

# Daily Report 68/2020

21 March 2020<sup>1</sup>

#### **Summary**

- Compared with the previous reporting period, the SMM recorded more ceasefire • violations in both Donetsk and Luhansk regions.
- The SMM saw damage from shelling to a non-functional school in Donetsk city.
- The Mission continued monitoring the disengagement areas near Stanytsia Luhanska, Zolote and Petrivske. It recorded ceasefire violations inside the disengagement area near Petrivske.
- The SMM saw anti-tank mines, including some for the first time, near Bohdanivka, • Sanzharivka and Veselohorivka and remnants of ammunition near Krasnvi Yar.
- The Mission continued to observe measures related to the COVID-19 outbreak at checkpoints in both Donetsk and Luhansk regions, where it noted very limited movement of civilians.
- The SMM facilitated and monitored adherence to localized ceasefires to enable demining activities near Krasnyi Yar, as well as repairs to critical civilian infrastructure near Shchastia, Holubivske, Berezivske, Zalizne and Horlivka.
- Restrictions of the SMM's freedom of movement continued, including at four checkpoints of the armed formations in southern Donetsk region and in Donetsk city.\*



### Map of recorded ceasefire violations

<sup>&</sup>lt;sup>1</sup> Based on information from the Monitoring Teams as of 19:30, 20 March 2020. All times are in Eastern European Time. During the reporting period, the SMM camera in Svitlodarsk was not operational.

<sup>&</sup>lt;sup>2</sup> For a complete breakdown of ceasefire violations, please see the annexed table.

<sup>&</sup>lt;sup>3</sup> Including explosions.

<sup>&</sup>lt;sup>4</sup> Including from unidentified weapons.



In Donetsk region, the SMM recorded more ceasefire violations, including more explosions (about 420), compared with the <u>previous reporting period</u> (about 290 explosions). The majority of ceasefire violations, including the majority of explosions, were recorded at northerly directions of Kamianka (government-controlled, 20km north of Donetsk), at south-westerly directions of Svitlodarsk (government-controlled, 57km north-east of Donetsk), and in areas west and south-west of Yasynuvata (non-government-controlled, 16km north-east of Donetsk), east-north-east and north-north-west of Orlivske (government-controlled, 82km south of Donetsk), and south-east of Hnutove (government-controlled, 90km south of Donetsk).

In Luhansk region, the SMM recorded more ceasefire violations, including more explosions (about 165), compared with the <u>previous reporting period</u> (about 130 explosions). The majority of ceasefire violations, including the majority of explosions, were recorded at northerly directions of Holubivka (formerly Kirovsk, non-government-controlled, 51km west of Luhansk), and at westerly and south-westerly directions of Trokhizbenka (government-controlled, 32km north-west of Luhansk), including about 30 explosions of artillery rounds.

#### Shelling and fire damage to non-functional school and gas station

On 20 March, at 1 Lisova Street, in the northern outskirts of non-government-controlled Donetsk city, the SMM saw a fresh crater, assessed as caused by a probable (120mm) mortar round in the backyard of a non-functional school (about 3m west of the building). It also saw fresh shrapnel damage to the north-west facing side and metal gate of the school building, as well as scorch marks on a gas pipeline on a north-east facing side of the building. The Mission also saw fresh shrapnel damage to the school building. A local resident (man in his sixties) told the SMM that, on the night and early morning of 18-19 March, he and his wife had heard shelling in the area. He added that a gas pipeline had been damaged during shelling, causing a fire.

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

On 20 March, inside the **disengagement area near Stanytsia Luhanska** (governmentcontrolled, 16km north-east of Luhansk), the Mission saw six members of the armed formations (wearing armbands with "JCCC" written on them) between the new span of the Stanytsia Luhanska bridge (15km north-east of Luhansk) and their checkpoint south of it.

On the evening and night of 19-20 March, the SMM camera in Zolote (governmentcontrolled, 60km west of Luhansk) recorded four undetermined explosions and one projectile in flight at an assessed range of 1-5km east and east-north-east. On 20 March, while positioned at five different locations, the Mission heard about 40 explosions and about 25 shots and bursts of heavy-machine-gun fire. All of these ceasefire violations were assessed as outside the **disengagement area near Zolote** but within 5km of its periphery.

On 20 March, near the southern edge of the disengagement area near Zolote, the SMM saw five members of the armed formations (two of whom were wearing armbands with "JCCC" written on them) and two other members of the armed formations <u>again</u> conducting topographic mapping of road T-1316.

<sup>&</sup>lt;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 17 March, on the eastern edge of the **disengagement area near Petrivske** (nongovernment-controlled, 41km south of Donetsk), about 350m north of the area's southern edge, an SMM mini-unarmed aerial vehicle (UAV) spotted three people in camouflage clothing inside former forward positions of the armed formations.

Outside the disengagement area near Petrivske, an SMM mini-UAV <u>again</u> spotted five antitank mines (TM-62) (part of a larger minefield), assessed as belonging to the Ukrainian Armed Forces, laid in a field just north of a road running between Bohdanivka (governmentcontrolled, 41km south-west of Donetsk) and Viktorivka (non-government-controlled, 42km south-west of Donetsk).

On the evening of 19 March, the SMM camera 2km east of Bohdanivka (governmentcontrolled, 41km south-west of Donetsk) recorded 20 projectiles in flight and 11 muzzle flashes and, at an assessed range of 2-4km east-south-east. On the evening and night of 19-20 March, the SMM camera in Petrivske recorded 16 projectiles in flight, at an assessed range of 1-3km west-south-west and south-west. All of these ceasefire violations were assessed as inside the disengagement area near Petrivske. On the same evening and night, the two above-mentioned cameras recorded five projectiles in flight assessed as outside the disengagement area but within 5km of its periphery.

#### Withdrawal of weapons

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

The Mission saw a total of 83 weapons beyond withdrawal lines in government- and nongovernment-controlled areas of Luhansk and Donetsk regions. Most of the weapons were seen at railway stations and training areas (for further details, see the table below).

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

The Mission observed armoured combat vehicles, including some near residential areas, on both sides of the contact line (for further details, see the table below).<sup>7</sup>

Footage from an SMM mini-UAV, which flew over areas near Yasynuvata (nongovernment-controlled, 16km north-east of Donetsk) on 18 March, revealed the presence of a member of the armed formations pointing his rifle at the UAV (see <u>SMM Daily Report 19</u> <u>March 2020</u>).

# Anti-tank mines near Sanzharivka and Veselohorivka and remnants of ammunition near Krasnyi Yar

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

<sup>&</sup>lt;sup>7</sup> The SMM Daily Report of 20 March 2020 reported that "On 19 March, at two positions, about 3km east of and in Vesela Hora (non-government-controlled, 16km north of Luhansk), the SMM saw a total of 30 members of the armed formations, four of whom were wearing armbands with "JCCC" written on them, all fortifying trenches and positions with sandbags and ammunition boxes." It should have read that the members of the armed formations wearing armbands with "JCCC" written on them were not involved in fortifying trenches.

On 18 March, in fields about 2.5km north-west of Sanzharivka (non-government-controlled, 67km north-east of Donetsk), an SMM mid-range UAV spotted for the first time over 400 anti-tank mines, assessed as belonging to the armed formations (unable to be assessed if recently laid).

On 19 March, in fields about 2km north-west of Veselohorivka (non-government-controlled, 64km west of Luhansk), an SMM mini-UAV spotted for the first time at least 60 anti-tank mines (TM-62), assessed as belonging to the armed formations (unable to be assessed if recently laid) (for previous observations in the area, see <u>SMM Daily Report 9 July 2019</u>).

On the same day, on road M-03, about 2km south-east of Luhanske (government-controlled, 59km north-east of Donetsk), an SMM mini-UAV spotted a probable mine hazard sign, where it <u>previously</u> saw a concertina wire.

On 20 March, near Krasnyi Yar (non-government-controlled, 12km north-east of Luhansk), the SMM saw for the first time remnants of ammunition, assessed as a tailfin of a (120mm) mortar round in a field about 1m north of a road, in an area where the Mission has been facilitating demining activities (see below).

#### Preventive measures against COVID-19 outbreak

The Mission continued to see that the number of vehicles and pedestrians travelling through the entry-exit checkpoints (EECPs) and the corresponding checkpoints of the armed formations along the contact line was very low.

On 20 March, at the EECP near Pyshchevyk (government-controlled, 84km south of Donetsk), the SMM saw no traffic in either direction. On the same day, at the EECP near Marinka (government-controlled, 23km south-west of Donetsk), the Mission saw a car travelling from non-government- to government-controlled areas and about seven cars and 50 pedestrians travelling in opposite direction.

The same day, at the checkpoint south-east of Kreminets (non-government-controlled, 16km south-west of Donetsk), the SMM saw about 25 civilian vehicles and two buses queuing to proceed further into non-government-controlled areas. About 250m west of the checkpoint, the Mission saw about 30 civilians (mixed ages and genders) queueing in front of a white tent, assessed as the location where civilians' temperature is measured to counter the spread of COVID-19.

At a parking lot about 1.2km south of the Stanytsia Luhanska bridge (15km north-east of Luhansk), the SMM did not observe any pedestrians queuing for a bus to travel towards the checkpoint of the armed formations about 100m south of the bridge.

#### SMM facilitation of repairs to critical civilian infrastructure and demining activities

The SMM facilitated and monitored adherence to localized ceasefires to enable repairs to: power lines near Shchastia (government-controlled, 20km north of Luhansk) and between Holubivske (non-government-controlled, 51km west of Luhansk) and Berezivske (non-government-controlled, 53km north-west of Luhansk); demining activities near Krasnyi Yar (non-government-controlled, 12km north-east of Luhansk), along the bank of the Sieverskyi Donets river; and maintenance work at a phenol sludge reservoir near Zalizne (government-controlled, 42km north-east of Donetsk).

The SMM continued to facilitate the operation of the Donetsk Filtration Station (DFS) (15km north of Donetsk) and to monitor the security situation near the pumping station close to Vasylivka (non-government-controlled, 20km north of Donetsk). While positioned at two locations near the DFS, the SMM heard about 30 undetermined explosions. On the evenings of 19 and 20 March, the SMM camera at the DFS recorded five projectiles and one undetermined explosion. All of the above ceasefire violations were assessed as within a 2km radius from the DFS.

The Mission continued monitoring in Kherson, Odessa, Lviv, Ivano-Frankivsk, Kharkiv, Dnipro and 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 (JCCC) should contribute to such response and co-ordinate mine clearance. Nonetheless, the armed formations in parts of Donetsk and Luhansk regions frequently deny the SMM access to areas adjacent to Ukraine's border outside control of the Government (for example, see <u>SMM Daily</u> <u>Report 20 March 2020</u>). The SMM's operations in Donetsk and Luhansk regions remain restricted following the fatal incident of 23 April 2017 near Pryshyb; these restrictions continued to limit the Mission's observations.

#### Denial of access:

- At a checkpoint in the north-western part of non-government-controlled Donetsk city, four members of the armed formations (three armed) denied the SMM passage, citing "orders from superiors". Due to this denial of access, the SMM could not follow up on allegations of damage to civilian property in Donetsk city's Kuibyshevskyi district.
- At a checkpoint north-west of Bezimenne (non-government-controlled, 100km south of Donetsk), a member of the armed formations denied the SMM passage, citing "orders from superiors". While at the checkpoint the Mission saw civilian traffic proceed through the checkpoint.
- At a checkpoint at the northern entrance of Novoazovsk (non-governmentcontrolled, 102km south-east of Donetsk), a member of the armed formations denied the SMM passage, citing "an ongoing operation" in the area. While at the checkpoint, the Mission saw civilian traffic passing through the checkpoint in both directions.
- In Shevchenko (non-government-controlled, 69km south of Donetsk), two armed members of the armed formations stopped the SMM and denied it passage towards Mykolaivka (non-government-controlled, 70km south of Donetsk), citing "orders from superiors due to safety and security reasons".
- At a checkpoint near Hryhorivka (non-government-controlled, 68km south of Donetsk), two armed members of the armed formations denied the SMM passage toward the settlement citing "ongoing engineering works". While at the checkpoint, the Mission saw one civilian car proceed through the checkpoint.

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

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

#### Other impediments:

- Medical staff at a hospital in non-government-controlled Donetsk city refused to provide information to the SMM regarding reports of a civilian casualty and referred it to senior members of the armed formations.
- An SMM mini-UAV experienced signal interference, assessed as caused by probable jamming, while flying over areas west of Vesele (non-government-controlled, 92km south-west of Donetsk).<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> The interference could have originated from anywhere within the radius of kilometres from the UAVs' positions.

## **Table of weapons**

| Date       | No. of<br>weapons | Type of weapon  | Location  | Source of observation |  |
|------------|-------------------|---|---|-----------------------|--|
|            |                   | Governmen   | t-controlled areas  |                       |  |
|            | 6                 | Mortar (2S9 Nona-S, 120)                                    | At the railway station in Rubizhne (84km  |                       |  |
| 19/03/2020 | 4                 | Surface-to-air missile system (9K35 <i>Strela-10</i> )      | north-west of Luhansk)  | Mini-UAV              |  |
| 20/02/2020 | 2                 | Surface-to-air missile system (9K35 Strela-10)              | In Dmytrivka (43km north of Luhansk), heading east                                  | Patrol                |  |
|            | 5                 | Towed mortar (2B9 <i>Vasilek</i> , 82mm)                    | At the train station in Kostiantynivka (60km north of Donetsk)                      |                       |  |
|            | 6                 | Self-propelled howitzer (2S3<br><i>Akatsiya</i> , 152mm)    |   |                       |  |
|            | 8                 | Self-propelled howitzer (2S1<br>Gvozdika, 122mm)            | At two railway stations in Sloviansk (95km north of Donetsk)                        | Patrol                |  |
| 20/03/2020 | 5                 | Anti-tank gun (MT-12 <i>Rapira</i> , 100mm)                 |   |                       |  |
|            | 1                 | Self-propelled anti-aircraft system (2K22 <i>Tunguska</i> ) | At the railway station in Bakhmut<br>(formerly Artemivsk, 67km north of<br>Donetsk) |                       |  |
|            | 5                 | Mortar (type unknown)                                       | In Urzuf (132km south-west of Donetsk)  |                       |  |
|            |                   | Non-governm   | ent-controlled areas  |                       |  |
| 19/02/2020 | 9                 | Tank (T-72)   | In a training area near Pokrovka (36km east of Donetsk)                             | Long range UAV        |  |
| 19/02/2020 | 32                | Tank (20 T-64 and 12 T-72)                                  | In a training area near Kruhlyk (31km south-west of Luhansk)                        | Long-range UAV        |  |

# Weapons beyond withdrawal lines but outside designated storage sites

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

| Date       | No. | Туре                                       | Location  | Source of observation |  |
|------------|-----|--|---|-----------------------|--|
|            |     | Government-                                | controlled areas  |                       |  |
| 17/03/2020 | 4   | Armoured combat vehicle                    | North-west of Vodiane (94km south of Donetsk)                               | Aerial<br>imagery     |  |
|            | 1   | Infantry fighting vehicle (BMP-<br>1)      | About 400m from residential houses in Luhanske (59km north-east of Donetsk) | Mini-UAV              |  |
| 19/03/2020 | 1   | Combat engineering vehicle (BAT-2)         | Near Orikhove-Donetske (44km north-west of Luhansk)                         | Long-range<br>UAV     |  |
|            | 6   | Armoured combat vehicle                    | Near Nyzhnie (56km north-west of Luhansk)                                   |                       |  |
|            | 1   | Armoured reconnaissance vehicle (BRDM-2)   | Near Avdiivka (17km north of Donetsk)                                       |                       |  |
| 20/03/2020 | 1   | Anti-aircraft gun (ZU-23, 23mm)            | Near a residential area in Novoselivka (31km north of Donetsk)              | Patrol                |  |
|            | 1   | Armoured personnel carrier (BTR-60)        | Near a residential area of Kyrylivka (76km south of Donetsk)                |                       |  |
|            |     | Non-governmen                              | nt-controlled areas   |                       |  |
| 17/03/2020 | -   | Recently dug trench (about 100m in length) | Western edge of Pikuzy (formerly Kominternove, 92km south of Donetsk)       | Aerial<br>imagery     |  |

<sup>&</sup>lt;sup>9</sup> The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

| - 9 - |  |
|-------|--|
|       |  |

| 1 18/03/2020 - |   | Combat engineering vehicle (IMR-2)  | Near Kruhlyk (65km south-west of Luhansk)                                 |                   |
|----------------|---|---|---|-------------------|
|                |   | Trenches (in total 400m in<br>length; not seen in imagery from<br>3 October 2019) | In fields west of Yasynuvata (16km north-east of Donetsk), near road M-04 |                   |
|                | 1 | Probable anti-aircraft gun (ZPU-<br>1, 14.5mm)                                    | Near Nadarivka (64km west of Luhansk)                                     | Mini-UAV          |
| 10/02/2020     | 1 | Infantry fighting vehicle (BMP variant)   | In a residential area of Veselohorivka (64km west of Luhansk)             |                   |
| 19/03/2020     | 2 | Armoured combat vehicle   | Eastern edge of Uzhivka (formerly Leninske,<br>96km south of Donetsk)     |                   |
|                | 2 | Armoured combat vehicle   | Near Pakhalivka (40km west of Luhansk)                                    | Long-range<br>UAV |

| SMM position   | <b>Event location</b> | Means    | No. | Observation  | Description   | Weapon | Date, time    |
|--|-----------------------|----------|-----|--------------|---|--------|---------------|
| SMM camera in<br>Avdiivka<br>(government-<br>controlled, 17km<br>N of Donetsk)             | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 20:45 |
| ,  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 20:49 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 21:01 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 21:02 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 21:49 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:21 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:28 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:29 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:30 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:32 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:34 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:35 |
|  | 3-5km ESE             | Recorded | 8   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:36 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:40 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:43 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:51 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:52 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:53 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:57 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:58 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 22:59 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:03 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:04 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:05 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:09 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:14 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:24 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:26 |
|  | 3-5km ESE             | Recorded | 1   | Muzzle flash |   | N/K    | 19-Mar, 23:30 |
|  | 2-4km ESE             | Recorded | 1   | Projectile   |   | N/K    | 19-Mar, 23:30 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:30 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:35 |
|  | 3-5km ESE             | Recorded | 2   | Explosion    | Undetermined  | N/K    | 19-Mar, 23:40 |
|  | 3-5km ESE             | Recorded | 1   | Explosion    | Airburst  | N/K    | 20-Mar, 00:11 |
| SMM camera in<br>Berezove<br>government-<br>ontrolled, 31km<br>SW of Donetsk)              | 2-3km SSE             | Recorded | 1   | Projectile   |   | N/K    | 19-Mar, 23:31 |
| SMM camera<br>2km E of<br>Bohdanivka<br>(government-<br>controlled, 41km<br>SW of Donetsk) | 3-5km ESE             | Recorded | 1   | Projectile   | Unable to be<br>assessed inside<br>or outside the<br>Petrivske<br>disengagement<br>area | N/K    | 19-Mar, 19:25 |

Table of ceasefire violations as of 20 March 2020<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> The table only includes ceasefire violations directly observed by the 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.

|  | 3-5km ESE            | Recorded             | 1   | Projectile               | Unable to be<br>assessed inside<br>or outside the<br>Petrivske<br>disengagement<br>area                  | N/K        | 19-Mar, 19:28                  |
|--|----------------------|----------------------|-----|--------------------------|--|------------|--------------------------------|
|  | 2-4km ESE            | Recorded             | 2   | Muzzle flash             | Assessed as<br>inside of the<br>Petrivske<br>disengagement<br>area                                       | N/K        | 19-Mar, 20:12                  |
|  | 2-4km ESE            | Recorded             | 5   | Projectile               | Assessed as<br>inside the<br>Petrivske<br>disengagement<br>area  | N/K        | 19-Mar, 20:12                  |
|  | 2-4km ESE            | Recorded             | 10  | Projectile               | Assessed as<br>inside the<br>Petrivske<br>disengagement<br>area  | N/K        | 19-Mar, 20:13                  |
|  | 2-4km ESE            | Recorded             | 9   | Muzzle flash             | Assessed as<br>inside the<br>Petrivske<br>disengagement<br>area  | N/K        | 19-Mar, 20:17                  |
|  | 2-4km ESE            | Recorded             | 1   | Projectile               | Subsequent to<br>the previous<br>event (assessed<br>as inside the<br>Petrivske<br>disengagement<br>area) | N/K        | 19-Mar, 20:17                  |
|  | 2-4km ESE            | Recorded             | 1   | Projectile               | Assessed as<br>inside the<br>Petrivske<br>disengagement<br>area  | N/K        | 19-Mar, 20:19                  |
|  | 2-4km ESE            | Recorded             | 3   | Projectile               | Assessed as<br>inside the<br>Petrivske<br>disengagement<br>area  | N/K        | 19-Mar, 20:20                  |
|  | 2-4km E              | Recorded             | 1   | Projectile               | Unable to be<br>assessed inside<br>or outside the<br>Petrivske<br>disengagement<br>area                  | N/K        | 19-Mar, 20:22                  |
| SMM camera in  | 2-4km SE             | Recorded             | 1   | Projectile               |  | N/K        | 19-Mar, 23:23                  |
| Chermalyk<br>(government-<br>controlled, 77km<br>S of Donetsk) | 2-4km SE<br>2-4km SE | Recorded<br>Recorded | 2 6 | Projectile<br>Projectile |  | N/K<br>N/K | 19-Mar, 23:25<br>19-Mar, 23:27 |
| SMM camera at  | 0.5-1km S            | Recorded             | 2   | Projectile               |  | N/K        | 19-Mar, 20:20                  |
| Donetsk Filtration   | 0.5-1km S            | Recorded             | 1   | Projectile               |  | N/K        | 19-Mar, 20:21                  |
| Station (15km N<br>of Donetsk)                                 | 1-3km S              | Recorded             | 1   | Explosion                | Undetermined   | N/K        | 19-Mar, 23:21                  |
| or Donetsk)  | 1-2km S              | Recorded             | 2   | Projectile               |  | N/K        | 20-Mar, 18:51                  |
| SMM camera   | 2-4km SE             | Recorded             | 17  | Projectile               |  | N/K        | 19-Mar, 20:56                  |
| 1.5km NE of  | 2-4km SE             | Recorded             | 6   | Projectile               |  | N/K        | 19-Mar, 20:57                  |
| Hnutove  | 2-4km SE             | Recorded             | 29  | Projectile               |  | N/K        | 19-Mar, 20:58                  |
| (government-<br>controlled, 90km                               | 2-4km SE             | Recorded             | 1   | Projectile               | In vertical flight   | N/K        | 19-Mar, 20:58                  |
| S of Donetsk)  | 2-4km SE             | Recorded             | 8   | Projectile               | In vertical flight   | N/K        | 19-Mar, 21:00                  |
|  | 2-4km SE             | Recorded             | 8   | Projectile               |  | N/K        | 19-Mar, 21:01                  |
|  | 2-4km SE             | Recorded             | 3   | Projectile               |  | N/K        | 19-Mar, 21:04                  |

|   | 2-4km SE  | Recorded | 3  | Projectile            |  | N/K | 19-Mar, 22:48 |
|---|-----------|----------|----|-----------------------|--|-----|---------------|
| SMM camera in<br>Krasnohorivka<br>(government-<br>controlled, 21km<br>W of Donetsk)                           | 2-3km E   | Recorded | 1  | Projectile            |  | N/K | 20-Mar, 02:35 |
| SMM camera at<br>entry-exit<br>checkpoint in<br>Marinka<br>(government-<br>controlled, 23km<br>SW of Donetsk) | 3-4km NNE | Recorded | 8  | Projectile            |  | N/K | 20-Mar, 01:51 |
| SMM camera at   | 3-5km NE  | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 20:31 |
| Oktiabr mine<br>(non-government-  | 3-5km NE  | Recorded | 1  | Illumination flare    | In vertical flight   | N/K | 19-Mar, 20:52 |
| controlled, 9km<br>NW of Donetsk  | 3-5km NE  | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 21:06 |
| city centre)  | 3-5km NE  | Recorded | 1  | Explosion             | Undetermined   | N/K | 20-Mar, 02:10 |
| ency centre)  | 3-5km NE  | Recorded | 1  | Explosion             | Undetermined   |     | 20-Mar, 18:58 |
| SMM camera in<br>Petrivske (non-<br>government-<br>controlled, 41km<br>S of Donetsk)                          | 1-3km SSW | Recorded | 2  | Projectile            | Unable to be<br>assessed inside<br>or outside the<br>disengagement<br>area | N/K | 19-Mar, 22:39 |
|   | 1-3km WSW | Recorded | 6  | Projectile            | Assessed as<br>inside the<br>disengagement<br>area                         | N/K | 20-Mar, 00:36 |
|   | 1-3km SW  | Recorded | 10 | Projectile            | Assessed as<br>inside of the<br>disengagement<br>area                      | N/K | 20-Mar, 02:02 |
| SMM camera  | 3-5km N   | Recorded | 1  | Projectile            |  | N/K | 19-Mar, 19:04 |
| 1km SW of   | 3-5km N   | Recorded | 3  | Projectile            |  | N/K | 19-Mar, 19:07 |
| Shyrokyne   | 3-5km N   | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 19:17 |
| (government-<br>controlled, 100km   | 5-7km N   | Recorded | 2  | Projectile            |  | N/K | 19-Mar, 21:02 |
| S of Donetsk)   | 5-7km N   | Recorded | 2  | Projectile            |  | N/K | 19-Mar, 21:06 |
| ,   | 5-7km N   | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 21:06 |
|   | 5-7km NNW | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 21:34 |
|   | 5-7km NNW | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 21:37 |
|   | 5-7km NNW | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 21:51 |
|   | 5-7km N   | Recorded | 1  | Projectile            |  | N/K | 19-Mar, 21:55 |
|   | 5-7km N   | Recorded | 8  | Projectile            |  | N/K | 19-Mar, 22:18 |
|   | 5-7km N   | Recorded | 1  | Projectile            | In vertical flight   | N/K | 19-Mar, 22:18 |
|   | 5-7km N   | Recorded | 1  | Projectile            |  | N/K | 19-Mar, 22:39 |
|   | 5-7km N   | Recorded | 4  | Projectile            |  | N/K | 19-Mar, 22:48 |
|   | 5-7km N   | Recorded | 1  | Projectile            |  | N/K | 19-Mar, 22:49 |
|   | 5-7km N   | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 23:19 |
|   | 5-7km N   | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 23:48 |
|   | 5-7km N   | Recorded | 1  | Explosion             | Undetermined   | N/K | 19-Mar, 23:57 |
|   | 5-7km N   | Recorded | 6  | Projectile            |  | N/K | 20-Mar, 00:11 |
|   | 5-7km N   | Recorded | 1  | Muzzle flash          |  | N/K | 20-Mar, 00:11 |
|   | 5-7km N   | Recorded | 9  | Projectile            |  | N/K | 20-Mar, 00:12 |
|   | 5-7km N   | Recorded | 6  | Projectile            |  | N/K | 20-Mar, 00:13 |
|   | 5-7km N   | Recorded | 1  | Projectile            |  | N/K | 20-Mar, 00:39 |
|   | 5-7km NNW | Recorded | 2  | Projectile            |  | N/K | 20-Mar, 01:03 |
|   | 5-7km N   | Recorded | 1  | Illumination<br>flare |  | N/K | 20-Mar, 18:34 |
| SMM camera in<br>Svitlodarsk<br>(government-<br>controlled, 57km<br>NE of Donetsk)                            | 3-5km WSW | Recorded | 3  | Projectile            |  | N/K | 19-Mar, 22:59 |

| About 1km NW<br>of the railway<br>station in<br>Yasynuvata (non-                        | 3-5km W   | Heard | 7  | Explosion | Undetermined<br>(within 5km<br>radius from<br>DFS) | N/K        | 20-Mar, 09:07-<br>09:13 |
|---|-----------|-------|----|-----------|--|------------|-------------------------|
| government-<br>controlled, 16km<br>NE of Donetsk)                                       | 4-6km W   | Heard | 67 | Explosion | Undetermined<br>(within 5km<br>radius from<br>DFS) | N/K        | 20-Mar, 09:42-<br>10:25 |
|   | 2-3km SW  | Heard | 2  | Burst     | within 5km<br>radius of DFS                        | HMG        | 20-Mar, 10:11           |
|   | 4-6km W   | Heard | 7  | Explosion | Undetermined<br>(within 5km<br>radius from<br>DFS) | N/K        | 20-Mar, 10:27-<br>10:44 |
|   | 4-6km W   | Heard | 2  | Explosion | Undetermined<br>(within 5km<br>radius from<br>DFS) | N/K        | 20-Mar, 13:32           |
| About 1km E of<br>Kruta Balka (non-<br>government-<br>controlled, 16km<br>N of Donetsk) | 4-6km W   | Heard | 3  | Explosion | Undetermined<br>(within 5km<br>radius from<br>DFS) | N/K        | 20-Mar, 11:18-<br>11:28 |
| Railway station in  | 3-4km NE  | Heard | 1  | Explosion | Undetermined                                       | N/K        | 20-Mar, 08:50           |
| Donetsk (non-   | 2-3km NE  | Heard | 1  | Burst     |  | HMG        | 20-Mar, 09:04           |
| government<br>controlled, 6km   | 2-3km NW  | Heard | 30 | Burst     |  | HMG        | 20-Mar, 09:13-<br>09:16 |
| NW of Donetsk   | 2-3km N   | Heard | 1  | Explosion | Undetermined                                       | N/K        | 20-Mar, 09:22           |
| city centre)  | 3-4km N   | Heard | 3  | Explosion | Undetermined                                       | N/K        | 20-Mar, 09:23-<br>09:25 |
| About 2km SE of   | 3-4km NE  | Heard | 1  | Explosion | Undetermined                                       | N/K        | 20-Mar, 10:10           |
| Spartak (non-<br>government-<br>controlled, 9km N<br>of Donetsk)                        | 2-3km WNW | Heard | 11 | Burst     |  | Small arms | 20-Mar, 10:13-<br>10:23 |
| Netailove<br>(government-   | 3-5km N   | Heard | 25 | Explosion | Undetermined                                       | N/K        | 20-Mar, 08:54-<br>09:12 |
| controlled, 22km<br>NW of Donetsk)  | 3-5km E   | Heard | 1  | Explosion | Undetermined                                       | N/K        | 20-Mar, 08:55           |
| About 2km NW<br>of Pisky<br>(government-<br>controlled, 12km<br>NW of Donetsk)          | 4-5km NNW | Heard | 24 | Explosion | Undetermined                                       | N/K        | 20-Mar, 09:30-<br>10:10 |
| NW of<br>Bezimenne (non-<br>government-<br>controlled, 100km<br>S of Donetsk)           | 3-4km SW  | Heard | 11 | Shot      |  | Small arms | 20-Mar, 09:43           |
| Orlivske<br>(government-  | 3-5km ENE | Heard | 6  | Explosion | Undetermined                                       | N/K        | 20-Mar, 11:07-<br>11:10 |
| controlled, 82km<br>S of Donetsk)   | 3-5km ENE | Heard | 15 | Explosion | Undetermined                                       | N/K        | 20-Mar, 11:15-<br>11:20 |
|   | 3-5km ENE | Heard | 27 | Explosion | Undetermined                                       | N/K        | 20-Mar, 11:31-<br>11:38 |
|   | 3-5km ENE | Heard | 7  | Burst     |  | HMG        | 20-Mar, 11:31-<br>11:38 |
|   | 6-8km NNW | Heard | 2  | Explosion | Undetermined                                       | N/K        | 20-Mar, 11:40-<br>11:41 |
|   | 6-8km NNW | Heard | 5  | Explosion | Undetermined                                       | N/K        | 20-Mar, 11:45-<br>11:48 |
|   | 6-8km NNW | Heard | 5  | Explosion | Undetermined                                       | N/K        | 20-Mar, 11:51-<br>11:55 |
|   | 6km NNW   | Heard | 1  | Explosion | Undetermined                                       | N/K        | 20-Mar, 12:16           |

| About 2km NE of<br>Chernenko<br>(government-<br>controlled, 86km<br>S of Donetsk)      | N/K NE    | Heard | 1  | Explosion | Undetermined | N/K | 20-Mar, 08:25           |
|--|-----------|-------|----|-----------|--------------|-----|-------------------------|
| About 500m NE<br>of Kamianka   | 3-5km NW  | Heard | 10 | Explosion | Undetermined | N/K | 20-Mar, 08:55-<br>09:05 |
| (government-<br>controlled, 20km   | 3-5km NW  | Heard | 5  | Explosion | Undetermined | N/K | 20-Mar, 09:09-<br>09:12 |
| N of Donetsk)  | 5-7km NE  | Heard | 21 | Explosion | Undetermined | N/K | 20-Mar, 09:20-<br>09:22 |
|  | 3-5km NW  | Heard | 7  | Explosion | Undetermined | N/K | 20-Mar, 09:42-<br>09:46 |
|  | 3-5km NW  | Heard | 18 | Explosion | Undetermined | N/K | 20-Mar, 09:47-<br>09:55 |
|  | 3-5km NW  | Heard | 12 | Explosion | Undetermined | N/K | 20-Mar, 09:57-<br>10:11 |
|  | 3-5km NW  | Heard | 18 | Explosion | Undetermined | N/K | 20-Mar, 10:17-<br>10:30 |
|  | 3-5km NW  | Heard | 6  | Explosion | Undetermined | N/K | 20-Mar, 10:40-<br>10:47 |
|  | 3-5km NW  | Heard | 7  | Explosion | Undetermined | N/K | 20-Mar, 11:02-<br>11:10 |
| About 2km SW of<br>Horlivka (non-<br>government-<br>controlled, 39km<br>NE of Donetsk) | 5km N     | Heard | 3  | Explosion | Undetermined | N/K | 20-Mar, 09:09-<br>09:14 |
| About 7.5km  | 3-5km N   | Heard | 9  | Burst     |              | HMG | 20-Mar, 09:14           |
| WNW of<br>Horlivka (non-<br>government-<br>controlled, 39km<br>NE of Donetsk)          | 3-5km N   | Heard | 7  | Burst     |              | HMG | 20-Mar, 09:53           |
| Horlivka (non-   | 4-5km SSE | Heard | 1  | Explosion | Undetermined | N/K | 20-Mar, 16:12           |
| government-<br>controlled, 39km<br>NE of Donetsk)                                      | 4-5km SSE | Heard | 2  | Explosion | Undetermined | N/K | 20-Mar, 16:33-<br>16:35 |
| About 2km WSW<br>of Zalizne  | 5-7km SW  | Heard | 6  | Explosion | Undetermined | N/K | 20-Mar, 09:03-<br>09:06 |
| (formerly<br>Artemove,   | 5-7km SW  | Heard | 6  | Explosion | Undetermined | N/K | 20-Mar, 09:10-<br>09:11 |
| government-  | 5-7km SW  | Heard | 2  | Explosion | Undetermined | N/K | 20-Mar, 09:14           |
| controlled, 42km<br>NE of Donetsk)   | 5-7km SW  | Heard | 5  | Explosion | Undetermined | N/K | 20-Mar, 09:51-<br>09:55 |
| About 1km NE of  | 6-8km SW  | Heard | 2  | Explosion | Undetermined | N/K | 20-Mar, 10:23           |
| Zalizne (formerly  | 6-8km SW  | Heard | 1  | Explosion | Undetermined | N/K | 20-Mar, 10:27           |
| Artemove,<br>government-<br>controlled, 42km<br>NE of Donetsk)                         | 6-8km SW  | Heard | 2  | Explosion | Undetermined | N/K | 20-Mar, 10:32           |
| About 2km SE of  | 5-7km SE  | Heard | 3  | Explosion | Undetermined | N/K | 20-Mar, 10:20           |
| Yurivka<br>(government-<br>controlled, 35km<br>N of Donetsk)                           | 5-7km SE  | Heard | 1  | Explosion | Undetermined | N/K | 20-Mar, 10:23           |
| Svitlodarsk  | 4-6km SSW | Heard | 1  | Explosion | Undetermined | N/K | 19-Mar, 19:37           |
| government-  | 4-6km SW  | Heard | 1  | Explosion | Undetermined | N/K | 19-Mar, 21:21           |
| controlled, 57km   | 4-6km SW  | Heard | 1  | Explosion | Undetermined | N/K | 19-Mar, 22:55           |
| NE of Donetsk)   | 4-6km SSW | Heard | 10 | Explosion | Undetermined | N/K | 19-Mar, 22:57           |
|  | 4-6km SW  | Heard | 12 | Burst     |              | HMG | 19-Mar, 22:58           |
|  | 4-6km SW  | Heard | 1  | Explosion | Undetermined | N/K | 19-Mar, 22:59           |
|  | 4-6km SW  | Heard | 1  | Burst     |              | HMG | 19-Mar, 23:00           |
|  | 4-6km SW  | Heard | 1  | Burst     |              | HMG | 19-Mar, 23:01           |
|  |           | Heard | 2  | Burst     |              |     |                         |

|  | 4-6km SW  | Heard    | 6  | Burst              |  | HMG                  | 19-Mar, 23:03           |
|--|-----------|----------|----|--------------------|--|----------------------|-------------------------|
|  | 4-6km SW  | Heard    | 3  | Explosion          | Undetermined   | N/K                  | 19-Mar, 23:03-<br>23:06 |
|  | 4-6km SW  | Heard    | 36 | Burst              |  | HMG                  | 19-Mar, 23:06-<br>23:20 |
|  | 2-4km SSW | Heard    | 7  | Burst              |  | Small arms           | 19-Mar, 23:21           |
|  | 4-6km SW  | Heard    | 5  | Burst              |  | HMG                  | 19-Mar, 23:36           |
| SMM camera in<br>Kriakivka<br>(government-<br>controlled, 38km<br>NW of Luhansk) | 5-7km SSW | Recorded | 1  | Explosion          | Undetermined   | N/K                  | 19-Mar, 21:35           |
| SMM camera on  | 2-4km E   | Recorded | 1  | Projectile         |  | N/K                  | 19-Mar, 21:57           |
| N edge of  | 2-4km E   | Recorded | 1  | Explosion          | Airburst   | N/K                  | 19-Mar, 21:57           |
| Popasna  | 2-4km E   | Recorded | 1  | Projectile         |  | N/K                  | 19-Mar, 22:17           |
| (government-   | 4-6km E   | Recorded | 1  | Projectile         | In vertical flight   | N/K                  | 19-Mar, 22:26           |
| controlled, 69km<br>W of Luhansk)  | 4-6km ENE | Recorded | 1  | Explosion          | Undetermined   | N/K                  | 19-Mar, 22:26           |
| w of Luffallsk)  | 2-4km E   | Recorded | 4  | Projectile         |  | N/K                  | 19-Mar, 22:36           |
|  | 2-4km E   | Recorded | 2  | Projectile         | In vertical flight   | N/K                  | 19-Mar, 22:36           |
|  | 2-4km E   | Recorded | 4  | Projectile         |  | N/K                  | 19-Mar, 22:36           |
| SMM camera in<br>Zolote<br>(government-<br>controlled, 60km<br>W of Luhansk)     | 2-4km E   | Recorded | 1  | Explosion          | Undetermined<br>(assessed as<br>outside of the<br>disengagement<br>area)                   | N/K                  | 19-Mar, 20:04           |
|  | 2-4km E   | Recorded | 1  | Explosion          | Undetermined<br>(assessed as<br>outside the<br>disengagement<br>area)                      | N/K                  | 19-Mar, 20:07           |
|  | 1-3km E   | Recorded | 2  | Explosion          | Undetermined<br>(assessed as<br>outside the<br>disengagement<br>area)                      | N/K                  | 19-Mar, 20:10           |
|  | 3-5km ENE | Recorded | 1  | Projectile         | Assessed as<br>outside of the<br>disengagement<br>area                                     | N/K                  | 20-Mar, 03:35           |
| N edge of Zolote<br>(government-<br>controlled, 60km<br>W of Luhansk)            | 8-10km E  | Heard    | 12 | Explosion          | Undetermined   | N/K                  | 20-Mar, 09:08-<br>09:15 |
| N edge of<br>Holubivka   | 3-5km NNW | Heard    | 20 | Explosion          | Outgoing and impacts   | N/K                  | 20-Mar, 10:08-<br>10:17 |
| (formerly,<br>Kirovsk, non-  | 3-5km NNW | Heard    | 10 | Shot and<br>burst  |  | HMG                  | 20-Mar, 10:08-<br>10:17 |
| government-<br>controlled, 51km<br>W of Luhansk)                                 | 3-5km NW  | Heard    | 25 | Explosion          | Outgoing and<br>impacts<br>(assessed as<br>outside the<br>Zolote<br>disengagement<br>area) | Mortar (type<br>N/K) | 20-Mar, 11:08-<br>11:25 |
|  | 3-5km NW  | Heard    | 12 | Shots and<br>burst | Assessed as<br>outside the<br>Zolote<br>disengagement<br>area                              | HMG                  | 20-Mar, 11:08-<br>11:25 |
| SW edge of<br>Zolote-<br>5/Mykhailivka<br>(non-government-                       | 4-6km NNW | Heard    | 1  | Explosion          | Undetermined<br>(assessed as<br>outside the<br>disengagement<br>area )                     | N/K                  | 20-Feb, 10:26-<br>10:40 |

| controlled, 58km<br>W of Luhansk)   | 2-4km NNW   | Heard         | 2  | Burst             | Assessed as<br>outside the<br>disengagement<br>area                             | HMG                     | 20-Feb, 10:26-<br>10:40 |
|---|-------------|---------------|----|-------------------|---|-------------------------|-------------------------|
|   | 6-8km NNW   | Heard         | 9  | Explosion         | Undetermined  | N/K                     | 20-Feb, 10:46-<br>10:52 |
| SE edge of<br>Zolote-<br>5/Mykhailivika<br>(non-government-<br>controlled, 58km               | 3-4km NNE   | Heard         | 9  | Explosion         | Undetermined<br>(assessed as<br>outside the<br>disengagement<br>area)           | N/K                     | 20-Feb, 11:13-<br>11:30 |
| W of Luhansk)   | 3-4km NNE   | Heard         | 9  | Burst             | Assessed as<br>outside the<br>disengagement<br>area                             | HMG                     | 20-Feb, 11:13-<br>11:30 |
| 2km E of Zolote-<br>2/Karbonit  | 5-8km E     | Heard         | 8  | Explosion         | Undetermined  | N/K                     | 20-Mar, 11:00-<br>11:58 |
| (government-<br>controlled, 62km  | 5-8km E     | Heard         | 3  | Shot and<br>burst |   | HMG                     | 20-Mar, 11:35-<br>11:58 |
| W of Luhansk)   | 3-5km SSE   | Heard         | 6  | Explosion         | Undetermined<br>(assessed as<br>outside the<br>disengagement<br>area)           | N/K                     | 20-Mar, 13:50-<br>13:58 |
| W edge of Zolote-<br>2/Karbonit<br>(government-<br>controlled, 62km<br>W of Luhansk)          | 5-8km S     | Heard and saw | 1  | Explosion         | Impact (assessed<br>as outside the<br>disengagement<br>area)                    | N/K                     | 20-Mar, 13:13-<br>13:20 |
| SW edge of<br>Berezivske (non-<br>government-<br>controlled, 53km<br>NW of Luhansk)           | 1.5-2km NNW | Heard         | 4  | Explosion         | Undetermined  | N/K                     | 20-Feb, 11:08           |
| SW edge of<br>Trokhizbenka  | 10-15km W   | Heard         | 14 | Explosion         | Outgoing  | Artillery<br>(type N/K) | 20-Mar, 11:19           |
| (government-<br>controlled, 32km<br>NW of Luhansk)  | 10-15km SW  | Heard         | 14 | Explosion         | Impact  | Artillery<br>(type N/K) | 20-Mar, 11:19           |
| NE edge of<br>Holubivske (non-<br>government-<br>controlled, 51km<br>W of Luhansk)            | 4-5km WNW   | Heard         | 35 | Explosion         | Undetermined<br>(assessed as<br>outside the<br>Zolote<br>disengagement<br>area) | N/K                     | 20-Mar, 11:45-<br>11:52 |
| W edge of<br>Kalynove<br>Borshchuvate<br>(non-government<br>controlled, 61km<br>W of Luhansk) | 2-4km NW    | Heard         | 1  | Explosion         | Undetermined<br>(assessed as<br>outside the<br>Zolote<br>disengagement<br>area) | N/K                     | 20-Mar, 13:29           |



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

<sup>&</sup>lt;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).