

# Annex H) Noise Survey Report

## 1. Methodology

The Rulebook on the methods of calculation and measurement of the environmental noise level ("Official Gazette of Montenegro", No. 27/14, 17/17 ) will be followed to measure noise.

The measurement will be conducted according to the Montenegrin standard: MEST ISO 1996-1:2018 Acoustics - Description, measurement and assessment of environmental noise:

Part 1: Basic quantities and assessment procedures; and

Part 2: Determination of sound pressure levels.

The measurement of noise will be performed three times on each location per 10 minutes in the following periods:

7-12 a.m.

12-7 p.m.

7-11 p.m. and

after 11 p.m.

Data on traffic flow for determination of measurement uncertainty and the exact distance of the measurement points from the road will be recorded.

## 2. Results

In accordance with the request, the measured noise level on the M18 (E762) main road in daytime (07-19h), evening (19-23h) and night cycle (23-07h) were performed. For the daily cycle, two series of 3 measurements were performed (before and after noon), for the evening cycle one series of 3 measurements and for the night cycle of two series of 3 measurements. The results of all measurements are given in Tables 1 - 50.

### Measuring position 1

Table 1. Measured indicators of the daily traffic noise level at (07-19h) MM 1 before noon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
24/06/2019	10:00	<b>60.5</b>	116.1	73.1	45.6	94.3
24/06/2019	10:00	<b>61.4</b>	117.0	77.9	42.5	100.1
24/06/2019	10:00	<b>60.5</b>	116.2	73.3	41.7	92.9

Table 2 Measured indicators of the daily traffic noise level at (07-19h) MM1 afternoon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
24/06/2019	10:00	<b>62.6</b>	118.2	79.0	44.5	94.6

24/06/2019	10:03	<b>61.0</b>	116.6	76.3	45.4	95.3
24/06/2019	10:04	<b>63.9</b>	119.5	84.5	42.6	101.1

Table 3 Measured indicators of the daily traffic noise level at (19-23h) MM1 evening

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	10:02	<b>63.3</b>	118.8	83.7	47.2	99.5
26/06/2019	10:08	<b>60.3</b>	116.0	72.5	45.4	93.4
26/06/2019	10:02	<b>59.7</b>	115.3	74.6	45.9	93.7

Table 4 Measured indicators of the daily traffic noise level at (23-07h) MM 1 night 1

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/2019	10:13	<b>55.8</b>	111.5	76.7	35.1	94.2
28/06/2019	10:11	<b>55.2</b>	110.9	72.9	36.7	91.4
28/06/2019	10:12	<b>55.8</b>	111.5	72.2	37.0	90.1

Table 5 Measured indicators of the daily traffic noise level at (23-07h) MM 1 night 2

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
30/06/2019	10:46	<b>55.5</b>	111.7	74.7	33.7	92.2
30/06/2019	10:02	<b>53.0</b>	108.6	73.6	33.6	88.5
30/06/2019	10:04	<b>55.1</b>	110.8	73.5	35.1	94.7

### Measuring position 2

Table 6 Measured indicators of the daily traffic noise level at (07-19h) MM 2 before noon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/2019	10:16	<b>58.5</b>	114.3	73.9	48.9	89.1
27/06/2019	11:32	<b>59.7</b>	116.5	75.5	48.9	92.8
27/06/2019	12:44	<b>60.3</b>	118.0	73.8	51.9	93.0

Table 7 Measured indicators of the daily traffic noise level at (07-19h) MM2 afternoon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
24/06/2019	10:04	<b>59.2</b>	114.8	73.6	46.0	91.7
24/06/2019	10:43	<b>60.6</b>	116.8	76.9	45.8	95.4
24/06/2019	10:09	<b>60.2</b>	115.9	74.8	46.2	92.8

Table 8 Measured indicators of the daily traffic noise level at (19-23h) MM2 evening

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	10:04	<b>59.5</b>	115.2	74.7	44.6	101.6
26/06/2019	10:03	<b>60.0</b>	115.6	76.0	42.1	96.6
26/06/2019	10:17	<b>60.0</b>	115.8	84.5	45.4	96.2

Table 9 Measured indicators of the daily traffic noise level at (23-07h) MM 2 night 1

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/2019	10:00	<b>52.2</b>	79.9	76.2	35.4	89.1
28/06/2019	10:00	<b>52.0</b>	79.8	67.2	32.0	88.4
28/06/2019	10:00	<b>50.2</b>	77.9	65.8	32.0	86.8

Table 10 Measured indicators of the daily traffic noise level at (23-07h) MM 2 night 2

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
30/06/2019	10:03	<b>52.0</b>	107.6	69.1	33.9	91.6
30/06/2019	10:04	<b>53.4</b>	109.1	72.9	38.7	99.0
30/06/2019	10:04	<b>52.1</b>	107.8	71.7	34.2	88.7

### Measuring position 3

Table 11 Measured indicators of the daily traffic noise level at (07-19h) MM 3 before noon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/2019	10:00	<b>57.4</b>	85.2	70.7	42.1	91.3
27/06/2019	10:00	<b>59.4</b>	87.1	77.9	46.0	93.3
27/06/2019	10:00	<b>57.6</b>	85.4	72.0	46.3	88.6

Table 12 Measured indicators of the daily traffic noise level at (07-19h) MM3 afternoon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
24/06/2019	10:02	<b>59.0</b>	114.6	74.1	41.5	89.0
24/06/2019	10:29	<b>59.0</b>	115.0	71.7	45.2	91.8
24/06/2019	10:17	<b>60.4</b>	115.3	79.0	46.2	91.2

Table 13 Measured indicators of the daily traffic noise level at (19-23h) MM3 evening

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	10:22	<b>59.5</b>	115.3	76.1	46.3	93.9
26/06/2019	12:15	<b>60.3</b>	117.6	75.4	49.8	91.5
26/06/2019	11:16	<b>60.4</b>	117.0	75.7	50.7	90.8

Table 14 Measured indicators of the daily traffic noise level at (23-07h) MM 3 night 1

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/2019	10:11	<b>54.6</b>	110.4	69.7	42.5	92.4
27/06/2019	11:02	<b>54.6</b>	111.0	69.6	40.2	89.9
28/06/2019	10:05	<b>56.0</b>	111.6	69.9	40.5	91.8

Table 15 Measured indicators of the daily traffic noise level at (23-07h) MM 3 night 2

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
01/07/2019	10:03	<b>56.4</b>	112.0	70.2	34.5	84.2
01/07/2019	10:02	<b>56.1</b>	111.7	70.5	37.9	87.4
01/07/2019	10:02	<b>57.4</b>	113.0	71.8	39.0	87.4

#### Measuring position 4

Table 16 Measured indicators of the daily traffic noise level at (07-19h) MM 4 before noon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/2019	10:15	<b>59.8</b>	115.6	76.1	51.0	92.1
27/06/2019	10:24	<b>60.3</b>	116.2	73.2	52.6	89.7
27/06/2019	10:17	<b>61.2</b>	117.0	76.0	54.6	90.2

Table 17 Measured indicators of the daily traffic noise level at (07-19h) MM4 afternoon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	10:21	<b>60.3</b>	116.1	69.5	53.2	90.8
26/06/2019	10:57	<b>60.6</b>	116.9	72.8	52.0	90.5
26/06/2019	10:03	<b>59.8</b>	115.4	68.8	52.4	88.1

Table 18 Measured indicators of the daily traffic noise level at (19-23h) MM4 evening

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	10:15	<b>59.7</b>	115.5	73.3	46.7	91.7
26/06/2019	12:21	<b>58.7</b>	116.1	75.9	46.2	97.3
26/06/2019	10:03	<b>58.5</b>	114.1	71.6	46.4	88.7

Table 19 Measured indicators of the daily traffic noise level at (23-07h) MM 4 night 1

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/2019	10:03	<b>50.6</b>	106.3	63.9	31.3	79.9
28/06/2019	10:04	<b>53.0</b>	108.6	69.7	28.2	89.9
28/06/2019	10:00	<b>50.1</b>	77.9	63.5	30.7	80.2

Table 20 Measured indicators of the daily traffic noise level at (23-07h) MM 4 night 2

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
30/06/2019	10:02	<b>55.8</b>	111.4	75.3	31.0	87.9
30/06/2019	10:09	<b>57.3</b>	113.0	76.9	31.6	90.6
30/06/2019	10:02	<b>54.6</b>	110.2	73.1	31.1	84.4

#### Measuring position 5

Table 21 Measured indicators of the daily traffic noise level at (07-19h) MM 5 before noon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/2019	10:00	<b>71.1</b>	98.9	82.2	51.6	100.6
28/06/2019	10:00	<b>70.6</b>	98.4	83.5	51.1	102.9
28/06/2019	10:00	<b>69.4</b>	97.2	86.1	49.1	100.1

Table 22 Measured indicators of the daily traffic noise level at (07-19h) MM5 afternoon

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	11:35	<b>64.4</b>	121.2	78.6	38.0	98.9
26/06/2019	10:02	<b>64.9</b>	120.5	80.8	38.2	92.9
26/06/2019	10:30	<b>63.7</b>	119.7	82.9	37.9	98.9

Table 23 Measured indicators of the daily traffic noise level at (19-23h) MM5 evening

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/2019	10:14	<b>62.2</b>	118.0	77.8	35.5	92.6
26/06/2019	10:10	<b>63.5</b>	119.2	82.0	34.9	94.9
26/06/2019	11:05	<b>61.8</b>	118.2	77.2	35.8	97.0

Table 24 Measured indicators of the daily traffic noise level at (23-07h) MM 5 night 1

Date of measurement	Elapsed time	LAeq (dB)	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
29/06/2019	10:02	<b>57.6</b>	113.2	76.5	25.1	95.3
29/06/2019	10:04	<b>58.6</b>	114.2	77.1	23.4	89.3
29/06/2019	11:02	<b>60.2</b>	116.6	79.3	23.7	95.1

Table 25 Measured indicators of the daily traffic noise level at (23-07h) MM 5 night 2

Date of measurement	Elapsed time	L <sub>Aeq</sub> (dB)	L <sub>AE</sub> (dB)	L <sub>AFmax</sub> (dB)	L <sub>AFmin</sub> (dB)	L <sub>Cpeak</sub> (dB)
30/06/2019	10:03	<b>59.8</b>	115.4	75.6	30.7	90.9
30/06/2019	10:03	<b>60.5</b>	116.1	75.8	30.4	96.0
30/06/2019	10:02	<b>62.2</b>	117.8	76.0	30.3	96.9

### Measuring position 6

Table 26 Measured indicators of the daily traffic noise level at (07-19h) MM 6 before noon

Date of measurement	Elapsed time	L <sub>Aeq</sub> (dB)	L <sub>AE</sub> (dB)	L <sub>AFmax</sub> (dB)	L <sub>AFmin</sub> (dB)	L <sub>Cpeak</sub> (dB)
26/06/19	10:03	<b>66.5</b>	122.1	78.0	41.2	100.4
26/06/19	10:03	<b>66.6</b>	122.2	85.6	45.5	99.6
26/06/19	10:45	<b>66.7</b>	122.9	78.1	44.3	97.4

Table 27 Measured indicators of the daily traffic noise level at (07-19h) MM6 afternoon

Date of measurement	Elapsed time	L <sub>Aeq</sub> (dB)	L <sub>AE</sub> (dB)	L <sub>AFmax</sub> (dB)	L <sub>AFmin</sub> (dB)	L <sub>Cpeak</sub> (dB)
26/06/19	10:02	<b>66.1</b>	121.7	80.2	43.0	97.5
26/06/19	10:16	<b>66.2</b>	122.0	79.2	42.4	96.3
26/06/19	10:03	<b>65.5</b>	121.1	79.0	40.8	97.5

Table 28 Measured indicators of the daily traffic noise level at (19-23h) MM6 evening

Date of measurement	Elapsed time	L <sub>Aeq</sub> (dB)	L <sub>AE</sub> (dB)	L <sub>AFmax</sub> (dB)	L <sub>AFmin</sub> (dB)	L <sub>Cpeak</sub> (dB)
26/06/19	10:13	<b>65.3</b>	121.1	78.9	40.1	98.9
26/06/19	10:13	<b>63.3</b>	119.0	78.2	40.6	100.7
26/06/19	10:03	<b>63.4</b>	119.0	81.1	39.4	98.9

Table 29 Measured indicators of the daily traffic noise level at (23-07h) MM 6 night 1

Date of measurement	Elapsed time	L <sub>Aeq</sub> (dB)	L <sub>AE</sub> (dB)	L <sub>AFmax</sub> (dB)	L <sub>AFmin</sub> (dB)	L <sub>Cpeak</sub> (dB)
29/06/19	10:20	<b>57.2</b>	113.1	73.8	35.2	91.1
29/06/19	10:19	<b>57.7</b>	113.5	70.6	36.8	93.4
29/06/19	10:03	<b>58.1</b>	113.8	73.9	36.2	93.2

Table 30 Measured indicators of the daily traffic noise level at (23-07h) MM 6 night 2

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
30/06/19	10:02	<b>66.4</b>	122.0	84.1	40.4	98.3
30/06/19	10:02	<b>64.5</b>	120.2	81	37.5	96.6
30/06/19	10:22	<b>65.3</b>	121.2	80.7	40.8	94.5

### Measuring position 7

Table 31 Measured indicators of the daily traffic noise level at (07-19h) MM 7 before noon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/19	14:31	<b>66.4</b>	125.2	83.2	44.4	100.2
26/06/19	10:47	<b>67.2</b>	123.4	86.5	44.2	101.1
26/06/19	10:11	<b>66.0</b>	121.8	82.5	47.0	102.3

Table 32 Measured indicators of the daily traffic noise level at (07-19h) MM7 afternoon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/19	10:03	<b>66.0</b>	121.6	80.6	47.4	97.1
26/06/19	10:03	<b>67.0</b>	122.6	84.0	51.3	100.5
26/06/19	10:02	<b>64.6</b>	120.2	78.9	52.8	95.4

Table 33 Measured indicators of the daily traffic noise level at (19-23h) MM7 evening

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/19	10:02	<b>64.7</b>	120.3	78.3	41.6	98.7
27/06/19	12:39	<b>68.1</b>	125.7	83.9	44.6	100.5
27/06/19	10:03	<b>66.0</b>	121.7	81.1	46.1	100.4

Table 34 Measured indicators of the daily traffic noise level at (23-07h) MM 7 night 1

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
29/06/19	12:11	<b>59.6</b>	116.8	78.8	33.6	118.4
29/06/19	10:03	<b>57.5</b>	113.2	76.7	39.5	99.5
29/06/19	10:12	<b>58.5</b>	114.2	72.4	39.2	101.0

Table 35 Measured indicators of the daily traffic noise level at (23-07h) MM 7 night 2

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
01/07/19	10:01	<b>64.6</b>	120.2	82.0	36.9	98.7
01/07/19	10:02	<b>64.6</b>	120.2	77.6	38.8	95.0
01/07/19	10:02	<b>65.8</b>	121.4	84.7	41.0	101.9

### Measuring position 8

Table 36 Measured indicators of the daily traffic noise level at (07-19h) MM 8 before noon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/19	10:00	<b>52.4</b>	80.2	64.3	47.9	96.1
28/06/19	10:00	<b>52.9</b>	80.6	63.7	48.1	95.1
28/06/19	10:00	<b>52.5</b>	80.3	59.1	47.7	95.9

Table 37 Measured indicators of the daily traffic noise level at (07-19h) MM8 afternoon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/19	10:00	<b>54.5</b>	82.3	66.0	48.4	98.7
28/06/19	10:00	<b>54.0</b>	81.8	62.9	48.6	94.4
28/06/19	10:00	<b>53.3</b>	81.1	60.0	49.1	97.9

Table 38 Measured indicators of the daily traffic noise level at (19-23h) MM8 evening

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/19	10:00	<b>55.6</b>	83.4	65.4	50.8	88.8
27/06/19	10:00	<b>56.3</b>	84.0	62.2	50.1	81.2
27/06/19	10:00	<b>56.6</b>	84.4	69.8	51.1	82.3

Table 2.39 Measured indicators of the daily traffic noise level at (23-07h) MM8 night 1

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/19	10:00	<b>50.6</b>	78.3	61.2	40.1	81.4
28/06/19	10:00	<b>49.6</b>	77.4	64.8	39.7	79.9
28/06/19	10:00	<b>50.3</b>	78.1	65.0	42.0	88.7

Table 2.40 Measured indicators of the daily traffic noise level at (23-07h) MM8 night 2

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
30/06/19	10:07	<b>44.8</b>	100.4	61.6	25.5	84.7
30/06/19	10:37	<b>44.1</b>	100.2	56.7	28.5	72.4
30/06/19	10:02	<b>44.8</b>	100.4	61.0	27.5	74.8

### Measuring position 9

Table 2.41 Measured indicators of the daily traffic noise level at (07-19h) MM 9 before noon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/19	10:00	<b>52.7</b>	80.5	63.9	35.4	86.7
27/06/19	10:00	<b>53.9</b>	81.6	94.7	36.8	87.6
27/06/19	10:00	<b>53.3</b>	81.1	65.2	38.7	88.0

Table 2.42 Measured indicators of the daily traffic noise level at (07-19h) MM9 afternoon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
26/06/19	10:06	<b>55.0</b>	110.7	67.1	41.0	95.3
26/06/19	10:24	<b>55.7</b>	111.6	65.0	41.7	100.0
26/06/19	10:19	<b>54.9</b>	110.7	65.5	42.9	98.8

Table 43 Measured indicators of the daily traffic noise level at (19-23h) MM9 evening

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/19	10:00	<b>52.7</b>	80.5	64.6	41.8	86.3
27/06/19	10:00	<b>53.0</b>	80.8	64.6	40.1	87.5
27/06/19	10:00	<b>52.1</b>	79.8	60.7	41.0	84.1



Table 44 Measured indicators of the daily traffic noise level at (23-07h) MM9 night 1

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/19	10:00	<b>48.2</b>	76.0	60.4	34.8	81.3
27/06/19	10:00	<b>46.4</b>	74.2	62.1	33.2	85.8
27/06/19	10:00	<b>46.3</b>	74.1	61.0	32.5	82.7

Table 45 Measured indicators of the daily traffic noise level at (23-07h) MM9 night 2

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
30/06/19	10:04	<b>49.5</b>	105.1	76.6	32.4	89.7
30/06/19	10:03	<b>50.5</b>	106.1	66.8	32.2	84.7
30/06/19	10:05	<b>50.6</b>	106.2	62.5	34.8	88.0

### Measuring position 10

Table 46 Measured indicators of the daily traffic noise level at (07-19h) MM 10 before noon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/19	10:00	<b>62.2</b>	90.0	73.5	53.4	92.6
28/06/19	10:00	<b>63.0</b>	90.8	73.4	53.4	91.6
28/06/19	10:00	<b>63.2</b>	91.0	77.5	53.5	96.3

Table 47 Measured indicators of the daily traffic noise level at (07-19h) MM10 afternoon

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
28/06/19	10:00	<b>62.2</b>	90.0	73.7	53.0	92.5
28/06/19	10:00	<b>63.4</b>	91.2	76.7	54.8	95.6
28/06/19	10:00	<b>63.4</b>	91.2	78.6	54.7	92.5

Table 48 Measured indicators of the daily traffic noise level at (19-23h) MM10 evening

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
27/06/19	10:00	<b>55.3</b>	83.1	69.3	39.2	90.2
27/06/19	10:00	<b>56.2</b>	84.0	77.6	36.2	90.5
27/06/19	10:00	<b>55.5</b>	83.2	69.7	38.3	86.2

Table 49 Measured indicators of the daily traffic noise level at (23-07h) MM10 night 1

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
29/06/19	10:04	<b>53.2</b>	108.8	68.7	36.1	92.9
29/06/19	10:03	<b>54.8</b>	110.4	72.8	36.9	92.5
29/06/19	10:03	<b>54.5</b>	110.1	73.3	38.0	89.7

Table 50 Measured indicators of the daily traffic noise level at (23-07h) MM9 night 2

Date of measurement	Elapsed time	<b>LAeq (dB)</b>	LAE (dB)	LAFmax (dB)	LAFmin (dB)	LCpeak (dB)
01/07/19	10:04	<b>59.1</b>	114.7	76.0	44.3	91.5
01/07/19	10:02	<b>59.3</b>	114.9	75.6	42.9	92.1
01/07/19	10:09	<b>59.9</b>	115.6	79.1	45.8	93.7

### 3. Review and Analysis of the Recieved Results

Of all the measurement positions, where the level of traffic noise in the environment was tested, along the main road M18 (E762) on the route from Komanski bridge at the exit from Podgorica to the roundabout at the entrance to Danilovgrad, only 2 measuring positions (7 and 10) belong to the territory of the Municipality Podgorica, while the remaining 8 are located on the territory of the Municipality of Danlovgrad.

Measuring positions at which traffic noise levels are tested on the M18 magistral road belong to a zone with strong noise impact from road traffic for which the noise levels for the daily, evening and night cycle are 60, 60 and 55 dB respectively, in accordance with Ordinance on limit values of environmental noise, the method of determining the noise indicators and acoustic zones and methods of assessment of adverse effects ("Official Gazette of Montenegro ", No. 60/11).

In addition to the daily, evening and night noise level indicators ( $L_{day}$ ,  $L_{evening}$  and  $L_{night}$ ), the total all day long noise indicator  $L_{den}$  is calculated in the manner described in the Ordinance on limit values of environmental noise, the method of determining the noise indicators and acoustic zones and methods of assessment of adverse effects ("Official Gazette of Montenegro ", No. 60/11), Attachment 2. According to this methodology, in the logarithmic addition of  $L_{day}$ ,  $L_{evening}$  and  $L_{night}$ , the 5 dB is added to the value of the  $L_{evening}$  indicator, and 10 dB is added to the value of the indicator  $L_{night}$ .

Table 4.1 shows the mean values of the series of measured equivalent traffic noise levels  $LA_{eq}$  for daily, evening, night and all-day cycle ( $L_{day}$ ,  $L_{evening}$ ,  $L_{night}$  and  $L_{den}$ ), as well as the corresponding values of noise level  $L_{day}$ ,  $L_{evening}$  and  $L_{nigh}$  for a given acoustic zone to which the measuring positions belong.

Table 4.1 Measured values of the noise level indicator and the corresponding noise level limit values for a given measuring position.

	Residual noise level $LA_{eq}(L_{day} / L_{evening} / L_{night} / L_{den})$ (dB)	Limit value of the noise level for $L_{dan} / L_{Evening} / L_{Night} / L_{den}$ (dB)

1 - Day	62	60
1 – Evening	61	60
1 – Night	44	55
1- all day	64	/
2 - Day	60	60
2– Evening	60	60
2 – Night	52	55
2- all day	62	/
3 - Day	59	60
3– Evening	60	60
3 – Night	56	55
3- all day	63	/
4 – Day	60	60
4– Evening	59	60
4 – Night	54	55
4- all day	63	/
5 – Day	68	60
5– Evening	63	60
5 – Night	60	55
5- all day	69	/
6 – Day	66	60
6– Evening	64	60
6– Night	63	55
6- all day	70	/
7 – Day	66	60
7– Evening	66	60
7 – Night	62	55
7- all day	70	/
8 – Day	53	60
8– Evening	56	60
8 – Night	48	55
8 - all day	57	/
9 – Day	54	60
9– Evening	53	60

9 – Night	49	55
9 - all day	57	/
10 – Day	63	60
10– Evening	56	60
10– Night	58	55
10 - all day	65	/

## 4. Conclusion

The analysis of the results of measuring traffic noise levels in the environment along the main road M18 (E762), based on the requirements of E 3 Consulting - Podgorica, show that on 6 out of 10 measurement positions, at least one noise level indicator (daily, evening or night) **exceeds** the limit values prescribed by the Ordinance on limit values of environmental noise, the method of determining the noise indicators and acoustic zones and methods of assessment of adverse effects ("Official Gazette of Montenegro ", No. 60/11).

Of the total of 30 noise level indicators examined, 14 (47%) measured values **exceed** the legally prescribed limit (5 daily, 4 Evening and 5 Night Indicators).