuments which is away from Navahi Substation construction site and OHLs and will not be affected by project works.

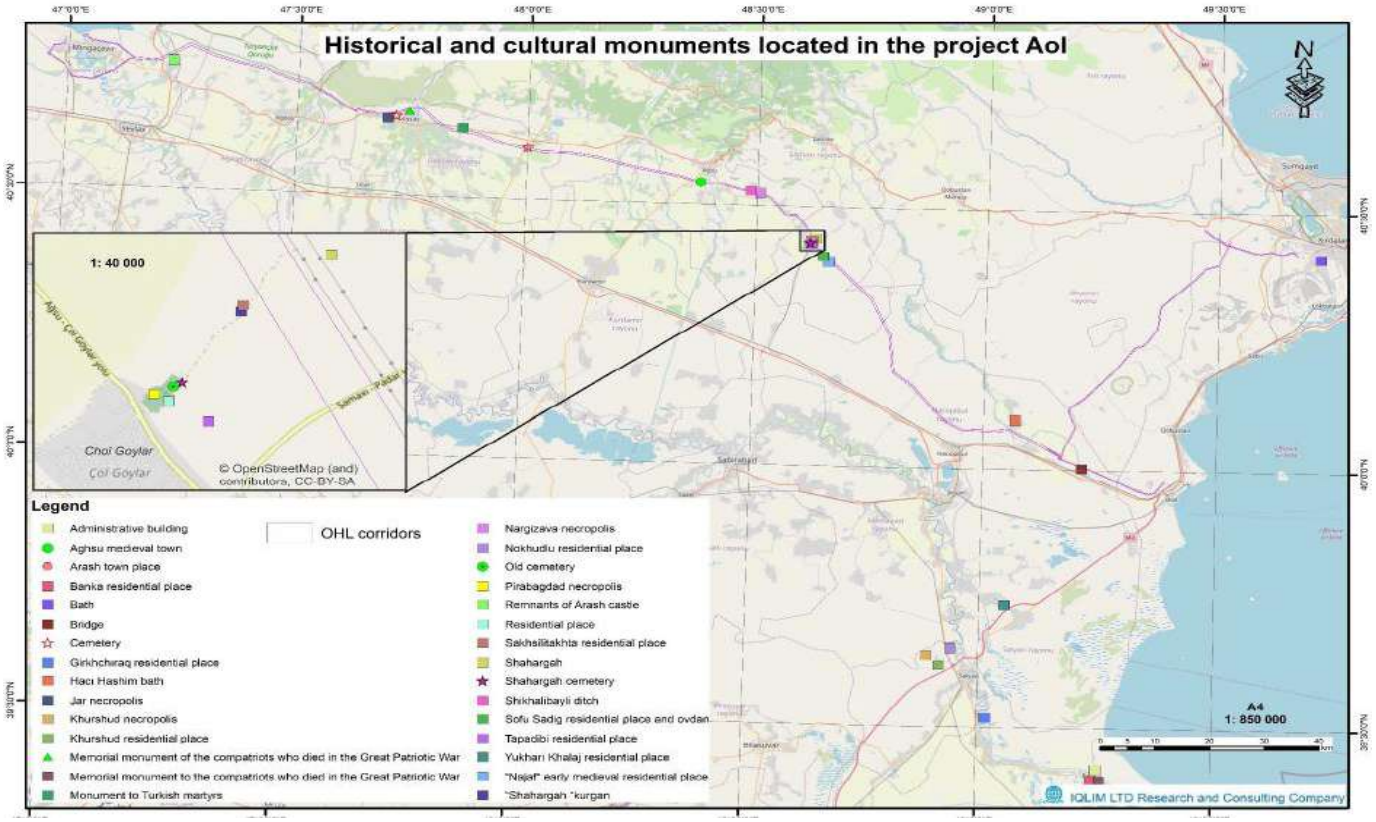
Table 12-1. List of historical and cultural monuments located along the routes of OHLs and Navahi SS

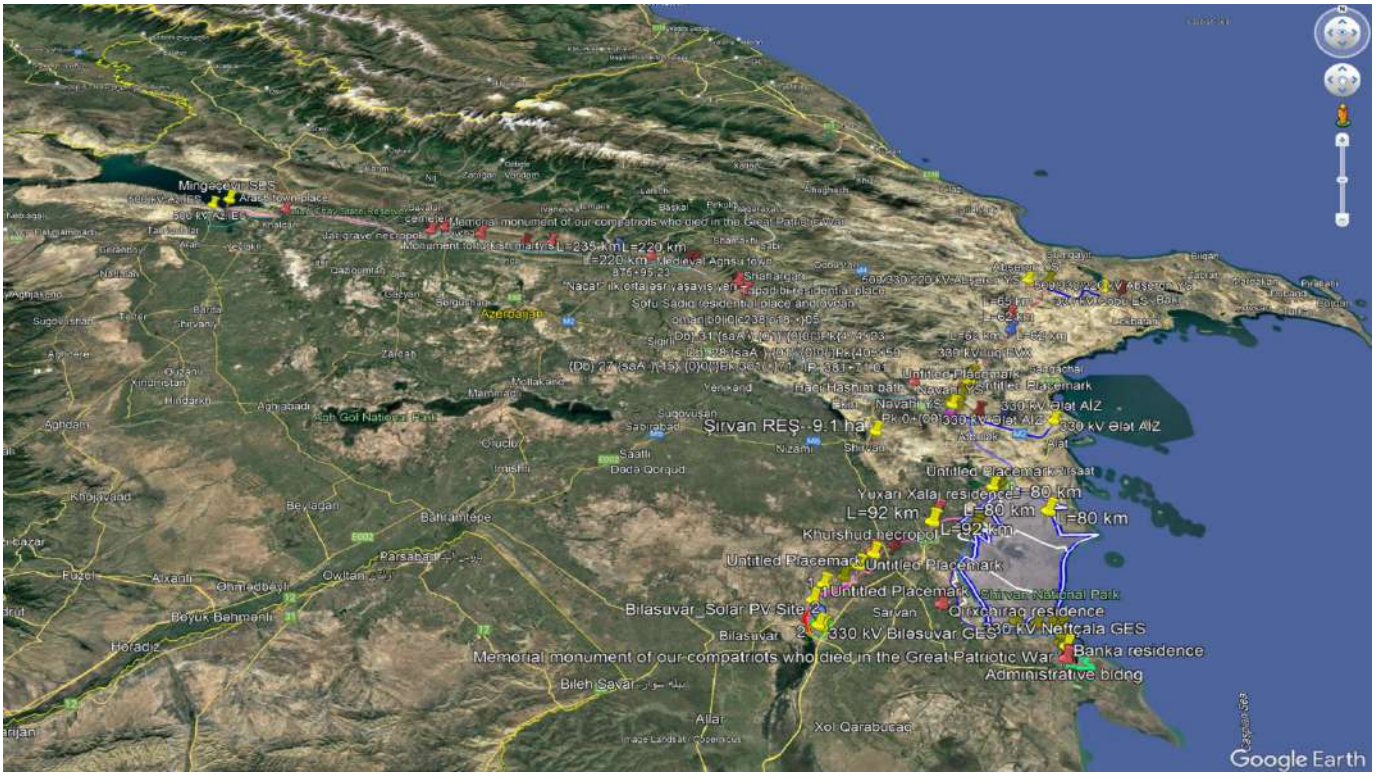
S/N	Name of the monument	Inventory No.:	Address of the monument	Coordinates of the monument
1	Bathroom	4004	Absheron region, Gobu settlement	40°24'43.20"N 49°43'7.10"E
2	City Hall	1708	Shamakhi region, Chol Goylar village	40°26'19.80"N 48°37'40.80"E
3	Monument and mound called "Shehergah"	New discovery	Shamakhi region, near the village of Chol Goylar	40°26'6.20"N 48°37'16.60"E
4	Pottery dwelling	1710	Shamakhi region, Chol Goylar village	40°26'6.74"N 48°37'16.75"E
5	Pirabaghdad necropolis	1711	Shamakhi region, Chol Goylar village	40°25'46.40"N 48°36'53.30"E
6	"Najaf" the first medieval settlement	New discovery	Shamakhi region, Chol Goylar village	40°24'6.30"N 48°38'54.90"E
7	Old cemetery	1709	Shamakhi region, Chol-Goylar village	40°25'49.20"N 48°37'0.80"E

8	From the residence and hunting of Sofu Sadiq	6014	Shamakhi region, Chol-Goylar village	40°24'17.20"N 48°38'46.20"E
9	Residence	6013	Shamakhi region, Chol-Goylar village	40°25'44.80"N 48°36'57.30"E
10	Tepedibi residence	6012	Shamakhi region, Chol-Goylar village	40°25'39.89"N 48°37'7.85"E
11	City cemetery	1709	Shamakhi region, Chol-Goylar village	40°25'49.20"N 48°37'0.80"E
12	Monument to Turkish martyrs	New discovery	Goychay district, Bigir village	40°38'7.20"N 47°51'30.30"E
13	Necropolis of Cube Graves	1073	Goychay district, I Arabjabirli village	40°39'3.30"N 47°42'7.60"E
14	Cemetery	1074	Goychay district, Arabjabirli village II	40°39'6.40"N 47°42'20.80"E
15	Memorial to our compatriots who died in the Great Patriotic War	5641	Goychay district	40°39'52.20"N 47°44'31.60"E
16	Cemetery	1076	Goychay district, near the village of Garamaryam	40°36'2.60"N 48° 0'0.60"E
17	Nargizava necropolis	New discovery	Agsu district, Gegeli village	40°31'28.54"N 48°30'21.29"E
18	Shikhalibeyli ark	New discovery	Agsu district, Gegeli village	40°31'41.50"N 48°29'6.20"E
19	Medieval Agsu city	808	Agsu district, Ulguj village	40°32'36.18"N 48°22'35.48"E
20	Khurshud residence	5983	Khurshud village, Salyan region	39°37'9.51"N 48°55'1.98"E

21	Khurshud necropolis	5984	Khurshud village, Salyan region	39°38'18.28"N 48°53'23.87"E
22	Pea habitat	1679	Nokhudlu village, Salyan region	39°39'8.22"N 48°56'25.79"E
23	Kirkhchirag settlement	5980	Southeast of the village of Khalaj, Salyan district	39°31'7.82"N 49° 1'5.82"E
24	Yukhari Khalaj settlement	5981	Salyan district, Khalaj village	39°44'13.35"N 49° 3'15.21"E
25	Bank residence	1630	Banka settlement, Neftchala district	39°24'23.22"N 49°14'57.87"E
26	Administrative building	4936	Banka settlement, Neftchala district	39°24'31.22"N 49°15'4.48"E
27	Memorial to our compatriots who died in the Great Patriotic War	5677	Banka settlement, Neftchala district	39°24'32.17"N 49°15'1.89"E
28	Bridge	New discovery	Qizilburun village, Hajigabul region	40° 00'13.2"N 49°12'44.00"E
29	Haji Hashim Bath	New discovery	Ranjbar village, Hajigabul region	40° 5'43.32"N 49° 4'5.53"E
30	Arash city location	New discovery	Yevlakh district, Arash village	40° 44'55.42"N 47°13'40.42"E
31	Ruins of Arash Castle	New discovery	Yevlakh district, Arash village	40° 44'55.42"N 47°13'40.42"E

Figure 12-1 shows location of historical and cultural monuments





The main impact on presently un-discovered archaeologically important sites is expected only during excavation works. In case of discovering archaeologically important sites, representatives of Institute of Archaeology and Ethnography of Azerbaijan National Academy of Science will be informed and invited to the site.

4.2. Mitigation measures

All Contractor personnel will be instructed on the procedure of Archaeological Chance Find. The Procedure provides that in case of Contractor's personnel will find fossils, coin, articles of values or antiquity, and structures and other remains or items of geological or archaeological interest they will be placed under the care and authority of Employer.

All works at the discovery site will be immediately stopped as in accordance to items 13 and 14 of the "Law on the Protection of Historical and Cultural Monuments of Azerbaijan Republic" that state that "if a monument is found during any construction or other works, the works should be immediately stopped until relevant authorities such as Ministry of Culture and Azerbaijan Science Academy will take into consideration expert evaluation.

The area of discovery will be under Contractor surveillance to protect the finds from any movement or damage. Contractor's personnel will immediately inform the Construction Area Manager and the Employer (or Engineer) who shall issue instructions for dealing with it. The Engineer then should inform the PIU personnel which by-turn will inform the Institute of Archaeology and Ethnography of Azerbaijan National Academy of Science. The Contractor is obligated for discovery site protection until assigned archaeological specialist will arrive to the site for area investigation.

The removal of archeological find can be done only by Institute of Archaeology and Ethnography of Azerbaijan National Academy of Science or with participation of specialists assigned by this organization. Continuation of road construction works will start only by resolution of Academy of Science and permission letter from Engineers. Until the removal of archeological find from the appropriate authorities, Azconstruction JSC will not start the activities on the find area.

Management options for archaeological site

- Site avoidance. If the boundaries of the site have been delineated attempt must be made to redesign the proposed development to avoid the site. (The fastest and most cost-effective management option)
- Mitigation. If it is not feasible to avoid the site through redesign, it will be necessary to sample it using data collection program prior to its loss. This could include surface collection and/or excavation. (The most expensive and time-consuming management option.)
- Site Protection. It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with a geotextile and then capping it with fill. The exact prescription would be site-specific.

4.3. Procedure

If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;
2. Immediately notify a foreman. The foreman will then notify the Construction Area Manager who will in turn must contact the PIU's Safeguards Specialist;
3. Record details in Incident Report and take photos of the find;
4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
5. Preliminary evaluation of the findings by PIU's Safeguards Specialist; and if necessary, government archaeologists. The PIU's Safeguards Specialist; must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;
6. Sites of minor significance (such as isolated or unclear features, and isolated finds) will be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.
7. In case of significant find the Agency/Ministry (Ministry of Culture, hereinafter referred to as Heritage team) will be informed immediately and in writing within 7 days from the find (ref. law on heritage protection).
8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.
9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide response in writing.
10. Decisions on how to handle the finding shall be taken by the responsible authorities.
11. Construction works could resume only after permission is granted from the responsible authorities.
12. In case no response received within the 2 weeks period mentioned above, this is considered as authorization to proceed with suspended construction works.

4.4. The procedure of archaelogical / cultrural find