



Daily Report 268/2021

15 November 2021¹

Summary

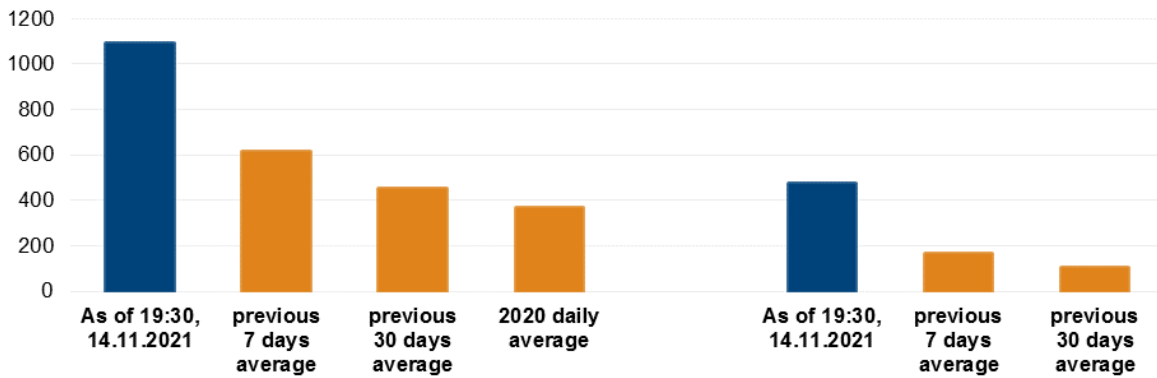
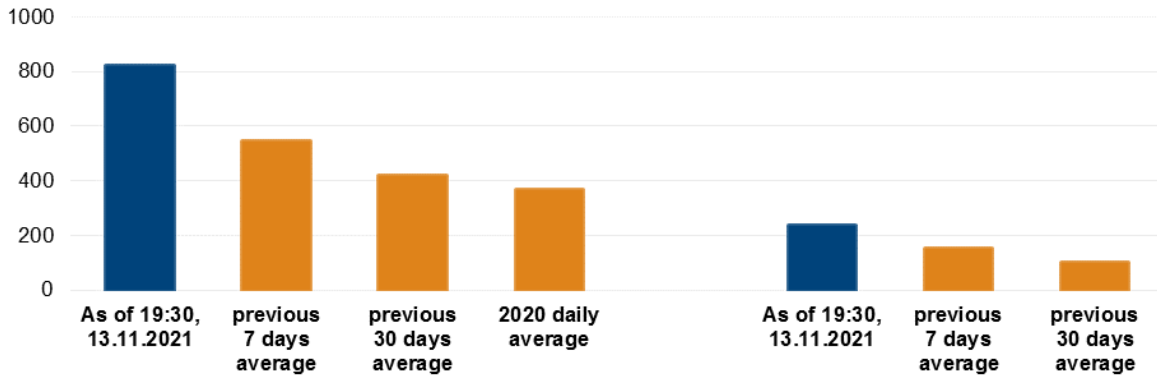
- In Donetsk region, between the evenings of 12 to 14 November, the SMM recorded 1,240 ceasefire violations, including 441 explosions. In the previous reporting period, it recorded 723 ceasefire violations in the region.
- In Luhansk region, between the evenings of 12 to 14 November, the Mission recorded 649 ceasefire violations, including 248 explosions. In the previous reporting period, it recorded nine ceasefire violations in the region.
- Small-arms fire was assessed as directed at an SMM mini-unmanned aerial vehicle (UAV) near government-controlled Novozvanivka, Luhansk region
- The SMM saw four non-SMM UAVs near government-controlled Luhanske, Donetsk region.
- The Mission continued monitoring the disengagement areas near Stanytsia Luhanska, Zolote and Petrivske and recorded ceasefire violations inside the area near Petrivske.
- The SMM facilitated and monitored adherence to localized ceasefires to enable the operation of critical civilian infrastructure.
- The Mission continued following up on the situation of civilians, including at six entry-exit checkpoints and four corresponding checkpoints of the armed formations in Donetsk and Luhansk regions.
- The SMM's freedom of movement continued to be restricted, including in southern Donetsk region and at a border crossing point in non-government-controlled Voznesenivka (formerly Chervonopartyzansk), and at the Chervona Mohyla railway station in Voznesenivka. Its UAVs again experienced instances of probable jamming.*

¹ Based on information from the Monitoring Teams as of 19:30, 14 November 2021. All times are in Eastern European Time.

Ceasefire violations²

Number of recorded ceasefire violations³

Number of recorded explosions⁴



² For a complete breakdown of ceasefire violations, please see the annexed table.

³ Including explosions.

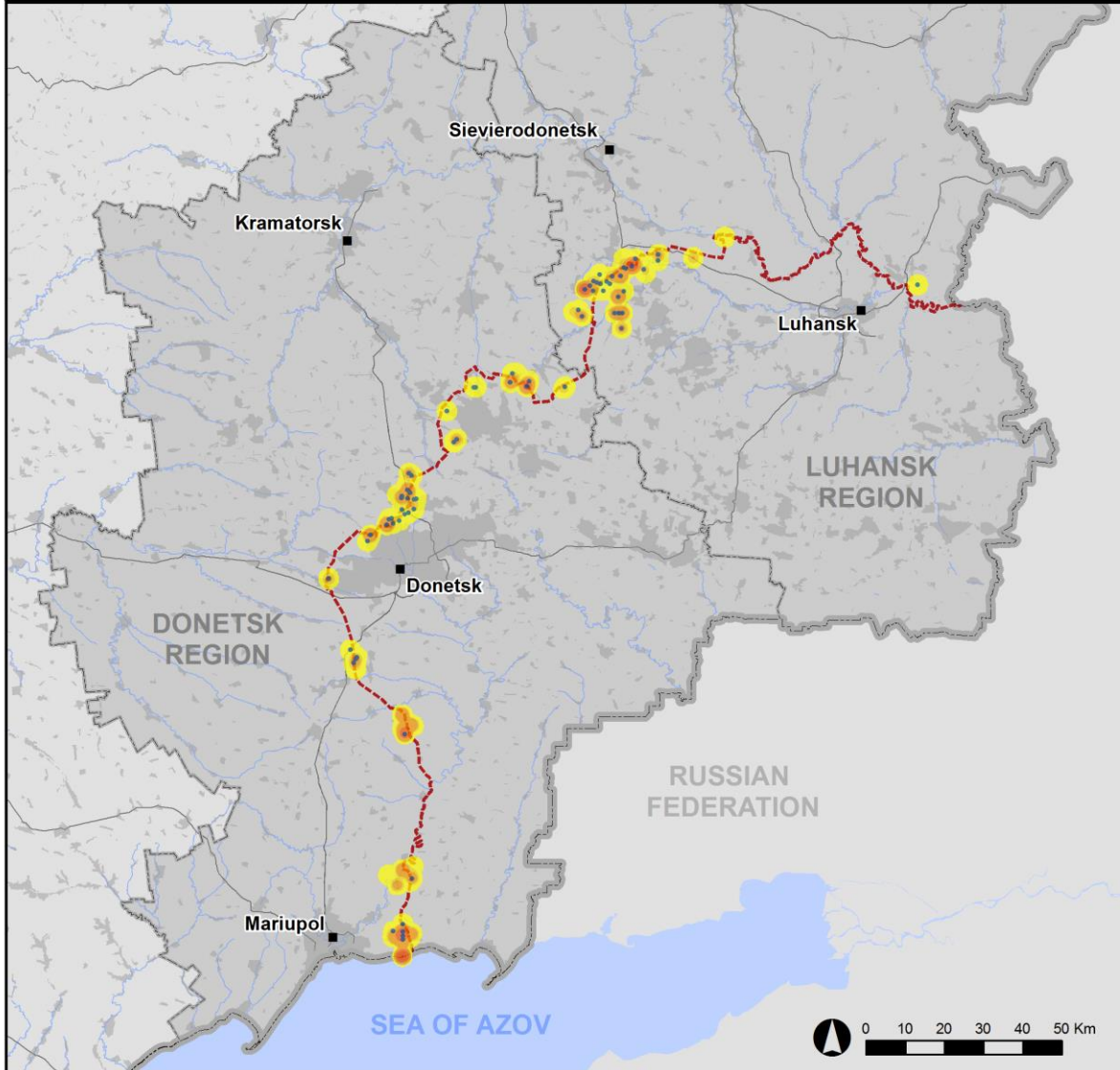
⁴ Including from unidentified weapons.

Map of recorded ceasefire violations

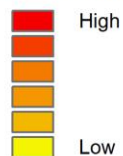


Organization for Security and
Co-operation in Europe
Special Monitoring Mission to Ukraine

Ceasefire violations observed by the SMM 13-14 November 2021



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: 15/11/2021

In Donetsk region, between the evenings of 12 to 14 November, the SMM recorded 1,240 ceasefire violations, including 441 explosions (two impacts, 56 airbursts and 383 undetermined). The majority of ceasefire violations occurred inside and in areas north-east and south-east of the disengagement area near Petrivske (non-government-controlled, 41km south of Donetsk) (see below), in areas north of Shyrokyne (government-controlled, 100km south of Donetsk) and west of Svitlodarsk (government-controlled, 57km north-east of Donetsk). The Mission also heard 200 bursts and shots of small-arms fire near Berdianske (government-controlled, 102km south of Donetsk), which it assessed as a live-fire training exercise in the security zone, in violation of the decision of the Trilateral Contact Group (TCG) of 3 March 2016 that prohibits the conduct of live-fire training in the security zone. In the [previous reporting period](#), the Mission recorded 723 ceasefire violations in the region, the majority of which also occurred in areas north of Shyrokyne and close to the disengagement area near Petrivske.

In Luhansk region, between the evenings of 12 to 14 November, the SMM recorded 649 ceasefire violations, including 248 explosions (19 impacts, one airburst and 228 undetermined). Almost all these ceasefire violations occurred in areas north-east, east, south-east, south-west and west of the disengagement area near Zolote (government-controlled, 60km west of Luhansk) (see below). In the [previous reporting period](#), the Mission recorded nine ceasefire violations in the region.

Following agreement reached at the meeting of the TCG on 22 July 2020 regarding Measures to strengthen the ceasefire, from 00:01 on 27 July 2020 until the end of the reporting period, the SMM has recorded at least 79,030 ceasefire violations in both Donetsk and Luhansk regions (including 21,429 explosions, 18,226 projectiles in flight, 375 muzzle flashes, 337 illumination flares and at least 38,663 bursts and shots).

Small-arms fire assessed as directed at an SMM mini-UAV near Novozvanivka, Luhansk region, and non-SMM UAVs observed near Luhanske, Donetsk region

On 13 November, while positioned on the southern outskirts of Novozvanivka (government-controlled, 70km west of Luhansk) to conduct an announced mini-unmanned aerial vehicle (UAV) flight, the Mission heard ten shots of small-arms fire at an assessed range of 400-500m west-north-west of its position, assessed as targeting the UAV. The SMM landed the UAV and left the area.*

On 14 November, while positioned on the south-western edge of Luhanske (government-controlled, 59km north-east of Donetsk) and conducting an announced mini-UAV flight, the SMM saw four non-SMM UAVs (three with fixed wings and one probable quad copter) near and above the patrol's position, flying in a southerly to northerly direction, despite the ban on the operation of any aerial vehicles included in the 22 July 2020 agreement on Measures to strengthen the ceasefire. The Mission landed its UAV and left the area. During the same flight, the mini-UAV also experienced GPS signal interference, assessed as caused by probable jamming.*

Disengagement areas near Stanytsia Luhanska, Zolote and Petrivske⁵

On the night of 13-14 November, while in Stanytsia Luhanska (government-controlled, 16km north-east of Luhansk), the SMM heard one undetermined explosion at an assessed range of 3-6km south-east, assessed as outside the **disengagement area Stanytsia Luhanska** but within 5km of its periphery.

On 13 and 14 November, inside the disengagement area, the Mission saw members of the armed formations (wearing armbands with “JCCC” written on them) south of the repaired span of the Stanytsia Luhanska bridge (15km north-east of Luhansk).

On the evening and night of 12-13 November, the SMM camera in Popasna (government-controlled, 69km west of Luhansk) recorded six undetermined explosions and four projectiles in flight at an assessed range of 3-5km east-south-east. On the same day, the SMM camera in Zolote recorded one undetermined explosion, nine projectiles in flight and one illumination flare at an assessed range of 2-5km east, east-north-east, east and east-south-east. All the aforementioned ceasefire violations were assessed as outside the **disengagement area near Zolote** (government-controlled, 60km west of Luhansk) but within 5km of its periphery.

During the day on 13 November, while positioned in Holubivka (formerly Kirovsk, non-government-controlled, 51km west of Luhansk), the Mission heard three undetermined explosions at an assessed range of 3-4km north-north-west. On the same day, while positioned in Kadiivka (formerly Stakhanov, non-government-controlled, 50km west of Luhansk), the SMM heard four undetermined explosions at an assessed range of 14-16km west-north-west. All these ceasefire violations were assessed as outside the disengagement area but within 5km of its periphery.

During the day on 14 November, the SMM camera in Popasna recorded two explosions (one airburst and one undetermined) and one projectile at an assessed range of 3-7km east-south-east, assessed as outside the disengagement area but within 5km of its periphery. While positioned in six locations near the area, the Mission heard 37 undetermined explosions, 137 bursts and shots of heavy-machine-gun and small-arms fire, assessed as outside the disengagement area but within 5km of its periphery, as well as 41 undetermined explosions (including two assessed as mortar rounds) and 25 bursts of heavy-machine-gun fire, unable to be assessed as inside or outside the disengagement area.

On both days, near the checkpoint of the armed formations south of the disengagement area, the Mission saw members of the armed formations (wearing armbands with “JCCC” written on them). The SMM again saw the seven previously observed containers located south of the area’s southern edge and inside the disengagement area. It saw that the previously reported road barriers across road T-1316, on the area’s southern edge, continued to be closed.

On the evening of 12 November, the SMM camera 2km east of Bohdanivka (government-controlled, 41km south-west of Donetsk) recorded three projectiles in flight at an assessed range of 1-3km south-east, assessed as inside the **disengagement area near Petrivske**. On the same evening, the SMM camera in Petrivske recorded 43 projectiles in flight and one muzzle

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

flash at an assessed range of 2-4km west-north-west, assessed as outside the disengagement area but within 5km of its periphery.

On the evening of 13 November, the SMM camera 2km east of Bohdanivka recorded 29 projectiles at an assessed range of 2-4km east-south-east, assessed as inside the disengagement area and 17 projectiles in flight at an assessed range of 3-5km east-south-east, unable to be assessed as inside or outside the disengagement area.

During the day of 14 November, while positioned about 2km east of Bohdanivka, the Mission heard 26 shots of small-arms fire at an assessed range of 2-3km south-south-east, assessed as inside the area. It also heard 60 undetermined explosions and 32 bursts and shots of small-arms fire at an assessed range of 3-5km south-south-east, assessed as outside the area but within 5km of its periphery.

Withdrawal of weapons

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

In violation of withdrawal lines, the SMM observed one surface-to-air missile system in a government-controlled area of Luhansk region.

Beyond withdrawal lines but outside designated storage sites, the Mission observed one tank in a residential area in a government-controlled area of Luhansk region. (For further information, see the tables below.)

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

The SMM observed four armoured combat vehicles in government-controlled areas of Donetsk region, and three armoured combat vehicles in non-government-controlled areas of Luhansk region, including in a residential area. (For further information, see the table below.)

On 14 November, while positioned about 2km north of Petrivske, the SMM saw a non-SMM UAV fly in a westerly to easterly direction and then return, despite the ban on the operation of any aerial vehicles included in the 22 July 2020 agreement on Measures to strengthen the ceasefire.

On the same day, an SMM mini-UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying over areas near Pervomaisk (non-government-controlled, 58km west of Luhansk), about 500m south of the southern edge of the disengagement area.*

Presence of UXO, craters and mine hazard signs in Donetsk and Luhansk regions

On 12 November, about 3km north-west of non-government-controlled Luhansk city, an SMM mini-UAV observed a piece of unexploded ordnance (UXO) (not previously reported and assessed as not recent) embedded in the northern edge of a local road, assessed as a 122mm rocket of a multiple launch rocket system fired from an eastern direction.

On 13 November, about 1.5km north-east of Staromarivka (62km south of Donetsk), the Mission observed two mortar tailfins embedded in the asphalt of road T-0512, assessed as recent and as 120mm mortar rounds.

On the same day, on the north-eastern edge of Vesele (non-government-controlled, 9km north-west of Donetsk), the SMM observed an impact crater on the asphalt of a parking lot next to a local road, assessed as recent and caused by a 120mm mortar round. In the south-eastern part of Vesele, the Mission saw a mine hazard sign (red rectangle with “Mines” written in Russian, not previously reported), assessed as recent, attached to a wooden stick about 45m west of a local road.

On the same day, at a checkpoint of the armed formations on the north-eastern edge of Novohryhorivka (non-government-controlled, 61km north-east of Donetsk), the Mission observed a mine hazard sign (red rectangle with “Stop! Mines!” written in Russian and “Dangerous Mines!” written in English, not previously reported) attached to a road barrier placed across a local road.

On the same day, on the north-eastern edge of Dachne (non-government-controlled, 47km west of Luhansk), the SMM observed that a [previously reported](#) mine hazard sign had been removed from the north-eastern edge of a local road.

On 14 November, in the southern part of Novozvanivka (government-controlled, 70km west of Luhansk), the Mission observed four impact craters in a garden surrounding an uninhabited house, assessed as recent and caused by probable 120mm mortar rounds.

On the same day, at a checkpoint of the armed formations about 3km south-east of the bridge near Shchastia (government-controlled, 20km north of Luhansk), the SMM observed a mine hazard sign (red rectangle with “Stop! Mines!” written in Russian, not previously reported) on a metal pole about 40m east of road H-21.

SMM facilitation of the operation of critical civilian infrastructure

On 13 and 14 November, the Mission continued to facilitate the operation of the Donetsk Filtration Station (15km north of Donetsk) (DFS). On 13 November, while positioned at five locations near the DFS, the SMM heard 48 undetermined explosions, three burst of heavy-machine-gun and 12 shots of small-arms fire, assessed as inside a 5km radius of the DFS, of which two explosions occurred during the transfer of DFS workers between Yasynuvata (non-government-controlled, 16km north-east of Donetsk), and the station. On 14 November, while positioned at two locations near the DFS, the SMM heard three undetermined explosions, assessed as inside a 5km radius of the DFS, of which two explosions occurred during the transfer of DFS workers between the station and Yasynuvata.

Situation at entry-exit checkpoints and corresponding checkpoints

On 13 November, in Donetsk region, the SMM observed that the entry-exit checkpoint (EECP) near Novotroitske (government-controlled, 36km south-west of Donetsk) was open but did not see any traffic passing through.

On 13 and 14 November, in Donetsk region, the Mission saw that the EECP near Marinka (government-controlled, 23km south-west of Donetsk) was open and that the corresponding

checkpoint of the armed formations near Kreminets (non-government-controlled, 16km south-west of Donetsk) was closed.

On 14 November, in Donetsk region, the SMM observed that the EECP near Maiorsk (government-controlled, 45km north-east of Donetsk) was open.

On 13 and 14 November, in Luhansk region, the SMM observed that the EECP near Stanytsia Luhanska and the corresponding checkpoint of the armed formations south of the Stanytsia Luhanska bridge were open, with people queuing to travel in both directions.

On 13 and 14 November, in Luhansk region, the Mission noted that the EECPs near Zolote and Shchastia (government-controlled, 20km north of Luhansk) were open, but that the corresponding checkpoints of the armed formations south of the disengagement area near Zolote and 3km south-east of the bridge in Shchastia were closed.

On 13 and 14 November, about 300m south of the EECP near Zolote, close to the intersection of road T-1316 and the road leading to Zolote 4/Rodina (government-controlled, 62km west of Luhansk), the SMM observed that ground works involving between eight and 15 workers continued. (For previous observations in this area, [SMM Daily Report of 13 November 2021](#).)

Border areas outside government control⁶

On 14 November, while at a border crossing point near Dovzhanske (84km south-east of Luhansk), the Mission saw three people (two women and one man, mixed ages) enter Ukraine, as well as four cars (including two with “LPR” plates), 31 covered cargo trucks (including 28 with “LPR” plates) and one minibus (with “LPR” plates) exit Ukraine. After about five minutes, a member of the armed formations told the SMM to leave the area.*

While at the Chervona Mohyla railway station in Voznesenivka (formerly Chervonopartyzansk, non-government-controlled, 65km south-east of Luhansk), the SMM observed five stationary cargo railway cars. Upon its arrival, two members of the armed formations told the SMM to leave the area.*

The SMM 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 Minsk agreements have agreed on the need for this safe and secure access, that restriction of the SMM’s freedom of movement constitutes a violation, and on the need for rapid response to these violations. They have also agreed that the Joint Centre for Control and Co-ordination (JCCC) should contribute to such response and co-ordinate mine clearance. Nonetheless, the armed formations in parts of Donetsk and Luhansk regions frequently deny the SMM access to areas adjacent to Ukraine’s border

⁶ According to decisions in 2014 by the Cabinet of Ministers of Ukraine, operations are officially designated as suspended at these and other border crossing points located outside government control.

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:

- On 13 November, at a checkpoint near Zaichenko (non-government-controlled, 93km south of Donetsk), an armed member of the armed formations denied the SMM passage west towards Pikuzy (formerly Kominternove, non-government-controlled, 92km south of Donetsk) and south towards Zaichenko.
- On the same day, at a checkpoint near Khreshchatytske (formerly Krasnoarmiiske, non-government-controlled, 86km south of Donetsk), three armed members of the armed formations denied the SMM passage west towards Verkhnohyrokiyske (formerly Oktiabr, non-government-controlled, 85km south of Donetsk), citing “ongoing engineering activities in the area”.
- On 14 November, at a Ukrainian Army Forces restricted area near Kriakivka (38km north-west of Luhansk) within which an SMM camera is located, a representative of the Ukrainian Armed Forces denied the SMM access, citing a lack of permission from his superior due to communication issues.
- On the same day, at a checkpoint near Novohryhorivka (non-government-controlled, 61km north-east of Donetsk), an armed member of the armed formations denied the SMM passage north towards Sanzharivka (non-government-controlled, 67km north-east of Donetsk), citing a “lack of prior coordination” and “the SMM's safety”.
- On the same day, at a border crossing point near Dovzhanske (84km south-east of Luhansk), a member of the armed formations told the SMM to leave the area, referring to a lack of permission from those in control.
- On the same day, at the Chervona Mohyla railway station in Voznesenivka (formerly Chervonopartyzansk, non-government-controlled, 65km south-east of Luhansk), two members of the armed formations told the SMM to leave the area, referring to a lack of permission from those in control.

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 13 November, at a checkpoint near Nova Marivka (non-government-controlled, 64km south of Donetsk), four members of the armed formations (two of whom were visibly armed) allowed the SMM passage west towards Staromarivka (62km south of Donetsk), only after 29 minutes of waiting, citing “the SMM's safety”.

Other impediments:⁷

⁷ For cases of probable jamming and jamming mentioned in this section, the interference could have originated from anywhere within the radius of tens of kilometres from the UAVs' positions.

- On 13 November, an SMM mini-UAV was assessed as targeted by small-arms fire while flying over areas near Novozvanivka (government-controlled, 70km west of Luhansk). (See above.)
- On the same day, while conducting a test flight, an SMM long-range UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying over areas between Novoandriivka (government-controlled, 75km north-west of Donetsk) and Raiske (government-controlled, 67km north of Donetsk), between Boikivske (formerly Telmanove, non-government-controlled, 67km south-east of Donetsk) and Petrivske (non-government-controlled, 41km south of Donetsk) and between Stepne (government-controlled, 29km south-west of Donetsk) and Krasnohorivka (government-controlled, 21km west of Donetsk), and near Pryvillia (government-controlled, 85km north of Donetsk). The same UAV experienced GPS signal interference, assessed as caused by jamming, while flying over areas between Raiske and Boikivske and between Krasnohorivka and Pryvillia.
- On the same day, SMM mini-UAVs experienced GPS signal interference, assessed as caused by probable jamming, during five flights: on four occasions while flying over areas near government-controlled New York (formerly Novhorodske, 35km north of Donetsk), as well as once while flying over areas near government-controlled Shchastia (20km north of Luhansk).
- On 14 November, while positioned on the south-western edge of Luhanske (government-controlled, 59km north-east of Donetsk) and carrying out an announced mini-UAV flight, the SMM saw four non-SMM UAV near and above the patrol's position. The Mission landed the UAV and left the area. During the same flight, the mini-UAV also experienced GPS signal interference, assessed as caused by probable jamming. (See above.)
- On the same day, while conducting a test flight, an SMM long-range UAV experienced GPS signal interference, assessed as caused by probable jamming, while flying over areas between Novoandriivka (government-controlled, 75km north-west of Donetsk) and Halytsynivka (government-controlled, 29km north-west of Donetsk), between Dmytrivka (non-government-controlled, 85km east of Donetsk) and Lobacheve (non-government-controlled, 13km east of Luhansk) and near Pryvillia (government-controlled, 85km north of Donetsk). The same UAV experienced GPS signal interference, assessed as caused by jamming, while flying over areas between Halytsynivka and Dmytrivka and between Lobacheve and Pryvillia.
- On the same day, an SMM mid-range UAV experienced GPS signal interference, assessed as caused by probable jamming on five occasions while flying over areas near government-controlled Pyshchevyk (84km south of Donetsk), Vodiane (94km south of Donetsk) and Hnutove (90km south of Donetsk), non-government-controlled Nova Tavriia (92km south of Donetsk) and Bezimenne (100km south of Donetsk).
- On the same day, SMM mini-UAVs experienced GPS signal interference, assessed as caused by probable jamming, during 14 flights: on four occasions while flying over areas near non-government-controlled Nyzhnie Lozove (59km north-east of Donetsk); on two occasions near government-controlled Pylypchatyne (76km north-east of Donetsk) and non-government-controlled Lozivskiyi (32km west of Luhansk), as well as once each while flying over areas near government-controlled Luhanske, Shchastia (20km north of Luhansk) and non-government-controlled Novohryhorivka, Ivanivske (formerly Lotykove, 30km west of Luhansk), Zymohiria (27km west of Luhansk) and Pervomaisk (58km west of Luhansk). (See above)

Tables of weapons

Weapons in violation of withdrawal lines

Date	No. of weapons	Type of weapon	Location	Source of observation
Government-controlled areas				
13/11/2021	1	Surface-to-air missile system (9K33 <i>Osa</i>)	Near Voitove (33km north-west of Luhansk)	Patrol

Weapons beyond withdrawal lines but outside designated storage sites

Date	No. of weapons	Type of weapon	Location	Source of observation
Government-controlled areas				
13/11/2021	1	Tank (T-64)	In a residential area of Chabanivka (66km north-west of Luhansk)	Patrol

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

Date	No.	Type	Location	Source of observation
Government-controlled areas				
12/11/2021	1	Probable armoured combat vehicle (type undetermined)	Near Hranitne (60km south of Donetsk)	Mid-range UAV
13/11/2021	1	Armoured personnel carrier (MT-LB, ambulance type)	Near Karlivka (25km north-west of Donetsk)	Patrol
	1	Infantry fighting vehicle (BMP-2)		
14/11/2021	1	Infantry fighting vehicle (BTR-70)	Near Novobakhmutivka (28km north of Donetsk)	
Non-government-controlled areas				
12/11/2021	1	Infantry fighting vehicle (BMP variant)	Near Novoselivka (16km west of Luhansk)	Mini-UAV
	2	Infantry fighting vehicle (BMP variant)	At a compound in a residential area of Novoselivka (16km west of Luhansk)	

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 14 November 2021⁹

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	2-3km NNE	Recorded	1	Projectile	WNW to ESE	N/K	12-Nov, 22:09
	2-3km NNE	Recorded	1	Projectile	WNW to ESE	N/K	12-Nov, 22:10
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	13-Nov, 17:03
	2-4km ESE	Recorded	4	Explosion	Undetermined, subsequent to previous event	N/K	13-Nov, 17:03
	2-4km SE	Recorded	5	Projectile	SW to NE	N/K	13-Nov, 17:04
	2-4km ESE	Recorded	3	Explosion	Undetermined	N/K	13-Nov, 17:04
	2-4km SE	Recorded	3	Explosion	Undetermined	N/K	13-Nov, 17:05
	2-4km ESE	Recorded	3	Projectile	SW to NE	N/K	13-Nov, 17:06
	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 17:06
SMM camera 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	1-3km SE	Recorded	1	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 20:14
	1-3km SE	Recorded	2	Projectile	SW to NE (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 20:40
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	2-5km SSW	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 22:26
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	3-4km E	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 01:37
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-4km W	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 04:41
	3-6km NNE	Recorded	1	Explosion	Undetermined (also recorded by the SMM camera in DFS)	N/K	12-Nov, 22:55
SMM camera in Petrivske (non-government-controlled, 41km S of Donetsk)	2-4km WNW	Recorded	7	Projectile	SSE to NNW (assessed as outside the disengagement area)	N/K	12-Nov, 19:00
	2-4km WNW	Recorded	13	Projectile	SSE to NNW (assessed as outside the disengagement area)	N/K	12-Nov, 19:11
	2-4km WNW	Recorded	22	Projectile	SSE to NNW (assessed as outside the disengagement area)	N/K	12-Nov, 19:12
	2-4km WNW	Recorded	1	Muzzle flash	Assessed as outside the disengagement area area)	N/K	12-Nov, 19:23
	2-4km WNW	Recorded	1	Projectile	SSE to NNW subsequent to previous event (assessed as outside the disengagement area)	N/K	12-Nov, 19:23
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	5-7km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 19:01
	5-7km N	Recorded	2	Explosion	Undetermined	N/K	12-Nov, 19:02
	5-7km N	Recorded	1	Muzzle flash		N/K	12-Nov, 19:05
	5-7km N	Recorded	1	Muzzle flash		N/K	12-Nov, 19:11
	5-7km N	Recorded	1	Projectile	W to E (subsequent to previous event)	N/K	12-Nov, 19:11
	5-7km N	Recorded	1	Explosion	Impact (subsequent to previous event)	N/K	12-Nov, 19:11
	5-7km N	Recorded	1	Projectile	W to E	N/K	12-Nov, 19:16
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 19:23
	5-7km N	Recorded	6	Projectile	E to W	N/K	12-Nov, 19:28
	4-6km N	Recorded	2	Explosion	Undetermined	N/K	12-Nov, 20:55
	7-9km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 21:09
	7-9km N	Recorded	1	Projectile	SE to NW	N/K	12-Nov, 21:12
	4-6km N	Recorded	1	Projectile	W to E	N/K	12-Nov, 21:27
	3-5km N	Recorded	2	Explosion	Undetermined	N/K	12-Nov, 21:29
	5-7km N	Recorded	1	Projectile	SE to NW	N/K	12-Nov, 21:39
	5-7km N	Recorded	1	Projectile	SE to NW	N/K	12-Nov, 21:40
	7-9km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 21:40
	5-7km N	Recorded	1	Muzzle flash		N/K	12-Nov, 21:47

⁹ The table only includes ceasefire violations directly observed by SMM patrols or recorded by the SMM cameras, 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 technical monitoring officers, 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 technical limitations and/or other considerations. Ceasefire violations recorded by more than one patrol/camera and assessed to be the same are entered only once.

	5-7km N	Recorded	1	Projectile	SE to NW (subsequent to previous event)	N/K	12-Nov, 21:47
	5-7km N	Recorded	1	Explosion	Impact (subsequent to previous event)	N/K	12-Nov, 21:47
	3-5km N	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 22:39
	4-6km NNE	Recorded	1	Projectile	E to W	N/K	13-Nov, 01:30
	5-7km N	Recorded	1	Projectile	SE to NW	N/K	13-Nov, 01:44
	4-6km N	Recorded	1	Projectile	E to W	N/K	13-Nov, 02:27
	5-7km N	Recorded	2	Projectile	SE to NW	N/K	13-Nov, 02:43
	3-5km N	Recorded	1	Projectile	W to E	N/K	13-Nov, 02:55
	4-6km NNE	Recorded	3	Projectile	W to E	N/K	13-Nov, 03:17
	4-6km N	Recorded	24	Projectile	ESE to WNW	N/K	13-Nov, 03:59
	2-4km N	Recorded	3	Projectile	WSW to ENE	N/K	13-Nov, 17:25
	2-4km N	Recorded	9	Projectile	WSW to ENE	N/K	13-Nov, 17:29
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	5-7km WSW	Recorded	1	Projectile	SSE to NNW	N/K	12-Nov, 20:58
	5-7km WSW	Recorded	1	Projectile	SSE to NNW	N/K	12-Nov, 21:04
	5-7km WSW	Recorded	1	Projectile	NNW to SSE	N/K	12-Nov, 21:04
	5-7km WSW	Recorded	2	Explosion	Undetermined	N/K	12-Nov, 21:04
	5-7km WSW	Recorded	3	Muzzle flash		N/K	12-Nov, 21:04
	5-7km WSW	Recorded	1	Explosion	Undetermined	N/K	12-Nov, 21:05
	5-7km WSW	Recorded	4	Explosion	Undetermined	N/K	12-Nov, 21:06
	5-7km WSW	Recorded	1	Muzzle flash		N/K	12-Nov, 21:06
	5-7km WSW	Recorded	1	Projectile	SSE to NNW (subsequent to previous event)	N/K	12-Nov, 21:06
	5-7km WSW	Recorded	7	Projectile	SSE to NNW	N/K	12-Nov, 21:08
	5-7km WSW	Recorded	6	Projectile	SSE to NNW	N/K	12-Nov, 21:21
	3-5km W	Recorded	3	Projectile	SSE to NNW	N/K	13-Nov, 00:34
	3-5km W	Recorded	1	Projectile	NNW to SSE	N/K	13-Nov, 00:35
	4-6km W	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 00:57
	4-6km W	Recorded	2	Explosion	Undetermined	N/K	13-Nov, 00:58
	4-6km WSW	Recorded	7	Projectile	SSE to NNW	N/K	13-Nov, 00:58
Horlivka (non-government-controlled, 39km NE of Donetsk)	3-5km SW	Heard	11	Explosion	Undetermined	N/K	12-Nov, 19:12-19:30
	4-6km SW	Heard	2	Explosion	Undetermined	N/K	12-Nov, 22:45-22:47
Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-5km SSW	Heard	10	Explosion	Undetermined	N/K	12-Nov, 21:05
	4-5km SSW	Heard	20	Burst		HMG	12-Nov, 21:06
	4-5km SSW	Heard	7	Explosion	Undetermined	N/K	12-Nov, 21:07
	4km SSW	Heard	10	Burst		HMG	12-Nov, 21:08
	4-5km SSW	Heard	5	Explosion	Undetermined	N/K	12-Nov, 21:08
	4-5km SSW	Heard	5	Burst		HMG	12-Nov, 21:09
	4-5km SSW	Heard	10	Burst		HMG	12-Nov, 21:16
	4-5km SSW	Heard	5	Burst		HMG	12-Nov, 21:17
	3-4km SSW	Heard	5	Burst		HMG	12-Nov, 21:18
	3-4km SSW	Heard	5	Burst		HMG	12-Nov, 21:19
	3km SSW	Heard	7	Explosion	Undetermined	N/K	12-Nov, 21:19
	3-4km SSW	Heard	7	Burst		HMG	12-Nov, 21:21
	4-5km SSW	Heard	3	Explosion	Undetermined	N/K	12-Nov, 22:20
	4-5km SSW	Heard	3	Explosion	Undetermined	N/K	12-Nov, 22:30
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	3km WNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 09:15
	4-5km WNW	Heard	1	Explosion	Undetermined	N/K	13-Nov, 09:17
	4-5km WSW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 09:37
	4-5km WSW	Heard	1	Explosion	Undetermined	N/K	13-Nov, 09:43
	4-5km WNW	Heard	1	Explosion	Undetermined	N/K	13-Nov, 09:55
	4-5km WNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 09:57
	4-5km WNW	Heard	6	Explosion	Undetermined	N/K	13-Nov, 10:14
	4-5km WNW	Heard	5	Explosion	Undetermined	N/K	13-Nov, 10:25
	3-4km WNW	Heard	1	Burst		Small arms	13-Nov, 10:25
	1km WSW	Heard	1	Burst		Small arms	13-Nov, 10:30
Railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	2-3km W	Heard	12	Shot		Small arms	13-Nov, 10:40
	5-6km WNW	Heard	4	Explosion	Undetermined	N/K	13-Nov, 10:44
	5-6km WNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 10:55

	5-6km WNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 10:56
	5-6km WNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 11:08
	2km WSW	Heard	1	Explosion	Undetermined	N/K	13-Nov, 11:12
	5-6km WNW	Heard	6	Explosion	Undetermined	N/K	13-Nov, 11:12
	5-6km WNW	Heard	6	Explosion	Undetermined	N/K	13-Nov, 11:21
Spartak (non-government-controlled, 9km N of Donetsk)	8-9km NNE	Heard	1	Explosion	Undetermined	N/K	13-Nov, 12:40
About 3km S of Lohvynove (non-government-controlled, 59km NE of Donetsk)	4-6km NNW	Heard	2	Explosion	Undetermined	N/K	13-Nov, 10:49
About 2km SSE of Kamianka (government-controlled, 20km N of Donetsk)	1-2km N	Heard	3	Burst		HMG	13-Nov, 09:16
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	2-3km NE	Heard	3	Explosion	Undetermined	N/K	13-Nov, 09:54-09:55
	2-3km NNE	Heard	4	Explosion	Undetermined	N/K	13-Nov, 10:13
	2-3km NNE	Heard	6	Explosion	Undetermined	N/K	13-Nov, 10:25
	2-3km NNE	Heard	3	Explosion	Undetermined	N/K	13-Nov, 10:44
	2-3km NNE	Heard	6	Explosion	Undetermined	N/K	13-Nov, 11:21
SE edge of Avdiivka (government-controlled, 17km N of Donetsk)	3-5km NE	Heard	4	Explosion	Undetermined	N/K	13-Nov, 10:44
New York (formerly Novhorodske, government-controlled, 35km N of Donetsk)	5-7km ENE	Heard	1	Explosion	Undetermined	N/K	13-Nov, 12:05
	5-7km ENE	Heard	1	Explosion	Undetermined	N/K	13-Nov, 12:15
Pavlopil (government-controlled, 84km S of Donetsk)	2-3km NNE	Heard	36	Shot		Small arms	13-Nov, 11:35
	3-4km E	Heard	15	Explosion	Undetermined	N/K	13-Nov, 11:52-11:55
About 2km NE of Chernenko (government-controlled, 86km S of Donetsk)	2-3km NNE	Heard	15	burst		Small arms	13-Nov, 12:50-12:55
	2-3km NNE	Heard	7	shot		Small arms	13-Nov, 12:50-12:55
About 2.5km SE of Lebedynske (government-controlled, 99km S of Donetsk)	3-5km N	Heard	2	Explosion	Undetermined	N/K	13-Nov, 11:33-11:39
	2-3km NNE	Heard	10	Shot		Small arms	13-Nov, 11:33-11:39
	2-3km N	Heard	14	Shot		Small arms	13-Nov, 11:47-11:57
	2-3km N	Heard	2	Burst		Small arms	13-Nov, 11:47-11:57
	3-5km N	Heard	7	Explosion	Undetermined	N/K	13-Nov, 12:02-12:12
	2-3km NNE	Heard	18	Shot		Small arms	13-Nov, 12:02-12:12
Berdianske (government-controlled, 102km S of Donetsk)	1-2km E	Heard	100	Burst	Assessed as a live-fire exercise	Small arms	13-Nov, 12:32-13:12
	1-2km E	Heard	100	Shot	Assessed as a live-fire exercise	Small arms	13-Nov, 12:32-13:12
Horlivka (non-government-controlled, 39km NE of Donetsk)	3-5km SW	Heard	8	Explosion	Undetermined	N/K	13-Nov, 14:40-14:44
SMM camera on N edge of Popasna (government-controlled, 69km W of Luhansk)	3-5km ESE	Recorded	3	Projectile	SSW to NNE	N/K	12-Nov, 20:35
	3-5km ESE	Recorded	1	Projectile	NNE to SSW	N/K	12-Nov, 20:47
	3-5km ESE	Recorded	6	Explosion	Undetermined	N/K	12-Nov, 20:58
	3-5km SE	Recorded	4	Projectile	SSW to NNE	N/K	12-Nov, 21:31
	3-5km SSE	Recorded	4	Projectile	WSW to ENE	N/K	13-Nov, 16:40
	3-5km SE	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 17:14
	3-5km SE	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 17:24
SMM camera in Zolote (government-controlled, 60km W of Luhansk)	2-4km ENE	Recorded	2	Projectile	NW to SE (assessed as outside the disengagement area)	N/K	12-Nov, 19:30
	3-5km E	Recorded	1	Illumination flare	In vertical flight (assessed as outside the disengagement area)	N/K	12-Nov, 20:00
	2-4km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	12-Nov, 20:31
	2-4km E	Recorded	1	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	13-Nov, 01:04
	2-4km E	Recorded	4	Projectile	SW to NE (assessed as outside the disengagement area)	N/K	13-Nov, 01:44
	2-4km E	Recorded	2	Projectile	In vertical flight (assessed as outside the disengagement area)	N/K	13-Nov, 01:44
Holubivka (Formerly Kirovsk, non-government-controlled, 51km West of Luhansk)	3-4km NNW	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area)	N/K	13-Nov, 09:00-09:05

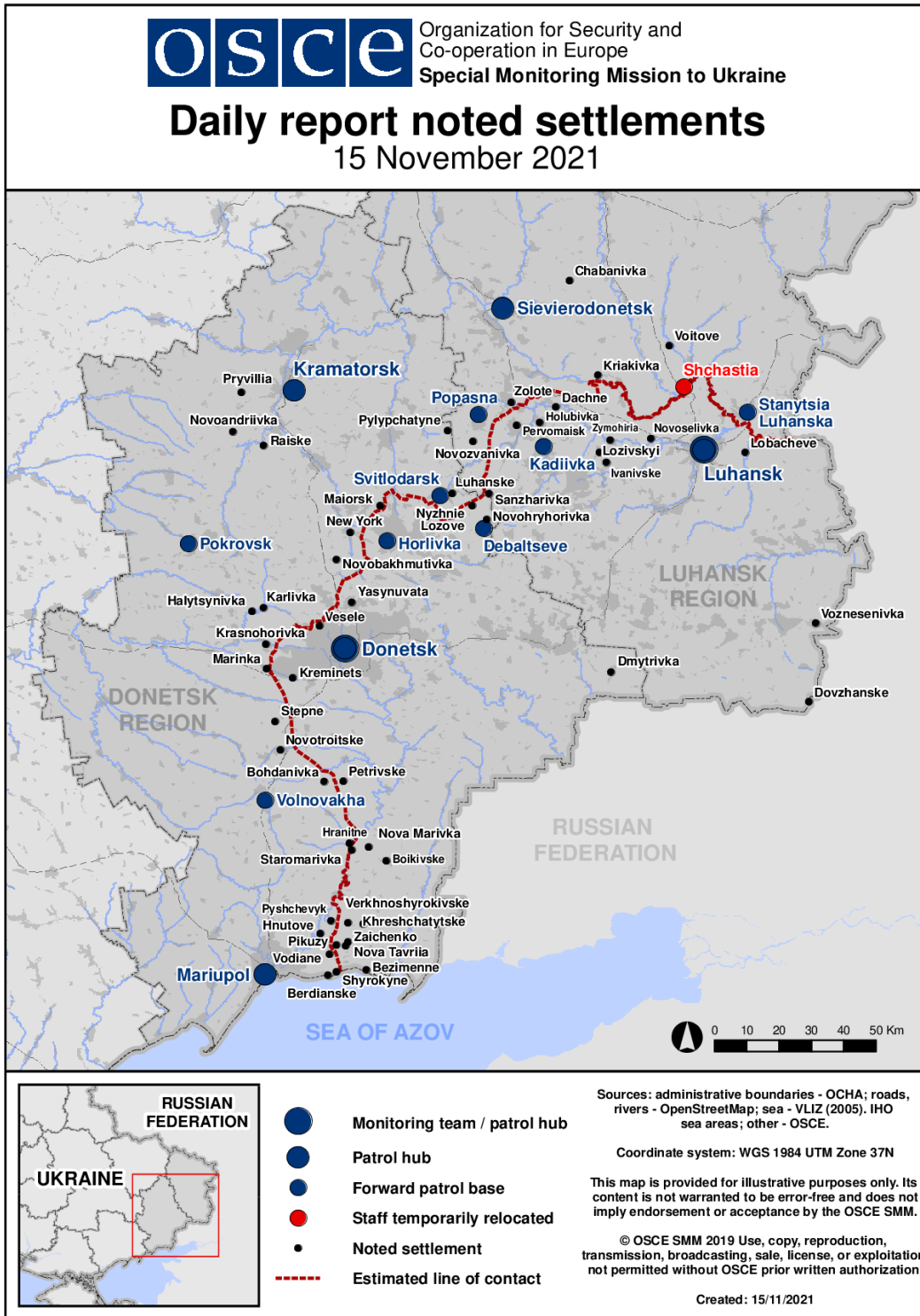
	2-3km NNW	Heard	6	Shot		Small arms	13-Nov, 09:00-09:05
	3-4km W	Heard	3	Shot	Undetermined	Small arms	13-Nov, 10:00
Novozvanivka (government-controlled, 70km West of Luhansk)	0.4-0.05km WNW	Heard	10	Shot		Small arms	13-Nov, 10:05-10:06
E outskirts of Sentianivka (formerly Frunze, non-government-controlled, 44km W of Luhansk)	2-3km NNE	Heard	14	Shot	Undetermined	Small arms	13-Nov, 11:19
Kadiivka (formerly Stakhanov, non-government-controlled, 50km W of Luhansk)	10-12km W	Heard	19	Explosion	Undetermined	N/K	13-Nov, 16:45-17:00
	14-16km N	Heard	9	Explosion	Undetermined	N/K	13-Nov, 17:00-17:45
	14-16km WNW	Heard	4	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	13-Nov, 17:00-17:45
SMM camera in Avdiivka (government-controlled, 17km N of Donetsk)	4-6km NE	Recorded	5	Explosion	Airburst	N/K	13-Nov, 21:29
	4-6km NE	Recorded	4	Explosion	Airburst	N/K	13-Nov, 21:30
	4-6km NE	Recorded	7	Explosion	Airburst	N/K	13-Nov, 21:31
	4-6km NE	Recorded	10	Explosion	Airburst	N/K	13-Nov, 21:33
	4-6km NE	Recorded	2	Projectile	NW to SE	N/K	13-Nov, 21:33
	4-6km NE	Recorded	14	Explosion	Airburst	N/K	13-Nov, 21:35
	4-6km NE	Recorded	2	Projectile	NW to SE	N/K	13-Nov, 21:35
SMM camera 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	2-4km ESE	Recorded	24	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 19:13
	2-4km ESE	Recorded	3	Projectile	N to S (assessed as inside the disengagement area near Petrivske)	N/K	13-Nov, 19:14
	2-4km ESE	Recorded	2	Projectile	NNE to SSW (assessed as inside the disengagement area near Petrivske)	N/K	14-Nov, 00:46
	3-5km ESE	Recorded	17	Projectile	NNE to SSW (unable to assess if inside or outside the disengagement area near Petrivske)	N/K	14-Nov, 17:15
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	4-6km SSE	Recorded	10	Projectile	WSW to ENE	N/K	14-Nov, 03:08
	2-4km SE	Recorded	6	Projectile	NE to SW	N/K	14-Nov, 18:50
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)	3-5km SSW	Recorded	3	Burst	In vertical flight (three rounds each)	N/K	14-Nov, 17:30
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	3-5km E	Recorded	1	Projectile	NNE to SSW	N/K	14-Nov, 16:48
	3-5km E	Recorded	1	Explosion	Airburst (subsequent to previous event)	N/K	14-Nov, 16:48
SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk)	3-4km NNE	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:01
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:08
	3-4km NNE	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:10
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:15
	3-4km NNE	Recorded	1	Muzzle flash		N/K	14-Nov, 01:17
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:17
	3-4km NNE	Recorded	5	Explosion	Undetermined	N/K	14-Nov, 01:19
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:22
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:23
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:25
	3-4km NNE	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:27
SMM camera at Oktiabr mine (non-government-controlled, 9km NW of Donetsk city centre)	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:00
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:01
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:07
	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:08
	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:09
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:10
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:12
	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:14
	2-4km W	Recorded	5	Explosion	Undetermined	N/K	14-Nov, 01:16
	2-4km W	Recorded	2	Explosion	Undetermined	N/K	14-Nov, 01:17
	2-4km W	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:18
	2-4km W	Recorded	6	Explosion	Undetermined	N/K	14-Nov, 01:19
	2-4km W	Recorded	4	Explosion	Undetermined	N/K	14-Nov, 01:21
	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:23
	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:25
2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:27	

	2-4km W	Recorded	3	Explosion	Undetermined	N/K	14-Nov, 01:29
	3-5km WSW	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:46
	3-5km WSW	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 01:47
	2-4km NNE	Recorded	2	Projectile	WNW to ESE	N/K	13-Nov, 21:26
	2-4km NNE	Recorded	2	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:26
	2-4km NNE	Recorded	3	Explosion	Undetermined	N/K	13-Nov, 21:26
	2-4km NNE	Recorded	3	Explosion	Undetermined	N/K	13-Nov, 21:28
	2-4km NNE	Recorded	1	Projectile	WNW to ESE	N/K	13-Nov, 21:29
	2-4km NNE	Recorded	1	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:29
	2-4km NNE	Recorded	4	Explosion	Undetermined	N/K	13-Nov, 21:29
	2-4km NNE	Recorded	3	Projectile	WNW to ESE	N/K	13-Nov, 21:30
	2-4km NNE	Recorded	3	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:30
	2-4km NNE	Recorded	10	Explosion	Undetermined	N/K	13-Nov, 21:30
	2-4km NNE	Recorded	2	Projectile	WNW to ESE	N/K	13-Nov, 21:33
	2-4km NNE	Recorded	2	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:33
	2-4km NNE	Recorded	9	Explosion	Undetermined	N/K	13-Nov, 21:33
	2-4km NNE	Recorded	2	Projectile	WNW to ESE	N/K	13-Nov, 21:35
	2-4km NNE	Recorded	2	Explosion	Undetermined (subsequent to previous event)	N/K	13-Nov, 21:35
	2-4km NNE	Recorded	9	Explosion	Undetermined	N/K	13-Nov, 21:35
	2-4km NNE	Recorded	1	Projectile	WNW to ESE	N/K	13-Nov, 21:38
	2-4km NNE	Recorded	7	Explosion	Airburst	N/K	13-Nov, 21:38
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	5-7km N	Recorded	1	Projectile	W to E	N/K	13-Nov, 19:06
	5-7km N	Recorded	1	Projectile	SW to NE	N/K	13-Nov, 19:08
	5-7km N	Recorded	1	Projectile	W to E	N/K	13-Nov, 19:19
	2-4km N	Recorded	7	Projectile	WSW to ENE	N/K	13-Nov, 19:24
	2-4km N	Recorded	10	Projectile	WSW to ENE	N/K	13-Nov, 19:25
	5-7km N	Recorded	20	Projectile	SE to NW	N/K	13-Nov, 19:45
	5-7km N	Recorded	1	Projectile	SW to NE	N/K	13-Nov, 19:56
	5-7km N	Recorded	1	Illumination flare	In vertical flight	N/K	13-Nov, 20:02
	5-7km N	Recorded	2	Projectile	WSW to ENE	N/K	13-Nov, 20:19
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 20:26
	5-7km N	Recorded	2	Muzzle flash		N/K	13-Nov, 20:55
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 20:55
	5-7km N	Recorded	2	Projectile	WSW to ENE	N/K	13-Nov, 20:55
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 21:16
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 21:28
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 21:28
	5-7km N	Recorded	2	Projectile	WSW to ENE	N/K	13-Nov, 21:29
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	13-Nov, 21:32
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 21:32
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 21:48
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	13-Nov, 22:50
	5-7km N	Recorded	1	Projectile	SW to NE	N/K	13-Nov, 22:57
	5-7km N	Recorded	1	Explosion	Airburst (subsequent to previous event)	N/K	13-Nov, 22:57
	5-7km N	Recorded	1	Illumination flare	In vertical flight	N/K	13-Nov, 23:58
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 00:12
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	14-Nov, 00:14
	5-7km NNE	Recorded	20	Projectile	WSW to ENE	N/K	14-Nov, 03:14
	5-7km NNE	Recorded	3	Projectile	E to W	N/K	14-Nov, 03:58
	5-7km NNE	Recorded	2	Projectile	W to E	N/K	14-Nov, 03:58
	5-7km NNE	Recorded	1	Projectile	In vertical flight	N/K	14-Nov, 03:58
	5-7km N	Recorded	1	Projectile	W to E	N/K	14-Nov, 04:25
	5-7km N	Recorded	1	Projectile	W to E	N/K	14-Nov, 04:38
	5-7km N	Recorded	1	Muzzle flash		N/K	14-Nov, 04:38
	5-7km N	Recorded	4	Projectile	W to E	N/K	14-Nov, 05:15

	5-7km N	Recorded	2	Projectile	SW to NE	N/K	14-Nov, 05:15
	5-7km N	Recorded	2	Projectile	W to E	N/K	14-Nov, 05:18
	5-7km NNE	Recorded	2	Projectile	W to E	N/K	14-Nov, 05:25
	4-6km N	Recorded	16	Projectile	E to W	N/K	14-Nov, 17:19
	4-6km N	Recorded	1	Projectile	In vertical flight	N/K	14-Nov, 17:19
	4-6km N	Recorded	1	Projectile	W to E	N/K	14-Nov, 18:11
	4-6km N	Recorded	1	Projectile	W to E	N/K	14-Nov, 18:12
SMM camera in Svitlodarsk (government-controlled, 57km NE of Donetsk)	4-6km WSW	Recorded	6	Projectile	SE to NW	N/K	13-Nov, 20:57
About 2km SSE of Kamianka (government-controlled, 20km N of Donetsk)	2-4km SE	Heard	1	Explosion	Undetermined	N/K	14-Nov, 09:27
	2-4km SE	Heard	1	Explosion	Undetermined	N/K	14-Nov, 09:32
Orlivske (government-controlled, 82km S of Donetsk)	2-3km NNE	Heard	1	Shot		Small arms	14-Nov, 10:48
About 2km E of Bohdanivka (government-controlled, 41km SW of Donetsk)	2-3km SSE	Heard	26	Shot	assessed as inside the disengagement area near Petrivske	Small arms	14-Nov, 12:42-12:49
	3-5km SSE	Heard	60	Explosion	Undetermined (assessed as outside the disengagement area near Petrivske)	N/K	14-Nov, 12:44-12:55
	3-5km SSE	Heard	32	Shots and bursts	Assessed as outside the disengagement area near Petrivske	Small arms	14-Nov, 12:44-12:55
About 1.5km NW of Pavlopil (government-controlled, 84km S of Donetsk)	2-3km ENE	Heard	7	Shot		Small arms	14-Nov, 12:58
Horlivka (non-government-controlled, 39km NE of Donetsk)	4-6km SW	Heard	2	Explosion	Undetermined	N/K	14-Nov, 06:54-06:55
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	3-4km SW	Heard	1	Explosion	Undetermined	N/K	14-Nov, 09:41
	2-3km NW	Heard	3	Burst		HMG	14-Nov, 09:51
About 2km NW of Donetsk Railway Station (6km NW of Donetsk city centre)	3-5km NNE	Heard	3	Explosion	Undetermined	N/K	14-Nov, 09:41-09:53
	2-4km N	Heard	2	Explosion	Undetermined	N/K	14-Nov, 10:49
About 1km Dokuchaievsk (non-government-controlled, 30km SW of Donetsk)	3-4km W	Heard	5	Shot		HMG	14-Nov, 10:05
	4-5km NW	Heard	4	Explosion	Undetermined	N/K	14-Nov, 10:05
	6-8km NW	Heard	1	Explosion	Undetermined	N/K	14-Nov, 10:25
About 1km SE of Nyzhnie Lozove (non-government-controlled, 59km NE of Donetsk)	2-3km W	Heard	8	Shot		Small arms	14-Nov, 11:50
	2-3km W	Heard	1	Burst		Small arms	14-Nov, 11:50
Yakovlivka (non-government-controlled, 10km N of Donetsk)	5-6km N	Heard	1	Explosion	Undetermined	N/K	14-Nov, 11:20
Donetsk Railway Station (non-government-controlled, 6km NW of Donetsk city centre)	5-6km N	Heard	1	Explosion	Undetermined	N/K	14-Nov, 12:08
SMM camera on N edge of Popasna (government-controlled, 69km W of Luhansk)	3-7km ESE	Recorded	1	Explosion	Airburst (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 16:37
	3-7km ESE	Recorded	1	Muzzle flash	Assessed as outside the disengagement area near Zolote	N/K	14-Nov, 16:38
	3-7km ESE	Recorded	1	Projectile	NE to SW subsequent to previous event (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 16:38
	5-7km ESE	Recorded	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 16:52
Kadiivka (formerly Stakhanov, non-government-controlled, 50km West of Luhansk)	10-12km WNW	Heard	11	Explosion	Undetermined	N/K	13-Nov, 23:45-00:02
	10-12km WNW	Heard	50	Burst		HMG	13-Nov, 23:45-00:02
N edge of Popasna (government-controlled, 69km West of Luhansk)	3-5km SSE	Heard	1	Explosion	Undetermined	N/K	13-Nov, 23:46
	3-5km SSE	Heard	4	Burst		HMG	13-Nov, 23:46-23:48
	3-5km SSE	Heard	2	Explosion	Undetermined	N/K	13-Nov, 23:52-23:57
	3-5km SSE	Heard	92	Burst		HMG	13-Nov, 23:52-23:57
	3-5km SSE	Heard	2	Explosion	Undetermined	N/K	14-Nov, 00:01-00:08
	3-5km SSE	Heard	34	Burst		HMG	14-Nov, 00:01-00:08
Stanytsia Luhanska (government-controlled, 16km North East of Luhansk)	3-6km SE	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Stanytsia Luhanska)	N/K	14-Nov, 04:26
Holubivka (formerly Kirovsk, non-government-controlled, 51km west of Luhansk)	10-12km SW	Heard	4	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 10:08
Katerynivka (government-controlled 64km west of Luhansk)	3-5km WSW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	Artillery (type N/K)	14-Nov, 10:45

About 700m NE of Katerynivka (government-controlled 64km west of Luhansk)	4-6km SSW	Heard	3	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	Mortar (type N/K)	14-Nov, 13:40-13:51
Zolote (government-controlled, 60km west of Luhansk)	2-3km ESE	Heard	3	Burst	Assessed as outside the disengagement area near Zolote	HMG	14-Nov, 13:15-13:16
	3-4km ESE	Heard	2	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	Mortar (type N/K)	14-Nov, 13:20
Molodizhne (non-government-controlled, 63 km NW of Luhansk)	0.6-0.8km NE	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 10:45
About 2km SW of Berezivske (non-government-controlled, 53km north-west of Luhansk)	2-3km NW	Heard	24	Shot	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 12:47-13:03
	2-3km NW	Heard	5	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 12:47-13:03
	2-3km NW	Heard	11	Burst	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 12:47-13:03
	2-3km NW	Heard	11	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 13:03-13:19
	2-3km NW	Heard	25	Burst	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 13:03-13:19
	2-3km NW	Heard	29	Shot	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 13:03-13:19
	3-4km NNW	Heard	40	Shot	Assessed as outside the disengagement area near Zolote	Small arms	14-Nov, 13:24-13:39
	8-10km W	Heard	11	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 13:24-13:39
	8-10km W	Heard	5	Burst	Assessed as outside the disengagement area near Zolote	N/K	14-Nov, 13:24-13:39
About 1km E of Popasna (government-controlled, 69km West of Luhansk)	2-3km SSE	Heard	9	Explosion	Undetermined	N/K	14-Nov, 11:15-11:16
N edge of Popasna (government-controlled, 69km West of Luhansk)	8-10km S	Heard	2	Explosion	Undetermined	N/K	14-Nov, 13:57-14:00
	5-7km S	Heard	20	Explosion	Undetermined		14-Nov, 14:33-14:56
Kadiivka (formerly Stakhanov, non-government-controlled, 50km West of Luhansk)	8-10km W	Heard	40	Explosion	Undetermined	N/K	14-Nov, 14:08-14:30
	8-12km WSW	Heard	19	Explosion	Outgoing	Artillery (type N/K)	14-Nov, 14:31-14:47
	8-12km W	Heard	19	Explosion	Impact (subsequent to previous event)	Artillery (type N/K)	14-Nov, 14:31-14:47
	12-15km N	Heard	3	Explosion	Undetermined	N/K	14-Nov, 14:59-15:17
	12-15km NW	Heard	17	Explosion	Undetermined (unable to assess if inside or outside the disengagement area near Zolote)	N/K	14-Nov, 17:01-17:31
	14-16km NNW	Heard	1	Explosion	Undetermined (assessed as outside the disengagement area near Zolote)	N/K	14-Nov, 17:01-17:31
	12-15km NW	Heard	5	Burst	Unable to assess if inside or outside the disengagement area near Zolote	HMG	14-Nov, 17:01-17:31
	14-16km N	Heard	8	Explosion	Undetermined	N/K	14-Nov, 17:32-18:00
	12-15km NW	Heard	1	Explosion	Undetermined (unable to assess if inside or outside the disengagement area near Zolote)	N/K	14-Nov, 17:45
	10-12km W	Heard	6	Explosion	Undetermined	N/K	14-Nov, 16:27-17:00
12-15km NW	Heard	21	Explosion	Undetermined (unable to assess if inside or outside the disengagement area near Zolote)	N/K	14-Nov, 16:27-17:00	
12-15km NW	Heard	20	Burst	Unable to assess if inside or outside the disengagement area near Zolote	HMG	14-Nov, 16:27-17:00	

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 have 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 also patrols in this settlement during daylight hours).