

Daily Report 261/2019

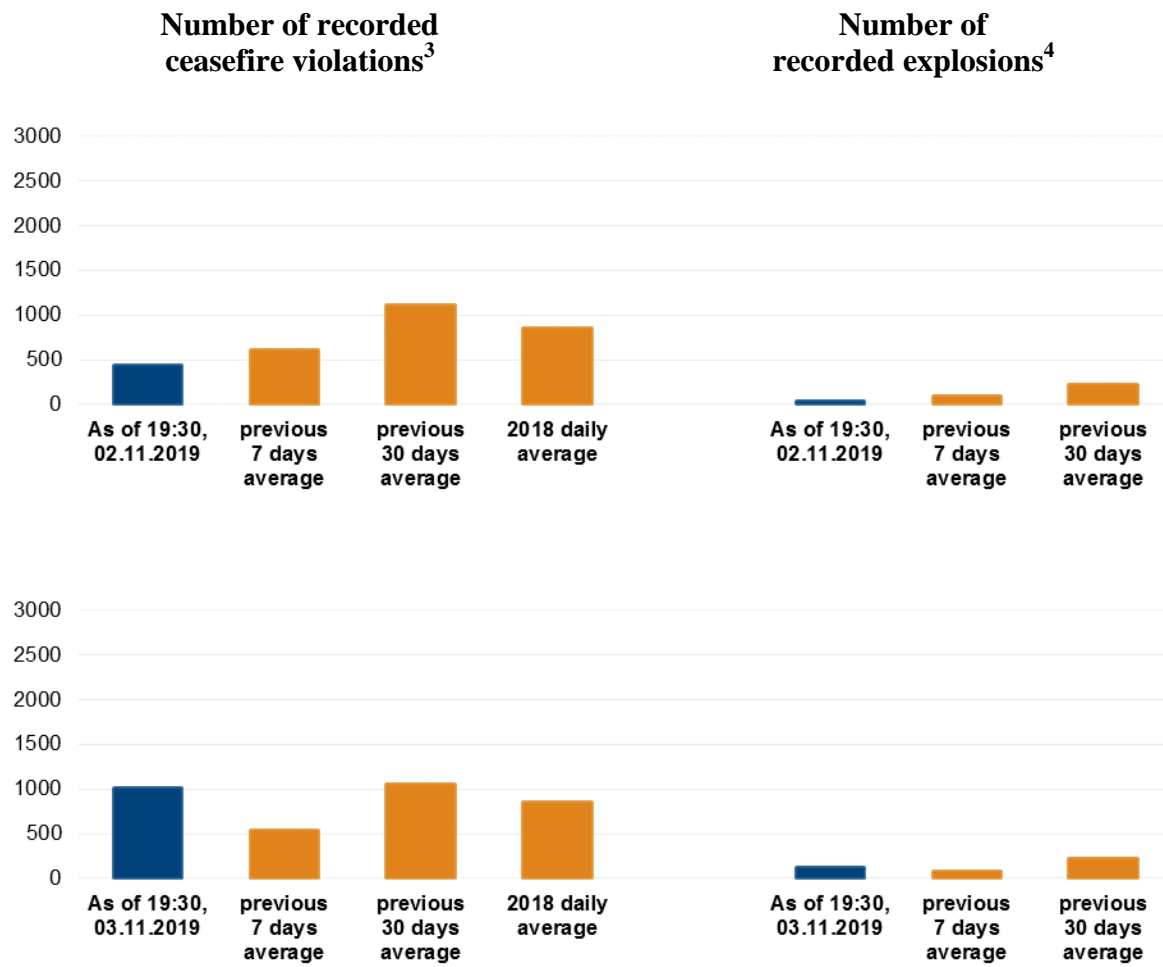
4 November 2019¹

Summary

- Compared with the previous reporting period, between the evenings of 1 and 2 November, the SMM recorded fewer ceasefire violations in Donetsk region and a similar number of ceasefire violations in Luhansk region.
- Between the evenings of 2 and 3 November, the Mission recorded more ceasefire violations in both Donetsk and Luhansk regions, compared with the previous 24 hours.
- The SMM saw damage to a house in non-government-controlled Yasynuvata.
- Inside the Stanytsia Luhanska disengagement area, the Mission continued to observe reconstruction works of the broken section of the bridge.
- The Mission observed deminers from government-controlled areas inside the disengagement area near Zolote.
- The SMM observed weapons in violation of withdrawal lines on both sides of the contact line.
- The SMM observed anti-tank mines, some for the first time, near non-government-controlled Pikuzy and government-controlled Vodiane.
- Restrictions of the Mission's freedom of movement continued, including at checkpoints near non-government-controlled Verkhnohyrokiivske, Zaichenko and Horlivka.*

¹ Based on information from the Monitoring Teams as of 19:30, 3 November 2019. All times are in Eastern European Time.

Ceasefire violations²



² For a complete breakdown of ceasefire violations, please see the annexed table. During the reporting period, the SMM cameras in Shyrokyne and Stanytsia Luhanska were not operational.

³ Including explosions.

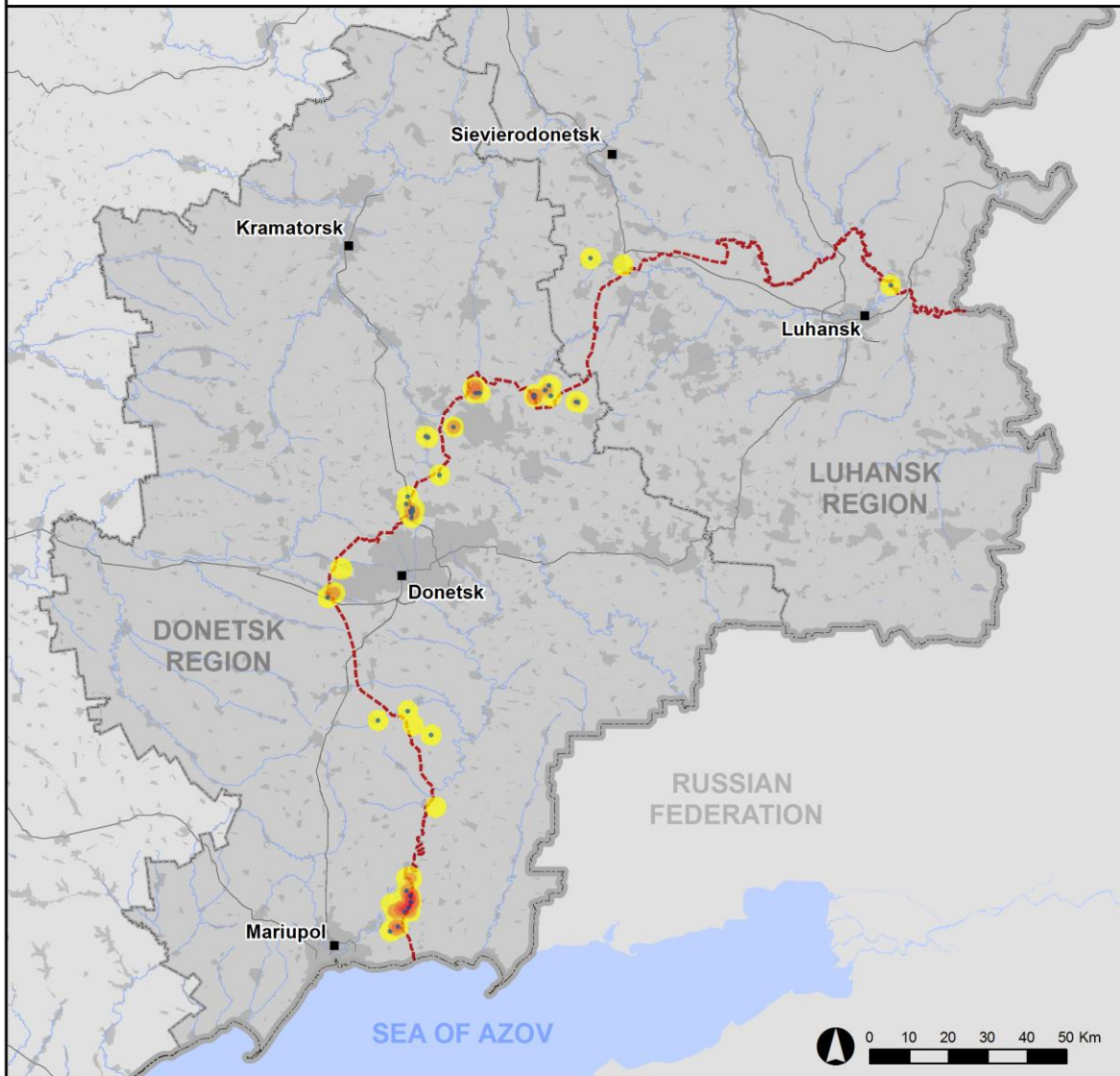
⁴ Including from unidentified weapons.

Map of recorded ceasefire violations

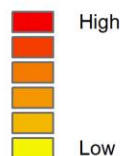


Organization for Security and
Co-operation in Europe
Special Monitoring Mission to Ukraine

Ceasefire violations observed by the SMM 2-3 November 2019



Ceasefire violation concentration



- Explosion
- Settlement

..... Estimated line of contact

Sources: Administrative Boundaries - OCHA; Roads, Rivers - OpenStreetMap; Sea - VLIZ (2005). IHO Sea Areas; Other - OSCE.

Coordinate System: WGS 1984 UTM Zone 37N

This map is provided for illustrative purposes only. Its content is not warranted to be error-free and does not imply endorsement or acceptance by the OSCE SMM.

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Created: 04/11/2019

In Donetsk region, between the evenings of 1 and 2 November, the SMM recorded fewer ceasefire violations, including fewer explosions (39), compared with the [previous reporting period](#) (about 130 explosions). The majority of the ceasefire violations were recorded at easterly directions of Hnutove (government-controlled, 90km south of Donetsk), in areas east-north-east and east of Maiorsk (government-controlled, 45km north-east of Donetsk) and in areas south and south-south-east of Pyshevyk (government-controlled, 84km south of Donetsk).

Between the evenings of 2 and 3 November, the SMM recorded more ceasefire violations, including more explosions (about 115), compared with the previous 24 hours. The majority of ceasefire violations were recorded in areas east-north-east and east of Hnutove, at southerly directions of Pyshevyk, in areas east-north-east of Lomakyne (government-controlled, 93km south of Donetsk) and at southerly directions of Svitlodarsk (government-controlled, 57km north-east of Donetsk), where the majority of explosions occurred.

In Luhansk region, between the evenings of 1 and 2 November, the SMM recorded a similar number of ceasefire violations, all of them explosions (two), compared with the [previous reporting period](#) (two explosions). The explosions were recorded in areas north-north-west of Molodizhne (non-government-controlled, 63km west of Luhansk).

Between the evenings of 2 and 3 November, the SMM recorded more ceasefire violations, including five explosions, compared with the previous 24 hours. All ceasefire violations were recorded outside the disengagement areas near Stanytsia Luhanska (government-controlled, 16km north-east of Luhansk) (see below) and near Zolote (government-controlled, 60km west of Luhansk), but within their 5km peripheries.

Damage to a house in non-government-controlled Yasynuvata

On 3 November, at 175a Ordzhonikidze Street, in an apartment on the second floor of a five-storey residential building in Yasynuvata (non-government-controlled, 16km north-east of Donetsk), the SMM saw a hole in a balcony window, a corresponding hole in a window of a living room adjacent to the balcony, and a corresponding hole in a wooden cabinet located inside the living room, all facing west. The SMM assessed the damage as recent and caused by a round fired by an infantry fighting vehicle (BMP-2) from a west-north-westerly direction. A resident of the apartment told the SMM that she had not been at home, when the damage occurred.

Disengagement areas near Stanytsia Luhanska, Zolote and Petrivske⁵

On 1 November, the SMM received a letter from the armed formations in non-government-controlled areas of Luhansk region notifying that they had completed the withdrawal of forces and hardware in the **disengagement area near Zolote** and notifying about their readiness to begin the removal of fortifications and other installations of military value from the disengagement area.

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

On 2 November, the SMM received two Notes Verbales from the Ministry of Foreign Affairs of Ukraine, notifying that they had completed the withdrawal of forces and hardware in the agreed disengagement area near Zolote and notifying about their readiness to begin the removal of fortifications and other installations of military value from the disengagement area (see [SMM Spot Report 2 November 2019](#)).

On 2 November, positioned at the checkpoint of the Ukrainian Armed Forces on the northern edge of the disengagement area, the SMM saw Ukrainian Armed Forces personnel in six cars, with no visible weapons, escorting a bus with about 20 persons with cameras, microphones, and notepads, assessed as journalists, into the disengagement area and further to Katerynivka (government-controlled, 64km west of Luhansk). About 30 minutes later, the SMM saw two of the vehicles and the bus returning to the said checkpoint.

On the same day, positioned at the checkpoint of the armed formations on the disengagement area's southern edge, the SMM also saw about nine unarmed persons, including three members of the armed formations (two wearing armbands with "JCCC" written on them) heading on foot into the disengagement area towards the SMM camera site in the southern part of the disengagement area, and then exiting the area through the same checkpoint and heading towards Zolote 5/Mykhailivka (non-government-controlled, 61km north-west of Luhansk).

On 3 November, positioned on the northern edge of the disengagement area, just west of road T-1316, the SMM saw ten deminers of the State Emergency Service of Ukraine with five vehicles entering the disengagement area, as well as five deminers and one unarmed Ukrainian Armed Forces personnel on the railway bridge on road T-1316, inside the disengagement area.

Outside the disengagement area, on the night of 1-2 November, an SMM long-range UAV spotted two infantry fighting vehicles (BMP-1) and four trucks about 150m east of the Ukrainian Armed Forces checkpoint about 300m north of the disengagement area's northern edge.

On 2 and 3 November, outside the disengagement area, the Mission also saw Ukrainian Armed Forces personnel reinforcing military positions about 300m north of the northern edge of the disengagement area up to 300m east and west of the checkpoint of the Ukrainian Armed Forces on the northern edge of the disengagement area.

On 2 and 3 November, outside the disengagement area, the SMM saw that a [previously reported](#) checkpoint of the armed formations on the road leading to Zolote-5/Mykhailivka, about 300m east of the area's eastern edge was manned by members of the armed formations. On 2 November, the SMM saw three members of the armed formations painting a metal traffic barrier that had been installed about 10m further east. On the same days, the SMM [again](#) saw two blue containers (with "JCCC" written on the side): about 30m east of the disengagement area's eastern edge and about 20m south of the checkpoint of the armed formations on the area's southern edge. On 2 November, the SMM saw an armed member of the armed formations exiting the blue container about 20m south of the checkpoint of the armed formations on the area's southern edge and on 3 November, the SMM saw three members of the armed formations (wearing armbands with "JCCC" written on them) near it.

On 3 November, the SMM observed five members of the armed formations (wearing armbands with “JCCC” written on them) at the checkpoint of the armed formations on the area’s southern edge.

On the evening of 2 November, the SMM camera in Zolote recorded a projectile in flight at an assessed range of 1-3km east-north-east, assessed as outside the disengagement area but within its 5km periphery.

On 2 and 3 November, inside the **disengagement area near Stanytsia Luhanska**, the Mission saw 15 workers from government-controlled areas installing metal decks at the broken section of the Stanytsia Luhanska bridge (15km north-east of Luhansk) covering almost all of its length. On 3 November, the Mission also saw the same workers covering the concrete structure on the northern edge of the bridge and the concrete section of its support pillar with tar.

On 2 November, the SMM saw two new radiation detectors installed at the entry-exit checkpoint (EECP) of the Ukrainian Armed Forces. A border guard at the EECP told the SMM that they will be used to detect radioactive material being carried by pedestrians in about a week.

On 2 and 3 November respectively, the SMM saw at least six and three 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.

On 3 November, the SMM observed 11 workers from non-government-controlled areas [continuing](#) laying asphalt and gravel at a parking lot 300m south of the bridge.

Outside the disengagement area, on 2 November, the SMM saw that the [previously reported](#) barbed wire placed around the SMM camera’s mast in Stanytsia Luhanska (about 350m north-north-east of the disengagement area’s northern edge) continues to impede the SMM’s access to its camera.

On 3 November, positioned on the eastern edge of Stanytsia Luhanska, the SMM heard five undetermined explosions 4-6km west-south-west, assessed as outside the disengagement area but within its 5km periphery.

On 2 November, positioned about 2km north of **Petrivske** (non-government-controlled, 41km south of Donetsk), the SMM heard three undetermined explosions at an assessed range of 4-6km south-east. On 3 November, positioned in the same location, the SMM heard an undetermined explosion at an assessed range of 3-4km north-west. All ceasefire violations were assessed as outside the disengagement area but within its 5km periphery.

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 15 weapons in violation of withdrawal lines on both sides of the contact line, including some in a training area near Ternove (non-government-controlled, 57km east of Donetsk) and at the former Luhansk international airport, about 2km north of

Peremozhne (non-government-controlled, 19km south of Luhansk). It also observed 53 weapons beyond withdrawal lines but outside of designated storage sites in non-government-controlled areas of Donetsk and Luhansk regions (for further details, see the tables below).

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

The SMM observed military and military-type presence in the security zone on both sides of the contact line, including infantry fighting vehicles, armoured combat vehicles, armoured personnel carriers and an anti-aircraft gun in government-controlled areas of Donetsk and Luhansk regions (for further details, see the table below).

On 1 November, an SMM mid-range UAV spotted ongoing reinforcement of military-type positions, assessed as belonging to the armed formations about 2km west-north-west of Uzhivka (formerly Leninske, non-government-controlled, 96km south of Donetsk).

On 2 November, the SMM saw four members of the armed formations, digging the ground with shovels, 6-8m north of a local road, about 3km south-east of Raivka (non-government-controlled, 16km north-west of Luhansk).

On 3 November, the SMM saw for the first time an about 20m-long trench and a mound assessed as fresh on the eastern side of a road about 2km west-north-west of Lyman (non-government-controlled, 12km north-west of Luhansk).

Presence of anti-tank mines near Pikuzy and Vodiane as well as mine hazard signs in Raivka and near Pavlopil

On 1 November, an SMM mid-range UAV spotted at least 50 anti-tank mines in a field about 1km south of Pikuzy (formerly Kominternove, non-government-controlled, 92km south of Donetsk), and about 1.5km further north-west, at least 40 anti-tank mines, all seen for the first time and assessed as not recently laid and as belonging to the armed formations.

The same UAV also spotted [again](#) about 23 anti-tank mines laid across road T-0519 north of Vodiane (government-controlled, 94km south of Donetsk), assessed as belonging to the Ukrainian Armed Forces.

On 2 November, the SMM [again](#) saw a mine hazard sign on the northern side of a local road and a wooden roadblock placed in the middle of the same road in the south-western outskirts of Raivka (non-government-controlled, 16km north-west of Luhansk).

On 3 November, the SMM saw for the first time two mine hazard signs (red square plates with white skulls, on wooden sticks) on both sides of an unpaved road, about 500m west of Pavlopil (government-controlled, 84km south of Donetsk), about 25m south of electricity installations of the Pavlopil reservoir dam.

SMM facilitation of operation of critical civilian infrastructure

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

On 2 and 3 November, the SMM continued to facilitate the operation of the Donetsk Filtration Station (15km north of Donetsk).

SMM monitored the security situation in south-east Kherson region

On 1 November, the Mission observed a calm situation at an entry-exit checkpoint between Chonhar (163km south-east of Kherson) and Crimea.

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

***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, unexploded ordnance (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 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 2 November, at a checkpoint north of Zaichenko (non-government-controlled, 93km south of Donetsk), two armed members of the armed formations [again](#) denied the SMM passage towards Sakhanka (non-government-controlled, 97km south of Donetsk), citing “ongoing demining activities”. While at the checkpoint, the SMM saw vehicular traffic crossing through the said checkpoint.
- On 3 November, at a checkpoint west of Verkhnohyrokiivske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk), a member of the armed formations [again](#) denied the SMM passage.

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.

Delayed:

- On 2 November, on two occasions, at a checkpoint west of Verkhnohyrokiivske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk), four armed members of the armed formations allowed the SMM to proceed only after about 25 minutes of waiting.

- On 3 November, at a checkpoint near Horlivka (non-government-controlled, 39km north-east of Donetsk), three members of the armed formations allowed the SMM to proceed only after 35 minutes of waiting.

Other impediments:

- On the night between 1 and 2 November, an SMM long-range UAV experienced GPS signal interference, assessed as probable jamming between Stepanivka (government-controlled, 54km north of Donetsk) and Bobrykivka (non-government-controlled, 57km south-east of Luhansk), as well as between Oleksandropillia (government-controlled, 71km west of Luhansk) and Bile (non-government-controlled, 22km west of Luhansk).⁷

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

Table of weapons

Weapons in violation of the withdrawal lines

Date	No. of weapons	Type of weapon	Location	Source of observation
Government-controlled areas				
1/11/2019	1	Surface-to-air missile system (9K33 <i>Osa</i>)	Near Krynychne (67km north-east of Donetsk)	Mini-UAV
Non-government-controlled areas				
1/11/2019	2	Self-propelled howitzer (2S1 <i>Gvozdika</i> , 122mm)	In a training area near Ternove (57km east of Donetsk) (for previous observations see SMM Daily Report 22 October 2019)	Mini-UAV
	4	Towed howitzer (D-30A <i>Lyagushka</i> , 122mm)		
	3	Towed howitzer (two D-30 <i>Lyagushka</i> , 122mm and one 2A65 <i>Msta-B</i> , 152mm)	Former Luhansk international airport, about 2km north of Peremozhne (19km south of Luhansk) (for previous observations see SMM Daily Report 29 October 2019)	Long-range UAV
	2	Self-propelled howitzer (2S1 <i>Gvozdika</i> , 122mm and 2S3 <i>Akatsiya</i> , 152mm)		
	1	Multiple launch rocket system (BM-21 <i>Grad</i> , 122mm)		
	2	Anti-tank gun (MT-12 <i>Rapira</i> , 100mm)		

Beyond withdrawal lines but outside of designated storage sites

Date	No. of weapons	Type of weapon	Location	Source of observation
Non-government-controlled areas				
1/11/2019	32	Tank (17 T-72, five T-64 and ten probable T-64)	In a training area near Ternove (57km east of Donetsk) (see above)	Mini-UAV
	2	Mortar (probable 2B14 <i>Podnos</i> , 82mm)		
	9	Tank (type undetermined)	Northern outskirts of Lutuhyne (20km south-west of Luhansk)	Long-range UAV
	1	Towed mortar (2B9 <i>Vasilek</i> , 82mm)	Former Luhansk international airport, about 2km north of Peremozhne (19km south of Luhansk) (see above)	
	1	Mortar (2B11, 120mm)		
	7	Tanks (T-72)		
	1	Surface-to-air missile system (9K35 <i>Strela-10</i>)		

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

Date	No.	Type	Location	Source of observation
Government-controlled areas				
1/11/2019	3	Armoured combat vehicle	Near Katerynivka (64km west of Luhansk)	Long-range UAV
	1	Infantry fighting vehicle (BMP-1)	Zolote (60km west of Luhansk)	
	2	Armoured combat vehicle		
	1	Armoured personnel carrier (MT-LB)		
	1	Anti-aircraft gun (ZU-23, 23mm) mounted on a truck	Near residential buildings in Vidrozhennia (66km north-east of Donetsk)	Mini-UAV
3/11/2019	1	Infantry fighting vehicle (BTR-4) with 30mm gun	In Avdiivka (17km north of Donetsk)	Patrol
	1	Infantry fighting vehicle (BMP-1)	In Popasna (69km west of Luhansk)	Patrol
Non-government-controlled areas				
1/11/2019	1	Military-type position (ongoing reinforcement of existing positions) (see above)	Uzhivka (formerly Leninske, 96km south of Donetsk)	Patrol
3/11/2019	1	Military-type position (20m trench and mound observed for the first time) (see above)	Lyman (12km north-west of Luhansk)	Patrol

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

Table of ceasefire violations as of 3 November 2019⁹

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	2-5km SSE	Recorded	5	Projectile	WSW to ENE	N/K	1-Nov, 23:34
	2-5km SSE	Recorded	1	Projectile	WSW to ENE	N/K	1-Nov, 23:35
	2-5km SSE	Recorded	1	Illumination flare	In vertical flight	N/K	2-Nov, 01:58
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	3-5km ENE	Recorded	1	Projectile	N to S	N/K	1-Nov, 18:44
	3-5km ENE	Recorded	4	Projectile	N to S (also recorded by the SMM camera in Pyshevyk)	N/K	1-Nov, 18:50
	3-5km ENE	Recorded	3	Projectile	N to S (also recorded by the SMM camera in Pyshevyk)	N/K	1-Nov, 18:51
	3-5km ENE	Recorded	11	Projectile	S to N	N/K	1-Nov, 18:53
	3-5km ENE	Recorded	4	Projectile	N to S	N/K	1-Nov, 18:53
	3-5km ENE	Recorded	9	Projectile	N to S	N/K	1-Nov, 18:58
	3-5km NE	Recorded	7	Projectile	N to S	N/K	1-Nov, 20:43
	3-5km ENE	Recorded	1	Projectile	N to S	N/K	1-Nov, 20:44
	3-5km NE	Recorded	2	Projectile	N to S	N/K	1-Nov, 20:45
	3-5km NE	Recorded	5	Projectile	N to S	N/K	1-Nov, 20:48
	3-5km NE	Recorded	9	Projectile	N to S	N/K	1-Nov, 20:51
	3-5km NE	Recorded	1	Projectile	N to S	N/K	1-Nov, 21:01
	3-5km NE	Recorded	2	Projectile	N to S	N/K	1-Nov, 21:51
	3-5km NE	Recorded	5	Projectile	N to S	N/K	1-Nov, 21:52
	3-5km E	Recorded	2	Explosion		N/K	1-Nov, 22:25
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	1-Nov, 22:26
	3-5km E	Recorded	4	Projectile	SW to NE	N/K	1-Nov, 22:34
	3-5km E	Recorded	1	Projectile	SW to NE	N/K	1-Nov, 23:48
	3-5km E	Recorded	1	Projectile	NW to SE	N/K	2-Nov, 00:09
	3-5km ENE	Recorded	6	Projectile	S to N	N/K	2-Nov, 00:48
	3-5km ENE	Recorded	3	Projectile	S to N	N/K	2-Nov, 00:49
	3-5km ENE	Recorded	7	Projectile	SW to NE	N/K	2-Nov, 00:50
	3-5km ENE	Recorded	1	Projectile	SW to NE	N/K	2-Nov, 01:24
	3-5km ENE	Recorded	2	Projectile	N to S	N/K	2-Nov, 01:34
	3-5km NE	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 02:37
	3-5km ENE	Recorded	3	Projectile	In vertical flight	N/K	2-Nov, 02:37
	3-5km ENE	Recorded	5	Projectile	N to S	N/K	2-Nov, 02:37
	3-5km ENE	Recorded	8	Projectile	WSW to ENE	N/K	2-Nov, 02:37
	3-5km E	Recorded	2	Projectile	S to N	N/K	2-Nov, 17:14
	3-5km E	Recorded	1	Projectile	S to N	N/K	2-Nov, 17:18
3-5km E	Recorded	3	Projectile	S to N	N/K	2-Nov, 17:19	
3-5km E	Recorded	1	Projectile	S to N	N/K	2-Nov, 17:23	
SMM camera in Hranitne (government-controlled, 60km S of Donetsk)	2-4km ESE	Recorded	2	Projectile	NW to SE	N/K	1-Nov, 22:14

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, 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.

SMM camera in Krasnohorivka (government-controlled, 21km W of Donetsk)	3-5km E	Recorded	1	Projectile	N to S	N/K	1-Nov, 22:22
	2-5km E	Recorded	1	Projectile	N to S	N/K	1-Nov, 22:37
SMM camera E of Lomakyne (government-controlled, 93km S of Donetsk)	3-5km ENE	Recorded	2	Projectile	SE to NW	N/K	1-Nov, 19:05
	2-6km ENE	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 02:37
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-5km ENE	Recorded	4	Projectile	N to S	N/K	1-Nov, 20:09
	2-5km E	Recorded	1	Illumination flare	In vertical flight	N/K	1-Nov, 20:13
	2-5km ENE	Recorded	8	Projectile	N to S	N/K	1-Nov, 20:52
	2-5km ENE	Recorded	3	Projectile	N to S	N/K	1-Nov, 23:02
	2-5km E	Recorded	1	Projectile	NW to SE	N/K	1-Nov, 23:25
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	2-Nov, 02:15
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	2-Nov, 02:18
	2-4km E	Recorded	4	Projectile	N to S	N/K	2-Nov, 02:33
	2-5km ENE	Recorded	5	Projectile	N to S	N/K	2-Nov, 02:48
	2-5km ENE	Recorded	3	Projectile	N to S	N/K	2-Nov, 02:49
	2-5km E	Recorded	1	Projectile	S to N	N/K	2-Nov, 03:30
	2-5km ENE	Recorded	21	Projectile	N to S	N/K	2-Nov, 18:13
	2-5km ENE	Recorded	13	Projectile	N to S	N/K	2-Nov, 18:14
	2-5km ENE	Recorded	1	Projectile	N to S	N/K	2-Nov, 18:15
	2-5km ENE	Recorded	1	Projectile	N to S	N/K	2-Nov, 18:17
	2-5km ENE	Recorded	13	Projectile	N to S	N/K	2-Nov, 18:18
	2-5km ENE	Recorded	18	Projectile	N to S	N/K	2-Nov, 18:19
SMM camera in Petrivske (non-government-controlled, 41km S of Donetsk)	0.1-1km NW	Recorded	1	Projectile	NE to SW (assessed as outside the disengagement area)	N/K	22-Oct, 13:13
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 84km S of Donetsk)	2-4km S	Recorded	1	Projectile	NE to SW	N/K	1-Nov, 18:51
	2-4km S	Recorded	3	Projectile	W to E	N/K	1-Nov, 19:50
	3-5km S	Recorded	5	Projectile	E to W	N/K	1-Nov, 20:48
	3-5km S	Recorded	1	Projectile	In vertical flight	N/K	1-Nov, 20:49
	3-5km S	Recorded	10	Projectile	E to W	N/K	1-Nov, 20:51
	3-5km SSE	Recorded	1	Projectile	E to W	N/K	1-Nov, 21:01
	3-5km SSE	Recorded	2	Projectile	E to W	N/K	1-Nov, 21:05
	3-5km SSE	Recorded	1	Burst	W to E	N/K	1-Nov, 21:05
	3-5km S	Recorded	5	Projectile	E to W	N/K	1-Nov, 21:52
	3-5km S	Recorded	1	Projectile	E to W	N/K	1-Nov, 22:40
	3-5km SSE	Recorded	7	Projectile	W to E	N/K	1-Nov, 22:41
	3-5km SSE	Recorded	6	Projectile	W to E	N/K	1-Nov, 23:23
	3-5km SSE	Recorded	6	Projectile	W to E	N/K	1-Nov, 23:24
	3-5km SSE	Recorded	4	Projectile	W to E	N/K	2-Nov, 00:39
	3-5km S	Recorded	4	Projectile	E to W	N/K	2-Nov, 01:34
	3-5km SSE	Recorded	1	Explosion	Also recorded by the SMM camera in Hnutove	N/K	2-Nov, 02:10
	3-5km S	Recorded	7	Projectile	E to W	N/K	2-Nov, 02:37
	3-5km S	Recorded	1	Burst	In vertical flight	N/K	2-Nov, 04:57
4-6km SSE	Recorded	23	Projectile	W to E	N/K	2-Nov, 17:44	
4-6km SSE	Recorded	6	Projectile	W to E	N/K	2-Nov, 17:45	
About 1km N of the railway station in Yasynuvata (non-government-controlled, 16km NE	2-3km W	Heard	1	Explosion	Undetermined	N/K	2-Nov, 08:57
	2-3km W	Heard	1	Burst		HMG	2-Nov, 08:57
	2-3km SW	Heard	10	Burst		HMG	2-Nov, 09:20
	2-4km SW	Heard	1	Explosion	Undetermined	N/K	2-Nov, 12:23
	2-4km SW	Heard	4	Burst		Small	2-Nov, 12:33

of Donetsk)						arms	
	4-5km NW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 12:55
	4-5km NW	Heard	2	Explosion	Undetermined	N/K	2-Nov, 13:04
	2-3km W	Heard	4	Burst		HMG	2-Nov, 13:05
Petrovskiyi (non-government-controlled, 15km SW of Donetsk city centre)	2km SW	Heard	3	Burst		Small arms	2-Nov, 10:39
	2km SW	Heard	8	Burst		Small arms	2-Nov, 10:55
	2km SW	Heard	3	Shot		Small arms	2-Nov, 10:55
	2km SW	Heard	3	Burst		Small arms	2-Nov, 11:03
	2km SW	Heard	1	Shot		Small arms	2-Nov, 11:03
	1km SSW	Heard	23	Burst		Small arms	2-Nov, 11:11
	2-3km SW	Heard	3	Burst		Small arms	2-Nov, 11:19
About 1.8km N of Petrivske (non-government-controlled, 41km S of Donetsk)	8-12km W	Heard	4	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	2-Nov, 09:29
	4-6km SE	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	2-Nov, 09:48
About 2.6km SSE of Lomakyne (government-controlled, 93km S of Donetsk)	2-3km NE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 12:04
About 2km SW of Pyshevyk (government-controlled, 84km south of Donetsk)	3-4km SE	Heard and saw	1	Explosion	Impact	N/K	2-Nov, 13:03
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	3-5km S	Heard	5	Burst		HMG	2-Nov, 08:55
	3-5km S	Heard	1	Explosion	Undetermined	N/K	2-Nov, 08:55
Troitske (government-controlled, 30km N of Donetsk)	3-4km N	Heard	3	Explosion	Undetermined	N/K	2-Nov, 11:25
	3-4km N	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:31
	3-4km N	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:37
About 1.7 km NW of Novoselivka (government-controlled, 31km north-east of Donetsk)	3km NE	Heard	3	Explosion	Undetermined	N/K	2-Nov, 11:25
	3km NE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:31
	3km NE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 11:37
N edge of Verkhnotoretske (government-controlled, 23km NE of Donetsk)	2-3km SE	Heard	4	Explosion	Undetermined	N/K	2-Nov, 12:06
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-5km S	Heard	2	Explosion	Undetermined	N/K	2-Nov, 16:22
	3-5km S	Heard	12	Shot		Small arms	2-Nov, 16:50
1.7km SW of Molodizhne (non-government-controlled, 63km W of Luhansk)	8-10km NNW	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	2-Nov, 09:15-09:20

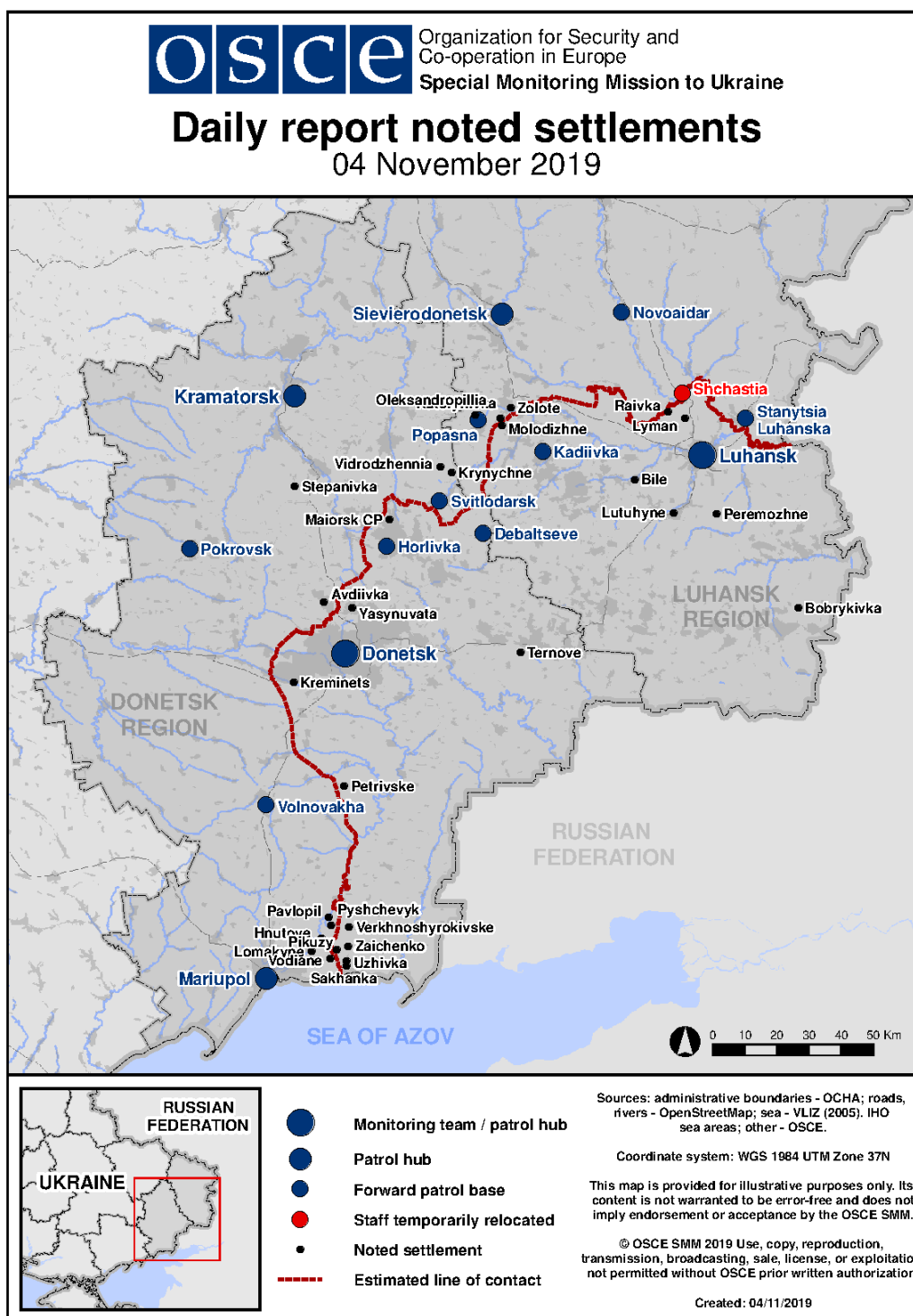
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	2-5km SSE	Recorded	3	Projectile	WSW to ENE	N/K	2-Nov, 18:44
	2-4km SSE	Recorded	5	Projectile	NE to SW	N/K	2-Nov, 21:47
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	2-Nov, 21:55
	2-4km SSE	Recorded	2	Projectile	WSW to ENE	N/K	2-Nov, 22:30
	2-4km SSE	Recorded	2	Projectile	ENE to WSW	N/K	3-Nov, 00:08
	2-4km SSE	Recorded	1	Projectile	W to E	N/K	3-Nov, 00:38
	2-4km S	Recorded	1	Projectile	W to E	N/K	3-Nov, 02:43
	2-4km S	Recorded	1	Projectile	WSW to ENE	N/K	3-Nov, 03:25
	2-4km S	Recorded	2	Projectile	WSW to ENE	N/K	3-Nov, 03:26
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.7-1km SSE	Recorded	3	Explosion	Undetermined	N/K	2-Nov, 20:33
	0.7-1km SSW	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 20:42
	0.7-1km SSW	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 21:20
	0.7-1km SSW	Recorded	2	Explosion	Undetermined	N/K	2-Nov, 21:42
	0.7-1km SSW	Recorded	2	Explosion	Undetermined	N/K	2-Nov, 21:49
	0.7-1km S	Recorded	1	Projectile	W to E	N/K	2-Nov, 22:13
	0.7-2km S	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 22:22
	0.7-1km S	Recorded	1	Projectile	W to E	N/K	2-Nov, 22:30
	0.7-1km S	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 23:53
	0.7-2km S	Recorded	4	Projectile	W to E	N/K	3-Nov, 01:56
	0.7-2km S	Recorded	3	Projectile	In vertical flight	N/K	3-Nov, 01:56
	0.7-2km S	Recorded	1	Projectile	N to S	N/K	3-Nov, 01:56
	1-2km S	Recorded	1	Projectile	NW to SE	N/K	3-Nov, 02:52
	1-2km S	Recorded	3	Projectile	N to S	N/K	3-Nov, 02:53
	1-2km S	Recorded	4	Projectile	W to E	N/K	3-Nov, 02:53
	1-2km S	Recorded	1	Projectile	E to W	N/K	3-Nov, 02:53
	1-2km SSW	Recorded	1	Projectile	E to W	N/K	3-Nov, 03:56
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	3-5km E	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 20:37
	3-5km ENE	Recorded	1	Projectile	N to S	N/K	2-Nov, 21:07
	3-5km ENE	Recorded	4	Projectile	S to N	N/K	2-Nov, 21:07
	3-5km ENE	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 21:08
	3-5km ENE	Recorded	1	Explosion	Undetermined	N/K	2-Nov, 21:07
	3-5km E	Recorded	9	Projectile	N to S	N/K	2-Nov, 23:09
	3-5km E	Recorded	10	Projectile	S to N	N/K	2-Nov, 23:21
	3-5km E	Recorded	5	Projectile	N to S	N/K	2-Nov, 23:21
	3-5km E	Recorded	9	Projectile		N/K	2-Nov, 23:22
	3-5km E	Recorded	7	Projectile	S to N	N/K	2-Nov, 23:23
	3-5km E	Recorded	6	Projectile	S to N	N/K	2-Nov, 23:24
	3-5km E	Recorded	3	Projectile	S to N	N/K	2-Nov, 23:35
	3-5km E	Recorded	4	Projectile	S to N	N/K	2-Nov, 23:38
	3-5km E	Recorded	10	Projectile	S to N	N/K	2-Nov, 23:42
	3-5km ENE	Recorded	11	Projectile	S to N	N/K	2-Nov, 23:43
	3-5km ENE	Recorded	13	Projectile	S to N	N/K	2-Nov, 23:44
	3-5km ENE	Recorded	4	Projectile	S to N	N/K	2-Nov, 23:45
	3-5km ENE	Recorded	2	Muzzle flash		N/K	2-Nov, 23:45
	3-5km ENE	Recorded	12	Projectile	S to N	N/K	2-Nov, 23:46
	3-5km ENE	Recorded	16	Projectile	S to N	N/K	3-Nov, 01:29
	3-5km ENE	Recorded	21	Projectile	S to N	N/K	3-Nov, 01:31
	3-5km ENE	Recorded	13	Projectile	S to N	N/K	3-Nov, 01:32
	3-5km ENE	Recorded	31	Projectile	S to N	N/K	3-Nov, 01:35
	3-5km ENE	Recorded	21	Projectile	S to N	N/K	3-Nov, 01:36
	3-5km ENE	Recorded	2	Projectile	S to N	N/K	3-Nov, 01:38
	3-5km E	Recorded	3	Projectile	S to N	N/K	3-Nov, 01:39
	3-5km E	Recorded	7	Projectile	S to N	N/K	3-Nov, 01:42
	3-5km E	Recorded	9	Projectile	S to N	N/K	3-Nov, 01:55
	3-5km ENE	Recorded	9	Projectile	S to N	N/K	3-Nov, 01:56
	3-5km E	Recorded	1	Projectile	S to N	N/K	3-Nov, 02:45
	3-5km E	Recorded	16	Projectile	S to N	N/K	3-Nov, 03:25
3-5km E	Recorded	1	Explosion	Undetermined	N/K	3-Nov, 03:25	

	3-5km E	Recorded	27	Projectile	S to N	N/K	3-Nov, 03:26
	3-5km E	Recorded	3	Projectile	S to N	N/K	3-Nov, 03:27
	3-5km E	Recorded	12	Projectile	S to N	N/K	3-Nov, 03:28
	3-5km E	Recorded	5	Projectile	S to N (also recorded by the SMM camera in Pyshevyk)	N/K	3-Nov, 17:06
	3-5km E	Recorded	2	Projectile	S to N (also recorded by the SMM camera in Pyshevyk)	N/K	3-Nov, 17:07
	3-5km E	Recorded	7	Projectile	S to N (also recorded by the SMM camera in Pyshevyk)	N/K	3-Nov, 17:11
	3-5km E	Recorded	6	Projectile	S to N (also recorded by the SMM camera in Pyshevyk)	N/K	3-Nov, 17:12
	3-5km E	Recorded	1	Projectile	N to S	N/K	3-Nov, 17:12
	3-5km E	Recorded	1	Projectile	S to N	N/K	3-Nov, 17:22
	3-5km E	Recorded	11	Projectile	WSW to ENE	N/K	3-Nov, 17:22
	3-5km E	Recorded	4	Projectile	S to N	N/K	3-Nov, 17:22
	3-5km E	Recorded	1	Projectile	S to N	N/K	3-Nov, 18:19
	3-5km E	Recorded	1	Projectile	S to N (also recorded by the SMM camera in Pyshevyk)	N/K	3-Nov, 18:22
SMM camera E of Lomakyne (government-controlled, 93km S of Donetsk)	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:22
	2-5km ENE	Recorded	2	Muzzle flash		N/K	2-Nov, 23:22
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:24
	2-5km ENE	Recorded	1	Muzzle flash		N/K	2-Nov, 23:24
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:28
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:31
	2-5km ENE	Recorded	1	Muzzle flash		N/K	2-Nov, 23:31
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:32
	2-5km ENE	Recorded	5	Muzzle flash		N/K	2-Nov, 23:35
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:37
	2-5km ENE	Recorded	4	Muzzle flash		N/K	2-Nov, 23:37
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:38
	2-5km ENE	Recorded	2	Muzzle flash		N/K	2-Nov, 23:38
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:42
	2-5km ENE	Recorded	3	Muzzle flash		N/K	2-Nov, 23:42
	2-5km ENE	Recorded	1	Projectile	SE to NW	N/K	2-Nov, 23:43
	2-4km ENE	Recorded	6	Projectile	NW to SE	N/K	3-Nov, 01:29
	2-5km ENE	Recorded	8	Projectile	NW to SE	N/K	3-Nov, 01:31
	2-5km ENE	Recorded	6	Muzzle flash		N/K	3-Nov, 01:32
	2-5km ENE	Recorded	3	Projectile	NW to SE	N/K	3-Nov, 01:35
	2-5km ENE	Recorded	13	Projectile	NW to SE	N/K	3-Nov, 01:36
	2-5km ENE	Recorded	8	Projectile	NW to SE	N/K	3-Nov, 01:37
	2-5km ENE	Recorded	2	Projectile	NW to SE	N/K	3-Nov, 01:38
	2-5km ENE	Recorded	1	Projectile	NW to SE	N/K	3-Nov, 01:39
	2-5km ENE	Recorded	1	Projectile	NW to SE	N/K	3-Nov, 01:42
	2-5km ENE	Recorded	1	Muzzle flash		N/K	3-Nov, 02:32
	2-5km ENE	Recorded	1	Projectile	NW to SE	N/K	3-Nov, 02:43
	2-5km ENE	Recorded	1	Projectile	NW to SE	N/K	3-Nov, 03:25
	2-5km ENE	Recorded	3	Projectile	NW to SE	N/K	3-Nov, 03:25
	2-5km ENE	Recorded	2	Muzzle flash		N/K	3-Nov, 03:25
2-5km ENE	Recorded	10	Projectile	NW to SE	N/K	3-Nov, 03:26	
SMM camera at entry-	2-5km ENE	Recorded	4	Projectile	N to S	N/K	2-Nov, 18:30

exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-5km E	Recorded	8	Explosion	Undetermined	N/K	2-Nov, 18:31
	2-5km E	Recorded	3	Explosion	N to S (undetermined)	N/K	2-Nov, 18:33
	2-4km E	Recorded	5	Projectile	NW to SE	N/K	2-Nov, 22:05
	2-4km ENE	Recorded	1	Projectile	WNW to ESE	N/K	2-Nov, 22:08
	2-4km E	Recorded	5	Projectile	N to S	N/K	2-Nov, 22:09
	2-4km E	Recorded	1	Projectile	WNW to ESE	N/K	2-Nov, 22:09
	2-7km E	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	2-Nov, 22:09
	2-4km E	Recorded	3	Projectile	N to S	N/K	2-Nov, 22:10
	2-4km E	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 22:21
	2-4km E	Recorded	3	Projectile	NNW to SSE	N/K	2-Nov, 22:54
	2-7km E	Recorded	1	Projectile	W to E	N/K	3-Nov, 00:20
	2-7km E	Recorded	1	Explosion	Impact (subsequent to the previous event)	N/K	3-Nov, 00:20
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	3-Nov, 02:06
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	3-Nov, 02:07
	2-4km ENE	Recorded	2	Projectile	N to S	N/K	3-Nov, 02:19
	2-4km ENE	Recorded	1	Projectile	N to S	N/K	3-Nov, 02:26
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 84km S of Donetsk)	1-2km S	Recorded	1	Muzzle flash		N/K	2-Nov, 20:37
	3-5km SW	Recorded	2	Projectile	In vertical flight	N/K	2-Nov, 21:05
	3-5km SSE	Recorded	1	Projectile	E to W	N/K	2-Nov, 21:08
	1-2km SSE	Recorded	1	Projectile	W to E	N/K	2-Nov, 21:15
	1-2km SE	Recorded	1	Burst	NE to SW	N/K	2-Nov, 21:22
	3-5km S	Recorded	2	Projectile	E to W	N/K	2-Nov, 21:43
	3-5km S	Recorded	2	Projectile	E to W	N/K	2-Nov, 21:48
	3-5km S	Recorded	1	Projectile	NNE to SSW	N/K	2-Nov, 21:48
	3-5km SSE	Recorded	1	Projectile	ENE to WSW	N/K	2-Nov, 22:47
	3-5km SSE	Recorded	1	Burst	NW to SE	N/K	2-Nov, 22:54
	3-5km SSE	Recorded	1	Burst	NW to SE	N/K	2-Nov, 23:09
	3-5km S	Recorded	11	Projectile	NW to SE	N/K	2-Nov, 23:21
	3-5km S	Recorded	7	Projectile	N to S	N/K	2-Nov, 23:21
	3-5km S	Recorded	8	Projectile	NW to SE	N/K	2-Nov, 23:22
	3-5km S	Recorded	8	Projectile	NW to SE	N/K	2-Nov, 23:23
	3-5km S	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:24
	3-5km S	Recorded	4	Projectile	NE to SW	N/K	2-Nov, 23:26
	3-5km S	Recorded	2	Projectile	NW to SE	N/K	2-Nov, 23:27
	3-5km S	Recorded	2	Projectile	N to S	N/K	2-Nov, 23:28
	3-5km S	Recorded	1	Projectile	NW to SE	N/K	2-Nov, 23:29
	3-5km S	Recorded	5	Projectile	N to S	N/K	2-Nov, 23:32
	3-5km S	Recorded	3	Projectile	NW to SE	N/K	2-Nov, 23:37
	3-5km S	Recorded	7	Projectile	NW to SE	N/K	2-Nov, 23:42
	3-5km S	Recorded	10	Projectile	NW to SE	N/K	2-Nov, 23:43
	3-5km SSE	Recorded	9	Projectile	NW to SE	N/K	2-Nov, 23:44
	3-5km SSE	Recorded	6	Projectile	NE to SW	N/K	2-Nov, 23:44
	3-5km SSE	Recorded	7	Projectile	NW to SE	N/K	2-Nov, 23:46
	3-5km SSE	Recorded	1	Projectile	NW to SE	N/K	2-Nov, 00:01
	3-5km S	Recorded	10	Projectile	NW to SE	N/K	3-Nov, 01:29
	3-5km S	Recorded	11	Projectile	NW to SE	N/K	3-Nov, 01:31
	3-5km S	Recorded	9	Projectile	NW to SE	N/K	3-Nov, 01:32
	3-5km S	Recorded	22	Projectile	NW to SE	N/K	3-Nov, 01:35
	3-5km S	Recorded	22	Projectile	NW to SE	N/K	3-Nov, 01:36
	3-5km S	Recorded	5	Projectile	NW to SE	N/K	3-Nov, 01:37
3-5km S	Recorded	10	Projectile	NW to SE	N/K	3-Nov, 01:42	
3-5km S	Recorded	2	Projectile	NE to SW	N/K	3-Nov, 01:31	
3-5km S	Recorded	2	Projectile	NE to SW	N/K	3-Nov, 01:32	
3-5km SSE	Recorded	1	Projectile	NE to SW	N/K	3-Nov, 02:05	

	3-5km SSE	Recorded	14	Projectile	NW to SE	N/K	3-Nov, 02:26
	3-5km SSE	Recorded	10	Projectile	NW to SE	N/K	3-Nov, 02:31
	3-5km SSE	Recorded	14	Projectile	NE to SW	N/K	3-Nov, 02:39
	3-5km SSE	Recorded	2	Projectile	NW to SE	N/K	3-Nov, 02:42
	3-5km SSE	Recorded	2	Projectile	NW to SE	N/K	3-Nov, 02:43
	3-5km SSE	Recorded	5	Projectile	NW to SE	N/K	3-Nov, 03:01
	4-6km S	Recorded	12	Projectile	WNW to ESE	N/K	3-Nov, 03:25
	4-6km SSW	Recorded	22	Projectile	NW to SE	N/K	3-Nov, 03:26
	4-6km S	Recorded	2	Projectile	N to S	N/K	3-Nov, 03:26
	4-6km SSW	Recorded	3	Projectile	NW to SE	N/K	3-Nov, 03:27
	4-6km SSW	Recorded	17	Projectile	NW to SE	N/K	3-Nov, 03:28
	3-5km SSE	Recorded	3	Projectile	NW to SE	N/K	3-Nov, 03:31
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-7km ESE	Recorded	2	Projectile	S to N	N/K	3-Nov, 03:32
	2-7km ESE	Recorded	2	Projectile	S to N	N/K	3-Nov, 04:34
About 1.8km N of Petrivske (non-government-controlled, 41km S of Donetsk)	3-4km NW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	3-Nov, 10:48
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	1-2km W	Heard	4	Burst		HMG	3-Nov, 09:05
	1-2km W	Heard	5	Shot		HMG	3-Nov, 09:05
West part of Petrovskyi (non-government-controlled, 15km SW of Donetsk city centre)	2-4km SW	Heard	1	Explosion	Undetermined	N/K	3-Nov, 11:46
NW part of Novohryhorivka (non-government-controlled, 61km NE of Donetsk)	3-5km WNW	Heard	5	Explosion	Undetermined	N/K	3-Nov, 12:15-12:24
	3-5km WNW	Heard	5	Explosion	Undetermined	N/K	3-Nov, 12:25-12:30
	3-5km WNW	Heard	3	Explosion	Undetermined	N/K	3-Nov, 12:35-12:37
	2-5km WNW	Heard	2	Explosion	Undetermined	N/K	3-Nov, 12:44
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-5km ESE	Heard	3	Explosion	Undetermined	N/K	2-Nov, 22:05
	3-5km SE	Heard	3	Explosion	Undetermined	N/K	2-Nov, 22:10
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 22:14
	5-7km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 22:21
	5-7km SE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 23:00
	3-5km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 23:11
	5-7km SE	Heard	1	Explosion	Undetermined	N/K	2-Nov, 23:32
	5-7km SE	Heard	2	Explosion	Undetermined	N/K	2-Nov, 23:48
	3-5km SE	Heard	2	Explosion	Undetermined	N/K	3-Nov, 07:24
	3-5km SE	Heard	4	Explosion	Undetermined	N/K	3-Nov, 07:30
	3-5km SE	Heard	5	Explosion	Undetermined	N/K	3-Nov, 07:45
	4-5km S	Heard	2	Explosion	Undetermined	N/K	3-Nov, 15:00
	4-5km S	Heard	4	Explosion	Undetermined	N/K	3-Nov, 15:29
	4-5km S	Heard	18	Explosion	Undetermined	N/K	3-Nov, 17:20-17:25
	4-5km S	Heard	26	Burst		HMG	3-Nov, 17:37-17:40
4-5km S	Heard	11	Shot	Assessed as a 30mm canon	Other	3-Nov, 17:43	
4-5km S	Heard	14	Explosion	Undetermined	N/K	3-Nov, 17:45	

Horlivka FPB (non-government-controlled, 39km NE of Donetsk)	4-5km WNW	Heard	16	Burst		HMG	3-Nov, 17:31
	4-5km WNW	Heard	10	Burst		HMG	3-Nov, 17:39
	4-5km WNW	Heard	7	Burst		HMG	3-Nov, 18:00
	4-5km WNW	Heard	5	Explosion	Undetermined	N/K	3-Nov, 18:10
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	1-3km ENE	Recorded	1	Projectile	N to S (assessed as outside the disengagement area)	N/K	2-Nov, 21:22
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	4-6km WSW	Heard	5	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	3-Nov, 00:05-00:07

Map of Donetsk and Luhansk regions¹⁰

¹⁰ 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).