SMM position	Location of event	Observation	Type of weapon/ammunition	Date/time
SW edge of		Heard 1 undetermined explosion		24 October, 11:25
Avdiivka (government- controlled, 17km N of Donetsk)	3-5km ESE	Heard 2 undetermined explosions	N/K	24 October, 11:38
	2-3km ESE	Heard 20 bursts		
	2km SE	Heard 3 bursts	HMG	24 October, 12:20-12:36
	1-2km SE	Heard 3 bursts	Small arms	24 October, 14:13
	2-3km SE	Heard 2 bursts	HMG	24 October, 14:27
	3-5km S	Heard 9 undetermined explosions	N/K	24 October, 14:36-14:41
Oktiabr mine (9km NW of Donetsk city centre)	1-2km W	Heard 1 burst	Small arms	24 October, 10:07
		Heard 1 shot		24 October, 10:17
3km SSE of Lozove	3-6km N	Heard 1 undetermined explosion		24 October, 10:40
(government-	3-5km N	Heard 2 undetermined explosions	N/IZ	24 October, 11:28-11:31
controlled, 52km NE of Donetsk)	3-6km NE	Heard 2 and saw explosions (outgoing)	N/K	24 October, 11:47-12:00
0.8km S of Novohryhorivka ("DPR"-controlled, 61km NE of Donetsk)	8-10km NW	Heard 4 undetermined explosions	- N/K	24 October, 15:08
	4-8km NW	Heard and saw 2 explosions (impacts)		24 October, 15:10
1km N of Pyshchevyk	2-3km SSW	Heard 2 undetermined explosions	- N/K	24 October, 12:11
(government- controlled, 25km NE of Mariupol)		Heard 2 undetermined explosions		24 October, 12:34
1.7km W of Khreshchatytske		Heard 1 undetermined explosion	N/K	24 October, 12:23
(formerly Krasnoarmiiske, "DPR"-controlled,	N/K SSW	Heard 1 undetermined explosion		24 October, 12:30
33km NE of Mariupol)		Heard 2 undetermined explosions		24 October, 12:34
Svitlodarsk		Heard 3 bursts	ID (C	23 October, 19:04
(government-		Heard 10 bursts	HMG	23 October, 19:37-19:51
controlled, 57km NE	2-3km SE	Heard 1 undetermined explosion	N/K	22 October 10:52
of Donetsk)		Heard 2 bursts	Small arms	23 October, 19:52
		Heard 1 explosion (outgoing)	Recoilless gun (SPG- 9, 73mm)	23 October, 19:53
		Heard 15 shots	Small arms	23 October, 19:54
		Heard 1 explosion (outgoing)	Recoilless gun (SPG- 9)	22.0 . 1 . 10.55
		Heard 1 burst	Small arms	23 October, 19:55
		Heard 2 shots	AGL	1
	3-4km SE	Heard 2 bursts	Small arms	23 October, 19:58
	2-3km SE	Heard 2 bursts	HMG	
	3-4km SE	Heard 10 bursts	Small arms	23 October, 19:59
	2-3km SE	Heard 3 bursts	HMG	23 October, 20:00
	3-4km SE	Heard 1 undetermined explosion	N/K	
	2-4km SE	Heard 13 bursts	HMG	23 October, 20:02-20:06
	3-4km SE	Heard 1 burst	AGL	23 October, 20:16
	1-4km SE	Heard 18 bursts	UD 4G	23 October, 20:18-20:20
	4-5km E	Heard 20 bursts	HMG	23 October, 20:21-20:26

<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.

		27.07	
	Heard 1 undetermined explosion	N/K	23 October, 20:26
4-5km SE	Heard 20 bursts	HMG	23 October, 20:33-20:36
2.41.015	Heard 5 bursts	AGL	
3-4km SE	Heard 8 bursts	HMG	23 October, 20:39
1-2km SE	Heard 11 bursts	0 11	23 October, 20:42
0.01 OF	Heard 10 shots	Small arms	
2-3km SE	Heard 10 bursts	HMG	23 October, 20:44-21:02
1-2km SE	Heard 1 explosion (outgoing)	Mortar (120mm)	23 October, 21:02
4-5km SE	Heard 6 bursts		23 October, 21:04
1-2km SE	Heard 1 burst	HMG	23 October, 21:05
4-5km SE	Heard 13 bursts	ПИО	23 October, 21:12
4-JKIII SE	Heard 39 bursts		23 October, 21:12-21:15
1-2km E	Heard 2 explosions (outgoing)	Mortar (82mm)	23 October, 21:15
	Heard 3 bursts	AGL	23 October, 21:16
4-5km SE	Heard 12 bursts	HMG	23 October, 21:17-21:18
1-2km SE	Heard 1 explosion (outgoing)	Mortar (82mm)	23 October, 21:18
3-4km SE	Heard uncountable overlapping bursts	Small arms	23 October, 21:18-21:20
5 4KII 5E	and shots	Sinan arms	25 000001, 21.10 21.20
1-4km SE	Heard 27 bursts	HMG	
3-4km SE	Heard uncountable overlapping bursts	Small arms	23 October, 21:21-21:23
	and shots		
	Heard 36 bursts	HMG	23 October, 21:24-21:25
1-4km SE	Heard uncountable overlapping bursts	Small arms	23 October, 21:24-21:26
1-4KIII DL	and shots		
	Heard 5 bursts	AGL	23 October, 21:26
1-2km SE	Heard 2 explosions (outgoing)	Mortar (82mm)	
1-4km SE	Heard 36 bursts	HMG	23 October, 21:26-21:28
	Heard 3 explosions (outgoing)	Mortar (82mm)	
1-2km S	Heard 17 bursts	HMG	23 October, 21:29
	Heard 2 explosions (outgoing)	Mortar (82mm)	23 October, 21:29-21:30
2.21 0	Heard 23 bursts	HMG	
2-3km S	Heard 3 explosions (impacts)	N/K	23 October, 21:30-21:32
1-2km S	Heard 11 bursts	Small arms	23 October, 21:32
	Heard 1 undetermined explosion	N/K	23 October, 21:34
	Heard 1 explosion (outgoing)	Mortar (82mm)	23 October, 21:37
1-2km SE	Heard 25 bursts	HMG	23 October, 21:38
	Heard 3 explosions (outgoing)	Monton (120mm)	23 October, 21:38-21:41
	Heard 2 explosions (outgoing)	Mortar (120mm)	23 October, 21:44
2-3km SE	Heard 16 bursts	HMG	23 October, 21:44-21:46
3-4km SE	Heard 1 explosion (impact)	N/K	23 October, 21:45
	Heard 1 explosion (outgoing)	Mortar (82mm)	23 October, 21:46
1-2km SE	Heard 4 explosions (outgoing)	Mortar (120mm)	23 October, 21:46-21:47
3-5km SE	Heard uncountable overlapping bursts	HMG and small arms	23 October, 21:49-21:51
	and shots		,
2-3km SE	Heard 5 bursts	HMG	23 October, 21:54
	Heard 2 bursts	Small arms	23 October, 22:04
	Heard 2 bursts	HMG	23 October, 22:05
	Heard 20 bursts	Small arms	23 October, 22:06-22:08
	Heard 4 shots	AGL	23 October, 22:08
3-5km SE	Heard uncountable overlapping bursts	HMG	23 October, 22:09
	Heard 8 shots	Small arms	23 October, 22:07
		Siliali alliis	25 0000001, 22.11
	Heard 6 bursts	HMG	23 October, 22:12
1-2km SE	Heard 6 shots Heard 2 explosions (outgoing)	Mortar (82mm)	23 October, 22:13-22:14
3-5km SE	Heard uncountable overlapping bursts	C	23 October, 22:14
	and shots Heard 1 burst	Small arms	23 October, 22:15
0 01 OF		Mortor (20mm-)	
2-3km SE	Heard 2 explosions (outgoing)	Mortar (82mm)	23 October, 22:16-22:20
	Heard 2 shots	HMG	23 October, 22:21

		Heard 1 explosion (outgoing)	Mortar (82mm)	23 October, 22:22
		Heard 3 bursts	()	23 October, 22:22
	3-5km SE	Heard uncountable overlapping bursts and shots	Small arms	23 October, 22:25-22:26
	2-3km SE	Heard 7 bursts	HMG	23 October, 22:27
		Heard 8 shots	AGL	23 October, 22:28
	3-5km SE	Heard 6 bursts	Small arms	23 October, 22:29
		Heard 5 shots	AGL	23 October, 22:36
		Heard uncountable overlapping bursts	Small arms	23 October, 22:36-22:37
		and shots		20 000000, 22100 2210 /
		Heard 20 shots		23 October, 22:41-23:00
		Heard 44 bursts	HMG	23 October, 23:02-23:18
		Heard 45 bursts		23 October, 23:36-23:47
		Heard 5 shots	Small arms	23 October, 23:48
		Heard 14 bursts	HMG	23 October, 23:52
		Heard 5 shots	Small arms	23 October, 23:54
		Heard 4 bursts	HMG	24 October, 00:05
	2-3km SE	Heard 1 undetermined explosion		24 October, 01:17
	2 JAN DE	Heard 1 undetermined explosion	N/K	24 October, 01:22
		Heard 4 bursts		24 October, 01:25
		Heard 7 shots	HMG	24 October, 01:25
		Heard 4 bursts	ПИО	24 October, 01:40
			N/K	
		Heard 1 undetermined explosion		24 October, 02:04
	2.51 05	Heard 4 bursts	HMG	24 October, 02:05
	3-5km SE	Heard 6 undetermined explosions Heard 10 bursts	N/K Small arms	24 October, 09:30-09:42 24 October, 10:32
		Heard 1 explosion (outgoing)	Recoilless gun (SPG-	24 October, 10:32 24 October, 10:35
	2-3km SE		9)	24 October, 10.55
		Heard 1 burst	AGL	24 October, 10:37
		Heard 1 undetermined explosion	N/K	
		Heard 1 explosion (outgoing)	Recoilless gun (SPG- 9)	24 October, 10:43
		Heard 10 bursts	Small arms	24 October, 10:44
		Heard uncountable overlapping bursts and shots	HMG	24 October, 10:45
		Heard 1 explosion (outgoing)	Mortar (82mm)	24 October, 10:47
		Heard 1 burst	HMG	24 October, 10:50
		Heard 1 undetermined explosion		24 October, 12:12
	2-3km SW	Heard 3 undetermined explosions	N/K	24 October, 15:10-15:14
C) () () () () () () () () () () () () ()	4-5km SW	Heard 2 undetermined explosions		24 October, 16:26
SMM camera in Zolote (government-		Recorded 1 projectile from NW to SE (assessed as outside the	N/Z	22 October, 19:43
controlled, 60km		disengagement area) Recorded 1 projectile from NW to SE		22.0 / 1 10.49
NW of Luhansk)				22 October, 19:48
N W OI LUIIAIISK)		1 0	N/V	
in w of Lunalisk)		(assessed as outside the	N/K	
in w of Lunansk)		(assessed as outside the disengagement area)	N/K	
(w of Lunalisk)	3-7km E	(assessed as outside the	N/K	
(w of Lunalisk)	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to	N/K	22 October 10:55
(w of Lunansk)	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to	N/K Flare	- 22 October, 19:55
(w of Lunansk)	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the		- 22 October, 19:55
(w of Lunansk)	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area)	Flare	
(w of Lunansk)	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 1 projectile from S to N		22 October, 19:55 23 October, 02:04
(w of Lunansk)	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 1 projectile from S to N (assessed as outside the	Flare	
	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 1 projectile from S to N (assessed as outside the disengagement area)	Flare N/K	
N edge of Popasna	3-7km E	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 1 projectile from S to N (assessed as outside the disengagement area) Heard 5 shots	Flare N/K Small arms	
N edge of Popasna (government-		(assessed as outside the disengagement area)Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area)Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area)Recorded 1 projectile from S to N (assessed as outside the disengagement area)Heard 5 shots Heard 12 bursts	Flare N/K Small arms HMG	23 October, 02:04
N edge of Popasna (government- controlled, 69km W	3-7km E 4-8km SSE	(assessed as outside the disengagement area) Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area) Recorded 1 projectile from S to N (assessed as outside the disengagement area) Heard 5 shots Heard 12 bursts Heard 38 bursts	Flare N/K Small arms HMG IFV (BMP-2) cannon (30mm)	
N edge of Popasna (government- controlled, 69km W of Luhansk)		(assessed as outside the disengagement area)Recorded 6 projectiles from NW to SE (assessed as outside the disengagement area)Recorded 3 projectiles from NW to SE (assessed as outside the disengagement area)Recorded 1 projectile from S to N (assessed as outside the disengagement area)Heard 5 shots Heard 12 bursts	Flare N/K Small arms HMG IFV (BMP-2) cannon	23 October, 02:04

		Heard 27 bursts	IFV (BMP-2) cannon	
		Heard 6 explosions (outgoing)	IFV (BMP-1) cannon	
		Heard 4 bursts	HMG	
		Heard 4 bursts	IFV (BMP-2) cannon	
		Heard 6 explosions (outgoing)	IFV (BMP-1) cannon	23 October, 22:30-22:35
		Heard 2 undetermined explosions	N/K	
	3-5km SE	Heard 3 shots	Small arms	24 October, 03:05
	3-5km SSE	Heard 10 shots		24 October, 03:43-03:48
	5-7km SSE	Heard 3 undetermined explosions	N/K	24 October, 06:20
Holubivske ("LPR"- controlled, 51km W of Luhansk)	3km NE	Heard 15 shots	Small arms	24 October, 10:00-10:05
Kruta Hora ("LPR"- controlled, 16km	5-10km WSW	Heard 4 undetermined explosions	N/K	24 October, 10:03-10:06
NW of Luhansk)	2km NNW	Heard 1 undetermined explosion	Mine	24 October, 10:17
Shymshynivka ("LPR"-controlled,		Heard 21 bursts (assessed as live-fire training exercise)	Small arms and HMG	
27km SW of Luhansk)	2km SW	Heard 3 undetermined explosions (assessed as live-fire training exercise)	Tank	24 October, 11:25-11:50
Sentianivka (formerly Frunze, "LPR"-controlled, 44km W of Luhansk)	5km SE	Heard 3 explosions (impacts)	N/K	24 October, 11:50-11:53
Plotyna (government- controlled, 28km NE of Luhansk)	5-6km SW	Heard 6 undetermined explosions	N/K	24 October, 12:38-12:52
1km S of Stanytsia Luhanska bridge (15km NE of Luhansk)	0.2km E	Heard and saw 1 white signal flare (assessed as outside the disengagement area)	Flare	24 October, 12:54



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

<sup>&</sup>lt;sup>2</sup> The SMM is 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 base from which SMM staff has temporarily relocated since 27 September 2016 based on recommendations of security experts from participating States.)