

# Daily Report 279/2019

25 November 2019<sup>1</sup>

## Summary

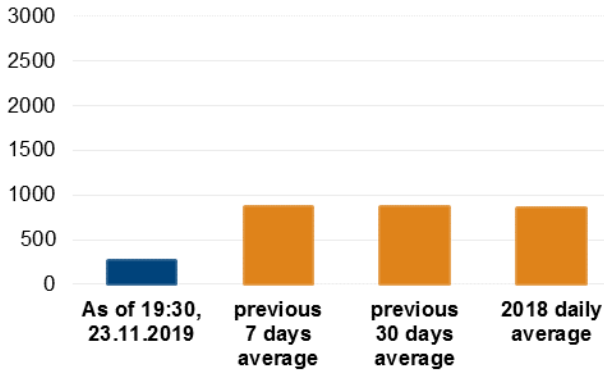
- Compared with the previous reporting period, between the evenings of 22 and 23 November, the SMM recorded fewer ceasefire violations in Donetsk region and no ceasefire violations in Luhansk region.
- Between the evenings of 23 and 24 November, the Mission recorded more ceasefire violations in both Donetsk and Luhansk regions, compared with the previous 24 hours.
- The SMM saw damage to a house in non-government-controlled Olenivka.
- Inside the disengagement area near Zolote, the SMM saw workers from non-government-controlled areas dismantling fortifications.
- The SMM continued to monitor the situation in disengagement areas near Petrivske and Stanytsia Luhanska.
- The SMM observed two weapons in violation of the withdrawal lines in a non-government-controlled area of Donetsk region.
- Restrictions of the SMM's freedom of movement continued, including at a checkpoint near non-government-controlled Zaichenko.\*

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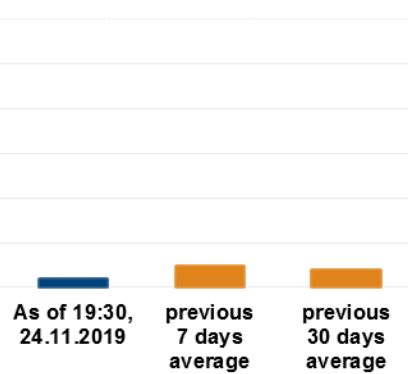
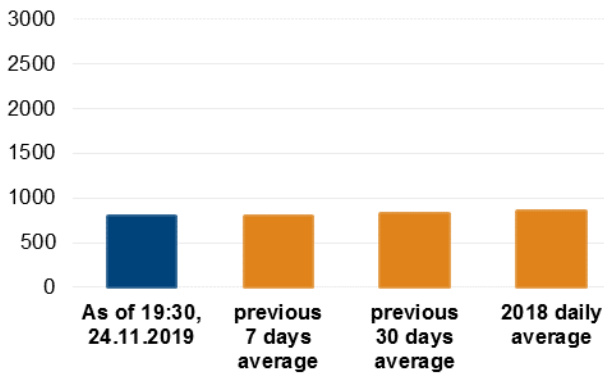
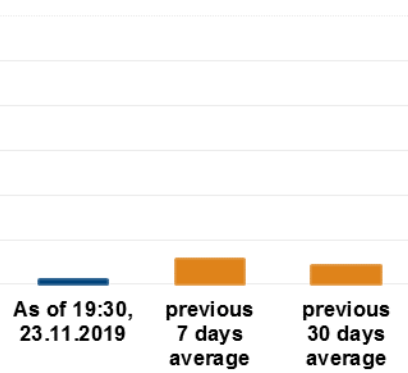
<sup>1</sup> Based on information from the Monitoring Teams as of 19:30, 24 November 2019. All times are in Eastern European Time.

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

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



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

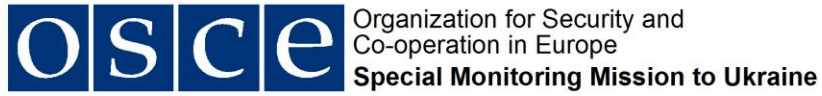


<sup>2</sup> For a complete breakdown of ceasefire violations, please see the annexed table. During the reporting period, the SMM camera in Stanytsia Luhanska was not operational.

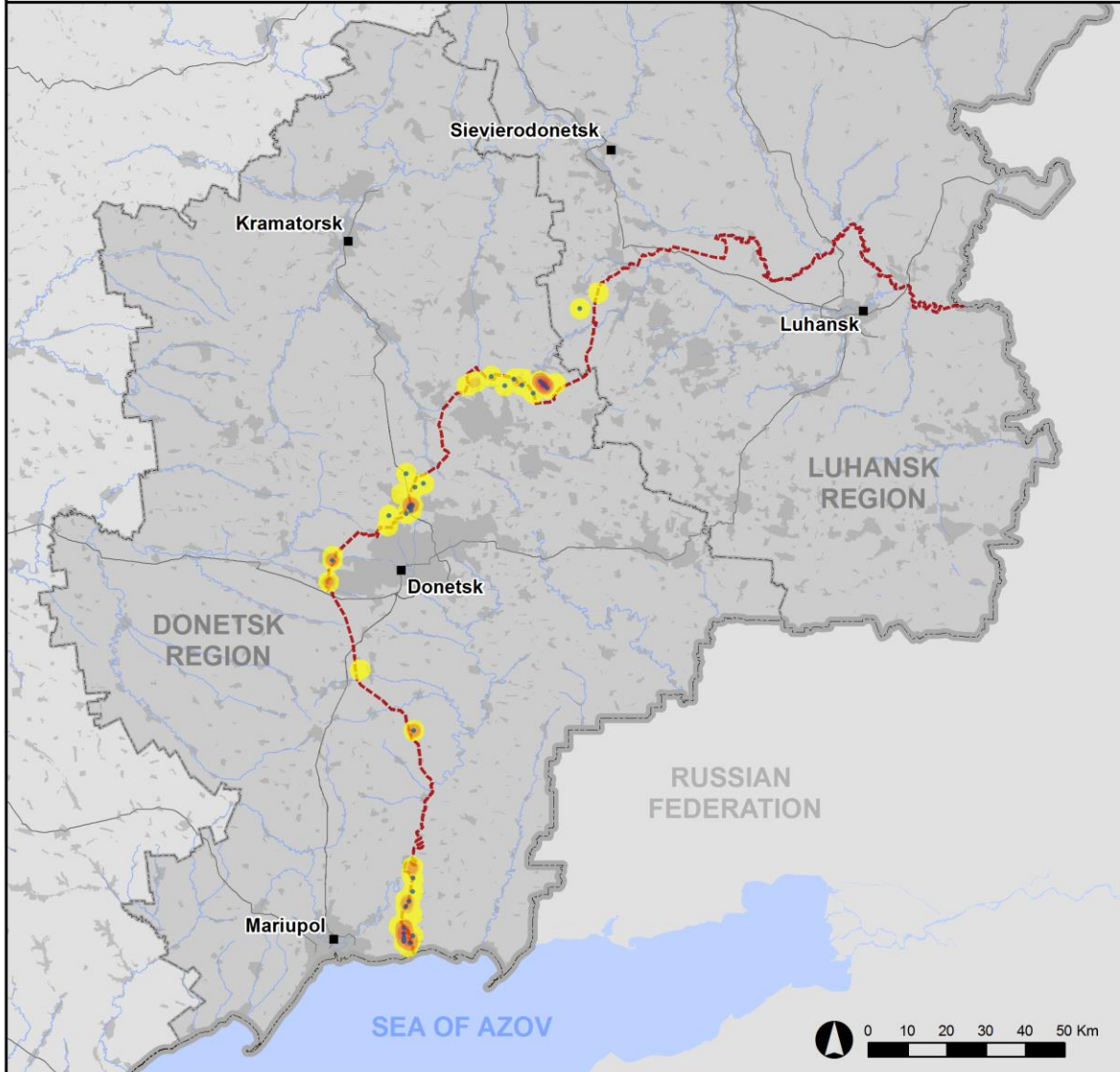
<sup>3</sup> Including explosions.

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

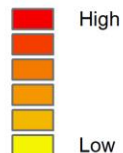
### Map of recorded ceasefire violations



## Ceasefire violations observed by the SMM 23-24 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: 25/11/2019

In Donetsk region, between the evenings of 22 and 23 November, the SMM recorded fewer ceasefire violations, including fewer explosions (about 45), compared with the [previous reporting period](#) (about 90 explosions). The majority of the ceasefire violations were recorded in areas north and north-north-east of Shyrokyne (government-controlled, 100km south of Donetsk) and in areas east-south-east and south-east of Hnutove (government-controlled, 90km south of Donetsk).

Between the evenings of 23 and 24 November, the Mission recorded more ceasefire violations, including more explosions (about 80), compared with the previous 24 hours. The majority of the ceasefire violations, including the majority of explosions, were recorded in areas south-east and east-south-east of Svitlodarsk (government-controlled, 57km north-east of Donetsk), in areas north and north-north-east of Shyrokyne and in areas south and south-south-west of the Donetsk Filtration Station (DFS) (15km north of Donetsk), including about 20 ceasefire violations about 300-600m from the DFS.

In Luhansk region, between the evenings of 22 and 23 November, the SMM recorded no ceasefire violations. In the [previous reporting period](#), it had recorded ceasefire violations, including 40 explosions.

Between the evenings of 23 and 24 November, the Mission recorded more ceasefire violations, including five explosions, compared with the previous 24 hours. All the ceasefire violations were recorded in areas south and south-south-east of Popasna (government-controlled, 69km west of Luhansk).

#### **Damage to a house in non-government-controlled Olenivka caused by gunfire**

On 23 November, at 5 Shevchenko Street in Olenivka (non-government-controlled, 23km south-west of Donetsk) (about 1km north of the contact line), the SMM saw a recently repaired top corner of a north-facing external wall of a one-storey inhabited house. Outside the house, the Mission saw a broken tile of asbestos in a dustbin. Inside the house, the SMM saw at least ten fresh penetrating holes (about 1cm in diameter) in the ceiling of the kitchen. It assessed that the damage had been caused by an undetermined projectile fired from a northerly direction, which had penetrated the upper corner of the wall and exploded between the roof and the ceiling. A resident (a man in his twenties) of the house told the SMM that an explosion had occurred on the morning of 22 November and caused the damage.

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

On 23 November, positioned about 1.3km north-east of Bohdanivka (government-controlled, 41km south-west of Donetsk), the SMM saw about 20 persons in six vehicles, assessed as belonging to the State Emergency Service of Ukraine, and an excavator heading toward **the disengagement area near Petrivske** (non-government-controlled, 41km south of Donetsk).

On 24 November, positioned about 1.3km north-east of Bohdanivka, the Mission saw four vehicles, an armoured personnel carrier (APC) (*Kozak* variant), an ambulance and an armoured medical evacuation vehicle, all belonging to the State Emergency Service of Ukraine heading towards the disengagement area.

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<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.

On the same day, positioned about 700m north-west of Petrivske, the SMM heard ten undetermined explosions and about 29 bursts of small-arms and heavy-machine-gun fire about 2-3km south, assessed as outside the disengagement area.

On 23 November, inside **the disengagement area near Zolote** (government-controlled, 60km west of Luhansk) the SMM saw five workers, a bulldozer and a truck dismantling fortifications about 600m north-east of the armed formations' checkpoint on the disengagement area's southern edge. The Mission also saw a senior member of the armed formations inside the disengagement area, heading towards the aforementioned location. It observed 16 workers and five deminers from non-government-controlled areas, accompanied by two members of the armed formations (wearing armbands with "JCCC" written on them), clearing vegetation about 5m west and east of the road north of the area's southern edge. The Mission saw that about 2-5m west and east of road T-1316 from the aforesaid checkpoint up to 1km north had been cleared of vegetation.

On the same day, the SMM camera in the southern part of the Zolote disengagement area recorded two explosions (also heard by the SMM positioned on the area's southern edge) at an assessed range of about 600-800m north-north-west, assessed as controlled detonations.

On 23 and 24 November, the Mission saw at least eight and six members of the armed formations (wearing armbands with "JCCC" written on them), respectively, at the checkpoint of the armed formations on the southern edge of the disengagement area and near a blue container south of the checkpoint. On 24 November, it also saw two members of the armed formations at the checkpoint.

On 24 November, the SMM saw 14 workers and three deminers from non-government-controlled areas entering the disengagement area.

On 23 November, inside **the disengagement area near Stanytsia Luhanska** (government-controlled, 16km north-east of Luhansk), the SMM saw three workers from non-government-controlled areas installing new railings on the railway bridge, about 500m east-north east of the Stanytsia Luhanska bridge (15km north-east of Luhansk).

On 23 and 24 November, the Mission saw four workers from government-controlled areas installing two metal detectors at the entry-exit checkpoint (EECP) north of the Stanytsia Luhanska bridge.

On the same days, the Mission saw at least three members of the armed formations (wearing armbands with "JCCC" written on them) between the newly constructed section of the bridge and the checkpoint of the armed formations south of the bridge.

## **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 two weapons in violation of the withdrawal lines in a training area in a non-government-controlled area of Donetsk region. It observed weapons beyond withdrawal lines but outside of designated storage sites: 40 in government-controlled areas and 16 in a

training area in a non-government-controlled area of Donetsk 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 infantry fighting vehicles and anti-aircraft guns in government-controlled areas of Donetsk region and an APC in a non-government-controlled area of Donetsk region (for further details, see the table below).

### **Anti-tank guided missile launcher tube at a checkpoint in government-controlled Popasna and tailfin of a mortar round removed in non-government-controlled Uzhivka**

On 23 November, the SMM saw for the first time at least four probable mine hazard signs (red and white plates) about 150m east of the road between Petrivske and Styla (non-government-controlled, 34km south of Donetsk), about 4.5km north of Petrivske.

On 24 November, on top of a Hesco-barrier at a Ukrainian Armed Forces checkpoint on the eastern edge of Popasna, the SMM saw for the first time a launcher tube for an anti-tank guided missile (9M111 *Fagot*).

On the same day, in Uzhivka (formerly Leninske, non-government-controlled, 96km south of Donetsk), the SMM saw that a [previously observed](#) tailfin of a 120mm mortar round embedded in the road at the eastern entrance to the village was no longer present.

### **Situation at checkpoints along the contact line**

On 24 November, at the EECF near Maiorsk (government-controlled, 45km north-east of Donetsk), the SMM saw about 250-300 pedestrians and about 30 cars queuing to exit government-controlled areas and about 30 cars entering government-controlled areas.

Thereafter, while at a corresponding checkpoint of the armed formations near Horlivka (non-government-controlled, 39km north-east of Donetsk), the Mission saw about 500 pedestrians and about 50 cars queuing to travel towards government-controlled areas.

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

On 23 November, the SMM monitored adherence to the ceasefire to facilitate repairs to power lines near Travneve (government-controlled, 51km north-east of Donetsk).

On 23 and 24 November, the Mission continued to facilitate the operation of the DFS and monitored the security situation in areas near the Pumping Station close to Vasylivka (non-government-controlled, 20km north of Donetsk). On 23 November, positioned in the western outskirts of Yasynuvata (non-government-controlled, 16km north-east of Donetsk), the SMM heard and saw an explosion about 2km west-south-west, assessed as a controlled detonation. The SMM also recorded ceasefire violations within a 1km periphery of the DFS (see below).

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

### Border areas not under government control

On 23 November, while at a border crossing point near Uspenka (73km south-east of Donetsk) for about an hour, the SMM saw 25 cars (three with Ukrainian, 11 with Russian federation, one with Georgian, and one with Lithuanian licence plates, as well as nine with “DPR” plates), a bus with “DPR” plates, and three pedestrians (two women in their fifties and a man in his sixties) entering Ukraine. It also saw 28 cars (11 with Ukrainian, seven with Russian Federation, and one with Georgian licence plates, as well as nine with “DPR” plates), two buses with “DPR” plates and four pedestrians (three women and a man, mixed ages) exiting Ukraine. At the border crossing point, a member of the armed formations refused to talk to the SMM, citing “orders from superiors”.

On the same day, while at a pedestrian border crossing point near Ulianivske (61km south-east of Donetsk) for about an hour, the Mission saw a woman (in her seventies) entering Ukraine. At the border crossing point, a member of the armed formations refused to talk to the SMM, citing “orders from superiors”.

Also on the same day, while at a border crossing point at Novoazovsk (102km south-east of Donetsk) for about 35 minutes, the SMM saw nine cars (six with Ukrainian and two with Russian Federation licence plates, as well as one with “DPR” plates) entering Ukraine. It also saw 27 cars (ten with Ukrainian, eight with Russian Federation, and one with Lithuanian licence plates, as well as eight with “DPR” plates), and four covered cargo trucks with “DPR” plates exiting Ukraine.

### SMM monitored the security situation in south-east Kherson region

On 23 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 Joint Centre for Control and Coordination 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 of 19 November 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 24 November, about 800m north of Zaichenko (non-government-controlled, 93km south of Donetsk), two armed members of the armed formations [again](#) denied the SMM

passage towards Pikuzy (non-government-controlled, formerly Kominternove, 92km south of Donetsk), citing “demining activities and engineering works in 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.

Delay:

- On 24 November, at a checkpoint of the Ukrainian Armed Forces south of Lebedynske (government-controlled, 99km south of Donetsk), two soldiers allowed the SMM to proceed only after about 20 minutes.

Conditional access:

- On 23 and 24 November, at a checkpoint in Staromykhailivka (non-government-controlled, 15km west of Donetsk), a member of the armed formations allowed the SMM to pass in order to follow up on alleged impacts in the settlement (see above) only after about 90 minutes and one hour, respectively, and only with an escort car from the armed formations.

Other impediments:

- On 23 November, an SMM mini-unmanned aerial vehicle (UAV) experienced GPS signal interference, assessed as due to probable jamming while flying near Pervomaiske (government-controlled, 17km north-west of Donetsk).<sup>7</sup>

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<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>				
22/11/2019	2	Self-propelled howitzer (2S1 <i>Gvozdika</i> , 122mm)	In a training area near Ternove (57km east of Donetsk) (for previous observations see <a href="#">SMM Daily Report 4 November 2019</a> )	Mini-UAV

**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>				
22/11/2019	1	Tank (T-72)	At a railway station in Khibodarivka (65km south-west of Donetsk)	Mini-UAV
	1	Surface-to-air missile system (9K35 <i>Strela-10</i> )	In the eastern outskirts of Khibodarivka	
	8	Towed howitzer (D-20, 152mm)		
	21	Tank (T-72)	At a railway station in Zachativka (74km south-west of Donetsk) (At the same railway station, the SMM also saw 32 infantry fighting vehicles (BMP-1)) <sup>8</sup>	
24/11/2019	9	Tank (T-72)	Near Pryvilne (72km south of Donetsk)	Patrol
<b>Non-government-controlled areas</b>				
22/11/2019	16	Tank (six T-72 and ten probable T-64)	In a training area near Ternove (57km east of Donetsk)	Mini-UAV

**Table of indications of military and military-type presence in the security zone<sup>9</sup>**

Date	No.	Type	Location	Source of observation
<b>Government-controlled areas</b>				
23/11/2019	1	Infantry fighting vehicle (BTR-4)	In a residential area in Avdiivka (17km north of Donetsk)	Patrol
	1	Infantry fighting vehicle (BMD-1)	Near Berdianske (102km south of Donetsk)	
	1	Anti-aircraft gun (ZU-23, 23mm)		
	1	Anti-aircraft gun (ZU-23, 23mm)	Near Shyrokyne (100km south of Donetsk)	SMM camera
<b>Non-government-controlled areas</b>				
24/11/2019	1	A refurbished <a href="#">previously reported</a> trench	About 2km north-west of Lyman (12km north-west of Luhansk)	Patrol
	1	Armoured personnel carrier (probable MT-LB)	In Donetsk city	

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

<sup>9</sup>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 24 November 2019<sup>10</sup>**

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	3-5km SSE	Recorded	3	Projectile	ESE to WNW	N/K	22-Nov, 18:40
	3-5km SSE	Recorded	3	Projectile	ESE to WNW	N/K	22-Nov, 18:41
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	0.5-1km S	Recorded	3	Projectile	WNW to ESE	N/K	22-Nov, 21:32
	0.5-1km SSE	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 22:01
	0.5-1km SSW	Recorded	5	Projectile	WNW to ESE	N/K	22-Nov, 22:16
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	3-5km SE	Recorded	1	Explosion	Outgoing (also recorded by SMM camera in Lomakyne)	N/K	22-Nov, 18:48
	3-5km SE	Recorded	1	Projectile	SW to NE (subsequent to previous event, also recorded by SMM camera in Lomakyne)	N/K	22-Nov, 18:48
	3-5km SE	Recorded	2	Projectile	SW to NE (also recorded by SMM camera in Lomakyne)	N/K	22-Nov, 18:48
	3-5km SE	Recorded	3	Projectile	SW to NE (also recorded by SMM camera in Lomakyne)	N/K	22-Nov, 18:49
	3-5km ESE	Recorded	1	Projectile	SW to NE	N/K	22-Nov, 18:58
	3-5km ESE	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 18:59
	3-5km SE	Recorded	2	Projectile	SW to NE	N/K	22-Nov, 19:25
	2-4km ESE	Recorded	1	Projectile	N to S	N/K	22-Nov, 20:08
	3-5km SE	Recorded	7	Projectile	NNE to SSW	N/K	23-Nov, 00:53
	2-4km ESE	Recorded	1	Muzzle flash		N/K	23-Nov, 03:33
	2-4km ESE	Recorded	1	Projectile	SW to NE (subsequent to previous event)	N/K	23-Nov, 03:33
	2-4km ESE	Recorded	3	Projectile	SW to NE	N/K	23-Nov, 03:37
	3-5km ESE	Recorded	2	Projectile	SW to NE	N/K	23-Nov, 16:55
	3-5km ESE	Recorded	2	Explosion	Undetermined	N/K	23-Nov, 18:08
	3-5km ESE	Recorded	2	Explosion	Undetermined	N/K	23-Nov, 18:09
SMM camera E of Lomakyne (government-controlled, 90km S of Donetsk)	7-9km ENE	Recorded	3	Projectile	W to E	N/K	22-Nov, 18:00
	7-9km ENE	Recorded	2	Projectile	W to E	N/K	22-Nov, 18:00
	3-5km E	Recorded	1	Projectile	W to E	N/K	22-Nov, 19:23
	3-5km E	Recorded	2	Projectile	SW to NE	N/K	22-Nov, 19:24
	3-5km E	Recorded	1	Projectile	Undetermined	N/K	22-Nov, 19:25
	3-5km E	Recorded	3	Projectile	SW to NE	N/K	22-Nov, 19:25
	5-7km E	Recorded	5	Projectile	Also recorded by SMM camera in Shyrokyne	N/K	23-Nov, 17:00

<sup>10</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.

	5-7km E	Recorded	1	Projectile	Also recorded by SMM camera in Shyrokyne	N/K	23-Nov, 18:28
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	3-5km ENE	Recorded	10	Projectile	N to S	N/K	22-Nov, 23:45
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	2-4km NNE	Recorded	5	Projectile	E to W	N/K	22-Nov, 19:45
	2-4km NNE	Recorded	5	Projectile	ESE to WNW	N/K	22-Nov, 19:45
	2-4km NNE	Recorded	6	Projectile	ESE to WNW	N/K	22-Nov, 19:47
	2-4km NNE	Recorded	1	Projectile	ESE to WNW	N/K	22-Nov, 19:49
	2-4km NNE	Recorded	4	Projectile	SE to NW	N/K	22-Nov, 19:50
SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 84km S of Donetsk)	2-4km ESE	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 19:00
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	8-10km N	Recorded	1	Illumination flare	In vertical flight (also recorded by SMM camera in Lomakyne)	N/K	22-Nov, 18:37
	3-6km N	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 18:47
	3-6km N	Recorded	2	Explosion	Undetermined	N/K	22-Nov, 18:48
	3-6km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 18:48
	3-6km N	Recorded	3	Projectile	W to E	N/K	22-Nov, 18:49
	3-6km N	Recorded	2	Projectile	ESE to WNW	N/K	22-Nov, 18:53
	3-6km NNE	Recorded	1	Projectile	ESE to WNW	N/K	22-Nov, 19:12
	4-8km N	Recorded	2	Explosion	Undetermined	N/K	22-Nov, 19:16
	4-8km N	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 19:17
	4-8km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 19:24
	5-7km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 22:15
	5-7km N	Recorded	2	Explosion	Undetermined	N/K	22-Nov, 22:16
	5-7km N	Recorded	1	Muzzle flash		N/K	22-Nov, 22:17
	5-7km N	Recorded	2	Projectile	W to E (subsequent to previous event)	N/K	22-Nov, 22:17
	5-7km N	Recorded	2	Projectile	ESE to WNW	N/K	22-Nov, 22:17
	5-7km N	Recorded	9	Projectile	ESE to WNW	N/K	22-Nov, 22:23
	5-7km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 23:18
	5-7km N	Recorded	1	Explosion	Impact (subsequent to previous event)	N/K	22-Nov, 23:18
	5-7km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 23:20
	5-7km N	Recorded	1	Projectile	SE to NW	N/K	22-Nov, 23:25
	5-7km N	Recorded	2	Projectile	W to E	N/K	22-Nov, 23:43
	5-7km N	Recorded	5	Projectile	W to E	N/K	22-Nov, 23:44
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 23:44
5-7km N	Recorded	2	Projectile	SW to NE (in vertical flight)	N/K	22-Nov, 23:45	
5-7km N	Recorded	2	Projectile	W to E	N/K	23-Nov, 00:14	
5-7km N	Recorded	3	Projectile	E to W	N/K	23-Nov, 00:35	
5-7km NNE	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 01:35	
5-7km NNE	Recorded	1	Projectile	W to E	N/K	23-Nov, 01:35	

	5-7km N	Recorded	1	Projectile	In vertical flight	N/K	23-Nov, 01:39
	5-7km NNE	Recorded	1	Projectile	E to W	N/K	23-Nov, 02:26
	5-7km N	Recorded	1	Projectile	In vertical flight	N/K	23-Nov, 02:26
	5-7km N	Recorded	1	Burst	E to W	N/K	23-Nov, 02:26
	5-7km N	Recorded	22	Projectile	W to E	N/K	23-Nov, 02:37
	5-7km N	Recorded	3	Projectile	W to E	N/K	23-Nov, 03:32
	5-7km N	Recorded	8	Projectile	W to E	N/K	23-Nov, 03:33
	5-7km N	Recorded	7	Projectile	E to W	N/K	23-Nov, 04:05
	5-7km N	Recorded	1	Projectile	W to E	N/K	23-Nov, 04:05
	5-7km NNE	Recorded	2	Projectile	W to E	N/K	23-Nov, 04:10
	5-7km NNE	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 04:10
	5-7km NNE	Recorded	1	Projectile	W to E	N/K	23-Nov, 04:24
	5-7km N	Recorded	1	Projectile	SSE to NNW	N/K	23-Nov, 04:25
	5-7km N	Recorded	7	Projectile	W to E	N/K	23-Nov, 04:37
	5-7km N	Recorded	1	Burst	W to E	N/K	23-Nov, 04:37
	5-7km NNE	Recorded	1	Projectile	W to E	N/K	23-Nov, 04:43
	5-7km NNE	Recorded	2	Projectile	W to E	N/K	23-Nov, 04:44
	3-5km NNE	Recorded	4	Projectile	E to W	N/K	23-Nov, 05:01
	3-5km NNE	Recorded	1	Projectile	E to W	N/K	23-Nov, 05:04
	3-5km NNE	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 16:42
	3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	23-Nov, 16:56
	3-5km N	Recorded	1	Projectile	W to E	N/K	23-Nov, 17:08
	3-5km N	Recorded	1	Projectile	In vertical flight	N/K	23-Nov, 17:59
	3-5km N	Recorded	1	Explosion	Undetermined (also recorded by SMM camera in Lomakyne)	N/K	23-Nov, 18:02
	3-5km N	Recorded	3	Projectile	W to E	N/K	23-Nov, 18:14
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 18:21
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-4km WSW	Recorded	4	Projectile	N to S	N/K	22-Nov, 21:08
	5-7km ESE	Recorded	1	Projectile		N/K	23-Nov, 18:08
Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km ESE	Recorded	2	Projectile		N/K	23-Nov, 18:15
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	22-Nov, 18:47
	4-6km SE	Heard	2	Explosion	Undetermined	N/K	22-Nov, 19:34
	4-6km SE	Heard	1	Explosion	Undetermined	N/K	22-Nov, 19:42
	4-6km SE	Heard	2	Explosion	Undetermined	N/K	22-Nov, 22:23
	4-6km SE	Heard	1	Explosion	Undetermined	N/K	22-Nov, 22:58
	3-5km SE	Heard	4	Burst		HMG	22-Nov, 23:02
	3-5km SE	Heard	3	Burst		HMG	22-Nov, 23:16
	3-5km SW	Heard	1	Explosion	Undetermined	N/K	23-Nov, 11:16
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	23-Nov, 11:24
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	3-4km SE	Heard	3	Explosion	Undetermined	N/K	23-Nov, 13:18-13:20
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	23-Nov, 14:50
SW edge of Novoluhanske (government-controlled, 53km NE of Donetsk)	2-3km ESE	Heard	1	Explosion	Undetermined	N/K	23-Nov, 09:23
	1-2km S	Heard	10	Shot		Small arms	23-Nov, 09:45
	1km SW	Heard and saw	1	Explosion	Impact	N/K	23-Nov, 10:25
	5-7km SE	Heard and saw	1	Explosion	Impact	N/K	23-Nov, 11:16
	5-7km SE	Heard	1	Explosion	Undetermined	N/K	23-Nov, 11:24
	2-3km NNW	Heard	1	Explosion	Undetermined	N/K	23-Nov, 10:28

Holmivskiyi (non-government-controlled, 49km NE of Donetsk)	2-3km E	Heard	1	Explosion	Undetermined	N/K	23-Nov, 11:17
	2-3km E	Heard	1	Explosion	Undetermined	N/K	23-Nov, 11:23
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	4-6km SE	Recorded	3	Projectile	NNE to SSW	N/K	24-Nov, 17:16
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	2-3km SE	Recorded	22	Projectile	NE to SW	N/K	23-Nov, 20:59
	4-6km SSE	Recorded	1	Projectile	NE to SW	N/K	23-Nov, 23:43
	4-6km SSE	Recorded	1	Explosion	Impact (subsequent to previous event)	N/K	23-Nov, 23:43
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	500-800m S	Recorded	1	Explosion	Impact	N/K	23-Nov, 20:35
	500-800m S	Recorded	1	Explosion	Outgoing	N/K	23-Nov, 20:35
	500-800m S	Recorded	1	Muzzle flash		N/K	23-Nov, 21:00
	500-800m S	Recorded	1	Projectile	E to W	N/K	23-Nov, 21:00
	500-800m S	Recorded	2	Muzzle flash		N/K	23-Nov, 21:01
	500-800m S	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 21:01
	500-800m S	Recorded	1	Muzzle flash		N/K	23-Nov, 21:45
	500-800m S	Recorded	2	Muzzle flash		N/K	23-Nov, 21:46
	500-800m S	Recorded	9	Muzzle flash		N/K	23-Nov, 22:01
	500-800m S	Recorded	11	Muzzle flash		N/K	23-Nov, 22:02
	500-800m S	Recorded	2	Muzzle flash		N/K	23-Nov, 22:03
	500-800m SSW	Recorded	1	Projectile	NW to SE	N/K	23-Nov, 22:23
	500-800m S	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 22:25
	0.7-1km S	Recorded	1	Projectile	NE to SW	N/K	23-Nov, 22:38
	500-800m SSW	Recorded	2	Projectile	NE to SW	N/K	23-Nov, 22:55
	0.8-1km S	Recorded	1	Projectile	NE to SW	N/K	23-Nov, 22:58
	1-1.5km SSW	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 23:00
	1-1.5km SSW	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 23:03
	500-800m SSW	Recorded	9	Muzzle flash		N/K	23-Nov, 23:08
	500-800m SSW	Recorded	1	Projectile	NE to SW	N/K	23-Nov, 23:08
	500-800m SSW	Recorded	2	Projectile	NE to SW	N/K	23-Nov, 23:28
	0.8-1km S	Recorded	1	Muzzle flash		N/K	23-Nov, 23:42
	1-1.5km S	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 23:43
	1km S	Recorded	3	Projectile	NNW to SSE	N/K	23-Nov, 23:44
	0.5-1km S	Recorded	1	Illumination flare	In vertical flight	N/K	24-Nov, 00:25
	1-2km S	Recorded	1	Explosion	Undetermined	N/K	24-Nov, 00:25
	0.5-1km S	Recorded	1	Explosion	Airburst	N/K	24-Nov, 00:26
	0.5-1km S	Recorded	1	Projectile	NNW to SSE (airburst)	N/K	24-Nov, 00:26
	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	24-Nov, 01:33
	0.5-1km SSW	Recorded	1	Projectile	NW to SE	N/K	24-Nov, 01:33
	2-4km SSW	Recorded	1	Explosion	Undetermined	N/K	24-Nov, 01:36
	1-2km SSW	Recorded	3	Projectile	WNW to ESE	N/K	24-Nov, 02:43
	300-600m SSW	Recorded	5	Burst	NW to SE	N/K	24-Nov, 03:05
400-700m S	Recorded	1	Muzzle flash		N/K	24-Nov, 03:05	
300-600m SSW	Recorded	2	Burst	NE to SW	N/K	24-Nov, 03:23	
300-600m SSW	Recorded	1	Projectile	WNW to ESE (subsequent to previous event)	N/K	24-Nov, 03:23	

	300-600m SSW	Recorded	3	Burst	NNW to SSE	N/K	24-Nov, 03:30
	300-600m SSW	Recorded	1	Burst	NW to SE	N/K	24-Nov, 03:44
	300-600m SSW	Recorded	1	Muzzle flash		N/K	24-Nov, 03:49
	300-600m SSW	Recorded	2	Burst	NNW to SSE	N/K	24-Nov, 03:49
	300-600m SSW	Recorded	2	Burst	NNE to SSW	N/K	24-Nov, 03:49
	300-600m SSW	Recorded	3	Burst	NNW to SSE	N/K	24-Nov, 03:56
	300-600m SSW	Recorded	2	Burst	NNE to SSW	N/K	24-Nov, 03:56
	1-3km S	Recorded	1	Explosion	Also recorded by SMM cameras in Avdiivka and Oktiabr Mine	N/K	24-Nov, 18:22
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	3-5km ESE	Recorded	5	Explosion	Undetermined	N/K	23-Nov, 18:43
	2-4km ESE	Recorded	1	Projectile	W to E	N/K	23-Nov, 22:31
	2-4km ESE	Recorded	3	Projectile	SW to NE	N/K	24-Nov, 03:37
SMM camera in Krasnohorivka (government-controlled, 21km W of Donetsk)	2-3km NE	Recorded	3	Projectile	W to E	N/K	23-Nov, 23:04
SMM camera E of Lomakyne (government-controlled, 90km S of Donetsk)	5-7km E	Recorded	2	Projectile	SSW to NNE (also recorded by SMM camera in Shyrokyne)	N/K	24-Nov, 00:24
	5-7km E	Recorded	4	Projectile	SSW to NNE (also recorded by SMM camera in Shyrokyne)	N/K	24-Nov, 00:33
	5-7km E	Recorded	4	Projectile	SSW to NNE (also recorded by SMM camera in Shyrokyne)	N/K	24-Nov, 01:03
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-3km ENE	Recorded	5	Projectile	N to S	N/K	23-Nov, 19:57
	1-2km ENE	Recorded	1	Projectile	N to S	N/K	23-Nov, 21:05
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-4km NNE	Recorded	2	Projectile	In vertical flight (also recorded by SMM cameras at the DFS and in Avdiivka)	N/K	24-Nov, 18:07
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	3-5km N	Recorded	1	Projectile	E to W	N/K	23-Nov, 19:10
	4-7km N	Recorded	3	Projectile	WNW to ESE	N/K	23-Nov, 19:15
	5-7km N	Recorded	7	Projectile	E to W	N/K	23-Nov, 20:06
	3-5km NNE	Recorded	1	Projectile	SE to NW	N/K	23-Nov, 21:09
	5-7km N	Recorded	2	Projectile	W to E	N/K	23-Nov, 21:25
	5-7km N	Recorded	5	Projectile	W to E	N/K	23-Nov, 21:31

3-5km NNE	Recorded	1	Projectile	SE to NW	N/K	23-Nov, 21:31
5-7km N	Recorded	2	Explosion	Undetermined	N/K	23-Nov, 21:59
5-7km N	Recorded	1	Projectile	W to E	N/K	23-Nov, 21:59
5-7km N	Recorded	1	Projectile	W to E	N/K	23-Nov, 22:01
3-5km N	Recorded	1	Projectile	SSE to NNW	N/K	23-Nov, 22:11
3-5km NNE	Recorded	1	Muzzle flash		N/K	23-Nov, 22:11
5-7km N	Recorded	2	Projectile	W to E	N/K	23-Nov, 22:22
3-5km NNE	Recorded	9	Projectile	ESE to WNW	N/K	23-Nov, 22:29
5-7km N	Recorded	1	Projectile	W to E	N/K	23-Nov, 22:35
3-5km NNE	Recorded	1	Projectile	SSE to NNW	N/K	23-Nov, 22:43
5-7km N	Recorded	1	Explosion	Undetermined	N/K	23-Nov, 22:50
3-5km NNE	Recorded	1	Projectile	SSE to NNW	N/K	23-Nov, 23:08
5-7km N	Recorded	3	Projectile	WSW to ENE	N/K	23-Nov, 23:16
3-5km NNE	Recorded	5	Projectile	ESE to WNW	N/K	23-Nov, 23:31
3-5km NNE	Recorded	5	Projectile	ESE to WNW	N/K	23-Nov, 23:57
3-5km NNE	Recorded	1	Projectile	In vertical flight	N/K	23-Nov, 23:57
3-5km NNE	Recorded	1	Projectile	SSW to NNE	N/K	23-Nov, 23:57
3-5km NNE	Recorded	1	Projectile	S to N	N/K	24-Nov, 00:03
3-5km NNE	Recorded	3	Projectile	SE to NW	N/K	24-Nov, 00:03
5-7km N	Recorded	8	Projectile	WSW to ENE	N/K	24-Nov, 00:07
3-5km NNE	Recorded	1	Projectile	SE to NW	N/K	24-Nov, 00:12
5-7km N	Recorded	2	Projectile	W to E	N/K	24-Nov, 00:13
3-5km NNE	Recorded	3	Projectile	ESE to WNW	N/K	24-Nov, 00:31
3-5km NNE	Recorded	7	Projectile	ESE to WNW	N/K	24-Nov, 00:35
5-7km N	Recorded	1	Projectile	ESE to WNW	N/K	24-Nov, 00:35
3-5km NNE	Recorded	1	Explosion	Undetermined	N/K	24-Nov, 00:36
3-5km NNE	Recorded	1	Projectile	SSE to NNW	N/K	24-Nov, 00:36
3-5km NNE	Recorded	1	Projectile	ESE to WNW	N/K	24-Nov, 00:36
3-5km NNE	Recorded	5	Projectile	SSE to NNW	N/K	24-Nov, 00:43
3-5km NNE	Recorded	2	Projectile	ESE to WNW	N/K	24-Nov, 00:43
3-5km N	Recorded	1	Projectile	WSW to ENE	N/K	24-Nov, 00:53
5-7km N	Recorded	1	Projectile	WSW to ENE (also recorded by SMM camera in Lomakyne)	N/K	24-Nov, 00:53
3-5km NNE	Recorded	2	Projectile	ESE to WNW	N/K	24-Nov, 01:03
3-5km NNE	Recorded	1	Projectile	S to N	N/K	24-Nov, 01:03
3-5km N	Recorded	3	Projectile	WSW to ENE	N/K	24-Nov, 01:03
5-7km N	Recorded	2	Explosion	Undetermined	N/K	24-Nov, 01:17
5-7km N	Recorded	2	Projectile	W to E	N/K	24-Nov, 01:18
5-7km N	Recorded	3	Projectile	SSW to NNE	N/K	24-Nov, 01:18
5-7km N	Recorded	8	Projectile	SW to NE (also recorded by SMM camera in Lomakyne)	N/K	24-Nov, 01:22
5-7km N	Recorded	1	Explosion	Undetermined	N/K	24-Nov, 01:24
5-7km N	Recorded	5	Projectile	ESE to WNW	N/K	24-Nov, 01:32
7-8km N	Recorded	3	Projectile	WSW to ENE	N/K	24-Nov, 01:36
7-8km N	Recorded	12	Projectile	WSW to ENE	N/K	24-Nov, 01:40
7-8km N	Recorded	1	Projectile	In vertical flight	N/K	24-Nov, 01:40
7-8km N	Recorded	1	Projectile	WSW to ENE	N/K	24-Nov, 01:43
3-5km NNE	Recorded	3	Projectile	ESE to WNW	N/K	24-Nov, 01:51
7-8km N	Recorded	5	Projectile	WSW to ENE	N/K	24-Nov, 01:55
7-8km N	Recorded	7	Projectile	W to E	N/K	24-Nov, 01:58
7-8km N	Recorded	2	Projectile	WSW to ENE	N/K	24-Nov, 02:01
7-8km N	Recorded	1	Projectile	WSW to ENE	N/K	24-Nov, 02:07
3-5km NNE	Recorded	3	Projectile	ESE to WNW	N/K	24-Nov, 02:10
7-8km N	Recorded	1	Muzzle flash		N/K	24-Nov, 02:10

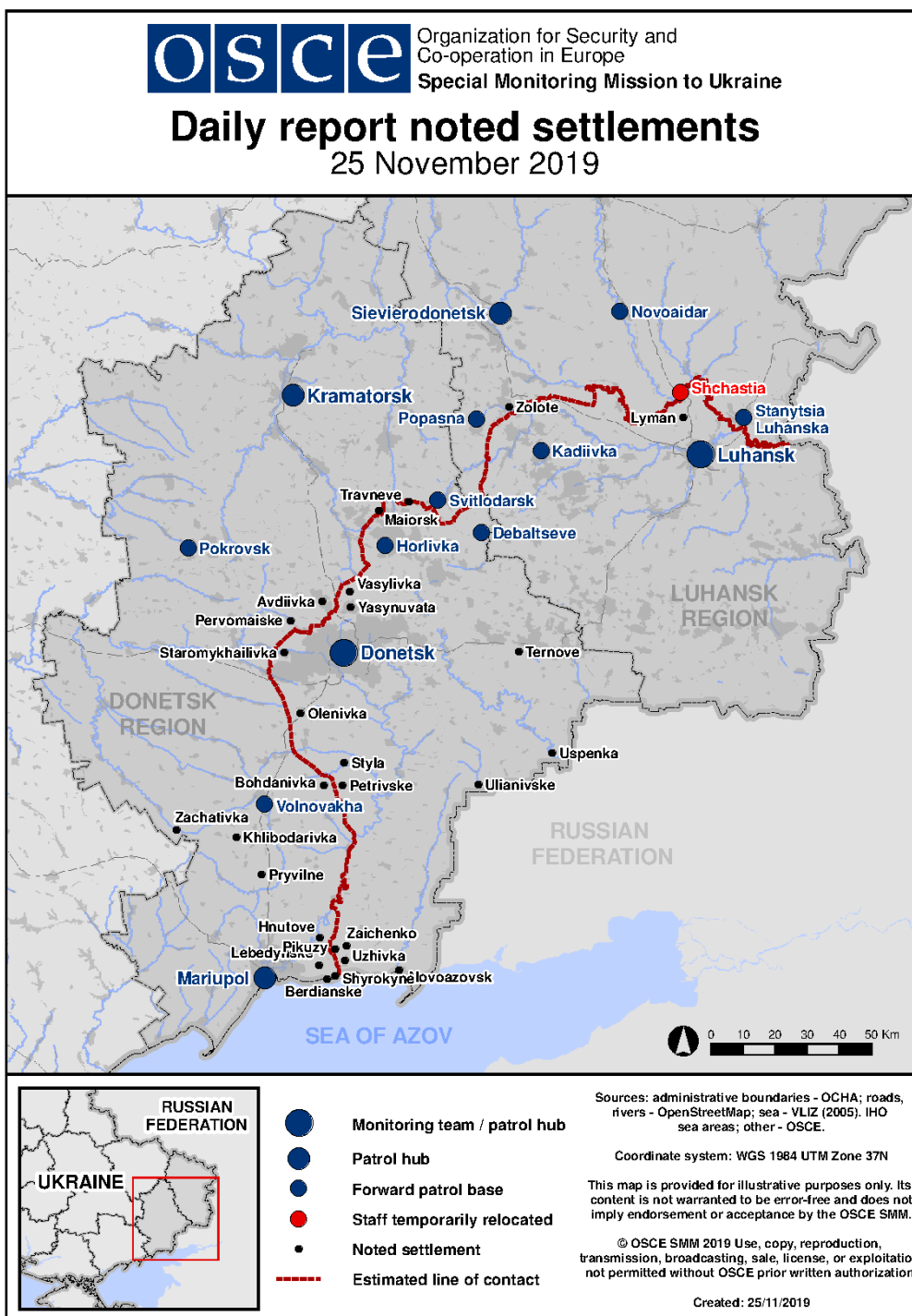
	7-8km N	Recorded	4	Projectile	WSW to ENE (subsequent to previous event, also recorded by SMM camera in Lomakyne)	N/K	24-Nov, 02:10
	7-8km N	Recorded	3	Projectile	WSW to ENE	N/K	24-Nov, 02:22
	7-8km N	Recorded	4	Explosion	Undetermined	N/K	24-Nov, 02:34
	3-5km NNE	Recorded	1	Projectile	ESE to WNW	N/K	24-Nov, 02:47
	7-8km N	Recorded	1	Projectile	ESE to WNW	N/K	24-Nov, 02:59
	7-8km N	Recorded	1	Projectile	WSW to ENE	N/K	24-Nov, 03:02
	7-8km N	Recorded	3	Projectile	ESE to WNW	N/K	24-Nov, 03:11
	3-5km NNE	Recorded	1	Projectile	WSW to ENE	N/K	24-Nov, 03:16
	3-5km NNE	Recorded	6	Projectile	WSW to ENE	N/K	24-Nov, 03:17
	3-5km NNE	Recorded	3	Projectile	WSW to ENE	N/K	24-Nov, 03:22
	3-5km NNE	Recorded	4	Projectile	SE to NW	N/K	24-Nov, 03:22
	7-8km N	Recorded	4	Projectile	WSW to ENE	N/K	24-Nov, 03:24
	7-8km N	Recorded	1	Projectile	WSW to ENE	N/K	24-Nov, 03:27
	5-7km N	Recorded	2	Projectile	WSW to ENE	N/K	24-Nov, 03:32
	5-7km N	Recorded	3	Projectile	ESE to WNW	N/K	24-Nov, 03:51
	5-7km N	Recorded	1	Projectile	ESE to WNW	N/K	24-Nov, 04:00
	5-7km N	Recorded	1	Projectile	SE to NW	N/K	24-Nov, 04:22
	2-4km NNE	Recorded	2	Projectile	E to W	N/K	24-Nov, 16:13
	3-5km NNE	Recorded	1	Projectile	In vertical flight	N/K	24-Nov, 16:13
	3-5km N	Recorded	2	Projectile	SE to NW	N/K	24-Nov, 16:14
	4-6km N	Recorded	5	Projectile	SW to NE	N/K	24-Nov, 16:20
	4-6km N	Recorded	9	Projectile	SE to NW	N/K	24-Nov, 16:21
	4-6km N	Recorded	2	Projectile	SE to NW	N/K	24-Nov, 16:22
	4-6km N	Recorded	1	Projectile	In vertical flight	N/K	24-Nov, 16:47
	4-6km N	Recorded	1	Explosion	Undetermined	N/K	24-Nov, 16:48
	3-5km N	Recorded	1	Projectile	E to W (in vertical flight)	N/K	24-Nov, 16:48
	4-6km N	Recorded	1	Projectile	In vertical flight	N/K	24-Nov, 16:49
	4-6km N	Recorded	2	Projectile	In vertical flight	N/K	24-Nov, 16:50
	3-5km N	Recorded	3	Projectile	E to W	N/K	24-Nov, 16:50
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km ESE	Recorded	1	Burst	NNE to SSW	N/K	24-Nov, 17:55
Krasnohorivka (government-controlled, 21km W of Donetsk)	1-2km SE	Heard	2	Explosion	Undetermined	N/K	24-Nov, 10:48-10:51
	1-2km SE	Heard	30	Burst		HMG	24-Nov, 10:48-10:51
SE edge of Avdiivka (government-controlled, 17km N of Donetsk)	3-5km SW	Heard	3	Explosion	Undetermined	N/K	24-Nov, 09:31
	3-5km SW	Heard	1	Explosion	Undetermined	N/K	24-Nov, 11:19
About 700m NW of Petrivske (non-government-controlled, 41km S of Donetsk)	2-3km S	Heard	6	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	24-Nov, 09:20
	2-3km S	Heard	5	Burst	Assessed as outside the disengagement area	Small arms	24-Nov, 09:20
	2-3km S	Heard	10	Burst	Assessed as outside the disengagement area	HMG	24-Nov, 09:27



	2-3km S	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	24-Nov, 09:27
	2-3km S	Heard	14	Burst	Assessed as outside the disengagement area	HMG	24-Nov, 09:38
	2-3km S	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	24-Nov, 09:40
Svitlodarsk (government-controlled, 57km NE of Donetsk)	2-3km SE	Heard	3	Burst		HMG	23-Nov, 18:52
	2-3km SE	Heard	5	Shot		Small arms	23-Nov, 19:04
	4-6km SE	Heard	2	Explosion	Undetermined	N/K	23-Nov, 19:08
	2-3km SE	Heard	6	Burst		HMG	23-Nov, 19:12
	4-6km SE	Heard	1	Explosion	Undetermined	N/K	23-Nov, 19:22
	2-3km SE	Heard	8	Burst		HMG	23-Nov, 19:23
	2-3km SE	Heard	21	Shot		Small arms	23-Nov, 19:38
	2-3km SE	Heard	7	Shot		Small arms	23-Nov, 20:03
	2-3km SE	Heard	3	Burst		HMG	23-Nov, 20:30
	2-3km SE	Heard	7	Burst		HMG	23-Nov, 20:47
	2-3km SE	Heard	5	Burst		HMG	23-Nov, 20:54
	4-6km SE	Heard	4	Explosion	Undetermined	N/K	23-Nov, 21:01
	2-3km SE	Heard	6	Burst		HMG	23-Nov, 21:05
	2-3km SE	Heard	14	Burst		HMG	23-Nov, 21:14
	2-3km SE	Heard	11	Burst		HMG	23-Nov, 21:22
	3-5km SE	Heard	21	Burst		HMG	23-Nov, 21:39-21:42
	2-4km SE	Heard	7	Shot		Small arms	23-Nov, 21:43
	3-5km SE	Heard	6	Burst		Small arms	23-Nov, 21:43
	3-5km SE	Heard	5	Shot		Small arms	23-Nov, 21:56
	3-5km SE	Heard	18	Burst		HMG	23-Nov, 22:03-22:06
	3-5km SE	Heard	9	Burst		HMG	23-Nov, 22:35
	3-5km SE	Heard	2	Shot		Small arms	23-Nov, 22:40
	3-5km SE	Heard	7	Burst		HMG	23-Nov, 22:42
	3-5km SE	Heard	25	Burst		HMG	23-Nov, 22:53-22:57
	3-5km SE	Heard	6	Shot		Small arms	23-Nov, 22:54
	3-5km SE	Heard	27	Burst		HMG	23-Nov, 23:02-23:04
	3-5km SE	Heard	4	Burst		HMG	23-Nov, 23:07
	3-5km SE	Heard	7	Burst		HMG	23-Nov, 23:25
	3-5km SE	Heard	11	Shot		Small arms	23-Nov, 23:35
	3-5km SE	Heard	9	Burst		HMG	23-Nov, 23:35
3-5km SE	Heard	3	Burst		HMG	23-Nov, 22:44	
3-5km SE	Heard	8	Shot		Small arms	23-Nov, 23:51	
3-5km SE	Heard	6	Burst		HMG	23-Nov, 23:59	

	3-5km SE	Heard	18	Burst		HMG	24-Nov, 10:10
	3-5km SE	Heard	2	Burst		HMG	24-Nov, 10:31
	2-3km SE	Heard	9	Burst		HMG	24-Nov, 12:10
	2-3km SE	Heard	2	Explosion	Undetermined	N/K	24-Nov, 12:11
	2-3km SE	Heard	11	Burst		HMG	24-Nov, 12:30
	3-5km SE	Heard	5	Explosion	Undetermined	N/K	24-Nov, 14:10
	3-5km SE	Heard	7	Explosion	Undetermined	N/K	24-Nov, 14:14
	3-4km SE	Heard	6	Explosion	Undetermined	N/K	24-Nov, 18:13-18:19
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	2-3km ESE	Heard	1	Explosion	Undetermined	N/K	24-Nov, 09:23
	2-4km SSW	Heard	4	Burst		HMG	24-Nov, 10:03
	2-3km N	Heard	4	Explosion	Undetermined	N/K	24-Nov, 10:07
	2-3km N	Heard	1	Explosion	Undetermined	N/K	24-Nov, 10:10
	4-5km E	Heard	3	Explosion	Undetermined	N/K	24-Nov, 11:07
N edge of Popasna (government-controlled, 69km west of Luhansk)	7-10km S	Heard	5	Explosion	Undetermined	N/K	24-Nov, 07:10-07:11
E edge of Popasna (government-controlled, 69km west of Luhansk)	2-3km SSE	Heard	3	Shot		Cannon (30mm)	24-Nov, 14:07

### Map of Donetsk and Luhansk regions<sup>11</sup>



<sup>11</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).