

# Daily Report 274/2019

19 November 2019<sup>1</sup>

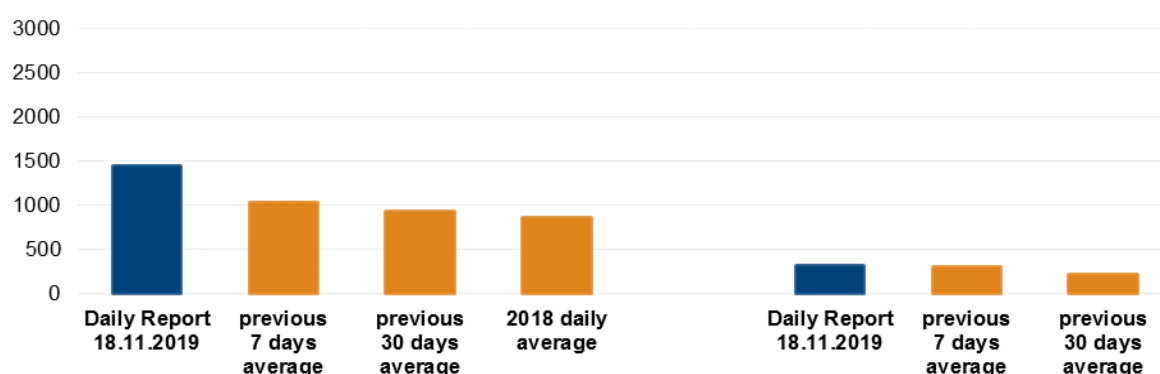
## Summary

- Compared with the previous 24 hours, the SMM recorded more ceasefire violations in Donetsk region and fewer in Luhansk region.
- The SMM continued to monitor the situation at the Petrivske and Zolote disengagement areas.
- Inside the Stanytsia Luhanska disengagement area, the Mission continued to observe construction works at the broken section of the bridge.
- The SMM observed four weapons in violation of the withdrawal lines in non-government-controlled areas of Donetsk region.
- The SMM saw for the first time unexploded ordnance on a road between the entry-exit checkpoint near Pyshevyk and checkpoint near Verkhnohyrokiivske.
- Restrictions of the SMM's freedom of movement continued, including at checkpoints near government-controlled Nevelske and non-government-controlled Boikiivske and Sosniivske, as well as near border crossing points in non-government-controlled areas of Luhansk region.\*

## Ceasefire violations<sup>2</sup>

Number of recorded ceasefire violations<sup>3</sup>

Number of recorded explosions<sup>4</sup>



<sup>1</sup> Based on information from the Monitoring Teams as of 19:30, 18 November 2019. All times are in Eastern European Time.

<sup>2</sup> For a complete breakdown of ceasefire violations, please see the annexed table. During the reporting period, fog limited the observation capabilities of some of the SMM cameras.

<sup>3</sup> Including explosions.

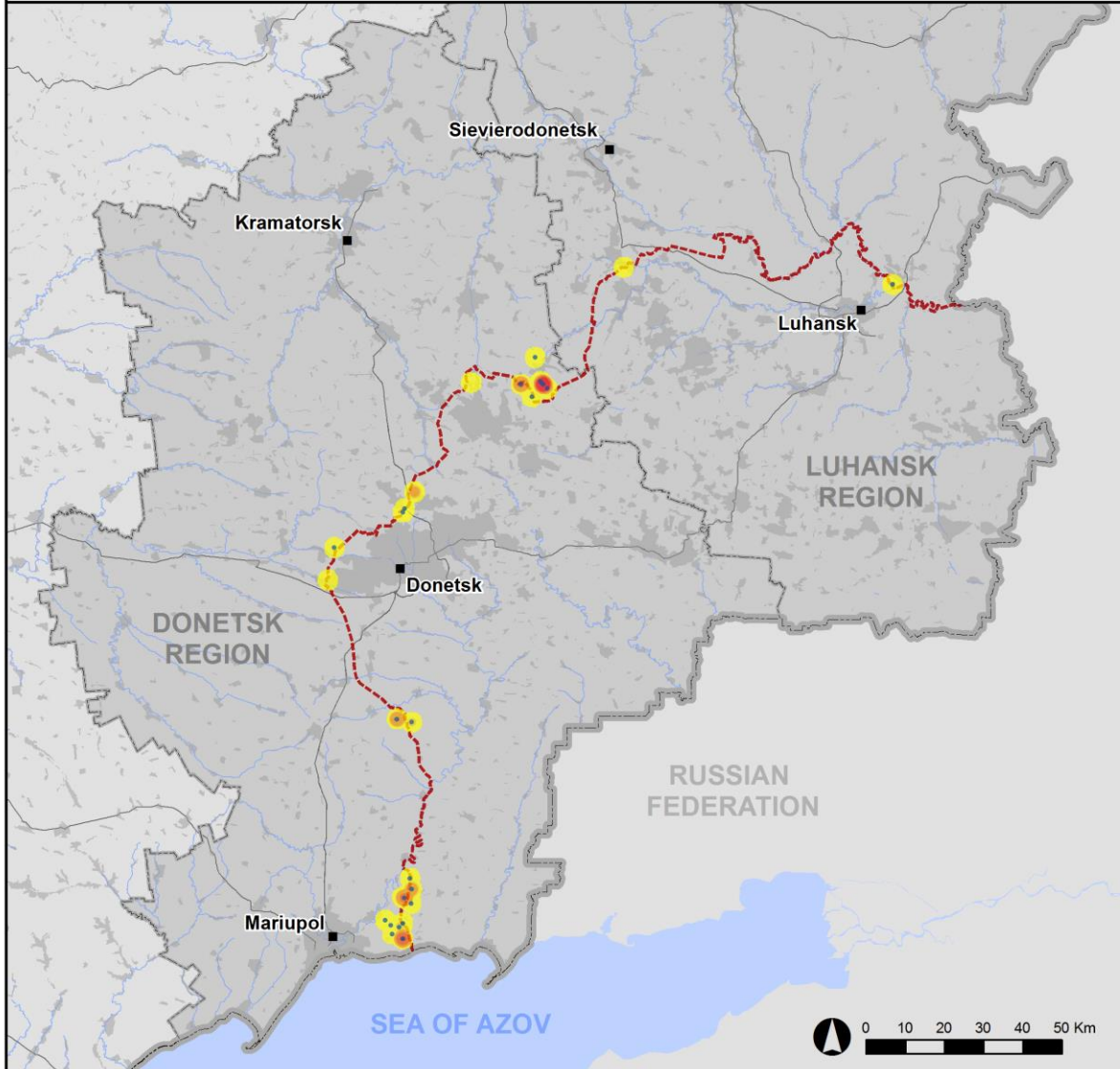
<sup>4</sup> Including from unidentified weapons.

### Map of recorded ceasefire violations

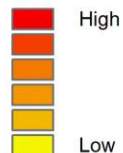


Organization for Security and  
Co-operation in Europe  
Special Monitoring Mission to Ukraine

## Ceasefire violations observed by the SMM 18 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.

© OSCE SMM 2019 Use, copy, reproduction, transmission, broadcasting, sale, license, or exploitation not permitted without OSCE prior written authorization.

Created: 19/11/2019

In Donetsk region, the SMM recorded more ceasefire violations, including more explosions (about 315), compared with the [previous 24 hours](#) (about 290 explosions). The majority of ceasefire violations, including the majority of explosions, were recorded at southerly directions of Svitlodarsk (government-controlled, 57km north-east of Donetsk), in areas north of Shyrokyne (government-controlled, 100km south of Donetsk), and at easterly directions of Hnutove (government-controlled, 90km south of Donetsk).

In Luhansk region, the SMM recorded fewer ceasefire violations (two in total, including an explosion), compared with the [previous 24 hours](#) (about 180 explosions).

### **Disengagement areas near Petrivske, Zolote and Stanytsia Luhanska<sup>5</sup>**

On 18 November, positioned about 2km north of Petrivske (non-government-controlled, 41km south of Donetsk), the SMM saw ten deminers from non-government-controlled areas in a minibus and a truck heading towards **the disengagement area**. While positioned at the same location, the SMM heard and saw an explosion about 2.5km west-south-west, assessed as a controlled detonation inside the disengagement area and two minutes later, it heard ten explosions assessed as impacts, and saw smoke, about 2.5km south-south-west, assessed as inside the disengagement area. Positioned about 1.2km north-east of Bohdanivka (government-controlled, 41km south-west of Donetsk), the SMM heard two explosions at least about 3km east and at least 2km south, both assessed as controlled detonations and outside the disengagement area.

Outside the disengagement area, on 16 November, an SMM long-range unmanned aerial vehicle (UAV) spotted two infantry fighting vehicles (IFV) (BMP variant) and an armoured personnel carrier (probable MT-LB) about 1.2km south-east of its south-western edge, assessed as belonging to the Ukrainian Armed Forces. About 3km north-west of the area's north-western edge, the UAV spotted an armoured combat vehicle (ACV), assessed as belonging to the Ukrainian Armed Forces. About 3km north-east of the north-eastern edge of the disengagement area, the UAV also spotted an ACV, assessed as belonging to the armed formations.

On 18 November, positioned on the northern edge of **the disengagement area near Zolote** (government-controlled, 60km west of Luhansk), the SMM heard an explosion 600-800m south, inside the area, assessed as a controlled detonation.

On the same day, positioned on the southern edge of the disengagement area, the SMM saw 17 workers and seven deminers from non-government-controlled areas with metal detectors, and three members of the armed formations (wearing armbands with "JCCC" written on them) entering the disengagement area. Thereafter, the Mission saw eight workers clearing vegetation 1-2m north and south of a road leading east towards Zolote-5/Mykhailivka (non-government-controlled, 58km west of Luhansk). Positioned on the southern edge of the disengagement area, the SMM saw smoke about 300m north, assessed as burning vegetation.

Outside the disengagement area, on 15 November, in Zolote-4/Rodina (government-controlled, 59km west of Luhansk), an SMM mini-UAV spotted for the first time a 40m-long extension (assessed as constructed between 12 and 22 October) of a trench (about 200m), about 870m north-east of the disengagement area. On 16 November, an SMM long-range UAV spotted two

---

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

IFVs (BMP-variants) about 130m east of the checkpoint of the Ukrainian Armed Forces about 300m north of the disengagement area.

On 18 November, the SMM camera in Zolote recorded a projectile in flight 2-4km east-south-east, assessed as outside the disengagement area.

On 18 November, inside **the disengagement area near Stanytsia Luhanska** (government-controlled, 16km north-east of Luhansk), the SMM observed ten workers from government-controlled areas painting pillars of the newly constructed section of the Stanytsia Luhanska bridge (15km north-east of Luhansk) and consolidating the ground at its northern end.

On the same day, the SMM saw five workers from non-government-controlled areas installing five concrete light poles at the parking lot of the checkpoint of the armed formations south of the bridge. The Mission observed seven workers clearing and burning vegetation around 50m west of the road south of the checkpoint. The SMM also saw at least seven members of the armed formations (wearing armbands with “JCCC” written on them) between the checkpoint and the southern edge of the newly constructed section of the bridge.

Outside the disengagement area, on 17 November, an SMM mini-UAV spotted an anti-aircraft gun (ZU-23, 23mm) near the Prince Ihor monument. On the evening of the same day, while on the eastern edge of Stanytsia Luhanska, the SMM heard an undetermined explosion at an assessed range of 4-5km south-west, assessed as outside the disengagement area but within its 5km periphery.

#### **SMM long-range UAV recorded rocket propelled grenade launcher fire**

On 17 November, in the eastern outskirts of Krasnohorivka (government-controlled, 21km west of Donetsk), an SMM long-range UAV spotted three persons, one of which fired two rounds of a rocket-propelled grenade launcher (RPG-7) eastwards. The UAV also spotted an impact in the western outskirts of Staromykhailivka (non-government-controlled, 15km west of Donetsk), 500m from the nearest civilian houses.

#### **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 four weapons in violation of the withdrawal lines in non-government-controlled areas of Donetsk region. It observed 24 weapons beyond withdrawal lines but outside of designated storage sites mainly in non-government-controlled areas of Luhansk region (for further details, see the tables below).

#### **Indications of military and military-type presence in the security zone<sup>6</sup>**

The SMM observed military and military-type presence inside the security zone on both sides of the contact line, including armoured reconnaissance vehicles, IFVs, a trench digger and an anti-aircraft gun in government-controlled areas of Donetsk and Luhansk regions, as well as

---

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

ACVs in non-government-controlled areas of Donetsk and Luhansk regions (for further details, see the table below).

### **Anti-tank guided missile tailfin near a school in Zolote-5/Mykhailivka and unexploded ordnance (UXO) on a road between Pyshevyk and Verkhnohyrokiivske**

On 15 November, in Zolote-5/Mykhailivka (non-government-controlled, 58km west of Luhansk), an SMM mini-UAV spotted the tailfin of an exploded anti-tank guided missile (9M111 *Fagot*) in an open field about 350m east of a functioning School No. 4, about 150m north of the nearest civilian houses.

On 17 November, the SMM saw for the first time a piece of UXO, assessed as a (40mm) rocket (OG-7 type) in a field 5m north of the road between the entry-exit checkpoint near Pyshevyk (government-controlled, 84km south of Donetsk) and a checkpoint of the armed formations near Verkhnohyrokiivske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk).

On 18 November, the Mission saw for the first time a mine hazard sign (a red square with “Stop. Mines” written in Ukrainian and Russian) in a residential area on the south-eastern edge of Semyhiria (government-controlled, 58km north-east of Donetsk).

On the same day, the Mission also saw white strips attached to sticks on both sides of an unpaved track (300-400m-long) leading east from Novoluhanske (government-controlled, 53km north-east of Donetsk) towards the Vuhlehirsk Thermal Power Plant.

### **SMM facilitation of repairs to and operation of critical civilian infrastructure**

The SMM continued to facilitate the operation of the Donetsk Filtration Station (DFS) (15km north of Donetsk). An SMM camera at the DFS and SMM patrols positioned in and near Avdiivka (government-controlled, 17km north of Donetsk) and Kamianka (government-controlled, 20km north of Donetsk) recorded ceasefire violations in the 5km periphery of the DFS (see ceasefire violations table below).

### **Border areas not under government control**

While at a border crossing point near Izvaryne (52km south-east of Luhansk) for about 30 minutes, the SMM saw 38 cars (16 with Ukrainian, 12 with Russian Federation, and one with Belarusian licence plates, as well as nine with “LPR” plates), four covered cargo trucks (two with Ukrainian and two with Belarusian licence plates), as well as three pedestrians (two women and one man, mixed ages) exiting Ukraine. Thereafter, a member of the armed formations told the SMM to leave the area.\*

While at a border crossing point near Voznesenivka (formerly Chervonopartyzansk, 65km south-east of Luhansk) for about ten minutes, the Mission saw a bus with Russian Federation licence plates entering Ukraine, as well as five cars and three covered cargo trucks (all with Ukrainian licence plates) exiting Ukraine. Thereafter, a member of the armed formations told the SMM to leave the area.\*

The Mission continued monitoring in Kherson, 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, 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 below). 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:

- At a checkpoint about 2km north of Nevelske (government-controlled, 18km north-west of Donetsk) an unarmed Ukrainian Armed Forces personnel denied the SMM passage, citing “security of the SMM”.
- At a checkpoint between Boikivske (formerly Telmanove, non-government-controlled, 67km south-east of Donetsk) and Staromarivka (62km south of Donetsk), an armed member of the armed formations denied the SMM passage, citing “orders from superiors”.
- At a checkpoint north-east of Sosnivske (non-government-controlled, 78km south of Donetsk), a member of the armed formations denied the Mission passage, citing “orders from superiors”.
- At a border crossing point near Izvaryne (non-government-controlled, 52km south-east of Luhansk), a member of the armed formations told the SMM to leave the area.
- At a border crossing point near Voznesenivka (formerly Chervonopartyzansk, non-government-controlled, 65km south-east of Luhansk), a member of the armed formations told the SMM to leave the area.

#### *Regular restrictions related to disengagement areas and mines/UXO:*

- The sides continued to deny the SMM full access, 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, UXO and other obstacles.

#### Other impediments:

- On 16 November, an SMM long-range UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying between Ozarianivka (formerly Pershe Travnia, government-controlled, 52km north of Donetsk) and Petrivske (non-government-controlled, 41km south of Donetsk) and again between Kalynove (non-

government-controlled, 60km west of Luhansk) and Kaiutyne (non-government-controlled, 47km north-east of Donetsk).<sup>7</sup>

- On 17 November, an SMM long-range UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying between Stepanivka (government-controlled, 54km north of Donetsk) and Ivanopillia (government-controlled, 51km north of Donetsk), Pravdivka (government-controlled, 38km north of Donetsk) and Yasne (non-government-controlled, 30km south-west of Donetsk), as well as between Petrivske and Diakove (non-government-controlled, 70km south-west of Luhansk).
- On 18 November, an SMM mid-range UAV experienced GPS signal interference, assessed as probable jamming while flying near Nova Marivka (non-government-controlled, 64km south of Donetsk).

---

<sup>7</sup> The interference could have originated from anywhere within the radius of kilometres from the UAVs' positions.

## Table of weapons

### Weapons in violation of the withdrawal lines

Date	No. of weapons	Type of weapon	Location	Source of observation
<b>Non-government-controlled areas</b>				
16/11/2019	3	Tank (T-64)	Near Novoselivka (37km north-east of Donetsk) (for previous observations in the area, see <a href="#">SMM Daily Report 5 November 2019</a> )	Long-range UAV
17/11/2019	1	Probable surface-to-air missile system (9K35 <i>Strela-10</i> )	Near Dokuchaievsk (30km south-west of Donetsk)	

### Beyond withdrawal lines but outside of designated storage sites

Date	No. of weapons	Type of weapon	Location	Source of observation
<b>Government-controlled areas</b>				
18/11/2019	1	Self-propelled anti-aircraft gun (2K22 <i>Tunguska</i> )	In Kurakhove (40km west of Donetsk)	Patrol
18/11/2019	1	Self-propelled anti-aircraft gun (2K22 <i>Tunguska</i> )	Near Novoselydivka (38km west of Donetsk)	Patrol
<b>Non-government-controlled areas</b>				
15/11/2019	18	Towed howitzer (ten 2A65 <i>Msta-B</i> , 152mm and eight 2A36 <i>Giatsint-B</i> , 152mm )	In two compounds near Khrustalnyi (formerly Krasnyi Luch, 54km south-west of Luhansk) (for previous observations in the area, see <a href="#">SMM Daily Report 22 October 2019</a> )	Mini-UAV
	3	Tank (two T-64 and a T-72)		
	1	Surface-to-air missile system (9K35 <i>Strela-10</i> )		

### **Table of indications of military and military-type presence in the security zone<sup>8</sup>**

Date	No.	Type	Location	Source of observation
<b>Government-controlled areas</b>				
16/11/2019	1	Armoured reconnaissance vehicle (BRDM-2)	Near Svitlodarsk (57km north-east of Donetsk)	Long-range UAV
	2	Armoured reconnaissance vehicle (BRDM-2)	Near Troitske (69km west of Luhansk)	
	2	Infantry fighting vehicle (BMP variant)		
	2	Armoured combat vehicle	Near Starohnativka (51km south of Donetsk)	
17/11/2019	1	Armoured combat vehicle	Near Nevelske (18km north-west of Donetsk)	Long-range UAV
	3	Armoured combat vehicle	Near Krasnohorivka (21km west of Donetsk)	

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



	2	Armoured combat vehicle	Near a residential area in Trokhizbenka (32km north-west of Luhansk)	
	3	Armoured combat vehicle	Near Krymske (42km north-west of Luhansk)	
	1	Infantry fighting vehicle (BMP-2)	In Zolote (60km west of Luhansk)	
	4	Armoured combat vehicle		
	1	Trench digger (probable PZM-2)		
	1	Infantry fighting vehicle (BMP-1)	Near Troitske (69km west of Luhansk)	
	2	Armoured personnel carrier (MT-LB)		
	1	Armoured combat vehicle		
	1	Probable armoured combat vehicle	Near Myronivskyi (62km north-east of Donetsk)	
	1	Armoured reconnaissance vehicle (BRDM-2)	Near Svitlodarsk (57km north-east of Donetsk)	
	1	Armoured combat vehicle	Near Troitske (30km north of Donetsk)	
	1	Armoured combat vehicle	Near Kamianka (20km north of Donetsk)	
	2	Armoured combat vehicle	Near Zalizne (formerly Artemove, 42km north-east of Donetsk)	
18/11/2019	1	Anti-aircraft gun (ZU-23, 23mm)	Near Nevelske (18km north-west of Donetsk)	Patrol
<b>Non-government-controlled areas</b>				
16/11/2019	2	Armoured combat vehicle	Near Molodizhne (63km west of Luhansk)	Long-range UAV
	1	Armoured combat vehicle	Near Kalynove-Borshchuvate (61km west of Luhansk)	
17/11/2019	1	Armoured combat vehicle	Pryshyb (34km north-west of Luhansk)	Mini-UAV
	2	Infantry fighting vehicle (BMP variant)	In a compound in Debaltseve (58km north-east of Donetsk)	

**Table of ceasefire violations as of 18 November 2019<sup>9</sup>**

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	3-5km ESE	Recorded	1	Projectile	SW to NE	N/K	17-Nov, 20:05
	3-5km SE	Recorded	4	Explosion	Undetermined (also recorded by SMM camera at the DFS)	N/K	17-Nov, 20:06
	3-5km SE	Recorded	11	Explosion	Undetermined (also recorded by SMM camera at the DFS)	N/K	17-Nov, 20:07
	3-5km SE	Recorded	10	Explosion	Undetermined (also recorded by SMM camera at the DFS)	N/K	17-Nov, 20:08
	3-5km SE	Recorded	2	Projectile	WSW to ENE	N/K	17-Nov, 20:13
	3-5km SE	Recorded	4	Projectile	In vertical flight	N/K	17-Nov, 20:13
	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	17-Nov, 20:20
	3-5km ESE	Recorded	6	Projectile	WSW to ENE	N/K	17-Nov, 20:29
	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	17-Nov, 20:30
	3-5km ESE	Recorded	2	Projectile	SW to NE	N/K	17-Nov, 20:30
	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	17-Nov, 20:32
	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	17-Nov, 20:33
	3-5km SE	Recorded	1	Projectile	WSW to ENE	N/K	17-Nov, 20:33
	3-5km SE	Recorded	10	Projectile	WSW to ENE	N/K	17-Nov, 20:45
3-5km SE	Recorded	3	Projectile	W to E	N/K	17-Nov, 20:54	
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	3-5km SE	Recorded	7	Projectile	NE to SW	N/K	17-Nov, 18:41
	2-4km SE	Recorded	4	Projectile	NE to SW	N/K	17-Nov, 21:21
	2-4km SE	Recorded	1	Explosion	Airburst	N/K	17-Nov, 21:21
	2-4km SSE	Recorded	4	Projectile	NE to SW	N/K	17-Nov, 22:00
	2-4km SSE	Recorded	3	Projectile	NE to SW	N/K	17-Nov, 22:01
	2-4km SSE	Recorded	1	Projectile	NE to SW	N/K	17-Nov, 22:01
	2-4km SSE	Recorded	1	Explosion	Impact	N/K	17-Nov, 22:01
	2-4km SSE	Recorded	2	Projectile	NE to SW	N/K	17-Nov, 22:02
	2-4km SSE	Recorded	4	Projectile	NE to SW	N/K	17-Nov, 22:11
	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 22:12
	2-4km SE	Recorded	2	Projectile	NE to SW	N/K	18-Nov, 05:10
	2-4km SE	Recorded	1	Projectile	SW to NE	N/K	18-Nov, 18:07
	2-4km SE	Recorded	2	Projectile	SW to NE	N/K	18-Nov, 18:08
	2-4km SE	Recorded	5	Projectile	N to S	N/K	18-Nov, 18:08
3-5km SE	Recorded	2	Projectile	SW to NE	N/K	18-Nov, 18:28	
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	1-2km S	Recorded	1	Projectile	NW to SE	N/K	17-Nov, 19:24
	1-2km S	Recorded	7	Projectile	NE to SW	N/K	17-Nov, 19:43
	1-2km SSW	Recorded	2	Projectile	E to W	N/K	17-Nov, 19:44
	1-2km SSW	Recorded	7	Projectile	E to W	N/K	17-Nov, 19:45
	1-2km SSW	Recorded	5	Projectile	E to W	N/K	17-Nov, 19:46
	1-2km SSW	Recorded	2	Projectile	ENE to WSW	N/K	17-Nov, 19:52
	1-2km SSW	Recorded	1	Projectile	NE to SW	N/K	17-Nov, 19:52
	1-2km SSW	Recorded	1	Projectile	E to W	N/K	17-Nov, 19:52
	2-4km SSW	Recorded	2	Explosion	Undetermined	N/K	17-Nov, 20:00

<sup>9</sup> The table only includes ceasefire violations directly observed by the SMM and it may include those also assessed to be live-fire exercises, controlled detonations, etc. Details provided – in terms of distance, direction, weapons-type, etc. – are based on assessments provided by monitors on the ground, and are not always necessarily precise. When information is not known (indicated with an “N/K”), the SMM was unable to ascertain such information due to distance, weather conditions and/or other considerations. Ceasefire violations recorded by more than one patrol and assessed to be the same are entered only once.

SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	1-2km SSW	Recorded	1	Projectile	W to E	N/K	17-Nov, 20:01
	1-2km SSW	Recorded	1	Projectile	W to E (also recorded by SMM camera in Avdiivka)	N/K	17-Nov, 20:02
	1.5-3km SSW	Recorded	7	Projectile	WNW to ESE (also recorded by SMM camera in Avdiivka)	N/K	17-Nov, 20:07
	0.7-1km SSE	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:08
	0.7-1km SSE	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:10
	0.7-1km S	Recorded	4	Explosion	Undetermined	N/K	17-Nov, 20:10
	1.5-3km SSW	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:10
	2-4km SSW	Recorded	10	Projectile	SE to NW	N/K	17-Nov, 20:11
	1.5-3km S	Recorded	2	Explosion	Undetermined	N/K	17-Nov, 20:11
	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:34
	1.5-2km SSW	Recorded	1	Projectile	ESE to WNW	N/K	17-Nov, 20:52
	1-2km SSW	Recorded	1	Projectile	NW to SE	N/K	17-Nov, 21:36
	0.7-1km S	Recorded	9	Muzzle flash		N/K	17-Nov, 21:39
	0.7-1km S	Recorded	14	Muzzle flash		N/K	17-Nov, 22:02
	0.7-1km S	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 22:14
	2-3km SSW	Recorded	1	Projectile	ESE to WNW	N/K	17-Nov, 22:55
	1-3km SSW	Recorded	1	Explosion	Undetermined (also recorded by SMM camera in Avdiivka)	N/K	17-Nov, 23:58
	2-3km SSW	Recorded	4	Projectile	ESE to WNW	N/K	18-Nov, 00:39
	2-3km SSW	Recorded	4	Projectile	ESE to WNW	N/K	18-Nov, 00:47
	0.7-1km SSE	Recorded	4	Muzzle flash		N/K	18-Nov, 01:01
	2-3km SSW	Recorded	2	Projectile	ESE to WNW	N/K	18-Nov, 01:02
	2-3km SSW	Recorded	3	Projectile	ESE to WNW	N/K	18-Nov, 01:26
	3-5km ESE	Recorded	1	Projectile	SSW to NNE	N/K	17-Nov, 20:03
	3-5km E	Recorded	1	Projectile		N/K	17-Nov, 20:09
	3-5km ESE	Recorded	3	Explosion	Undetermined	N/K	17-Nov, 20:09
	3-5km ESE	Recorded	3	Explosion	Undetermined	N/K	17-Nov, 20:09
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	17-Nov, 20:10
	3-5km SE	Recorded	2	Projectile	NNE to SSW	N/K	17-Nov, 20:17
	3-5km SE	Recorded	7	Projectile	NNE to SSW	N/K	17-Nov, 20:18
	3-5km SE	Recorded	5	Projectile	SSW to NNE	N/K	17-Nov, 20:19
	3-5km SE	Recorded	1	Projectile	NNE to SSW	N/K	17-Nov, 20:19
	3-5km ESE	Recorded	7	Projectile	SSW to NNE	N/K	17-Nov, 20:47
	3-5km ESE	Recorded	4	Projectile	SSW to NNE	N/K	17-Nov, 20:48
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:49
	3-5km E	Recorded	3	Explosion	Undetermined	N/K	17-Nov, 20:50
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	17-Nov, 20:55
	3-5km SE	Recorded	1	Projectile	NNE to SSW	N/K	17-Nov, 20:56
	3-5km ESE	Recorded	2	Explosion	Outgoing	N/K	17-Nov, 20:56
	3-5km ESE	Recorded	2	Projectile	SSW to NNE (subsequent to previous event)	N/K	17-Nov, 20:56
	3-5km E	Recorded	2	Impact	Undetermined (subsequent to previous event)	N/K	17-Nov, 20:56
	3-5km SE	Recorded	6	Projectile	SSW to NNE	N/K	17-Nov, 20:57
	3-5km E	Recorded	1	Explosion	Airburst	N/K	17-Nov, 21:23
	3-5km SE	Recorded	3	Projectile	NNE to SSW	N/K	17-Nov, 21:34

	3-5km E	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 21:35
	2-4km ESE	Recorded	1	Projectile	SSW to NNE	N/K	17-Nov, 21:44
	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 21:44
	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 21:44
	2-4km E	Recorded	4	Explosion	Undetermined	N/K	17-Nov, 21:55
	3-5km SE	Recorded	4	Projectile	SSW to NNE	N/K	17-Nov, 22:41
	3-5km E	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 22:46
	3-5km ESE	Recorded	3	Projectile	SSW to NNE	N/K	17-Nov, 23:11
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	17-Nov, 23:54
	3-5km E	Recorded	2	Explosion	Undetermined	N/K	18-Nov, 00:14
	3-5km ESE	Recorded	5	Projectile	SW to NE	N/K	18-Nov, 02:18
	3-5km ESE	Recorded	3	Projectile	SW to NE	N/K	18-Nov, 03:33
	3-5km ESE	Recorded	1	Projectile	WNW to ESE	N/K	18-Nov, 03:33
	3-5km ESE	Recorded	20	Projectile	SW to NE	N/K	18-Nov, 03:34
	3-5km ESE	Recorded	4	Projectile	SW to NE	N/K	18-Nov, 03:45
	3-5km ESE	Recorded	19	Projectile	SW to NE	N/K	18-Nov, 03:56
	3-5km ESE	Recorded	1	Explosion	Also recorded by SMM camera in Lomakyne	N/K	18-Nov, 10:50
	3-5km ESE	Recorded	1	Muzzle flash		N/K	18-Nov, 18:15
	3-5km ESE	Recorded	1	Projectile	NNW to SSE	N/K	18-Nov, 18:15
	3-5km ESE	Recorded	4	Projectile	SSW to NNE	N/K	18-Nov, 18:16
	3-5km ESE	Recorded	2	Projectile	NNW to SSE	N/K	18-Nov, 18:16
	3-5km ESE	Recorded	1	Projectile	SSW to NNE	N/K	18-Nov, 18:17
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-4km ENE	Recorded	1	Illumination flare	In vertical flight	N/K	17-Nov, 23:50
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	2-4km NNE	Recorded	2	Projectile	W to E	N/K	17-Nov, 21:48
SMM camera at entry-exit checkpoint in Pyshchevyk (government-controlled, 84km S of Donetsk)	2-4km ESE	Recorded	3	Projectile	WSW to ENE	N/K	17-Nov, 22:56
	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 23:01
	2-4km ESE	Recorded	6	Projectile	WSW to ENE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:04
	2-4km ESE	Recorded	6	Explosion	Undetermined (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:04
	2-4km ESE	Recorded	5	Projectile	NNW to SSE (also recorded by an SMM camera in Chermalyk)	N/K	17-Nov, 23:06
	2-4km ESE	Recorded	1	Projectile	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:12
	2-4km ESE	Recorded	1	Projectile	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:14
	2-4km ESE	Recorded	2	Projectile	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:18

	2-4km ESE	Recorded	1	Burst	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:18
	2-4km ESE	Recorded	2	Projectile	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:23
	2-4km ESE	Recorded	3	Projectile	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:24
	2-4km ESE	Recorded	2	Projectile	SSW to NNE (also recorded by SMM camera in Chermalyk)	N/K	17-Nov, 23:25
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	2-4km ESE	Recorded	1	Projectile	SSW to NNE	N/K	18-Nov, 00:06
	3-5km N	Recorded	6	Projectile	E to W	N/K	17-Nov, 18:24
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 18:36
	3-5km N	Recorded	5	Projectile	ESE to WNW	N/K	17-Nov, 18:43
	3-5km N	Recorded	26	Projectile	E to W	N/K	17-Nov, 18:44
	3-5km N	Recorded	8	Projectile	ESE to WNW	N/K	17-Nov, 18:45
	3-5km N	Recorded	14	Projectile	E to W	N/K	17-Nov, 19:19
	3-5km N	Recorded	4	Projectile	E to W	N/K	17-Nov, 19:21
	3-5km N	Recorded	4	Projectile	E to W	N/K	17-Nov, 19:22
	3-5km N	Recorded	1	Projectile	E to W	N/K	17-Nov, 19:23
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 19:26
	3-5km N	Recorded	1	Muzzle flash		N/K	17-Nov, 19:26
	3-5km N	Recorded	1	Projectile	W to E	N/K	17-Nov, 19:26
	3-5km N	Recorded	4	Projectile	E to W	N/K	17-Nov, 19:35
	3-5km N	Recorded	30	Projectile	E to W	N/K	17-Nov, 19:52
	3-5km N	Recorded	7	Projectile	E to W	N/K	17-Nov, 20:15
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:15
	3-5km N	Recorded	3	Projectile	E to W	N/K	17-Nov, 20:16
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:16
	3-5km N	Recorded	5	Projectile	E to W	N/K	17-Nov, 20:23
	3-5km N	Recorded	1	Projectile	E to W	N/K	17-Nov, 20:24
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:29
	3-5km N	Recorded	9	Projectile	E to W	N/K	17-Nov, 20:42
	3-5km N	Recorded	1	Projectile	E to W	N/K	17-Nov, 20:44
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	17-Nov, 20:44
	3-5km N	Recorded	2	Explosion	Undetermined	N/K	17-Nov, 20:49
	3-5km N	Recorded	14	Projectile	E to W	N/K	18-Nov, 02:29
	7-9km N	Recorded	1	Explosion	Undetermined (also recorded by SMM camera in Lomakyne)	N/K	18-Nov, 16:29
	7-9km N	Recorded	1	Projectile	Airburst (also recorded by SMM camera in Lomakyne)	N/K	18-Nov, 16:29
	3-5km N	Recorded	4	Projectile	E to W	N/K	18-Nov, 16:45
	3-5km N	Recorded	3	Projectile	E to W	N/K	18-Nov, 16:46
	3-5km N	Recorded	6	Projectile	W to E	N/K	18-Nov, 16:46
	3-5km N	Recorded	1	Projectile	E to W	N/K	18-Nov, 16:47
3-5km N	Recorded	3	Projectile	W to E	N/K	18-Nov, 16:47	
3-5km N	Recorded	2	Projectile	E to W	N/K	18-Nov, 16:47	
3-5km N	Recorded	2	Explosion	Undetermined	N/K	18-Nov, 16:47	
3-5km N	Recorded	3	Explosion	Undetermined	N/K	18-Nov, 16:50	
7-9km N	Recorded	2	Explosion	Undetermined, also recorded by	N/K	18-Nov, 16:50	

					SMM camera in Lomakyne		
	3-5km N	Recorded	14	Projectile	E to W	N/K	18-Nov, 17:13
	3-5km N	Recorded	2	Projectile	E to W	N/K	18-Nov, 17:22
	3-5km N	Recorded	3	Projectile	E to W	N/K	18-Nov, 17:23
	3-5km N	Recorded	2	Projectile	SW to NE	N/K	18-Nov, 17:27
	3-5km N	Recorded	7	Projectile	W to E	N/K	18-Nov, 17:32
	7-9km NNW	Recorded	1	Explosion	Undetermined (also recorded by SMM camera in Lomakyne)	N/K	18-Nov, 17:56
	7-9km N	Recorded	1	Explosion	Undetermined (also recorded by SMM camera in Lomakyne)	N/K	18-Nov, 18:02
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	18-Nov, 18:02
	3-5km N	Recorded	3	Projectile	W to E	N/K	18-Nov, 18:13
SE edge of Avdiivka (government-controlled, 17km N of Donetsk)	2km SE	Heard	1	Explosion	Undetermined	N/K	18-Nov, 09:23
	2-3km SSE	Heard	1	Explosion	Undetermined	N/K	18-Nov, 13:51
Krasnohorivka (government-controlled, 21km W of Donetsk)	2-3km NE	Heard	1	Explosion	Undetermined	N/K	18-Nov, 11:23
About 1.8km N of Petrivske (non-government-controlled, 41km S of Donetsk)	2.5km SSW	Heard	10	Explosion	Impact (assessed as inside the disengagement area)	N/K	18-Nov, 12:52
2km SW of Pyshevyk (government-controlled, 84km S of Donetsk)	2-4km ESE	Heard	10	Shot		Small arms	18-Nov, 10:00
	2-4km ESE	Heard	30	Burst		HMG	18-Nov, 10:03-10:05
	2-3km ESE	Heard	5	Shot		Small arms	18-Nov, 13:38-13:40
	2-3km ESE	Heard	10	Burst		HMG	18-Nov, 13:38-13:40
	2-4km ESE	Heard	4	Explosion	Undetermined	N/K	18-Nov, 13:45-13:50
	2-4km ESE	Heard	8	Shot		Small arms	18-Nov, 13:45-13:50
	2-4km ESE	Heard	25	Burst		HMG	18-Nov, 13:45-13:50
2.5km SSE of Lomakyne (government-controlled, 93km S of Donetsk)	2-3km NNE	Heard and saw	2	Explosion	Impact (followed by black smoke)	N/K	18-Nov, 00:00
About 3km SE of Lomakyne (government-controlled, 93km S of Donetsk)	2-3km SE	Heard	1	Explosion	Undetermined	N/K	18-Nov, 12:11
	3-4km E	Heard	6	Shot		Small arms	18-Nov, 12:40
	3-4km E	Heard	1	Explosion	Undetermined	N/K	18-Nov, 12:40
Verkhnohyrokiivske (formerly Oktiabr, non-government-controlled, 85km S of Donetsk)	3-4km SW	Heard	1	Explosion	Undetermined	N/K	18-Nov, 11:08
Pavlopil (government-controlled, 84km S of Donetsk)	2-4km E	Heard	2	Explosion	Undetermined	N/K	18-Nov, 11:35

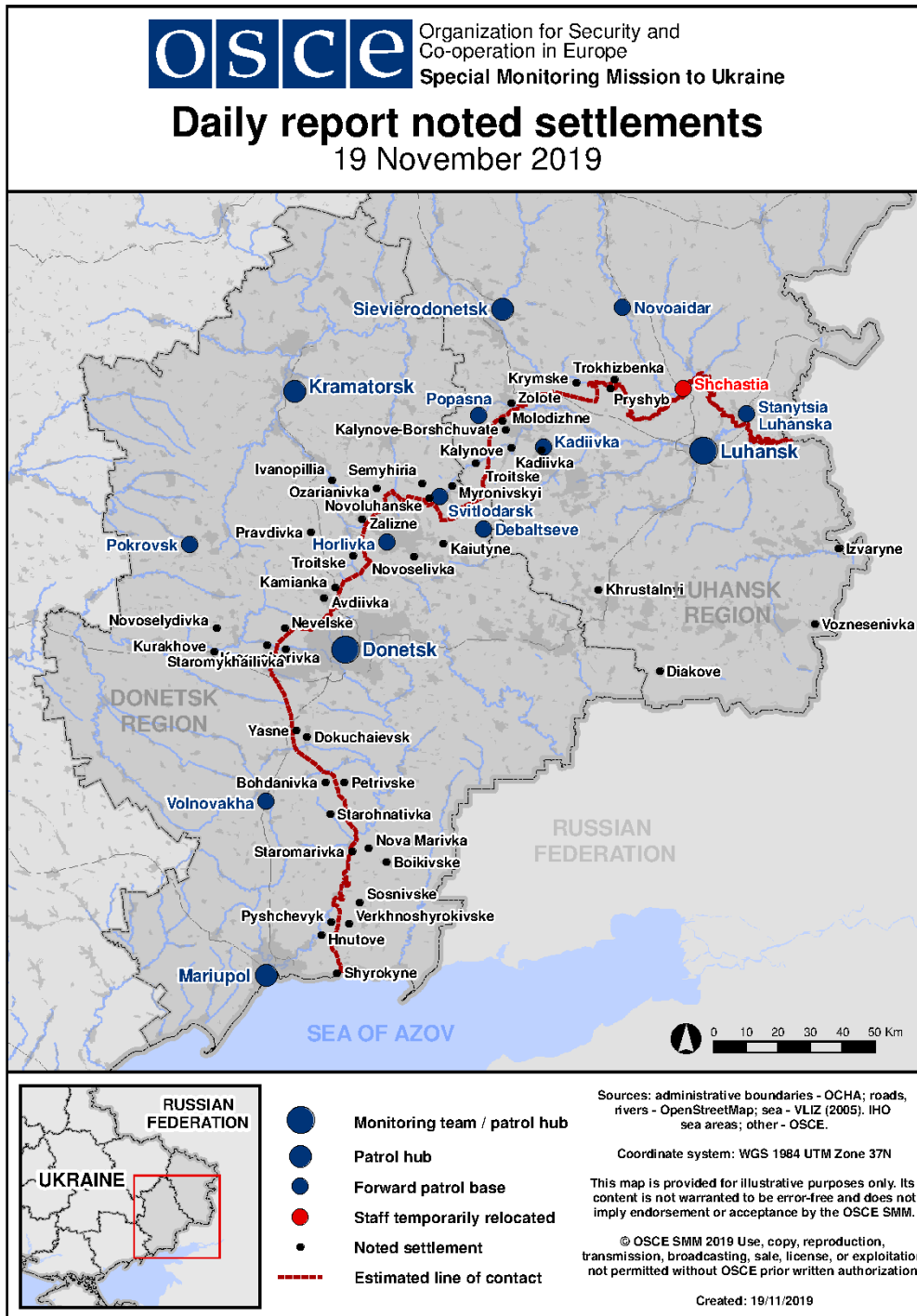
About 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	N/K SSW	Heard	35	Shot	Assessed as outside the Petrivske disengagement area	AGL	18-Nov, 12:32-12:37
	N/K SE	Heard	7	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	18-Nov, 11:56
	N/K SSW	Heard	6	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	18-Nov, 11:57
	N/K SSW	Heard	2	Burst	Assessed as outside the Petrivske disengagement area	HMG	18-Nov, 11:57
	N/K SSW	Heard	3	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	18-Nov, 13:02
	N/K SSW	Heard	1	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	18-Nov, 13:13
	N/K SSW	Heard	1	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	18-Nov, 14:09
	N/K SSW	Heard	3	Explosion	Undetermined (assessed as outside the Petrivske disengagement area)	N/K	18-Nov, 14:27
	N/K SSW	Heard	1	Burst	Assessed as outside the Petrivske disengagement area	Small arms	18-Nov, 14:27
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-5km SW	Heard	14	Burst		HMG	17-Nov, 18:40-18:44
	3-5km SW	Heard	12	Burst		Small arms	17-Nov, 19:02-19:05
	3-5km SW	Heard	4	Explosion	Undetermined	N/K	17-Nov, 19:02-19:05
	3-5km SW	Heard	12	Burst		HMG	17-Nov, 19:02-19:05
	3-5km SW	Heard	6	Burst		Small arms	17-Nov, 19:16-19:19
	3-5km SW	Heard	4	Shot		Small arms	17-Nov, 19:16-19:19

3-5km SW	Heard	6	Explosion	Undetermined	N/K	17-Nov, 19:16-19:19
3-5km SW	Heard	6	Burst		HMG	17-Nov, 19:16-19:19
3-5km SW	Heard	3	Explosion	Undetermined	N/K	17-Nov, 19:22
3-5km SW	Heard	5	Burst		HMG	17-Nov, 19:22
3-5km SW	Heard	1	Explosion	Undetermined	N/K	17-Nov, 19:28
3-5km SW	Heard	2	Explosion	Undetermined	N/K	17-Nov, 19:36
3-5km SW	Heard	4	Explosion	Undetermined	N/K	17-Nov, 19:40-19:45
3-5km S	Heard	1	Burst		HMG	17-Nov, 19:47
3-5km SE	Heard	7	Burst		HMG	17-Nov, 20:28
3-5km SE	Heard	18	Burst		HMG	17-Nov, 20:39-20:44
3-5km SE	Heard	3	Explosion	Undetermined	N/K	17-Nov, 20:45
3-5km SE	Heard	3	Burst		HMG	17-Nov, 20:45
3-5km SE	Heard	30	Burst		Small arms	17-Nov, 21:05-21:10
3-5km SE	Heard	12	Burst		HMG	17-Nov, 21:05-21:10
3-5km SE	Heard	1	Burst		Cannon (30mm)	17-Nov, 21:05-21:10
5-7km S	Heard	1	Explosion	Undetermined	N/K	17-Nov, 21:10
3-5km SE	Heard	1	Burst		Small arms	17-Nov, 21:12
3-5km SE	Heard	4	Burst		HMG	17-Nov, 21:25
3-5km SE	Heard	1	Explosion	Undetermined	N/K	17-Nov, 21:27
3-5km SE	Heard	9	Burst		Small arms	17-Nov, 21:34
3-5km SE	Heard	2	Burst		HMG	17-Nov, 21:34
3-5km SE	Heard	2	Explosion	Undetermined	N/K	17-Nov, 21:34-21:37
3-5km SE	Heard	1	Burst		Cannon (30mm)	17-Nov, 21:41
4-7km SE	Heard	5	Explosion	Undetermined	N/K	17-Nov, 21:41-21:44
3-5km SE	Heard	6	Burst		Cannon (30mm)	17-Nov, 21:46-21:50
3-5km SE	Heard	8	Burst		HMG	17-Nov, 21:46-21:50
3-5km SE	Heard	4	Burst		HMG	17-Nov, 22:04
4-6km SE	Heard	8	Burst		Small arms	17-Nov, 22:10-22:14
4-6km SE	Heard	14	Burst		HMG	17-Nov, 22:10-22:14
3-5km SE	Heard	7	Burst		HMG	17-Nov, 22:15
3-5km SE	Heard	2	Explosion	Undetermined	N/K	17-Nov, 22:15
3-5km SE	Heard	3	Burst		Small arms	17-Nov, 22:15
3-5km SE	Heard	5	Burst		HMG	17-Nov, 22:31
3-5km SE	Heard	3	Explosion	Undetermined	N/K	17-Nov, 22:32-22:33
3-5km SE	Heard	25	Burst		HMG	17-Nov, 22:34-22:36
3-4km SE	Heard	8	Explosion	Undetermined	N/K	17-Nov, 22:43
3-5km SE	Heard	41	Burst		HMG	17-Nov, 23:18-23:28
3-5km SE	Heard	6	Explosion	Undetermined	N/K	17-Nov, 23:18-23:28
3-5km SE	Heard	21	Shot		Small arms	17-Nov, 23:20-23:28



	3-5km SE	Heard	51	Shot		Small arms	17-Nov, 23:29
	3-5km SE	Heard	12	Burst		Small arms	17-Nov, 23:29
	2-4km SE	Heard	3	Explosion	Undetermined	N/K	17-Nov, 23:46
	3-4km SE	Heard	2	Explosion	Undetermined	N/K	18-Nov, 11:21
	3-4km SE	Heard	3	Explosion	Undetermined	N/K	18-Nov, 15:12-15:13
	2-4km SE	Heard	9	Explosion	Undetermined	N/K	18-Nov, 15:41-15:43
	2-4km SE	Heard	8	Burst		HMG	18-Nov, 15:41-15:43
	3-5km SE	Heard	67	Burst		HMG	18-Nov, 15:44-15:54
	3-5km SE	Heard	46	Explosion	Undetermined	N/K	18-Nov, 15:44-15:54
	3-5km SE	Heard	139	Burst		Small arms	18-Nov, 15:44-15:54
	3-5km SE	Heard	104	Shot		Small arms	18-Nov, 15:44
	3-5km SE	Heard	20	Shot		Cannon (30mm)	18-Nov, 15:44-15:54
	3-5km SE	Heard	44	Explosion	Undetermined	N/K	18-Nov, 15:55-16:04
	3-5km SE	Heard	33	Burst		HMG	18-Nov, 15:55-16:04
	3-5km SE	Heard	10	Shot		Small arms	18-Nov, 15:55-16:04
	3-5km SE	Heard	14	Burst		Small arms	18-Nov, 15:55-16:04
	3-5km SE	Heard	8	Shot		Cannon (30mm)	18-Nov, 15:55-16:04
	3-5km SE	Heard	8	Burst		HMG	18-Nov, 16:05-16:08
	3-5km SE	Heard	4	Explosion	Undetermined	N/K	18-Nov, 16:05-16:08
	3-5km SE	Heard	2	Shot		Cannon (30mm)	18-Nov, 16:05-16:08
	3-5km SE	Heard	5	Explosion	Undetermined	N/K	18-Nov, 16:19-16:21
SW edge of Novoluhanske (government-controlled, 53km NE of Donetsk)	6-8km NE	Heard	6	Explosion	Undetermined	N/K	18-Nov, 12:51-13:07
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	3-4km SE	Heard	25	Burst		HMG	18-Nov, 13:55
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	2-4km ESE	Recorded	1	Projectile	ESE to SE (assessed as outside the disengagement area)	N/K	18-Nov, 17:43
E edge of Stanytsia Luhanska (government-controlled, 16km NE of Luhansk)	4-5km SW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	17-Nov, 22:10

### Map of Donetsk and Luhansk regions<sup>10</sup>



<sup>10</sup> The SMM is deployed to ten locations throughout Ukraine – Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Donetsk, Dnipro, Chernivtsi, Luhansk and Kyiv – as per Permanent Council Decision 1117 of 21 March 2014. This map of eastern Ukraine is meant for illustrative purposes and indicates locations mentioned in the report, as well as those where the SMM has offices (monitoring teams, patrol hubs, and forward patrol bases) in Donetsk and Luhansk regions. (In red: 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).