## Table of ceasefire violations as of 9 November 2016<sup>1</sup>

SMM position	Location of	Observation	Type of weapon/ammunition	Date/time
Park Inn Hotel	event 5-10km NW	Heard 9 undetermined explosions	N/K	8 November, 19:30-
("DPR"-controlled,	J-TOKIII I VV	Treate 7 undetermined explosions	14/13	19:35
Donetsk city centre)		Heard 12 undetermined explosions	1	8 November, 19:50-
				20:01
		Heard 7 undetermined explosions		8 November, 20:14-
				20:18
		Heard 10 undetermined explosions		8 November, 20:34-
				20:39
		Heard 33 undetermined explosions		8 November, 20:44-
				21:13
		Heard 15 undetermined explosions		8 November, 22:10-
		H 12 1 1 1 1		22:19
		Heard 2 undetermined explosions		8 November, 22:29
		Heard 17 undetermined explosions		8 November, 22:36-
				22:42
		Heard 25 undetermined explosions		8 November, 22:51-
				22:56
		Heard 36 undetermined explosions		8 November, 23:09-
				23:13
		Heard 23 undetermined explosions		8 November, 23:21-
		Hand 20 and determined and a single	_	23:27
		Heard 30 undetermined explosions	_	8 November, 23:31- 23:48
		Heard 12 undetermined explosions		9 November, 00:06-
		Treate 12 undetermined expressions		00:12
		Heard 6 undetermined explosions		9 November, 00:35
		Heard 5 undetermined explosions		9 November, 00:47
		Heard 15 undetermined explosions	-	9 November, 00:55-
				01:03
		Heard 5 undetermined explosions		9 November, 01:14
		Heard 4 undetermined explosions		9 November, 01:26
				·
		Heard 8 undetermined explosions		9 November, 01:58
		Heard 14 undetermined explosions		9 November, 02:57-
		Hand 2 and demoined and a sign	_	03:03
		Heard 3 undetermined explosions	_	9 November, 04:03
Outskirts 10.5km		Heard 1 undetermined explosions		9 November, 04:51
SW of Donetsk city		Heard 1 undetermined explosion	_	9 November, 08:50
	3-5km W	Heard 1 undetermined explosion	N/K	9 November, 08:53
centre			1	,
G) (1) (	6.01	Heard 1 undetermined explosion	21/17	9 November, 09:00
SMM camera at Oktiabr mine	6-9km NE	Recorded 1 airburst	N/K	9 November, 07:21
("DPR"-controlled,		Recorded 2 undetermined explosions	1	
9km NW of		Recorded 1 undetermined explosion	-	9 November, 15:51
Donetsk)		Recorded 1 undetermined explosion		7 NOVEHIUCI, 13.31

-

<sup>&</sup>lt;sup>1</sup> The table only includes ceasefire violations directly observed by the SMM and it may include those also assessed to be live-fire exercises, controlled detonations, etc. Details provided – in terms of distance, direction, weapons-type, etc. – are based on assessments provided by monitors on the ground, and are not always necessarily precise. When information is not known (indicated with an "N/K"), the SMM was unable to ascertain such information due to distance, weather conditions and/or other considerations. Ceasefire violations recorded by more than one patrol and assessed to be the same are entered only once.

Debaltseve ("DPR"-	8-10km NNW	Heard 15 undetermined explosions	N/K	9 November, 06:55-
controlled, 58km NE	8-10KIII ININ W	Treatu 13 undetermined explosions	IV/K	07:15
of Donetsk)	5-7km NNW	Heard 7 undetermined explosions		9 November, 15:50
SSW outskirt of Debaltseve ("DPR"-	7-10km NNW	Heard 29 undetermined explosions	N/K	9 November, 13:47- 14:10
controlled, 58km NE of Donetsk)	6-8km NNW	Heard 58 undetermined explosions		9 November, 14:13- 14:25
		Heard 57 undetermined explosions		9 November, 14:30- 14:52
	10-12km NW	Heard 33 undetermined explosions		14:32
	6-8km NNW	Heard at least 7 bursts	Small arms	
	10-12km NNW	Heard 24 undetermined explosions	N/K	9 November, 14:55- 15:17
	6-8km NW	Heard 8 undetermined explosions		
Stupakove (former Krasnyi Pakhar ("DPR"-controlled, 48km NE of Donetsk)	10-12km NNW	Heard 5 undetermined explosions	N/K	9 November, 13:26- 13:28
Yasynuvata ("DPR"-	2-4km W	Heard 7 undetermined explosions	N/K	9 November, 09:10-
controlled, 16km NE of Donetsk)		Heard 12 bursts	Small arms	09:13
of Dolletsk)		Heard 11 shots		
		Heard 5 bursts	Heavy machine-gun	
	2-3km W	Heard 3 shots	Small arms	9 November, 09:15- 09:19
	3-5km WNW	Heard 1 undetermined explosion	N/K	9 November, 09:21
	2-3km W	Heard 19 shots	Small arms	9 November, 09:34- 09:40
	3-4km W	Heard 1 shot		9 November, 09:43
	2-3km WNW	Heard 1 shot		
	4-6km SW	Heard 5 undetermined explosions	N/K	9 November, 09:43-
	1-2km WSW	Heard 2 undetermined explosions		09:53
	3-4km W	Heard 3 shots	Small arms	
	4-6km WSW	Heard 20 shots		
	2-3km W	Heard 18 shots		
	1.5-2km	Heard 1 burst (30 shots)	_	
	WSW	Heard 3 shots		
		Heard 2 undetermined explosions	N/K	
	3-4km WSW	Heard 6 bursts	Small arms	9 November, 09:56-
	2-3km WSW	Heard 3 shots	_	10:03
	2-3km WNW	Heard 7 shots		
		Heard 4 bursts (3 shots each)		
		Heard 1 undetermined explosion	N/K	
		Heard 25 shots	Small arms	9 November, 10:18-
		Heard 1 undetermined explosion	N/K	10:22
		Heard 1 undetermined explosion		9 November, 10:31-
	2-3km W	Heard 4 shots	Small arms	10:36
		Heard 1 burst		
	3-4km W	Heard 7 undetermined explosions	N/K	9 November, 10:41
	2-3km W	Heard 5 bursts	Small arms	1
	2-4km W	Heard 4 bursts	Heavy machine-gun	9 November, 10:48-
		1		10:50

	Heard 15 shots	Small arms	
3-5km W	Heard 7 undetermined explosions	N/K	9 November, 10:52
2-3km W	Heard 4 bursts	Small arms	_
3-4km WSW	Heard 7 undetermined explosions	N/K	9 November, 10:55-
3-4km W	Heard 9 undetermined explosions		10:57
2-3km WSW	Heard 4 shots	Small arms	9 November, 11:06-
4-6km SW	Heard 2 bursts	Heavy machine-gun	11:13
	Heard 3 bursts	Small arms	
2-3km WSW	Heard 2 shots		
1-2km WSW	Heard 10 shots		
3-4km WSW	Heard 1 undetermined explosion	N/K	9 November, 11:17
4-6km WSW	Heard 2 shots	Small arms	9 November, 11:23
6km S	Heard 1 undetermined explosion	N/K	9 November, 11:28-
4-6km WSW	Heard 1 undetermined explosion		11:29
1-2km W	Heard 2 explosions (outgoing)	Tank (N/K type)	
2-3km WNW	Heard 3 bursts	Heavy machine-gun	9 November, 11:38
	Heard 8 undetermined explosions	N/K	9 November, 11:46-
	Heard 9 shots	Small arms	11:48
	Heard 16 shots		9 November, 11:53-
	Heard 7 undetermined explosions	N/K	12:28
5-7km WNW	Heard 27 undetermined explosions		
2-3km W	Heard 8 shots	Small arms	
3-4km W	Heard 2 undetermined explosions	N/K	
2-3km W	Heard 13 shots	Small arms	
	Heard 37 bursts	Heavy machine-gun	
5-7km WNW	Heard 1 undetermined explosion	N/K	
2-3km W	Heard uncountable overlapping bursts	Heavy machine-gun	
2-4km W	Heard 2 undetermined explosions	N/K	
2-3km W	Heard 15 shots	Small arms	
	Heard 6 bursts	Heavy machine-gun	
2-6km WNW	Heard 9 undetermined explosions	N/K	
2-3km W	Heard 4 shots	Small arms	
2-4km W	Heard 3 undetermined explosions	N/K	
2-3km W	Heard 11 bursts	Heavy machine-gun	9 November, 12:28- 12:46
2-4km W	Heard 13 undetermined explosions	N/K	12.40
2-4km W	Heard 34 shots	Small arms	
	Heard 148 bursts		
	Heard 23 undetermined explosions	N/K	
3-4km W	Heard 9 undetermined explosions		
	Heard 4 times uncountable overlapping undetermined explosions (barrage)		
2-3km W	Heard 3 bursts	Small arms	
	Heard 41 shots		
2-4km W	Heard 27 bursts		9 November, 12:49-
	Heard 15 shots		12:51
 2-5km W	Heard 11 undetermined explosions	N/K	9 November, 12:54-

2-3km W	Heard 35 bursts	Small arms	13:01
	Heard 8 shots		
2-6km W	Heard 20 undetermined explosions	N/K	
2km WSW	Heard 1 shot	Small arms	9 November, 13:10-
6km W	Heard 1 undetermined explosion	N/K	13:17
1-2km W	Heard 1 undetermined explosion	1	
4km WSW	Heard 1 burst	Heavy machine-gun	
4-5km S	Heard 5 shots	Small arms	
6km NW	Heard 1 undetermined explosion	N/K	
6km W	Heard 1 undetermined explosion	1	
4-6km W	Heard 19 shots	Small arms	9 November, 13:19-
1-2km W	Heard 5 shots	1	13:30
4-5km S	Heard 6 shots	1	
4-6km WSW	Heard 9 shots	1	
	Heard 4 undetermined explosions	N/K	
2-3km W	Heard 4 shots	Small arms	1
4-6km WSW	Heard 1 undetermined explosion	N/K	1
1-2km WSW	Heard 3 shots	Small arms	-
4-6km WSW	Heard 1 undetermined explosion	N/K	-
1-2km W	Heard 1 undetermined explosion	-	
4-6km WSW	Heard 5 undetermined explosions	1	
4-6km SW	Heard 3 shots	Small arms	-
2-3km W	Heard 17 shots	1	
4-6km W	Heard 2 undetermined explosions	N/K	-
2-3km W	Heard 11 shots	Small arms	-
3km W	Heard 16 shots	1	9 November, 13:31-
2-3km W	Heard 8 shots	1	13:32
4-6km W	Heard 1 undetermined explosion	N/K	-
2-4km W	Heard 12 undetermined explosions	-	9 November, 13:33-
	Heard 3 times uncountable overlapping undetermined explosions (barrage)	-	13:35
2-3km W	Heard 25 shots	Small arms	
	Heard 7 bursts	Heavy machine-gun	
2-6km W	Heard 23 undetermined explosions	N/K	9 November, 13:36-
2-3km W	Heard 38 bursts	Heavy machine-gun	13:39
	Heard 6 shots	Small arms	
2-4km W	Heard 23 undetermined explosions	N/K	9 November, 13:40-
2-3km W	Heard 4 bursts	Heavy machine-gun	13:43
	Heard 17 shots	Small arms	
2-6km W	Heard 21 undetermined explosions	N/K	9 November, 13:43-
2-3km W	Heard 15 bursts	Heavy machine-gun	13:46
	Heard 28 shots	Small arms	1
2-6km W	Heard 10 undetermined explosions	N/K	9 November, 13:47-
2-3km W	Heard 34 bursts	Heavy machine-gun	13:49
	Heard 8 shots	Small arms	†
2-4km W	Heard 9 undetermined explosions	N/K	9 November, 13:50-

	2-3km W	Heard 43 bursts	Heavy machine-gun	13:54
		Heard 35 shots	Small arms	1
	2-6km W	Heard 30 undetermined explosions	N/K	9 November, 13:55-
	2-3km W	Heard 23 bursts	Heavy machine-gun	14:00
		Heard 31 shots	Small arms	-
	1-2km WNW	Heard 24 shots	Sman arms	9 November, 14:11-
	1-2KIII WINW	Heard 8 bursts	11 1:	14:27
			Heavy machine-gun	
		Heard 36 undetermined explosions	N/K	
		Heard 4 undetermined explosions		9 November, 14:30- 14:32
	1-2km W	Heard 5 undetermined explosions		
	2-3km W	Heard 3 undetermined explosions		9 November, 14:40
		Heard 19 bursts	Heavy machine-gun	9 November, 14:44-
		Heard 30 shots	Small arms	14:50
	2-6km W	Heard 12 undetermined explosions	N/K	9 November, 14:51-
	5-7km SW	Heard 6 bursts	Anti-aircraft cannon (N/K calibre)	15:00
	0.7-4km W	Heard 10 bursts	Heavy machine-gun	1
	2-3km W	Heard 6 shots	Small arms	1
SMM camera in Shyrokyne (20km E	N/K NE	Recorded 1 direct tracer in flight from SE to NW	N/K	8 November, 23:25
of Mariupol)		Recorded 7 direct tracer bursts in		
		flight from W to E	-	
		Recorded 5 direct tracer bursts in flight from E to W		9 November, 16:49-
		Recorded 7 direct tracer bursts in	-	16:50
		flight from W to E	  -	
		Recorded 14 direct tracer bursts in flight from E to W		
		Recorded 28 direct tracer bursts in	1	9 November, 16:56
		flight from W to E		
		Recorded 28 direct tracer bursts in flight from W to E		9 November, 16:59
		Recorded 24 direct tracer bursts in	-	
		flight from W to E		
		Recorded 17 direct tracer bursts in flight from E to W		
		Recorded 27 direct tracer bursts in	1	
		flight from W to E  Recorded 14 direct tracer bursts in	-	9 November, 17:04
		flight from E to W		
		Recorded 12 direct tracer bursts in	9 Novemb	9 November, 17:12-
		flight from W to E	-	17:13
		Recorded 26 direct tracer bursts in flight from W to E		
		Recorded 27 direct tracer bursts in	-	9 November, 17:17
		flight from W to E	-	
		Recorded 28 direct tracer bursts in flight from W to E		9 November, 17:21
		Recorded 28 direct tracer bursts in		9 November, 17:32
		Recorded 16 direct tracer bursts in	-	9 November, 17:37
		flight from W to E  Recorded 7 direct tracer bursts in	-	9 November, 17:38
		flight from W to E	]	
		Recorded 53 tracers of direct fire from W to E		0 November 19:02
		Recorded 36 tracers of direct fire		9 November, 18:03
		from E to W		

		-		
		Recorded 68 tracers of direct fire from W to E  Recorded 3 tracers of undetermined	-	9 November, 18:10
		indirect fire from E to W		7 (NOVEMBE), 18.10
		Recorded 49 tracers of direct fire from W to E  Recorded 1 undetermined tracer of	_	9 November, 18:17
		indirect fire from E to W		
		Recorded 6 tracer bursts of direct fire from W to E		9 November, 18:20
		Recorded 27 tracer bursts of direct fire from W to E		9 November, 18:26
		Recorded 15 tracer bursts of direct fire from W to E		9 November, 18:36
		Recorded 23 tracer bursts of direct fire from W to E Recorded 2 undetermined tracers of	-	9 November, 18:41
		indirect fire from E to W Recorded 59 tracer bursts of direct		9 November, 18:48
7.3km NE of Hnutove (government- controlled, 20km NE of Mariupol)	7km SW	fire from W to E  Heard 9 explosions (outgoing)	Artillery (N/K calibre)	9 November, 09:22 – 09:30
Zoria (government- controlled, 22km NE	N/K SSW	Heard 8 explosions (impacts)	Artillery (N/K calibre)	9 November, 09:51 – 09:53
of Mariupol)	3-5km SSW	Heard 12 undetermined explosions	N/K	9 November, 10:09 – 10:17
Verkhnoshyrokivse (formerly Oktiabr,	0.5km E	Heard 12 explosions (impact)	N/K	9 November, 09:15
"DPR"-controlled, 29km NE of	N/K SSW	Heard 12 explosions (outgoing)	Artillery (N/K calibre)	9 November, 09:53- 10:10
Mariupol)	100m E	Heard 5 undetermined explosions Heard 5 explosions (impacts)	N/K	
	50m SE	Heard 9 explosions (impacts)		
2km N of Novotroitske	1.5km NE	Heard 15 undetermined explosions	N/K	9 November, 11:05- 11:08
(government- controlled, 36km SW	2-4km ENE	Heard 7 undetermined explosions	_	9 November, 11:12- 11:21
of Donetsk)	2-4km E	Heard 1 undetermined explosion		9 November, 11:24
3km NW of Oleksandrivske, (formerly Rozy Liuksemburh ("DPR"-controlled, 44km NE of Mariupol)	N/K W	Heard 6 explosions (impact)	N/K	9 November, 12:12
5km W of Oleksandrivske	N/K W	Heard 9 undetermined explosions	N/K	9 November, 13:03- 13:04
		Heard 11 undetermined explosions		9 November, 13:54
Prymorske ("DPR"- controlled, 39km NE of Mariupol)	N/K W	Heard 6 explosions (impacts)	N/K	9 November, 12:12
Orlivske	3-5km S	Heard 2 undetermined explosions	N/K	9 November, 12:53
(government- controlled, 23km NE of Mariupol)		Heard 5 undetermined explosions		9 November, 13:07- 13:19
	2km S	Heard 3 outgoing explosions		9 November, 13:53- 13:56
	3-5km SE	Heard 1 undetermined explosion		

Pavlopil	2km SE	Heard 4 undetermined explosions	N/K	9 November, 14:23-
(government-		Heard 6 explosions	Mortar (N/K calibre)	14:43
controlled, 26km NE		Heard at least 3 bursts	Anti-aircraft cannon	
of Mariupol)		Heard at least 3 bursts	ZU-23(23mm)	
		Uncountable bursts	Small arms	-
Horlivka ("DPR"-	4-6km W	Heard 9 single shots	Heavy machine-gun	8 November, 18:30-
controlled, 39km NE		_		18:32
of Donetsk)	6-8km W	Heard 12 explosions (impacts)	Mortar (120mm)	8 November, 18:44-
	4-5km W	Heard 8 undetermined explosions	N/K Heavy machine-gun	18:46 8 November, 18:46-
	4-3Km W	Heard 19 bursts (3-5 shots)	Heavy machine-gun	8 November, 18:46- 18:49
	6-8km W	Heard 3 explosions (impacts)	Mortar (120mm)	8 November, 18:48
		Heard 14 undetermined explosions	N/K	8 November, 18:50- 19:00
		Heard 15 explosions (impacts)	Mortar (120mm)	8 November, 19:03- 19:08
	4-5km W	Heard 8 explosions	IFV (BMP-2) cannon (30mm)	8 November, 19:15- 19:34
		Heard 11 explosions ( impacts)	Mortar (120mm)	
		Heard 4 bursts (3-5 shots)	Heavy machine-gun	
	6-8km SW	Heard 11 explosions (impacts)	Mortar (120mm)	
	6-8km WSW	Heard 3 explosions (impacts)		
	4-5km WSW	Heard 9 bursts (4-6 shots)	Heavy machine-gun	
	6-8km WSW	Heard 4 undetermined explosions	N/K	
	4-5km WSW	Heard 3 bursts (4-6 shots)	Heavy machine-gun	8 November, 19:35
		Heard 9 bursts	Anti-aircraft-gun (ZU-23-2, 23mm)	8 November, 19:38
		Heard 7 single shots	Heavy machine-gun	8 November, 19:48
		Heard 7 bursts		8 November, 19:51
	6-8km WSW	Heard 3 undetermined explosions	N/K	8 November, 19:52- 19:59
	4-5km W	Heard 11 explosions (outgoing)	Mortar (120mm)	8 November, 21:11- 21:14
	8-10km W	Heard 11 explosions (impacts)		8 November, 20:12- 20:15
	4-5km W	Heard 3 bursts	Heavy machine-gun	8 November, 20:34
		Heard 7 explosions (outgoing)	Mortar (120mm)	8 November, 20:36
	6-10km WSW	Heard 38 undetermined explosion	N/K	8 November 20:40- 20:48
	6-8km W	Heard 13 undetermined explosion		8 November 20:52-
	4-5km W	Heard 24 bursts	Small arms	20:58
	6-8km W	Heard 12 undetermined explosions	N/K	8 November, 21:28- 21:39
		Heard 2 undetermined explosions		8 November, 23:33
	6-8km W	Heard 24 undetermined explosions	N/K	9 November, 11:28- 11:50
	7-8km NW	Heard 2 explosions (impacts)	Mortar (N/K calibre)	9 November, 13:30
	7-10km W	Heard 5 undetermined explosions		9 November, 15:35- 15:37
	7-8km W	Heard 1 undetermined explosion		9 November, 15:30
	8-10km W	Heard 4 undetermined explosion		9 November, 16:40
	6-8km W	Heard 1 undetermined explosion		9 November, 16:44
	4-5km W	Heard 2 bursts	Heavy machine-gun	9 November, 16:45
	6-7km W	Heard 1 undetermined explosion	N/K	9 November, 16:47
	7-8km W	Heard 4 explosions (impacts)	"	9 November, 16:50

	7 01- 337	Heard 4 undetermined explosions		9 November, 16:52
1	7-8km W 8-10km W	Heard 3 undetermined explosions	_	9 November, 17:18
	6-8km W	-	_	9 November, 17:18
		Heard 1 undetermined explosion		
	3-4km NW	Heard 3 bursts	Small arms	9 November, 17:23
	5-8km W	Heard 2 undetermined explosions		9 November, 17:31
	7-9km W	Heard 3 undetermined explosions		9 November, 17:40
	8-10km W	Heard 7 undetermined explosions	N/K	9 November, 17:42- 17:46
	6-8km W	Heard 3 explosions (impacts)	IN/K	17:40
	8-10km W	Heard 1 undetermined explosion		9 November, 17:55
	6-8km W	Heard 1 undetermined explosion		9 November, 18:04
		Heard 10 bursts	Small arms	9 November, 18:12
		Heard 2 undetermined explosion		9 November, 18:15
	8-10km W	Heard 1 undetermined explosion		
	O-TOKIII W	Heard 1 undetermined explosion	N/K	9 November, 18:30-
		Heard 3 undetermined explosions	$\dashv$	18:36
	4-5km NWW	Heard 25 bursts (2shots each)		-
	3-4km WNW	Heard 5 bursts (4-7 shots each)	Small arms	09 November, 18:40
		Heard 5 explosions (impacts)		9 November, 18:57-
	7-8km WNW			18:59
		Heard 3 undetermined explosions	N/K	9 November, 19:03-
	8-9km WNW	Heard 7 undetermined explosions		19:07
	6-7km WNW	Heard 1 undetermined explosion		
	4-5km WSW	Heard 16 bursts (2-3 shots)	Small arms	9 November, 19:16-
	5-6km NW	Heard 2 bursts	IFV (BMP-2) cannon (30mm)	19:17
	7-8km NW	Heard 4 undetermined explosions	N/K	9 November, 19:24-
		Heard 7 bursts	Small arms	19:25
Svitlodarsk	2-5km SSE	Heard 55 explosions	Mortar (N/K calibre)	8 November, 18:18-
(government- controlled, 57km NE		Heard 56 bursts	Haaryy maahina ayn	19:00
of Donetsk)		Ticula 30 balbus	Heavy machine-gun	
		Heard 10 bursts	Anti-aircraft-gun (ZU-23-2, 23mm)	-
			Anti-aircraft-gun	
		Heard 10 bursts	Anti-aircraft-gun (ZU-23-2, 23mm) N/K Artillery (N/K calibre)	
		Heard 10 bursts  Heard 7 undetermined explosions	Anti-aircraft-gun (ZU-23-2, 23mm) N/K Artillery (N/K	
	2-3km SE	Heard 10 bursts  Heard 7 undetermined explosions	Anti-aircraft-gun (ZU-23-2, 23mm) N/K Artillery (N/K calibre)	
	2-3km SE 2-3km S	Heard 10 bursts  Heard 7 undetermined explosions  Heard 7 explosions (impacts)  Heard 14 bursts  Heard 3 bursts	Anti-aircraft-gun (ZU-23-2, 23mm) N/K Artillery (N/K calibre) Heavy machine-gun  Anti-aircraft-gun (ZU-23-2, 23mm)	8 November, 19:01- 19:07
	2-3km S	Heard 10 bursts  Heard 7 undetermined explosions  Heard 7 explosions (impacts)  Heard 14 bursts  Heard 3 bursts  Heard 10 bursts	Anti-aircraft-gun (ZU-23-2, 23mm) N/K  Artillery (N/K calibre) Heavy machine-gun  Anti-aircraft-gun (ZU-23-2, 23mm) Heavy machine-gun	19:07
		Heard 10 bursts  Heard 7 undetermined explosions  Heard 7 explosions (impacts)  Heard 14 bursts  Heard 3 bursts  Heard 10 bursts  Heard 2 undetermined explosions	Anti-aircraft-gun (ZU-23-2, 23mm) N/K Artillery (N/K calibre) Heavy machine-gun  Anti-aircraft-gun (ZU-23-2, 23mm)	
	2-3km S	Heard 10 bursts  Heard 7 undetermined explosions  Heard 7 explosions (impacts)  Heard 14 bursts  Heard 3 bursts  Heard 10 bursts	Anti-aircraft-gun (ZU-23-2, 23mm) N/K  Artillery (N/K calibre) Heavy machine-gun  Anti-aircraft-gun (ZU-23-2, 23mm) Heavy machine-gun	19:07
	2-3km S	Heard 10 bursts  Heard 7 undetermined explosions  Heard 7 explosions (impacts)  Heard 14 bursts  Heard 3 bursts  Heard 10 bursts  Heard 2 undetermined explosions	Anti-aircraft-gun (ZU-23-2, 23mm) N/K  Artillery (N/K calibre) Heavy machine-gun  Anti-aircraft-gun (ZU-23-2, 23mm) Heavy machine-gun	19:07 8 November, 20:14
	2-3km S  2-3km SE	Heard 10 bursts  Heard 7 undetermined explosions  Heard 7 explosions (impacts)  Heard 14 bursts  Heard 3 bursts  Heard 10 bursts  Heard 2 undetermined explosions  Heard 6 undetermined explosions	Anti-aircraft-gun (ZU-23-2, 23mm) N/K  Artillery (N/K calibre) Heavy machine-gun  Anti-aircraft-gun (ZU-23-2, 23mm) Heavy machine-gun N/K	19:07

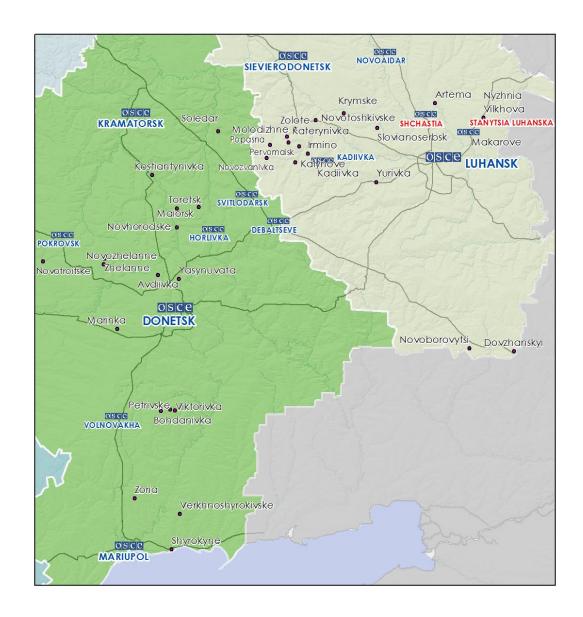
		Heard 1 burst		
	2km SE	Heard 10 bursts	Heavy machine-gun	
		Heard 46 explosions (impacts)	Mortars (N/K calibre)	9 November, 16:04
	2-3km SSE	Heard 5 bursts		9 November, 18:44
		Heard 2 bursts	Heavy machine-gun	9 November, 19:12
Avdiivka	3-4km SE	Heard 5 bursts	Small arms	9 November, 10:30
(government- controlled, 17km N		Heard 2 undetermined explosions	N/K	9 November, 10:43
of Donetsk)		Heard 1 burst	Small arms	9 November, 10:55
		Heard 1 undetermined explosion	N/K	9 November, 11:00
		Heard 1 undetermined explosion	1	9 November, 11:10
		Heard 5 bursts	Small arms	9 November, 11:35
		Heard 2 undetermined explosions	N/K	
	2km S	Heard 22 bursts	Heavy machine-gun	9 November, 11:40
	3-5km E	Heard 1 undetermined explosion	N/K	9 November, 12:01
		Heard 1 undetermined explosion		9 November, 12:15-
	2-3km SE	Heard 11 bursts	Heavy machine-gun	12:20
	3-5km SE	Heard 1 undetermined explosion	N/K	
	2-3km SE	Heard 5 bursts	Heavy machine-gun	
	3-5km SE	Heard 1 undetermined explosions	N/K	
		Heard 3 undetermined explosions		9 November, 12:30-
	2-3km SE	Heard 8 bursts	Heavy machine-gun	12:35
	3-5km SE	Heard 5 undetermined explosions	N/K	
	1-2km SE	Heard 4 explosions (outgoing)	Mortar (82mm)	-
	3-5km SE	Heard 4 undetermined explosions	N/K	-
		Heard 12 undetermined explosions		9 November, 12:40-
	2-3km S	Heard 6 explosions (outgoing)	Mortar (N/K calibre)	12:45
	2-3km SSE	Heard 19 undetermined explosions	N/K	9 November, 13:00- 13:15
	3-4km SE	Heard 1 undetermined explosion	N/K	9 November, 13:18
		Heard 10 single shots	Small arms	9 November, 13:25- 12:35
		Heard 4 explosions (outgoing)	Mortar (82mm)	9 November, 13:40-
		Heard 2 explosions (impacts)	N/K	13:47
		Heard 3 undetermined explosions		
		Heard 3 explosions (outgoing)	IFV (BMP-1) cannon (73mm)	
		Heard 2 explosions (impacts)	AGL	9 November, 13:52-
		Heard 30 bursts	Heavy machine-gun	14:00
		Heard 1 explosion (impact)	Recoilless gun (SPG-9)	
		Heard 12 undetermined explosions	N/K	1
SMM camera in Avdiivka	3-6km SE	Recorded 1 rocket-assisted projectile in flight from N to S		9 November, 16:35-
(government-	4.61.67	Recorded 2 undetermined explosions		16:37
controlled, 17km N of Donetsk)	4-6km SE	Recorded 3 undetermined explosions	N/K	9 November, 16:40-
	3-6km SE	Recorded 1 rocket-assisted projectile in flight from N to S		16:47

1	1		1
4-6km SE	Recorded 3 undetermined explosions		
3-6km SE	Recorded 1 rocket-assisted projectile in flight from N to S		
4 4 4 4	Recorded 1 undetermined explosion		9 November, 16:47
4-6km SE	Recorded 3 undetermined explosions		9 November, 16:59- 17:01
3-6km SE	Recorded 3 undetermined explosions		9 November, 17:07
	Recorded 1 undetermined explosion		
	Recorded 1 rocket-assisted projectile in flight from N to S		9 November, 17:11-
	Recorded 6 undetermined explosions		17:17
	Recorded 1 rocket-assisted projectile in flight from N to S		
	Recorded 2 undetermined explosions	]	9 November, 17:24
	Recorded 3 undetermined explosions		9 November, 17:28-
	Recorded 1 illumination flare		17:33
	Recorded 48 undetermined		
	Recorded 16 rocket-assisted	-	9 November, 17:37-
	projectiles in flight from N to S	-	17:48
	Recorded 1 airburst	-	
4-6km SE	Recorded 2 undetermined explosions		9 November, 17:51
	Recorded 2 undetermined explosions		9 November, 17:55-
			18:05
		-	9 November, 18:02-
	in flight from N to S	-	18:04
			9 November, 18:09-
	Recorded 4 rocket-assisted projectiles		18:13
		-	
	explosions		9 November, 18:13-
	Recorded 2 rocket-assisted projectiles		18:29
5-6km W		Artillery (N/K	9 November, 12:06-
		- calibre)	12:08
N/K	Heard 3 undetermined explosions	N/K	9 November, 10:40
10.151	Heard 200 avalesions (both immests	Autillam:	9 November 19:20
SSW	and outgoing)	Aitiliery	8 November, 18:20- 19:34
3-4km W	Heard 15 explosions (outgoing)	Artillery	
2-3km W	Heard 4 explosions (impacts)	Artillery	1
10-20km W	Heard 17 undetermined explosions	Artillery	8 November, 19:52- 20:50
10km NW	Heard 2 undetermined explosions	N/K	9 November, 13:57
10km W	Heard 1 undetermined explosion	1	9 November, 14:23
10-15km SW	Heard 16 explosions (both impacts and outgoing)	Artillery (unknown calibre)	9 November, 15:57
15km WSW	Heard over 200 explosions (both impacts and outgoing)		9 November, 16:52-
	3-6km SE  4-6km SE  3-6km SE  4-6km SE  4-6km SE  4-6km SE  5-6km W  N/K  10-15km SSW  3-4km W  10-20km W  10km NW  10km NW	3-6km SE Recorded 1 rocket-assisted projectile in flight from N to S Recorded 3 undetermined explosions Recorded 3 undetermined explosions Recorded 1 undetermined explosions Recorded 1 rocket-assisted projectile in flight from N to S Recorded 2 undetermined explosions Recorded 3 undetermined explosions Recorded 1 rocket-assisted projectile in flight from N to S Recorded 2 undetermined explosions Recorded 3 undetermined explosions Recorded 3 undetermined explosions Recorded 3 undetermined explosions Recorded 1 illumination flare Recorded 3 undetermined explosions Recorded 16 rocket-assisted projectiles in flight from N to S Recorded 1 airburst Recorded 1 airburst Recorded 1 undetermined explosions Recorded 1 undetermined explosions Recorded 1 undetermined explosions Recorded 3 rocket-assisted projectiles in flight from N to S Recorded 9 rocket-assisted projectiles in flight from N to S Recorded 9 rocket-assisted projectiles in flight from N to S Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 undetermined explosions Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 2 rocket-assisted projectiles in flight from S to N Recorded 3 rock	3-6km SE  Recorded 1 rocket-assisted projectile in flight from N to S Recorded 3 undetermined explosions Recorded 1 undetermined explosions Recorded 1 rocket-assisted projectile in flight from N to S Recorded 1 rocket-assisted projectile in flight from N to S Recorded 1 rocket-assisted projectile in flight from N to S Recorded 1 undetermined explosions Recorded 2 undetermined explosions Recorded 3 undetermined explosions Recorded 4 undetermined explosions Recorded 4 undetermined explosions Recorded 6 for ocket-assisted projectiles in flight from N to S Recorded 1 illumination flare Recorded 48 undetermined explosions Recorded 10 rocket-assisted projectiles in flight from N to S Recorded 1 undetermined explosions Recorded 2 undetermined explosions Recorded 1 undetermined explosions Recorded 3 rocket-assisted projectiles in flight from N to S Recorded 4 rocket-assisted projectiles in flight from N to S Recorded 4 rocket-assisted projectiles in flight from N to S Recorded 2 undetermined explosions Recorded 2 undetermined explosions Recorded 3 rocket-assisted projectiles in flight from N to S Recorded 4 rocket-assisted projectiles in flight from N to S Recorded 2 undetermined explosions Recorded 3 explosions (impacts) Recorded 3 explosions (impacts) Recorded 4 rocket-assisted projectiles in flight from S to N Recorded 2 undetermined explosions Recorded 3 explosions (impacts) Recorded 4 rocket-assisted projectiles in flight from S to N Recorded 2 to N Recorded 3 explosions (impacts) Recorded 4 to Explosions (both impacts and outgoing) Recorded 5 to Explosions (both impacts and outgoing) Recorded 5 to Explosions (both impacts and outgoin

	15-20km WSW		Artillery	18:30
		Heard about five barrages of incoming artillery fire (15-20 explosions each)		9 November, 17:27- 17:35
		Heard 26 undetermined explosions	-	9 November, 18:09- 18:30
	5km W	Heard incoming fire	Artillery	9 November, 18:38
Irmino ("LPR"- controlled, 54km W	10km W	Heard 2 undetermined explosions	N/K	9 November, 10:05
of Luhansk)	10km SW	Heard 4 undetermined explosions	Artillery (unknown calibre)	9 November, 13:15- 13:25
Novoaidar (government- controlled, 49km NW of Luhansk)	25km E	Heard 3 undetermined explosions (assessed as live-fire exercise)	SPG	9 November, 10:55- 11:00
Kalynove ("LPR"- controlled, 60km W	10km W	Heard 8 undetermined explosions	N/K	9 November, 11:05- 11:15
of Luhansk)	5km W	Heard 2 explosions (outgoing)	-	11.13
	10km WSW	Heard 28 undetermined explosions	N/K	9 November, 11:45- 13:00
Pervomaisk ("LPR"- controlled, 58km W of Luhansk)	10km SW	Heard 4 undetermined explosions	N/K	9 November, 11:20- 11:35
Popasna (government-	10km S	Heard 10 undetermined explosions	N/K	9 November, 11:40- 12:00
controlled, 69km W of Luhansk)	3-5km SE	Heard 50 bursts	Heavy machine-gun	9 November, 14:00- 14:15
		Heard about 20 explosions (outgoing)	Grenade launcher	
		Heard 10 explosions (impacts)	Mortar (calibre unknown)	
1km NE of Novozvanivka (government- controlled, 70km W of Luhansk)	10-15km SSW	Heard over 10 undetermined explosions	N/K	9 November, 12:40
1km S of Novozvanivka	10-15km SSW	Heard at least 25 undetermined explosions	N/K	9 November, 13:15- 13:30
		Heard continuous fire	HMG and BMP-1	1
Staryi Aidar (government- controlled, 20km NW of Luhansk)	20-25km SW	Heard 6 undetermined explosions	Artillery	9 November, 12:40- 12:50
Trokhizbenka (government-	5-7km W	Heard 10 undetermined explosions	NK	9 November, 13:15- 13:45
controlled, 32km NW of Luhansk)		Heard 1 burst	Anti-tank gun (ZU-23)	
Molodizhne ("LPR"-controlled, 63km	5km S	Heard 2 explosions (outgoing)	Mortar (calibre unknown)	9 November, 13:35- 13:45
NW of Luhansk)		Heard 4 explosions (outgoing)	Artillery (calibre unknown)	
		Heard 20-30 bursts	Heavy machine-gun	
		Heard 20 explosions (impacts)	AGS	1
Government- side of Stanytsia Luhanska bridge (16km NE of Luhansk)	300-400m SSE	Heard 2 shots	Small arms	9 November, 13:45

"LPR"-side of	400m NE	Heard 2 shots		
Stanytsia Luhanska				
bridge (16km NE of		(the same ones as above)		
Luhansk)				
Nyzhnie	N/K SW	Heard 14 undetermined explosions	N/K	9 November, 13:55-
(government-				14:04
controlled, 56km				
NW of Luhansk)				

## Map of Donetsk and Luhansk regions<sup>2</sup>



<sup>&</sup>lt;sup>2</sup> The SMM is actively deployed to ten locations throughout Ukraine, Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Donetsk, Dnipro, Chernivtsi, Luhansk and Kyiv, as per Permanent Council Decision 1117 of 21 March 2014. This map of eastern Ukraine is meant for illustrative purposes and indicates locations mentioned in the report, as well as those where the SMM has offices (monitoring teams, patrol hubs, and forward patrol bases) in Donetsk and Luhansk regions. (In red: forward patrol bases from which SMM staff has temporarily relocated since 27 September based on recommendations of security experts from participating States.)