

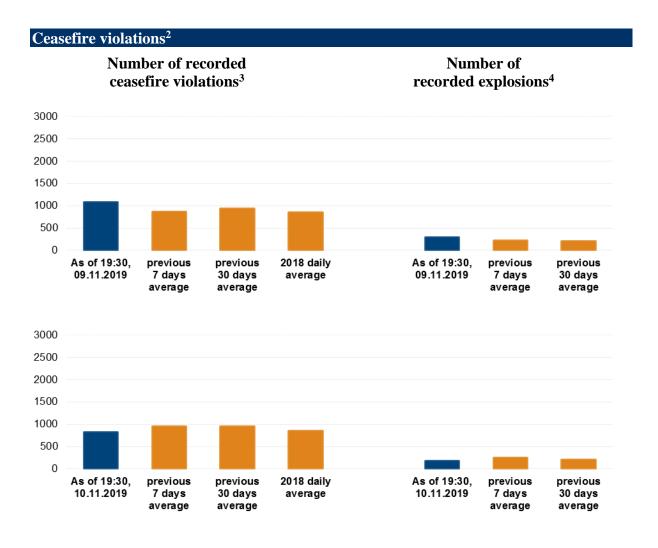
Daily Report 267/2019

11 November 2019¹

Summary

- Compared with the previous reporting period, between the evenings of 8 and 9
 November, the SMM recorded more ceasefire violations in both Donetsk and Luhansk
 regions.
- Between the evenings of 9 and 10 November, the Mission recorded fewer ceasefire violations in Donetsk region and more in Luhansk region, compared with the previous 24 hours
- On 9 November, the Mission monitored the beginning of the disengagement process in the Petrivske disengagement area. On 10 November, the SMM observed further withdrawal of forces and hardware from the disengagement area.
- The Mission continued to observe demining activities inside the Zolote disengagement area.
- Inside the Stanytsia Luhanska disengagement area, the Mission continued to observe construction works at the broken section of the bridge.
- Man injured by shelling in non-government-controlled Spartak.
- The SMM observed weapons in violation of withdrawal lines in a non-government-controlled area of Luhansk region.
- The Mission continued to monitor adherence to the ceasefire to facilitate the operation of the Donetsk Filtration Station.
- Restrictions of the Mission's freedom of movement continued, including at checkpoints near non-government-controlled Staromykhailivka, Verkhnoshyrokivske, Novoazovsk.*

¹ Based on information from the Monitoring Teams as of 19:30, 10 November 2019. All times are in Eastern European Time.



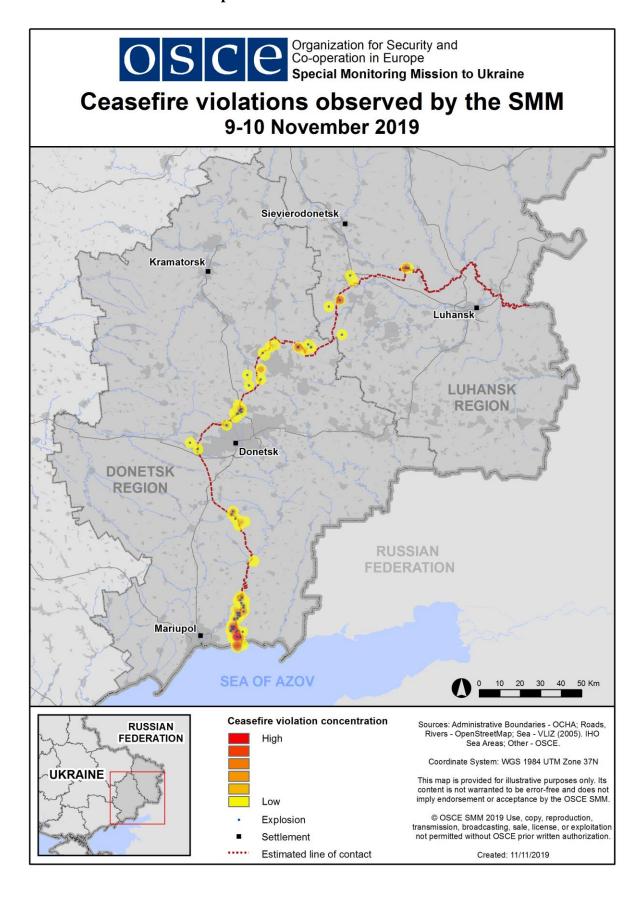
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² For a complete breakdown of ceasefire violations, please see the annexed table. During the reporting period, the SMM camera in Krasnohorivka was not operational.

³ Including explosions.

⁴ Including from unidentified weapons.

Map of recorded ceasefire violations



In Donetsk region, between the evenings of 8 and 9 November, the SMM recorded more ceasefire violations, including more explosions (about 290), compared with the <u>previous reporting period</u> (about 200 explosions). The majority of the ceasefire violations were recorded at northerly directions of Shyrokyne (government-controlled, 100km south of Donetsk), in areas south-east of Talakivka (government-controlled, 90km south of Donetsk) and in areas east and north-east of Lomakyne (government-controlled, 93km south of Donetsk). During the night of 8-9 November, the SMM camera at the Donetsk Filtration Station (DFS) (15km north of Donetsk) recorded three undetermined explosions and three projectiles at an assessed range of 0.3-1km at southerly directions.

Between the evenings of 9 and 10 November, the Mission recorded fewer ceasefire violations, including fewer explosions (about 115), compared with the previous 24 hours. The majority of the ceasefire violations were recorded again at northerly directions of Shyrokyne and at easterly directions of Berdianske (government-controlled, 103km south of Donetsk). During the night of 9-10 November, the SMM camera at the DFS recorded 15 undetermined explosions and 13 projectiles at an assessed range of 0.3-2km and at southerly directions.

In Luhansk region, between the evenings of 8 and 9 November, the SMM recorded more ceasefire violations, including, however, fewer explosions (17), compared with the <u>previous reporting period</u> (about 40 explosions). The majority of the ceasefire violations, including the majority of explosions, were recorded in areas south-west of Kriakivka (government-controlled, 38km north-west of Luhansk).

Between the evenings of 9 and 10 November, the Mission recorded more ceasefire violations, including more explosions (about 50), compared with the previous 24 hours. All ceasefire violations were recorded in areas south and south-east of Popasna (government-controlled, 69km west of Luhansk).

Beginning of the disengagement process at the Petrivske disengagement area⁵

On 9 November, the SMM observed the <u>beginning of the disengagement process at the</u> <u>disengagement area near Petrivske</u> (non-government-controlled, 41km south of Donetsk).

Shortly after 12:00, positioned near the disengagement area in Petrivske and Bohdanivka, the Mission saw the launch of white flares by the Ukrainian Armed Forces and by the armed formations, indicating their readiness to disengage. From the same locations, the SMM subsequently saw two green flares - one launched by the Ukrainian Armed Forces and another one by the armed formations, signalling the beginning of disengagement.

At about 12:00, positioned in Bohdanivka (government-controlled, 41km south-west of Donetsk), the SMM saw three infantry fighting vehicles (IFV) (BMP-2), with Ukrainian Armed Forces personnel on board, and a military truck with two Ukrainian Armed Forces personnel on board, together with their weapons, all exiting the disengagement area and heading west towards Bohdanivka.

⁵ Disengagement is foreseen in the Framework Decision of the Trilateral Contact Group relating to disengagement of forces and hardware of 21 September 2016.

Between 12:23 and 13:45, positioned 1.5km east of Bohdanivka, the Mission saw Ukrainian Armed Forces personnel, together with their weapons, exiting the area on board of two military trucks and three IFVs (BMP-2) and heading west towards Bohdanivka.

At 12:25, positioned in Petrivske, the SMM saw members of the armed formations, together with their weapons, outside the disengagement area, boarding a military-type truck and heading north towards Styla (non-government-controlled, 34km south of Donetsk).

On the same day, inside the disengagement area, an SMM mini-unmanned aerial vehicle (UAV) spotted <u>again</u> about 200 anti-tank mines (TM-62M and TM-62P3) laid in two rows running north to south, about 700m south of the area's northern edge and about 900m east of its western edge. The same UAV <u>again</u> spotted about 200 anti-tank mines running north to south about 1km east of its western edge, starting at about 650m north of the area's northern edge and continuing 350m south of the foresaid edge (70 of which are inside the disengagement area), assessed as belonging to the Ukrainian Armed Forces.

On the same day, positioned about 500m north-west of Petrivske, the SMM heard 20 undetermined explosions and a burst of heavy-machine-gun fire, all at an assessed range of 6-8km north-west and assessed as outside the disengagement area but within its 5km periphery. Additionally, while positioned in Petrivske, the SMM observed a non-SMM mini-UAV flying in a westerly direction.

On 10 November, outside of the disengagement area, positioned about 1.5km east of Bohdanivka, the SMM saw Ukrainian Armed Forces personnel, with their weapons walking from easterly and southerly directions and heading south and west, outside of the disengagement area. Additionally, about 160m north of the area's northern edge, an SMM-mini UAV again spotted 38 anti-tank mines laid across the road between Bohdanivka and Viktorivka (non-government-controlled, 42km south-west of Donetsk), assessed as belonging to the Ukrainian Armed Forces. About 250m north-west of its north-eastern edge, it again spotted a recoilless rifle system (SPG-9, 73mm) in a military-type position assessed as belonging to the armed formations. About 80m south-west, the same UAV spotted unexploded ordnance (UXO), assessed as a piece of a rocket-propelled grenade (RPG-7).

On the same day, positioned on the western edge of Petrivske and in Bohdanivka, the SMM heard 12 shots of small-arms fire, respectively 1km south-south-west and 2-3km south-east, all assessed as inside the disengagement area. Positioned about 2km north of Petrivske, the Mission heard ten shots of small-arms fire 1-2km south-west (unable to assess whether outside or inside the disengagement area). Positioned at the same location, the SMM also heard three undetermined explosions and a shot of small-arms fire, at an assessed range of 3-5km west and 1-2km south-south-east respectively, all assessed as outside the disengagement area but within its 5km periphery.

Disengagement areas near Zolote and Stanytsia Luhanska

On 9 November, in line with the commitments undertaken at the meeting of the <u>Trilateral</u> <u>Contact Group</u> (TCG) on 1 October, the SMM received a Note Verbale from the Ministry of Foreign Affairs of Ukraine and a letter from the armed formations, in which they inform the SMM about the completion of clearance of the roads and their shoulders and removal of obstacles, the clearance of areas from mines and explosive ordnance and the fencing-off of

areas contaminated with explosive ordnance in the **disengagement area near Zolote** (government-controlled, 60km west of Luhansk).

On the same day, at the checkpoint of the armed formations on the southern edge of the disengagement area, the SMM saw a senior member of the armed formations (wearing an armband with "JCCC" written on it), 17 workers and seven deminers from non-government-controlled areas entering the disengagement area and walking on road T-1316 to about 1km north of its southern edge. Positioned at the same location, the Mission heard an explosion, about 1km north-north-west of the southern edge, assessed as a controlled detonation of UXO.

On 10 November, the SMM saw three deminers from non-government-controlled areas at the checkpoint of the armed formations on the southern edge of the disengagement area. It then saw two deminers from non-government-controlled areas on board of a truck with "MChS" written on it entering the disengagement area and driving north. Positioned at the aforesaid checkpoint, the Mission heard an explosion about 600m north-west, assessed as a controlled detonation.

On the evening of 9 November, the SMM camera in Zolote recorded an undetermined explosion and a projectile at an assessed range of 2-5km at north-easterly directions, all assessed as outside the disengagement area but within its 5km periphery.

On 9 November, inside the **disengagement area near Stanytsia Luhanska**, the Mission saw two deminers as well as at least 19 workers from government-controlled areas installing and welding a deck at the broken section of the Stanytsia Luhanska bridge (15km north-east of Luhansk). The SMM saw that the scaffolding supporting the deck of the bridge during its construction was being removed by the aforesaid workers.

On the same day, south of the bridge, the SMM saw five workers from non-government-controlled areas clearing and burning vegetation east of the road between the shelter of an international organization and the checkpoint of the armed formations, as well as installing benches inside the aforesaid shelter.

On the same day, inside the disengagement area, an SMM mini-UAV spotted for the first time a concertina wire east of the road and extending to at least about 300-400m east partially within a treeline, about 200m south of its northern edge.

On 10 November, the Mission continued to observe at least 19 workers from government-controlled areas sandblasting and welding the deck of the bridge as well as removing the abovementioned scaffolding

On 9 and 10 November, the SMM saw up to 15 members of the armed formations (wearing armbands with "JCCC" written on them) between the broken section of the bridge and the checkpoint of the armed formations.

Man injured by shelling in non-government-controlled Spartak

On 9 November, at the Donetsk Regional Trauma Hospital, the SMM saw a man (40 years old) with bandages on his left leg and right upper arm. He told the Mission that on the morning of 1 November he had been outside his house at Pryvokzalna Street in Spartak (non-government-controlled, 9km north of Donetsk) when he heard the sound of two explosions and fell to the

ground. On 2 November, medical staff at the aforesaid hospital told the SMM that the man had been admitted on 1 November with shrapnel wounds to his left leg and right shoulder due to shelling.

Withdrawal of weapons

The SMM continued to monitor the withdrawal of weapons in implementation of the Memorandum and the Package of Measures and its Addendum.

The Mission observed 21 weapons in violation of withdrawal lines in a non-government-controlled area of Luhansk region. It also observed weapons beyond withdrawal lines but outside of designated storage sites in government-controlled areas of Luhansk and Donetsk regions (for further details, see the tables below).

Weapons permanent storage sites

At a permanent storage site in a non-government-controlled area of Donetsk region 9 November

The SMM noted that eight tanks (five T-72 and three T-64) continued to be missing.

At a heavy weapons permanent storage site in a non-government-controlled area of Luhansk region

10 November

The SMM saw that all weapons were present.

Indications of military and military-type presence in the security zone⁶

The SMM observed military and military-type presence inside the security zone on both sides of the contact line in Luhansk region and in government-controlled areas of Donetsk region, including five armoured combat vehicles near a functioning school in Avdiivka (government-controlled, 17km north of Donetsk) (for further details, see the table below).

On 8 November, an SMM mini-UAV spotted a military excavator (EEOV-4421) and three members of the armed formations reinforcing a military-type position, as well as one of the members of the armed formations pointing a rifle towards the SMM mini-UAV flying 2km south of Khrystove (non-government-controlled, 18km north of Luhansk) (for previous observation in the area, see SMM Daily Report 9 November 2019).

On 9 November, in the north-eastern outskirts of Molodizhne (non-government-controlled, 63km west of Luhansk), the SMM saw six members of the armed formations cleaning existing trenches and covering them with tree branches 10m north of a road.

Anti-tank mines near Shchastia, Vesela Hora and Talakivka, as well as UXO near Lebedynske

On 8 November, about 2km north-east of Vesela Hora (non-government-controlled, 16km north of Luhansk), an SMM mini-UAV <u>again</u> spotted four anti-tank mines (TM-62), assessed

⁶ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

as belonging to the armed formations, laid across the western lane of road H-21 leading to the bridge in Shchastia (government-controlled, 20km north of Luhansk). Approximately 2km north-west and about 150m south-east of the bridge in Shchastia, the same UAV also again spotted 36 anti-tank mines (TM-62) laid across the same road assessed as belonging to the Ukrainian Armed Forces.

On 9 November, an SMM mini-UAV <u>again</u> spotted about 20 anti-tank mines in a field south of a local road about 2km north-west of Pikuzy (formerly Kominternove, 92km south of Donetsk), between the forward positions of the Ukrainian Armed Forces and those of the armed formations.

On the same day, in Staryi Aidar (government-controlled, 20km north-west of Luhansk), the SMM saw for the first time "Mines!" written in Russian in the middle of an asphalt road that leads to a bridge connecting Staryi Aidar with Shchastia which is used daily by civilians.

On 10 November, the SMM saw for the first time a piece of UXO, assessed as a high explosive incendiary projectile, lying in a field on the north-eastern outskirts of Lebedynske (government-controlled, 99km south of Donetsk).

Border areas outside government control

On 9 November, while at a border crossing point near Uspenka (73km south-east of Donetsk) for an hour, the SMM saw 13 cars (seven with Ukrainian, three with Russian Federation and one with Georgian licence plates, as well as two with "DPR" plates), five covered cargo trucks (two with Ukrainian and two with Russian Federation licence plates, as well as one with "DPR" plates), two buses with "DPR" plates and a pedestrian (a man in his thirties) entering Ukraine. It also saw 13 cars (five with Ukrainian, one with Russian Federation and six with Georgian licence plates, as well as one with "DPR" plates), five covered cargo trucks (two with Ukrainian and one with Russian Federation licence plates, as well as two "DPR" plates) and two buses with "DPR" plates exiting Ukraine.

On the same day, while at a border crossing point near Novoazovsk (102km south-east of Donetsk) for about 30 minutes, the SMM saw 12 cars (ten with Ukrainian licence plates and two with "DPR" plates) and two covered cargo trucks with "DPR" plates entering Ukraine. The SMM also saw 18 cars (15 with Ukrainian licence plates, as well as three with "DPR" plates) and seven covered cargo trucks (four with Ukrainian licence plates and three with "DPR" plates) exiting Ukraine.

SMM facilitation of operation of critical civilian infrastructure

On 9 and 10 November, the SMM monitored adherence to the ceasefire to facilitate the operation of the DFS.

Peaceful protest in Kyiv

On the evening of 9 November, in front of the Embassy of the Republic of Poland at 12 Yaroslaviv Val Street in Kyiv, the SMM observed a peaceful protest of about 200 people (mixed gender and ages) reportedly in response to media reports that an ATO veteran had been detained in Poland. The SMM saw about 30 police officers.

The Mission continued monitoring in Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Dnipro and Chernivtsi.

*Restrictions of the SMM's freedom of movement or other impediments to fulfilment of its mandate

The SMM's monitoring and freedom of movement are restricted by security hazards and threats, including risks posed by mines, UXO and other impediments — which vary from day to day. The SMM's mandate provides for safe and secure access throughout Ukraine. All signatories of the Package of Measures have agreed on the need for this safe and secure access, that restriction of the SMM's freedom of movement constitutes a violation, and on the need for rapid response to these violations. They have also agreed that the Joint Centre for Control and Co-ordination (JCCC) should contribute to such response and co-ordinate mine clearance. Nonetheless, the armed formations in parts of Donetsk and Luhansk regions frequently deny the SMM access to areas adjacent to Ukraine's border outside control of the Government (for example, see SMM Daily Report 26 October 2019). The SMM's operations in Donetsk and Luhansk regions remain restricted following the fatal incident of 23 April 2017 near Pryshyb; these restrictions continued to limit the Mission's observations.

Denial of access:

- On 9 November, at a checkpoint in Staromykhailivka (non-government-controlled, 15km west of Donetsk), a member of the armed formations denied the SMM passage, citing "safety and security reasons".
- On 9 November, at a checkpoint near Verkhnoshyrokivske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk), two members of the armed formations (one of them visibly armed) <u>again</u> denied the SMM passage, citing "operations in the area".
- On 9 November, at a checkpoint north of Novoazovsk (non-government-controlled, 102km south-east of Donetsk), two armed members of the armed formations again denied the SMM passage towards Siedove (non-government-controlled, 106km south of Donetsk), citing "operations in the area".

Regular restrictions related to disengagement areas and mines/UXO:

- The sides continued to deny the SMM full access to disengagement areas near Zolote and Petrivske, as well as the ability to travel certain roads previously identified as important for effective monitoring by the Mission and for civilians' movement, through failure to conduct comprehensive clearance of mines and UXO.

Other impediments:

On 10 November, on six occasions, an SMM mini-UAV experienced GPS signal interference, assessed as caused by probable jamming while flying over Bohdanivka (government-controlled, 41km south-west of Donetsk).⁷

⁷ The interference could have originated from anywhere within the radius of kilometres from the UAVs' position.

Table of weapons

Weapons in violation of the withdrawal lines

Date	No. of weapons	Type of weapon	Location	Source of observation						
	Non-government-controlled areas									
10/11/2019	21	Multiple launch rocket system (BM-21 <i>Grad</i> , 122mm)	Near Khrustalnyi (formerly Krasnyi Luch, 56km south-west of Luhansk).	Patrol						

Beyond withdrawal lines but outside of designated storage sites

Date	No. of weapons	Type of weapon	Location	Source of observation						
	Government-controlled areas									
08/11/2019	8	Towed howitzer (2A36 <i>Giatsint-B</i> , 152mm)	Rubizhne (84km north-west of Luhansk)	Mini-UAV						
	4	Surface-to-air missile system (9K33 <i>Osa</i>)	Kasianivka (81km south of Donetsk)	Mini-UAV						

Table of indications of military and military-type presence in the security zone⁸

Date	No.	Туре	Location	Source of observation	
		Government-con	ntrolled areas		
	1	Armoured combat vehicle	4km east of Talakivka (90km south of Donetsk)	Mini-UAV	
	1	Infantry fighting vehicles (BMP-2)	In Popasna (69km west of Luhansk)		
	1	Infantry fighting vehicles (BMP-1)	In Oleksandropillia (71km west of Luhansk)		
09/11/2019	1	Armoured personnel carrier (BTR-60)	Near Novobakhmutivka (28km north of Donetsk)		
	5	Armoured personnel carrier (two BTR-70, one BTR-80, one MT-LB and one undetermined)	Near a functioning school in Avdiivka (17km north of Donetsk)	Patrol	
	1	Infantry fighting vehicle (BMP-2)	,		
10/11/2019	1	Infantry fighting vehicle (BMP-1)	Oleksandropillia (71km west of Luhansk)		
10/11/2019	1	Armoured personnel carrier (MT-LB)	Lebedynske (99km south of Donetsk)		
		Non-government-o	controlled areas		
	3	Infantry fighting vehicles (BMP-1)	Near Vesela Hora (16km north of Luhansk)		
	1	Armoured combat vehicle	·		
08/11/2019	1	Member of the armed formations pointing rifle towards an SMM mini-UAV	2km south of Khrystove (18km north of	Mini-UAV	
	1	Three members of the armed formations and a military excavator (EEOV-4421) reinforcing a military-type position	Luhansk) (for previous observation in the area, see <u>SMM Daily Report 9 November 2019</u>).		

⁸ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

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Table of ceasefire violations as of 10 November 20199

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Avdiivka (government- controlled, 17km N of Donetsk)	3-4km SE	Recorded	1	Projectile	S to N (also recorded by both SMM cameras in Verkhnoshyroki vske and Avdiivka)	N/K	8-Nov, 20:38
	3-4km SE	Recorded	1	Muzzle flash		N/K	8-Nov, 20:38
	3-4km SE	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 20:38
	4-5km SSE	Recorded	2	Projectile	NNW to SSE (also recorded by both SMM cameras in Verkhnoshyroki vske and Avdiivka)	N/K	8-Nov, 21:31
SMM camera in	1-2km SE	Recorded	3	Projectile	ESE to WNW	N/K	8-Nov, 19:38
Chermalyk (government- controlled, 77km S of Donetsk)	2-4km S	Recorded	1	Projectile	WNW to ESE	N/K	8-Nov, 22:46
SMM camera at	2-4km SSW	Recorded	1	Explosion	Airburst	N/K	8-Nov, 18:46
Donetsk Filtration	300-800m S	Recorded	1	Projectile	W to E	N/K	8-Nov, 23:00
Station (15km N of	0.5-1km SSE	Recorded	2	Explosion	Undetermined	N/K	9-Nov, 01:10
Donetsk)	0.5-1km SSW	Recorded	2	Projectile	W to E	N/K	9-Nov, 01:10
	0.5-1km S	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 02:10
	1-2km SSW	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 03:13
SMM camera 1.5km	2-3km E	Recorded	1	Projectile	NNE to SSW	N/K	8-Nov, 19:34
NE of Hnutove	2-3km E	Recorded	2	Explosion	Impact	N/K	8-Nov, 19:34
(government-	2-3km E	Recorded	4	Explosion	Impact	N/K	8-Nov, 19:38
controlled, 90km S of	2-3km E	Recorded	1	Projectile	NNE to SSW	N/K	8-Nov, 19:47
Donetsk)	2-3km E	Recorded	1	Explosion	Impact	N/K	8-Nov, 19:47
	2-4km ESE	Recorded	1	Projectile	WSW to ENE	N/K	8-Nov, 23:21
	2-4km ESE	Recorded	1	Explosion	Outgoing	N/K	8-Nov, 23:31
	2-4km ESE	Recorded	1	Explosion	Outgoing	N/K	9-Nov, 03:34
	2-4km ESE	Recorded	1	Projectile	SSW to NNE	N/K	9-Nov, 03:34
	2-4km ESE	Recorded	1	Explosion	Impact	N/K	9-Nov, 03:34
SMM camera E of Lomakyne (government- controlled, 90km S of Donetsk)	2-3km ESE	Recorded	1	Explosion	Impact	N/K	8-Nov, 18:24
SMM camera at entry-	1-2km ENE	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 19:09
exit checkpoint in	2-4km ENE	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 21:53
Maiorsk (government- controlled, 45km NE of Donetsk)	2-4km ENE	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 22:33
SMM camera 1km	3-5km N	Recorded	5	Projectile	W to E	N/K	8-Nov, 16:44
SW of Shyrokyne	3-5km N	Recorded	2	Projectile	N to S	N/K	8-Nov, 16:44
(government-	3-5km N	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 16:44

⁹ 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, weaponstype, 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.

controlled, 100km S	3-5km N	Recorded	4	Projectile	W to E	N/K	8-Nov, 16:45
of Donetsk)	3-5km N	Recorded	20	Projectile	W to E	N/K	8-Nov, 16:52
	3-5km N	Recorded	16	Projectile	W to E	N/K	8-Nov, 16:53
	3-5km N	Recorded	1	Projectile	W to E	N/K	8-Nov, 16:54
	3-5km N	Recorded	2	Projectile	W to E	N/K	8-Nov, 16:50
	3-5km N	Recorded	1	Illumination flare	In vertical flight	N/K	8-Nov, 16:57
	3-5km N	Recorded	3	Projectile	W to E	N/K	8-Nov, 16:58
	3-5km NNW	Recorded	1	Illumination flare	In vertical flight	N/K	8-Nov, 16:58
	3-5km N	Recorded	16	Projectile	W to E	N/K	8-Nov, 16:59
	3-5km N	Recorded	2	Projectile	E to W	N/K	8-Nov, 16:59
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 16:59
	3-5km N	Recorded	7	Projectile	W to E	N/K	8-Nov, 17:0
	3-5km N	Recorded	6	Projectile	W to E	N/K	8-Nov, 17:0
	3-5km N	Recorded	3	Projectile	W to E	N/K	8-Nov, 17:1
	3-5km N	Recorded	2	Projectile	In vertical flight	N/K	8-Nov, 17:1
	3-5km N	Recorded	4	Projectile	In vertical flight	N/K	8-Nov, 17:12
	3-5km N	Recorded	5	Muzzle flash		N/K	8-Nov, 17:12
	3-5km N	Recorded	10	Projectile	W to E	N/K	8-Nov, 17:1
	3-5km N	Recorded	5	Explosion	Undetermined	N/K	8-Nov, 17:1
	3-5km N	Recorded	9	Projectile	W to E	N/K	8-Nov, 17:1
	3-5km N	Recorded	5	Projectile	W to E	N/K	8-Nov, 17:1
	3-5km N	Recorded	3	Projectile	W to E	N/K	8-Nov, 17:2
	3-5km N	Recorded	1	Explosion	Impact	N/K	8-Nov, 17:3
	3-5km N	Recorded	4	Projectile	E to W	N/K	8-Nov, 17:3
	3-5km N	Recorded	1	Explosion	Impact	N/K	8-Nov, 17:3
	3-5km N	Recorded	1	Projectile	E to W	N/K	8-Nov, 17:3
	3-5km N	Recorded	5	Projectile	E to W	N/K	8-Nov, 17.3
	3-5km N	Recorded	11	Projectile	W to E	N/K	
		Recorded	5	-	E to W	N/K	8-Nov, 17:4
	3-5km N		_	Projectile		N/K N/K	8-Nov, 17:4
	3-5km N	Recorded	1	Projectile	In vertical flight	N/K N/K	8-Nov, 17:4
	3-5km N	Recorded	1	Explosion	Undetermined	N/K N/K	8-Nov, 17:4
	3-5km N	Recorded	5	Projectile	W to E		8-Nov, 17:4
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 17:4
	3-5km N	Recorded	11	Projectile	W to E	N/K	8-Nov, 17:4
	3-5km N	Recorded	1	Projectile	In vertical flight	N/K	8-Nov, 17:4
	3-5km N	Recorded	7	Projectile	W to E	N/K	8-Nov, 17:4
	3-5km N	Recorded	23	Projectile	E to W	N/K	8-Nov, 17:4
	3-5km NNE	Recorded	13	Explosion	Undetermined	N/K	8-Nov, 17:4
	3-5km N	Recorded	13	Projectile	W to E	N/K	8-Nov, 17:4
	3-5km N	Recorded	2	Projectile	In vertical flight	N/K	8-Nov, 17:4
	3-5km N	Recorded	2	Projectile	E to W	N/K	8-Nov, 17:4
	3-5km N	Recorded	5	Projectile	W to E	N/K	8-Nov, 17:5
	3-5km N	Recorded	1	Burst	In vertical flight	N/K	8-Nov, 18:0
	3-5km N	Recorded	7	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	1	Explosion	Airburst	N/K	8-Nov, 18:1
	3-5km N	Recorded	2	Explosion	Impact	N/K	8-Nov, 18:1
	3-5km N	Recorded	1	Muzzle flash		N/K	8-Nov, 18:1
	3-5km N	Recorded	5	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	2	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	1	Projectile	SSE to NNW	N/K	8-Nov, 18:1
	3-5km NNE	Recorded	3	Explosion	Undetermined	N/K	8-Nov, 18:1
	3-5km N	Recorded	5	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	2	Muzzle flash		N/K	8-Nov, 18:1
	3-5km N	Recorded	11	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	3	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	2	Projectile	SE to NW	N/K	8-Nov, 18:1
	3-5km N	Recorded	9	Projectile	E to W	N/K	8-Nov, 18:1
	3-5km N	Recorded	2	Muzzle flash		N/K	8-Nov, 18:1
	3-5km N	Recorded	9	Projectile	E to W	N/K	8-Nov, 18:1

3-5km N	Recorded	1	Explosion		N/K	8-Nov, 18:24
3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 00:45
3-5km N	Recorded	2	Projectile	WSW to ENE	N/K	9-Nov, 00:49
3-5km N	Recorded	1	Muzzle flash		N/K	9-Nov, 01:00
3-5km N	Recorded	1	Projectile	WSW to ENE (subsequent to previous event)	N/K	9-Nov, 01:00
3-5km N	Recorded	1	Explosion	Airburst	N/K	9-Nov, 01:00
3-5km N	Recorded	2	Projectile	WSW to ENE	N/K	9-Nov, 01:04
6-8km N	Recorded	1	Projectile	S to N (also recorded by the SMM camera in Lomakyne)	N/K	9-Nov, 01:09
3-5km N	Recorded	3	Projectile	W to E	N/K	9-Nov, 01:09
3-5km N	Recorded	4	Projectile	WSW to ENE	N/K	9-Nov, 01:10
3-5km N	Recorded	5	Projectile	WSW to ENE	N/K	9-Nov, 01:11
3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 01:12
3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 01:15
3-5km N	Recorded	3	Projectile	W to E	N/K	9-Nov, 01:16
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:16
3-5km N	Recorded	2	Projectile	W to E	N/K	9-Nov, 01:17
3-5km N	Recorded	18	Projectile	W to E	N/K	9-Nov, 01:18
3-5km N	Recorded	12	Projectile	W to E	N/K	9-Nov, 01:19
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:26
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:27
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:28
3-5km N	Recorded	3	Projectile	W to E	N/K	9-Nov, 01:29
3-5km N	Recorded	5	Projectile	SW to NE	N/K	9-Nov, 01:31
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 01:32
3-5km N	Recorded	1	Projectile	ESE to WNW	N/K	9-Nov, 01:32
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 01:35
3-5km N	Recorded	2	Projectile	WSW to ENE	N/K	9-Nov, 01:36
3-5km NNE	Recorded	2	Projectile	W to E	N/K	9-Nov, 01:38
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 01:40
3-5km N	Recorded	5	Projectile	WSW to ENE	N/K	9-Nov, 01:45
3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 01:45
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 01:47
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:51
3-5km N	Recorded	1		W to E	N/K	9-Nov, 01:52
3-5km N	Recorded	2	Projectile	W to E	N/K	
			Projectile			9-Nov, 01:53
3-5km N	Recorded	2	Projectile	W to E	N/K	9-Nov, 01:54
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:56
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 01:57
3-5km N	Recorded	4	Projectile	W to E	N/K	9-Nov, 02:01
3-5km N	Recorded	3	Projectile	W to E	N/K	9-Nov, 02:02
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 02:05
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 02:06
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 02:12
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 02:16
3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 02:20
3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 02:26
3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 02:33
3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 02:35
3-5km N	Recorded	1	Projectile	S to N	N/K	9-Nov, 02:35
3-5km N	Recorded	2	Projectile	SW to NE	N/K	9-Nov, 02:37
3-5km N	Recorded	2	Projectile	SW to NE	N/K	9-Nov, 02:38
3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 02:41
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 02:42
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 02:43
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 02:48
3-5km N	Recorded	2	Explosion	Undetermined	N/K	9-Nov, 02:48

	3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 02:51
	3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 02:54
	3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	9-Nov, 02:57
About 1km N of Avdiivka (government- controlled, 17km N of Donetsk)	1-2km ESE	Heard	2	Shot		Small arms	9-Nov, 11:52
Krasnohorivka (government-controlled, 21km W of Donetsk)	4-6km SW	Heard	1	Explosion	Undetermined	N/K	9-Nov, 10:46
About 500m NW of Petrivske (non- government- controlled, 41km S of Donetsk)	6-8km NW	Heard	20	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	9-Nov, 13:30- 13:40
	6-8km NW	Heard	1	Burst	Assessed as outside the disengagement area	HMG	9-Nov, 13:30
Donetsk city centre (non-government- controlled)	8-10km NW	Heard	14	Explosion	Undetermined	N/K	9-Nov, 15:55- 16:05
About 2km SW of Pyshchevyk	2-3km NE	Heard	11	Shot		Small arms	9-Nov, 09:34- 09:47
(government- controlled, 84km S of Donetsk)	3-4km SSE	Heard	7	Explosion	Undetermined	N/K	9-Nov, 09:34- 09:47
,	3-4km SSE	Heard	1	Shot		Small arms	9-Nov, 09:34- 09:47
	2-4km SSE	Heard	10	Explosion	Undetermined	N/K	9-Nov, 13:10- 13:15
	2-4km SE	Heard	27	Explosion	Undetermined	N/K	9-Nov, 12:48- 12:55
	2-4km SE	Heard	Unc ount able	Burst		Small arms	9-Nov, 12:48- 12:55
E part of Talakivka (government-	3-5km ESE	Heard	3	Burst		HMG	9-Nov, 11:22- 11:26
controlled, 90km south of Donetsk)	3-5km ESE	Heard	2	Explosion	Undetermined	N/K	9-Nov, 11:22- 11:26
	3-5km ESE	Heard	5	Explosion	Undetermined	N/K	9-Nov, 11:40- 11:46
	3km ESE	Heard	19	Shot		Small arms	9-Nov, 11:40- 11:46
	3-5km ESE	Heard	21	Explosion	Undetermined	N/K	9-Nov, 11:53- 11:57
	3-5km ESE	Heard	80	Burst		Small arms	9-Nov, 11:57- 12:08
	3-5km ESE	Heard	21	Explosion	Undetermined	N/K	9-Nov, 11:57- 12:08
	3-5km ESE	Heard	12	Shot		AGL	9-Nov, 11:57- 12:08
About 3km SE of Lomakyne	4-6km E	Heard	23	Explosion	Undetermined	N/K	9-Nov, 11:56- 12:18
(government- controlled, 93km S of	4-6km E	Heard		Shots and bursts	Uncountable	N/K	9-Nov, 11:56- 12:18
Donetsk)	4-6km E	Heard	3	Explosion	Undetermined	N/K	9-Nov, 12:18- 12:21
	2-5km ENE	Heard	44	Explosion	Undetermined	N/K	9-Nov, 12:49- 13:00
	2-5km ENE	Heard	11	Shot		N/K	9-Nov, 12:49- 13:00

	2-5km ENE	Heard	Unc ount able	Shots and bursts		Small arms	9-Nov, 12:49- 13:00
	3-5km ENE	Heard	3	Explosion	Outgoing	N/K	9-Nov, 13:06- 13:13
	3-5km ENE	Heard	3	Explosion	Impact	N/K	9-Nov, 13:06- 13:13
	3-5km ENE	Heard	15	Burst		Small arms	9-Nov, 13:06- 13:13
	2-5km ENE	Heard	2	Explosion	Outgoing	N/K	9-Nov, 13:18- 13:21
	2-5km ENE	Heard	2	Explosion	Impact	N/K	9-Nov, 13:18- 13:21
About 1.5km NE of Bohdanivka (government- controlled, 41km SW of Donetsk)	3-5km NNW	Heard	10	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	9-Nov, 13:13- 13:41
Svitlodarsk (government-	4-5km S	Heard	8	Burst		HMG	8-Nov, 23:00- 23:03
controlled, 57km NE	4-5km S	Heard	6	Burst		HMG	8-Nov, 23:44
of Donetsk)	4-5km SW	Heard	6	Explosion	Undetermined	N/K	9-Nov, 15:50
	4-5km SW	Heard	45	Burst		HMG	9-Nov, 15:52- 16:00
	4-5km SE	Heard	2	Explosion	Undetermined	N/K	9-Nov, 16:02
	4-5km SW	Heard	4	Explosion	Undetermined	N/K	9-Nov, 16:04
	4-5km SW	Heard	3	Explosion	Undetermined	N/K	9-Nov, 16:05
	4-5km SW	Heard	1	Explosion	Undetermined	N/K	9-Nov, 16:10
	4-5km SW	Heard	23	Burst		HMG	9-Nov, 16:16- 16:21
Horlivka (non-	6-8km SW	Heard	1	Explosion	Undetermined	N/K	8-Nov, 22:27
government- controlled, 39km NE	4-6km W	Heard	10	Shot	30 mm cannon	IFV (type N/K)	8-Nov, 22:40- 22:45
of Donetsk)	4-6km W	Heard	16	Burst		HMG	8-Nov, 22:40- 22:45
About 6km NW of	3-5km NW	Heard	1	Explosion	Undetermined	N/K	9-Nov, 13:06
Horlivka (non- government controlled, 39km NE of Donetsk)	2-3km NW	Heard	1	Shot		Small arms	9-Nov, 13:28
SMM camera in	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 21:46
Kriakivka	2-4km SSW	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 21:50
(government-	2-4km SSW	Recorded	2	Projectile	NW to SE	N/K	8-Nov, 21:52
controlled, 38km NW	2-4km SSW	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 21:55
of Luhansk)	2-4km SSW	Recorded	2	Projectile	NNW to SSE	N/K	8-Nov, 21:56
	2-4km SSW	Recorded	1	Explosion	Impact	N/K	8-Nov, 21:56
	2-4km SSW	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 21:57
	2-4km SSW	Recorded	2	Projectile	NW to SE	N/K	8-Nov, 21:58
	2-4km SSW	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 22:00
	2-4km SSW	Recorded	4	Projectile	NW to SE	N/K	8-Nov, 22:02
	2-4km SSW	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 22:03
	2-4km SSW	Recorded	1	Projectile	WSW to ENE	N/K	8-Nov, 22:05
	2-4km SSW	Recorded	1	Projectile	NW to SE	N/K	8-Nov, 22:05
	2-4km SSW	Recorded	7	Projectile	NW to SE	N/K	8-Nov, 22:06
	2-4km SSW	Recorded	3	Projectile	NW to SE	N/K	8-Nov, 22:07
	2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	8-Nov, 22:07
	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 22:07
	2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	8-Nov, 22:08
	2-4km SSW	Recorded	4	Explosion	Undetermined	N/K	8-Nov, 22:09
	2-4km SSW	Recorded	9	Projectile	ESE to WNW	N/K	8-Nov, 22:11
	2-4km SSW	Recorded	4	Projectile	ESE to WNW	N/K	8-Nov, 22:13
	2-4km SSW	Recorded	4	Projectile	NW to SE	N/K	8-Nov, 22:13

	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 22:13
	2-4km SSW	Recorded	3	Projectile	WNW to ESE	N/K	8-Nov, 22:14
	2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	8-Nov, 22:15
	2-4km SSW	Recorded	2	Projectile	WNW to ESE	N/K	8-Nov, 22:15
	2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	8-Nov, 22:16
	2-4km SSW	Recorded	2	Projectile	ESE to WNW	N/K	8-Nov, 22:17
	2-4km SSW	Recorded	2	Projectile	ESE to WNW	N/K	8-Nov, 22:18
	2-4km SSW	Recorded	2	Projectile	WNW to ESE	N/K	8-Nov, 22:18
	2-4km SSW	Recorded	5	Projectile	WNW to ESE	N/K	8-Nov, 22:19
	2-4km SSW	Recorded	1	Projectile	WNW to ESE	N/K	8-Nov, 22:20
	2-4km SSW	Recorded	2	Projectile	WNW to ESE	N/K	8-Nov, 22:23
	2-4km S	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 22:23
	2-4km SSW	Recorded	1	Projectile	WNW to ESE	N/K	8-Nov, 22:24
	2-4km SSW	Recorded	3	Projectile	WNW to ESE	N/K	8-Nov, 22:25
	2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	8-Nov, 22:27
			_	-			
	2-4km SSW	Recorded	1	Projectile	WNW to ESE	N/K	8-Nov, 22:29
	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 22:30
	2-4km SSW	Recorded	1	Projectile	ESE to WNW	N/K	8-Nov, 22:30
	2-4km SSW	Recorded	1	Projectile	NNE to SSW	N/K	8-Nov, 22:42
	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	8-Nov, 22:42
	2-4km SSW	Recorded	2	Projectile	NNE to SSW	N/K	8-Nov, 22:43
	2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	8-Nov, 22:44
	2-4km SSW	Recorded	1	Projectile	NNE to SSW	N/K	8-Nov, 22:44
	2-4km SSW	Recorded	7	Projectile	WNW to ESE	N/K	8-Nov, 22:46
	2-4km SSW	Recorded	2	Projectile	WNW to ESE	N/K	8-Nov, 22:54
	2-4km SSW	Recorded	1	Projectile	WNW to ESE	N/K	8-Nov, 22:56
	2-4km SSW	Recorded	2	Projectile	WNW to ESE	N/K	8-Nov, 23:00
	2-4km SSW	Recorded	6	Projectile	WNW to ESE	N/K	8-Nov, 23:01
Zolote (government- controlled, 60km W of Luhansk)					(assessed as outside the Zolote disengagement area)		
	3-5km NNE	Recorded	1	Explosion	Assessed as outside the Zolote disengagement area	N/K	8-Nov, 21:39
4km SW of Almazna (non-government- controlled, 55km W of Luhansk)	6-8km SW	Heard	1	Explosion	Undetermined	N/K	9-Nov, 09:35 09:36
SMM camera in	2-3km SE	Recorded	1	Explosion	Airburst	N/K	9-Nov, 17:23
Chermalyk	2-3km SE	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 17:43
(government- controlled, 77km S of Donetsk)	2-3km SE	Recorded	1	Explosion	Airburst, subsequent to previous event	N/K	9-Nov, 17:43
	2-3km SSE	Recorded	1	Projectile	NE to SW	N/K	9-Nov, 18:22
	2-3km SSE	Recorded	1	Projectile	NE to SW	N/K	9-Nov, 18:35
	2-4km SSE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:43
	2-4km SSE	Recorded	1	Projectile	ENE to WSW	N/K	9-Nov, 20:57
	4-5km SSE	Recorded	1	explosion	Undetermined	N/K	9-Nov, 21:23
	4-5km SSE	Recorded	1	Projectile	S to N	N/K	9-Nov, 21:23
	6-8km SSE	Recorded	1	Explosion	Undetermined (also recorded by the SMM camera in Pyshchevyk)	N/K	9-Nov, 21:34
	6-8km SSE	Recorded	1	Explosion	Undetermined (also recorded by the SMM	N/K	9-Nov, 21:47

					camera in Pyshchevyk)		
	6-8km SSE	Recorded	2	Explosion	Undetermined(a lso recorded by the SMM camera in Pyshchevyk)	N/K	9-Nov, 21:51
	4-5km SE	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 22:50
	2-4km SE	Recorded	1	Projectile	NE to SW	N/K	9-Nov, 23:39
	2-4km SE	Recorded	1	Projectile	NE to SW	N/K	9-Nov, 23:40
	2-4km SE	Recorded	1	Projectile	NE to SW	N/K	10-Nov, 01:16
	1-3km SSE	Recorded	1	Projectile	WNW to ESE	N/K	10-Nov, 16:55
	1-3km SE	Recorded	16	Projectile	NNE to SSW	N/K	10-Nov, 17:31
SMM camera at	800m SSW	Recorded	3	Projectile	WNW to ESE	N/K	9-Nov, 21:33
Donetsk Filtration	300-800m S	Recorded	1	Projectile	NNE to SSW	N/K	10-Nov, 00:56
Station (15km N of	0.5-1km S	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 01:54
Donetsk)	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 02:14
	0.5-1km S	Recorded	1	Explosion	Outgoing	N/K	10-Nov, 02:26
	0.5-1km S	Recorded	1	Projectile	NW to SE	N/K	10-Nov, 02:26
	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 02:34
	0.5-1km SSE 0.5-1km SSW	Recorded	3	Projectile	NNW to SSE	N/K	10-Nov, 02:41
	0.5-1km SSE	Recorded	2	Explosion	Undetermined	N/K	10-Nov, 02:41
	0.5-1km S	Recorded	2	Explosion	Undetermined	N/K	
	0.5-1km SSE	Recorded	_			N/K	10-Nov, 03:59
		Recorded	3	Explosion	Undetermined	N/K N/K	10-Nov, 03:59
	0.5-1km S		1	Projectile	W to E		10-Nov, 03:59
	0.5-1km S	Recorded	1	Explosion	Outgoing	N/K	10-Nov, 03:59
	0.8-1.5km SSW	Recorded	4	Projectile	WNW to ESE	N/K	10-Nov, 04:27
	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 05:17
	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 05:19
C3 63 6 1 51	1-2km SSW	Recorded	1	Explosion		N/K	10-Nov, 05:24
SMM camera 1.5km	3-5km ESE	Recorded	1	Muzzle flash	OTT NE	N/K	10-Nov, 00:46
NE of Hnutove	3-5km ESE	Recorded	1	Projectile	SW to NE	N/K	10-Nov, 00:46
(government- controlled, 90km S of Donetsk)	3-5km ESE	Recorded	1	Explosion	Impact	N/K	10-Nov, 00:46
SMM camera in	2-4km E	Recorded	5	Projectile	NW to SE	N/K	9-Nov, 22:27
Hranitne (government-controlled, 60km S of Donetsk)	2-4km E	Recorded	1	Projectile	NW to SE	N/K	9-Nov, 22:31
SMM camera E of	2-4km ENE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 22:27
Lomakyne	2-4km ENE	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 22:27
(government- controlled, 90km S of Donetsk)	2-4km E	Recorded	1	Muzzle flash	Also recorded by the SMM camera in Shyrokyne	N/K	9-Nov, 22:41
	2-4km E	Recorded	1	Explosion	Undetermined, Also recorded by Shyrokyne camera	N/K	9-Nov, 22:41
	2-4km E	Recorded	1	Explosion	Undetermined, Also recorded by the SMM camera in Shyrokyne	N/K	9-Nov, 22:42
	2-4km E	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 22:42
SMM camera at entry-	2-4km ENE	Recorded	2	Projectile	N to S	N/K	9-Nov, 21:55
exit checkpoint in	2-4km ENE	Recorded	1	Projectile	NNW to SSE	N/K	9-Nov, 22:18
Maiorsk (government-controlled, 45km NE	2-4km ENE	Recorded	1	Illumination flare	NE to SW	N/K	9-Nov, 22:21
of Donetsk)	2-4km ENE	Recorded	1	Projectile	NNW to SSE	N/K	9-Nov, 23:33
	3-5km ENE	Recorded	1	Projectile	NW to SE	N/K	10-Nov, 03:08
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	10-Nov, 03:32
	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 20:52

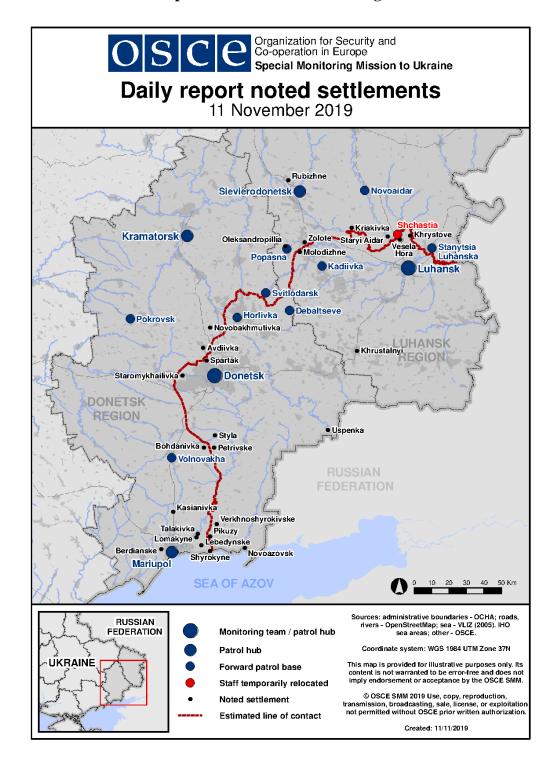
SMM camera at entry-	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 21:12
exit checkpoint in Marinka (government-	2-4km NNE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 21:18
controlled, 23km SW of Donetsk)							
SMM camera at entry-	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 20:17
exit checkpoint in	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 20:29
Pyshchevyk	3-5km ENE	Recorded	2	Explosion	Undetermined	N/K	9-Nov, 20:31
government-	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 20:36
controlled, 84km S of	3-5km ESE	Recorded	4	Projectile	SW to NE	N/K	9-Nov, 20:36
Donetsk)	3-5km ESE	Recorded	1	Projectile	N to S	N/K	9-Nov, 20:36
	3-5km ESE	Recorded	10	Projectile	SW to NE	N/K	9-Nov, 20:37
	3-5km ENE	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 20:37
	3-5km ESE	Recorded	3	Projectile	SW to NE	N/K	9-Nov, 20:38
	3-5km ESE	Recorded	2	Projectile	SW to NE	N/K	9-Nov, 20:44
	3-5km ENE	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 21:00
	3-5km ENE	Recorded	1	Explosion	Impact	N/K	9-Nov, 21:00
	3-5km ENE	Recorded	2	Projectile	W to E	N/K	9-Nov, 21:0
	3-5km ENE	Recorded	2	Explosion	Undetermined	N/K	9-Nov, 21:13
	3-5km E	Recorded	2	Projectile	N to S	N/K	9-Nov, 21:34
	3-5km ENE	Recorded	2	explosion	Undetermined	N/K	9-Nov, 21:5
	3-5km ESE	Recorded	8	Projectile	NNW to SSE	N/K	9-Nov, 23:09
SMM camera 1km	3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 17:3
SW of Shyrokyne	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 17:3
(government-	3-5km N	Recorded	2	Projectile	E to W	N/K	9-Nov, 17:30
controlled, 100km S	3-5km N	Recorded	1	Projectile	W to E	N/K	9-Nov, 17:43
of Donetsk)	3-5km N	Recorded	1	Explosion	Airburst, subsequent to previous event	N/K	9-Nov, 17:4.
	3-5km N	Recorded	8	Projectile	E to W	N/K	9-Nov, 18:42
	3-5km NNE	Recorded	2	Muzzle flash	E to W	N/K	9-Nov, 18:42
	3-5km N	Recorded	5	Projectile	E to W	N/K	9-Nov, 18:4:
	3-5km N	Recorded	9	Projectile	E to W	N/K	9-Nov, 18:44
	3-5km N	Recorded	3	Projectile	E to W	N/K	9-Nov, 18:4:
	3-5km N	Recorded	2	Projectile	E to W	N/K	
	3-5km N	Recorded	4	Explosion	Undetermined	N/K	9-Nov, 18:40 9-Nov, 18:54
		Recorded	7	Explosion	Undetermined	N/K	
	3-5km N	Recorded	1		W to E	N/K	9-Nov, 18:55
	3-5km N		_	Projectile			9-Nov, 18:55
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 18:58
	3-5km NNE	Recorded	1	Projectile	W to E	N/K	9-Nov, 19:07
	3-5km N	Recorded	3	Projectile	E to W	N/K	9-Nov, 19:1
	3-5km N	Recorded	29	Projectile	E to W	N/K	9-Nov, 19:14
	3-5km N	Recorded	9	Projectile	E to W	N/K	9-Nov, 19:15
	3-5km N	Recorded	2	Projectile	E to W	N/K	9-Nov, 19:10
	3-5km N	Recorded	9	Projectile	W to E	N/K	9-Nov, 19:1
	3-5km N	Recorded	15	Projectile	E to W	N/K	9-Nov, 19:17
	3-5km N	Recorded	3	Explosion	Undetermined	N/K	9-Nov, 19:1
	3-5km N	Recorded	9	Projectile	W to E	N/K	9-Nov, 19:19
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:19
	3-5km N	Recorded	1	Projectile	SSW to NNE	N/K	9-Nov, 19:22
	3-5km N	Recorded	1	Muzzle flash	arr. 275	N/K	9-Nov, 19:22
	3-5km N	Recorded	1	Projectile	SW to NE (subsequent to previous event)	N/K	9-Nov, 19:2
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:29
	3-5km NNE	Recorded	3	Projectile	W to E	N/K	9-Nov, 19:3
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:43
	3-5km N	Recorded	2	Explosion	Undetermined	N/K	9-Nov, 19:4
	3-5km N	Recorded	4	Projectile	W to E	N/K	9-Nov, 19:4
	3-5km N	Recorded	1	Projectile	E to W	N/K	9-Nov, 19:4
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:45
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 19:47

	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:47
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 19:52
	6-8km N	Recorded	1	Explosion	Undetermined	N/K	9-Nov, 20:24
	6-8km NNE	Recorded	2	Explosion	Undetermined	N/K	9-Nov, 20:25
	3-5km NNE	Recorded	16	Projectile	W to E	N/K	9-Nov, 20:31
	3-5km NNE	Recorded	3	Projectile	W to E	N/K	9-Nov, 20:33
	3-5km NNE	Recorded	1	Projectile	W to E	N/K	9-Nov, 20:47
	3-5km NNE	Recorded	3	Projectile	W to E	N/K	9-Nov, 21:14
	2-4km E	Recorded	1	Projectile	SW to NE	N/K	9-Nov, 22:41
	3-5km N	Recorded	7	Explosion	Undetermined	N/K	10-Nov, 16:5
	3-5km N	Recorded	7	Explosion	Undetermined	N/K	10-Nov, 16:5
					W to E	N/K	
	3-5km N	Recorded	2	Projectile			10-Nov, 17:0
	3-5km N	Recorded	2	Explosion	Undetermined	N/K	10-Nov, 17:0
	3-5km N	Recorded	2	Explosion	Undetermined	N/K	10-Nov, 17:1
	3-5km N	Recorded	7	Explosion	Undetermined	N/K	10-Nov, 17:1
	3-5km NNE	Recorded	2	Projectile	W to E	N/K	10-Nov, 17:1
	3-5km N	Recorded	4	Projectile	W to E	N/K	10-Nov, 17:2
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 17:2
	3-5km N	Recorded	4	Projectile	W to E	N/K	10-Nov, 17:2
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 17:2
	3-5km N	Recorded	2	Projectile	W to E	N/K	10-Nov, 17:3
	3-5km N	Recorded	3	Projectile	SW to NE	N/K	10-Nov, 17:3
	3-5km N	Recorded	15	Projectile	W to E	N/K	10-Nov, 17:3
	3-5km N	Recorded	10	Projectile	E to W	N/K	10-Nov, 17:3
	3-5km N	Recorded	2	Projectile	W to E	N/K	10-Nov, 17:3
	3-5km N	Recorded	3	Projectile	W to E	N/K	10-Nov, 17:4
	3-5km N	Recorded	1	Projectile	Undetermined	N/K	10-Nov, 17:4
	3-5km N	Recorded	3	Projectile	W to E	N/K	10-Nov, 17:4
	3-5km N	Recorded	1	Projectile	SW to NE	N/K	10-Nov, 17:4
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	10-Nov, 17:4
	3-5km N	Recorded	2	Projectile	W to E	N/K	
		Recorded			Undetermined	N/K	10-Nov, 17:4
	3-5km N		1	Explosion			10-Nov, 17:4
	3-5km N	Recorded	2	Projectile	W to E	N/K	10-Nov, 17:5
	3-5km N	Recorded	3	Projectile	W to E	N/K	10-Nov, 17:5
	3-5km N	Recorded	8	Projectile	SW to NE	N/K	10-Nov, 17:5
	3-5km N	Recorded	6	Projectile	W to E	N/K	10-Nov, 17:5
About 1km NW of the	2-3km SW	Heard	1	Explosion	Undetermined	N/K	10-Nov, 12:4
railway station in Yasynuvata (non- government- controlled, 16km NE of Donetsk)	2-3km SW	Heard	1	Explosion	Undetermined	N/K	10-Nov, 13:2
About 2km E of Avdiivka (government- controlled, 17km N of Donetsk)	1-2km E	Heard	2	Shot		Small arms	10-Nov, 11:3
W edge of Petrivske (non-government- controlled, 41km S of Donetsk)	1km SSW	Heard	6	Shot	Assessed as inside the disengagement area	Small arms	10-Nov, 08:5
About 2km N of Petrivske (non- government- controlled, 41km S of Donetsk)	1-2km SW	Heard	10	Shot	Unable to assess whether inside or outside the disengagement area	Small arms	10-Nov, 12:0
	3-5km W	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	10-Nov, 12:4
	1-2km SSE	Heard	1	Shot	Assessed as	Small	10-Nov, 14:0
					outside the	arms	, , , , ,

					disengagement area		
About 2km E of Bohdanivka (government- controlled, 41km SW of Donetsk)	2-3km SE	Heard	6	Shot	Assessed as inside the Petrivske disengagement area	Small arms	10-Nov, 07:57
E edge of Lebedynske (government- controlled, 99km S of Donetsk)	2-3km NE	Heard	3	Shot		Small arms	10-Nov, 10:03
	1-2km E	Heard	6	Shot		Small arms	10-Nov, 10:11
	1-2km E	Heard	1	Shot		Small arms	10-Nov, 10:17
	1-2km SE	Heard	1	Shot		Small arms	10-Nov, 10:36
Berdianske (government- controlled, 103km S of Donetsk)	1-2km ENE	Heard	60	Burst		HMG	10-Nov, 11:08-11:13
	2km NE	Heard	3	Shot		IFV (BMP-2, 30mm)	10-Nov, 11:18
	1-2km ESE	Heard	70	Shot		Small arms	10-Nov, 11:23-11:26
	600-800m ENE	Heard	25	Burst		HMG	10-Nov, 11:28-11:33
	1-2km ENE	Heard	65	Shot		Small arms	10-Nov, 11:45-11:51
	1-2km NE	Heard	2	Shot		Small arms	10-Nov, 11:58
Orlivske (government- controlled, 82km S of Donetsk)	6-8km SE	Heard	2	Explosion	Undetermined	N/K	10-Nov, 13:27
Verkhnotoretske (government- controlled, 23km NE of Donetsk)	3-4km S	Heard	1	Explosion	Undetermined	N/K	10-Nov, 11:47
Novobakhmutivka (government- controlled, 28km N of Donetsk)	4-5km NE	Heard	5	Explosion	Undetermined	N/K	10-Nov, 13:30-13:34
Svitlodarsk	3-4km SE	Heard	3	Burst		HMG	10-Nov, 15:10
(government-	4-5km SE	Heard	2	Explosion	Undetermined	N/K	10-Nov, 16:12
controlled, 57km NE	2-3km SE	Heard	1	Explosion	Undetermined	N/K	10-Nov, 16:22
of Donetsk)	4-5km SE	Heard	2	Explosion	Undetermined	N/K	10-Nov, 16:30
N edge of Popasna (government- controlled, 69km W of Luhansk)	5-10km SE	Heard	45	Explosion	Undetermined (assessed as outside the Zolote disengagement area)	N/K	9-Nov, 21:30- 22:30
	5-10km SE	Heard	25	Burst	Assessed as outside the Zolote disengagement area	HMG	9-Nov, 21:30- 22:30
	5-10km SE	Heard	43	Burst	Assessed as outside the Zolote disengagement area	Small arms	9-Nov, 21:30- 22:30
	5-10km SE	Heard	35	Shot	Assessed as outside the Zolote disengagement area	Small arms	9-Nov, 21:30- 22:30

7-10km S	Heard	6	Explosion	Undetermined	N/K	10-Nov,
						16:20-16:25

Map of Donetsk and Luhansk regions¹⁰



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: a forward patrol base from which SMM staff has temporarily relocated based on recommendations of security experts from participating States as well as SMM security considerations. The SMM uses the premises during daylight hours and patrols in this settlement during daylight hours, as well).