



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

THEMATIC REPORT

SMM facilitation and monitoring
of infrastructure repair in eastern Ukraine

September 2018 — June 2019

November 2019

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SUMMARY OF CONCLUSIONS

- Key infrastructure sites providing water, power and gas for millions of people are located along or near the contact line; and damage to such sites can directly threaten civilians' access to these basic services.
- The SMM has, for this reason, been committed to supporting repairs of those infrastructure sites deemed of critical importance to the local civilian population.
- Repairs are, however, greatly complicated by ongoing hostilities along the contact line.
- The recurrent lack of respect for localized ceasefires to support such repairs puts at risk the safety and security of SMM staff and workers.
- It is the responsibility of the sides to take action to ensure respect for windows of silence, enable repairs and protect infrastructure from damage.


INTRODUCTION

Across Donetsk and Luhansk regions, facilitating and monitoring adherence to the ceasefire for essential repair and maintenance works at civilian infrastructure sites, such as for the restoration of gas, electricity and water supplies, remains a priority for the OSCE Special Monitoring Mission (SMM) to Ukraine. As the conflict in eastern Ukraine continues into its sixth year, damage to infrastructure, often conflict-related, has become commonplace. Civilians, mainly those living in areas along the contact line, are regularly deprived of basic services. The continued volatile security situation in these areas, where many essential infrastructure sites are also located, has led to delays in maintenance and repair works.

Some of these objects —including water pipelines and power lines — lie directly between the positions of the Ukrainian Armed Forces and of the armed formations, leaving such infrastructure at risk of being damaged due to fighting. A large number of infrastructure sites are also decades old and require regular maintenance and sometimes replacement to ensure their proper functioning. These circumstances have resulted in civilians experiencing countless intermittent interruptions, or being left entirely without access to basic services, including for prolonged periods of time.

SMM Support of Infrastructure Repairs in Eastern Ukraine

Sep'2018 — Jun'2019

 **836**
Windows of silence

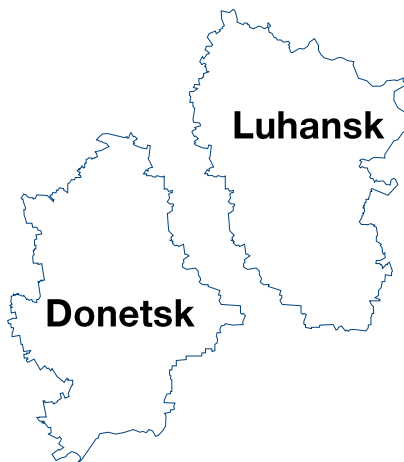
 **2,500**
Patrols including:

 **1,900**
water

 **194**
electricity

 **70**
gas

 **74**
Total projects



 **457**
Windows of silence

 **1,000**
Patrols including:

 **815**
water

 **178**
electricity

 **2**
gas

 **54**
Total projects

During this reporting period, the SMM has continued to allocate significant resources to facilitate and monitor windows of silence (WoS) for the repair and maintenance of essential infrastructure in eastern Ukraine¹.

In the ten months from September 2018 to June 2019, the Mission supported about 1,300 WoS for 128 repairs or maintenance projects (compared with 113 projects in the previous 20-month-long reporting period), deploying about 3,500 patrols (see Annex 1). In the first six months of 2019, the SMM facilitated and monitored WoS for 79 projects, compared with 94 for all of 2018. The SMM also used remote means of observation, mainly unmanned aerial vehicles (UAV), to gather information about infrastructure sites and the effects of the conflict on civilians. The Mission is committed to facilitate adherence to the ceasefire to enable repairs of infrastructure sites that are critically important to the civilian population. However, the recurrent lack of respect for temporary localized ceasefires poses a threat to the personnel operating and repairing the facilities, as well as the SMM staff monitoring and facilitating adherence to the ceasefire to enable repairs or WoS and should be eliminated in order to ensure the effective and efficient use of the high level resources mobilized by the SMM for this purpose.

During the reporting period, out of the 128 projects that the Mission facilitated, 35 were related to maintenance or inspection (including of the Donetsk Filtration Station (DFS) and the First Lift Water Pumping Station), whereas 89 were related to repairs (and four to demining activities)².

The ratio of projects related to repairs to the total number of facilitated projects in the previous reporting period was 57.3 per cent,

whereas in this reporting period it increased to 71 per cent³. However, in many cases it is difficult for the SMM to obtain information on whether the damage is conflict or non-conflict-related as the companies operating the infrastructure often do not distinguish between conflict and non-conflict-related damage in their requests for WoS.

Methodology and Structure of Report

This report follows the [2018 SMM thematic report](#) on the same topic, and provides updates on developments related to the impact of the conflict in eastern Ukraine on certain types of civilian infrastructure and access to basic services for civilians in the period September 2018 — June 2019⁴. While the previous report covered a longer period of 20 months (January 2017 — August 2018), this report highlights relevant changes to the operation and service delivery of selected civilian infrastructure sites since and the continued interdependence between different sites to ensure the delivery of services. The report includes a case study of the Zolote area in Luhansk region to highlight the continued volatile security situation in and around infrastructure sites and the humanitarian consequences that arise when such sites are damaged.

The report also outlines SMM-supported mechanisms, as well as the Mission's direct facilitation of the provision of basic services, mainly through facilitating and monitoring WoS to support operations, repair or maintenance of infrastructure.

¹ Windows of silence (WoS) are localized ceasefires for which the Ukrainian Armed Forces and the armed formations provide security guarantees, with a commitment to refrain from firing during specific periods and in specific locations, inter alia to allow essential repairs or maintenance work to be conducted. To support this work, when security guarantees are provided, the SMM deploys mirror patrols (patrols simultaneously and visibly present on both sides of the contact line) to effectively monitor adherence to the ceasefire for the WoS, and provide a reassuring presence on the ground during repair and maintenance works.

² Repairs relate to conflict and non-conflict-related damage.

³ During the previous reporting period (1 January 2017 to 31 August 2018; i.e. 20 months compared to ten months of this reporting period), the Mission facilitated 150 projects, out of which 38 were related to maintenance, inspection, assessments and continuation of regular operation and 86 to repairs (and 26 to demining).

⁴ SMM Thematic Report "SMM facilitation and monitoring of infrastructure repair in eastern Ukraine", December 2018.

POLITICAL FRAMEWORK FOR FACILITATION OF INFRASTRUCTURE MAINTENANCE AND REPAIRS

Dialogue facilitation

The mandated aim of the SMM is to contribute to reducing tensions and fostering peace, stability and security; and to monitor and support the implementation of all OSCE principles and commitments⁵. The Mission is tasked by the OSCE Permanent Council to monitor and support respect for human rights and fundamental freedoms, among other tasks. The SMM is also tasked to gather information and establish facts, as well as to report on the security situation and facilitate dialogue on the ground in order to reduce tensions and promote normalization of the situation. All OSCE participating States have committed to respecting and ensuring respect for international humanitarian law, including the protection of the civilian population⁶.

In line with its mandate and the OSCE principles, the SMM has regularly facilitated dialogue with the Joint Centre for Control and Co-ordination (JCCC) and now facilitates the provision of security guarantees from the Ukrainian side of the JCCC and from the armed formations, with the aim, among others, to support the maintenance and repair of infrastructure⁷.

Working Group on Security issues (WGSII)

The Trilateral Contact Group's (TCG) WGSII, chaired by the SMM Chief Monitor in his capacity as Co-ordinator, focuses on

the implementation of security aspects of the Minsk agreements which have implications for civilians living in areas close to the contact line. Recommitments to the ceasefire, discussed and agreed upon by participants in the WGSII, have resulted in decreased levels of violence, allowing brief respite to civilians caught in the fighting. Additionally, issues such as mine action and the protection of essential civilian infrastructure are standing items in the agenda of the WGSII.

The situation of the DFS⁸ and of the First Lift Water Pumping Station near non-government-controlled Vasylivka, two key civilian infrastructure sites in the area, has featured regularly in these discussions throughout 2017–2018, especially due to the risk of substantial damage from kinetic activities or when workers were injured or put at risk by crossfire (see below). In the WGSII, and through letters to the signatories, the Chief Monitor expressed his strong concern regarding ceasefire violations in breach of security guarantees provided for activities such as the facilitation of maintenance and repair to essential civilian infrastructure. However, the situation on the ground has not evolved significantly in that regard.

⁵ [Deployment of an OSCE Special Monitoring Mission to Ukraine](#), Permanent Council Decision No. 1117, 21 March 2014.

⁶ [CSCE Helsinki Document: The Challenges of Change](#), Helsinki Summit, the Fourth Follow-up Meeting, Helsinki, 10 July 1992.

⁷ The Joint Centre for Control and Co-ordination (JCCC) was established in September 2014 by Ukraine and the Russian Federation. Each posted a representative to jointly head the Centre and a staff of officers from the Ukrainian and Russian Federation Armed Forces to be co-located in defined sectors of Luhansk and Donetsk regions. In December 2017, Russian Federation Armed Forces officers withdrew from the JCCC and departed Ukraine.

⁸ The DFS provides potable water, sourced from the Siverskyi Donets river, for about 380,000 people on both sides of the contact line, including in government-controlled Avdiivka and Verkhnotoretske, parts of non-government-controlled Yasyuvata, Betmanove (former Krasny Partizan) and several districts of non-government-controlled Donetsk city.

POLITICAL FRAMEWORK FOR FACILITATION OF INFRASTRUCTURE MAINTENANCE AND REPAIRS

Joint Centre for Control and Co-ordination (JCCC)

The SMM, in line with its mandate, facilitates dialogue on the ground, including on the provision of security guarantees for the repair and maintenance of infrastructure. Through its liaison team as the main point of contact, the SMM liaises directly with the Ukrainian side of the JCCC on security guarantees and key issues related to infrastructure repairs (including security incidents involving the SMM when monitoring such repairs, see below), while also maintaining contact with the armed formations in non-government-controlled areas of Donetsk and Luhansk regions.

SMM SUPPORT FOR INFRASTRUCTURE MAINTENANCE AND REPAIR IN EASTERN UKRAINE

Overall SMM operational contributions

During the reporting period, the SMM facilitated 314 requests for security guarantees (54.5 per cent of the 576 requests received in total, for the remainder of which one of the sides did not provide security guarantees) for WoS for infrastructure repair and maintenance works. To facilitate and monitor these WoS, the Mission deployed an average of 58 SMM staff on a daily basis in such patrols. The SMM continued to facilitate the operation of the DFS and monitor the security situation around the First Lift Water Pumping Station.

In Donetsk region, the SMM facilitated and monitored WoS in support of repairs or maintenance of essential civilian infrastructure on 836 occasions (450 in the previous reporting period). The SMM allocated about 2,500 patrols (about 1,400 in the previous reporting period), supporting 74 projects. The patrols were mainly related to water supply (about 1,900), electricity (about 200) and gas supply projects (about 70 patrols).

In Luhansk region, the SMM facilitated and monitored WoS in support of repairs or maintenance of essential civilian infrastructure on 457 occasions (about 1,000 in the previous reporting period). For these purposes, the SMM allocated about 1,000 patrols supporting 54 projects. Over 80 per cent of these patrols were related to water supply (815 patrols for 24 projects), electricity supply (178 patrols for 29 projects) and two patrols for one gas supply project.

This number of patrols and instances of SMM facilitating and monitoring WoS represents a notable increase in the use of resources by the Mission in Donetsk region.

One contributing factor for this increase was the provision of a higher number of security guarantees for WoS to conduct repairs and maintenance. Some progress was also observed in this reporting period in dialogue facilitation on the ground, which led to progress with some long-stalled repairs and maintenance issues, including the completion of repairs at the sludge pond of the phenol plant near government-controlled Zalizne (formerly Artemove) in late August 2018.

Importantly, higher numbers of WoS compared with the previous reporting period can also be attributable to the increased necessity of repairs and maintenance due to the deteriorating security situation around some key infrastructure sites, including the aforementioned pumping station near Vasylivka. Increased damage to such sites, compared with the previous reporting period, has led to the SMM becoming further engaged in supporting repairs, maintenance and the operation of such sites to help avoid significant humanitarian impact of an interruption of activities of key infrastructure facilities.

In August 2018, the sides had agreed, in principle, to an arrangement allowing for repairs and an inspection for eventual maintenance at the Krasnohorivka gas distribution station, which provides natural gas to more than 20,000 civilians in government-controlled Krasnohorivka and Marinka, repairs to the dam of the septic tanks of the Bakhmut Agrarian Union pig farm near government-controlled Novoluhanske and to a damaged section of the South Donbas Water Way which provides water to 1.1 million people.



Figure 1: Demining works on the road to the Krasnohorivka Gas Distribution Station, October 2017.

By the end of the reporting period, repair works had been completed at the aforementioned South Donbas Water Way and pig farm near Novoluhanske, reducing the risk of pollutant being released into the environment including in the Bakhmut River basin — the main water source for more than 200,000 people in non-government-controlled Horlivka and the surrounding areas. However, necessary repairs and maintenance at the Krasnohorivka gas distribution station remained largely stalled during this reporting period.

Security challenges

Despite explicit security guarantees provided by those concerned, SMM patrols recorded about 4,650 ceasefire violations while monitoring adherence to the ceasefire in areas close to infrastructure sites while maintenance, repairs or demining were ongoing. While fighting puts the sites themselves at further risk of damage, it also endangers the safety of the workers involved in the repairs and maintenance, as well as of the SMM mirror patrols in the area. In some cases, these ceasefire violations occurred close to SMM patrols, forcing them to immediately leave the area.

The vast majority of these ceasefire violations (about 4,350) were recorded by the SMM in Donetsk region on 146 occasions, while about 300 ceasefire violations were recorded on 61 occasions under similar circumstances in Luhansk region.

In light of the repeated lack of adherence to localized ceasefires, the Chief Monitor in his letters to the signatories of the Minsk agreements, most recently in March and May 2019, has called upon the sides to take immediate remedial action in order to cease fire, respect security guarantees and protect civilian infrastructure. He also noted that repeated breaches of such guarantees put at risk the safety and security of SMM staff involved in monitoring and facilitating windows of silence and may require reappraisal of the SMM's operational posture in order to mitigate such risks. However, the overall situation had not improved as of the end of the reporting period.

This volatile security situation also puts the safety of workers at infrastructure sites at risk. For instance, during the reporting period, the Mission corroborated injuries to five employees of Voda Donbassa water company which they sustained while conducting their respective activities. On 23 October 2018, two men who had been conducting repairs to water pipelines in the area of the DFS were injured when an explosion damaged the truck that one of them was driving. Three other male company employees were injured in an explosion on 10 January while clearing snow from a road running from non-government-controlled Kruta Balka to the First Pumping Station near non-government-controlled Vasylivka.

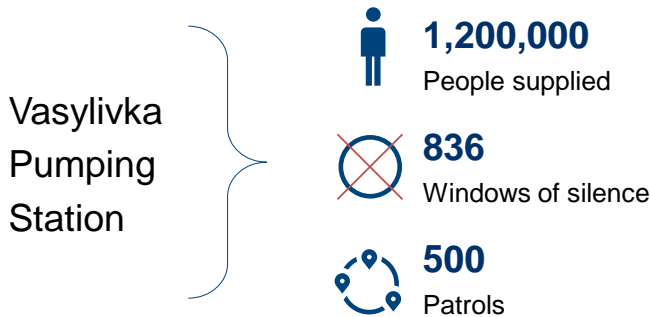
Water supply in Donetsk region

In this reporting period, the Mission facilitated and monitored WoS for 20 water-related infrastructure projects, which support more than four million civilians on both sides of the contact line in Donetsk region⁹.

First Lift Water Pumping Station

One of the 20 projects, the First Lift Water Pumping Station near Vasylivka, supplies water to five filtration stations in the region, including the DFS, and more than 1.2 million people in the southern part of Donetsk region on both sides of the contact line depend on this water supply on a daily basis. It often sustains damage from armed violence as it is located in close proximity of positions of the Ukrainian Armed Forces and of the armed formations (and about 4.5km north-east of the DFS).

At the beginning of April 2019, the pumping station was temporarily non-operational due to leaks from non-conflict-related damage to a water pipeline. The interruption due to the leak resulted in water shortages affecting tens of thousands of residents in non-government-controlled Dokuchaievsk and Olenivka, as well as in government-controlled Volnovakha.



⁹ The water system in Donetsk region also relies on the Siverskyi Donets river as the primary water source. With pipelines, pumping stations and filtration stations crossing the contact line, the sides remain interdependent for water supply.

On April 12, as repairs commenced, they were immediately halted for two days when repair workers refused to conduct repairs after they had been forced to take cover in a shelter due to armed violence nearby¹⁰. Following SMM-facilitated repairs on four occasions at the site, repair works were completed in April 2019 and consequently the SMM observed that water supply had been restored in the area.

In addition, the SMM monitored the general security situation around the pumping station

and ensured its normal operation on 148 occasions since 10 January 2019, when three Voda Donbassa employees were injured in an explosion while clearing snow on a road between non-government-controlled Kruta Balka and the station¹¹. Representatives of Voda Donbassa told the SMM that their employees had to take shelter on multiple occasions in 2019 due to ceasefire violations close to the station. Consequently, they added, only essential personnel remain present at the facility (see Annex 3).

“We hear shelling and shooting around the pumping station frequently, sometimes we are forced to take cover in the station’s shelter. We are concerned about our safety and the integrity of the station”.

— Workers at the pumping station near Vasylivka, April 2019

Donetsk Filtration Station (DFS)

The SMM continued facilitating and monitoring WoS for the regular operation of the DFS during the reporting period, thus supporting another critical infrastructure in Donetsk region that provides potable water for about 380,000 people on both sides of the contact line. Throughout the reporting period, the SMM monitored WoS in support of the operation of the DFS on 303 occasions, deploying over 1,200 patrols. In addition to the daily WoS to ensure that DFS staff can safely access the station (initiated following an incident in 2018 involving Voda Donbassa

water company employees injured by gunfire near the DFS), the SMM also facilitated and monitored WoS in order for various types of repairs to be completed, including on two occasions to help restore the gas supply to the DFS and on seven occasions to help restore the power supply to areas in and around the DFS¹².

The security situation at and around the DFS is tense due to the proximity of positions of the Ukrainian Armed Forces and of the armed formations which results in high numbers of ceasefire violations (see Annex 3).

¹¹ See [SMM Daily Report 11 January 2019](#).

¹² See [SMM Daily Report 18 April 2018](#).

Despite explicit security guarantees provided by the sides that there would be no ceasefire violations within a radius of 15km around the DFS, the Mission continued recording ceasefire violations on a daily basis, with a total of about 50,000 recorded within a radius of 5km around the DFS during this reporting period, including the use of mortars or artillery on 64 occasions. In May 2019, while the SMM was monitoring the security situation of the

DFS near government-controlled Kamianka, it heard outgoing fire 100m-300m from a patrol. Less than three weeks later, positioned near non-government-controlled Yasynuvata monitoring the security situation while the bus for DFS workers was travelling from the station to Yasynuvata, the SMM heard and saw explosions assessed as outgoing mortar rounds about 400-500m from its location¹³.

Donetsk
Filtration
Station



380,000

People supplied



303

Windows of silence



1,212

Patrols

Siverskyi Donets-Donbas (SDD)

Elsewhere, the SMM continued to facilitate and monitor WoS to enable maintenance and repairs to the main water lines of the Siverskyi Donets-Donbas (SDD) channel, an open water channel with some pipeline sections which supplies the DFS and the First Lift Water Pumping Station, providing the main source of water for almost the entire Donetsk region. The SDD channel takes water from the Siverskyi Donets river and delivers it to an estimated 2.3 million people in non-government-controlled areas and 950,000 people in government-controlled areas.



Figure 2: Damaged water pipeline near Horlivka

¹³ See [SMM Spot Report 15 May 2019](#) and [SMM Daily Report 4 June 2019](#).

Water from the channel reaches all major cities in the area (non-government-controlled Donetsk, Horlivka and Dokuchaievsk, and government-controlled Volnovakha, Pokrovsk and Mariupol), as well as numerous small settlements.

The SMM's first facilitation efforts relating to the channel date back to 2015, when the SMM supported WoS for the first time for repairs to three of the SDD's parallel pipelines, which had been damaged as a result of kinetic activities. For 42 consecutive days between July and August of that year, the SMM facilitated and monitored repairs until their successful completion. The SMM used the

lessons learned to plan further WoS along the contact line. However, due to frequent kinetic activities in the area surrounding the pipelines, additional damage occurred in the intervening years, and SMM facilitation and monitoring efforts have been repeatedly required to support repairs to pipelines. Between February and April 2019, the Mission facilitated and monitored WoS to repair pipelines to the SDD on seven occasions. At the end of June 2019, representatives of Voda Donbassa water company told the SMM that they had discovered additional leaks on the three main water pipelines near Horlivka, as a result of fighting (see Figure 3 below).



Figure 3: SMM UAV imagery of leakage at a water pipeline in an area between the forward positions of the Ukrainian Armed Forces and of the armed formations between government-controlled Shumy and non-government-controlled Horlivka, Donetsk region, June 2019.

The South Donbas Water Way (SDWW), another key infrastructure site that provides potable water to people on both sides of the contact line, was damaged during an escalation in armed violence in the area of government-controlled Avdiivka and non-

government-controlled Yasynuvata in late January 2017. However, it was not until August 2018 that security guarantees to repair the damage were finally provided, allowing for de-mining activities to begin in advance of an assessment and repairs to a SDWW pipeline.

In total, including the use of UAVs, the SMM facilitated and monitored WoS for the pipeline on 24 occasions during this reporting period, deploying 120 patrols on the ground in September and October 2018 to complete the repairs.

Water Supply in Luhansk Region

During the reporting period, the SMM deployed patrols to facilitate and monitor WoS for 24 water-related infrastructure projects providing potable water to about one million people on both sides of the contact line in Luhansk region. Many of these projects, located in areas near the contact line, have also been periodically subject to shelling, including for example in November 2018 when a water pumping station was damaged in government-controlled Marivka. About 500,000 civilians have benefitted from SMM-supported repairs and maintenance of multiple water supply lines and the filtration station of the Western treatment plant, located close to the contact line between government-controlled Bilohorivka and Zolote (see below). The SMM continued to facilitate repairs and maintenance to the 17 wells of the Petrivske water pumping station — on 161 occasions with the involvement of 322 patrols — to support this key infrastructure site that provides water to 150,000 civilians, including residents of Luhansk city.

The SMM also facilitated repairs or maintenance on 53 occasions to the ageing infrastructure of the Krasnyi Lyman and Yashchikove water intakes, deploying 106 patrols. These intakes provide potable water to about ten per cent of residents in non-government-controlled areas of Luhansk

region, including about 100,000 people in Slovianoserbsk, Zymohiria, Perevalsk and Alchevsk.

Similar to the previous reporting period, Ukrainian legal restrictions on payments between entities in government- and non-government-controlled areas affected payments between Luhanskvoda and Popasna Vodakanal water companies. The SMM continued to monitor the transfer of funds reportedly related to water payments and other services, from non-government- to government-controlled areas in Luhansk region, including through the use of UAVs.

Electricity supply in Donetsk and Luhansk regions

Many settlements along the contact line in Donetsk and Luhansk regions continue to experience electricity outages or shortages, from both conflict and non-conflict-related damage to power lines and other electricity infrastructure.

In Donetsk region during this reporting period, the Mission facilitated and monitored WoS to enable repairs and maintenance for 31 electricity supply projects which supported around 400,000 civilians. Many of these repairs were conducted to address damage caused by armed violence. For example, repairs were conducted to power lines near non-government-controlled Olenivka and Staromykhailivka, providing electricity to over 28,500 civilians, as well as to power lines in government-controlled Marinka in March 2019, restoring power to several hundred civilians in that area.

¹⁴ Water supply in central and southern Luhansk region was provided by Luhanskvoda until 2014. The main water resources lie along the Siverskyi Donets river, with water flowing through three sub-systems for water supply in the region. The vast majority of water sources, consisting of pumped water and boreholes, are in government-controlled areas. The contact line runs along the Siverskyi Donets river and splits Luhanskvoda sites, with the main office in non-government-controlled Luhansk city and other offices in government-controlled Popasna and Stanytsia Luhanska. The armed formations continued to operate Luhanskvoda water supply infrastructure in non-government-controlled areas, while Popasna Regional Water Utility (Popasna Vodakanal) took control of water supply infrastructure in government-controlled areas. Nearly 90 per cent of the company's almost 1.3 million estimated water consumers, however, are in non-government-controlled areas. As a result of the legal restrictions, debts continue to be accrued for water supplied to non-government-controlled areas, which has resulted in Popasna Vodakanal being unable to pay the government-controlled Luhansk Energy Association (LEO) for the electricity used by pumping stations for distributing water..



Figure 4: Civilians near damaged power lines close to Marinka, 2016.

In addition, the SMM facilitated and monitored WoS for repairs and maintenance at the Vuhleirska power plant providing electricity to more than 300,000 civilians around non-government-controlled Horlivka, government-controlled Svitlodarsk and Myronivskiy, as well as the Toretsk power supply lines supporting around 50,000 civilians.

In Luhansk region, during this reporting period, the Mission facilitated and monitored WoS to enable repairs and maintenance to 29 projects, supporting the provision of electricity to more than 1.2 million civilians on both sides of the contact line.

Electricity infrastructure in the wider Zolote area was repeatedly damaged from shelling or shooting in this reporting period, including on eight occasions between February and April 2019: six near non-government-controlled

Zolote-5/Mykhailivka and once each in government-controlled Zolote-2/Karbonit and Katerynivka. The SMM facilitated repairs in this area for power supply on a total of 68 occasions during the reporting period (see below).

Also, in May and June 2019, the SMM supported repairs to the Pobeda-Novodonbaska power line – the main power supply line in Luhansk region – ensuring electricity was maintained for more than one million civilians across Luhansk region.

The interdependence between the water supply and power supply systems has led to further supply interruptions for the civilian population in conflict-affected areas. Armed violence continues to disrupt power supply lines that are necessary for water pumps and water filtration stations to function effectively.

For example, power supply lines supporting the DFS were damaged from shelling in September and November 2018 – causing shortages and outages to water supply for civilians that lasted until the repairs, facilitated and monitored by the SMM, had been completed on 21 November 2018. Similarly, in March 2019, damage from kinetic activities to power lines near Yasynuvata which provide power supply for the First Lift Water Pumping Station near Vasylivka led to water supply interruption for civilians in nearby settlements before repairs, facilitated by the SMM, again restored the normal operational capacity of the station. In May 2019, a representative of Voda Donbassa expressed concern that any cessation of power supply to the DFS would not only lead to interruptions of water supply for a large number of civilians but also expressed concern that the DFS site itself could incur serious long-term damage if it remained without power for more than three weeks, thus making restarting the facilities more difficult.

The SMM also facilitated and monitored WoS to power lines supporting the Petrivske Pumping Station, to ensure the operation of the station so that potable water can be available to 150,000 residents of non-government-controlled areas, including in Luhansk city and smaller settlements in north-western Luhansk region.

Natural gas in Donetsk and Luhansk region

The supply of natural gas on both sides of the contact line in Donetsk and Luhansk regions continues to be interrupted by conflict- and non-conflict-related damage to infrastructure. These partial or complete shortages have increased hardship for civilians who rely on the supply for basic needs of heating and cooking, with some communities living without gas supply for over five years now.

During this reporting period, the SMM facilitated the maintenance and repair of gas infrastructure through seven gas supply projects in Donetsk region. One of these projects was the Krasnohorivka gas distribution station which was left inoperable after being damaged by shelling in 2014. The SMM had facilitated and monitored WoS to support repairs of the gas supply lines from late 2015 until the middle of 2016 when the gas pipelines were repaired. Repairs to the gas distribution station itself became stalled at that time, however, due to a lack of security guarantees provided from the armed formations. In August 2018, following SMM efforts to facilitate the repairs, security guarantees were issued by the Ukrainian Armed Forces and the armed formations. Thus, on 29 occasions between September 2018 and February 2019, the SMM facilitated inspections and repairs at the station. However, no further repairs were conducted since then, due to the lack of requests by the company for security guarantees, leaving residents of government-controlled Marinka and Krasnohorivka without gas since the conflict began. Other areas of Donetsk region also remain entirely without gas supply, including non-government-controlled Pikuzy since June 2017.

To address the lack of gas supply in other areas of Donetsk region, the SMM facilitated repairs in March 2019 to the gas pipeline in government-controlled Verkhnotoretske, ensuring gas supply for about 750 residents on both sides of the contact line and in May 2019 at the gas distribution station in non-government-controlled Sakhanka, supporting about 650 civilians in the area. The SMM also facilitated and monitored WoS for repairs to a gas pipeline in government-controlled Novoluhanske in March 2019, supplying about 3,500 civilians.

In Luhansk region, the Mission facilitated WoS for, among others, repairs in May 2019 to the gas supply for non-government controlled Vesela Hora, maintaining a system that provides gas to 1,100 civilians.

Cellular telecommunications in Donetsk and Luhansk regions

Over two million people in Donetsk and Luhansk regions rely on the Vodafone telecommunication network, with fibre optic lines crossing the contact line in both regions. Following the restoration of the Vodafone service on 24 May 2018 after a disruption in non-government-controlled areas of both Luhansk and Donetsk regions, the SMM continued to facilitate WoS on three occasions

in this reporting period – in September and October 2018 in Donetsk region – for Vodafone workers to cross the contact line and travel between non-government-controlled Donetsk city, Makiivka, Torez and Snizhne to deliver parts for cellular telecommunications infrastructure and repairs. Although no similar disruptions were reported during this period, maintenance of the system remains essential to ensure no future outage occurs. Reliable cellular service is essential for civilians for many reasons, including staying in touch with relatives and efficiently managing finances (including pensions). However, despite regular maintenance, service in many non-government-controlled areas of Donetsk and Luhansk regions remains unreliable.



Figure 5: SMM monitors in Makiivka, June 2017.

AREA PROFILE: ZOLOTE, LUHANSK REGION

The wider Zolote area in Luhansk region is home to about 15,000 civilians, 14,000 in government-controlled areas and around 1,000 in non-government-controlled areas. It consists of Zolote, Zolote-1/Soniachnyi, Zolote-2/Karbonit, Zolote-3/Stakhanovets, and Zolote-4/Rodina on the government-controlled side of the contact line and Zolote-5/Mykhailivka in non-government-controlled areas. Several water and electricity lines serving hundreds of thousands of civilians in Luhansk region pass through the Zolote area, lie north and east of the Zolote disengagement area, inside and near which the SMM has continued to note military and military-type presence¹⁵.

From October-December 2018, armed violence in this area was concentrated in the area of Volnyi Hutor, located between government-controlled Zolote-4/Rodina and non-government-controlled Zolote-5/Mykhailivka, which led to challenges in the provision of security guarantees for repairs of affected infrastructure. On 18 October 2018, two residents of Volnyi Hutor were killed as a result of a mine explosion, while reportedly attempting to fix a broken power line located in an area between the forward positions of the Ukrainian Armed Forces and of the armed formations¹⁶.

“We have been without electricity for two days. Two of our neighbours went to check the electrical transformer and see if they can place a voltage stabilizer. A couple of minutes later, we heard an explosion and loud screams. After more than an hour, the screaming stopped. They were both killed by a mine.”

Residents of Volnyi Hutor, 18 October 2018

Repairs to power lines were ultimately completed at the end of December 2018, restoring electricity supply to about 200 residents in the area, many of whom had lived without electricity since October.

Throughout the first six months of 2019, the security situation in the wider Zolote area continued to be volatile, with almost 10,000

ceasefire violations recorded by the SMM in the area, contributing to further civilian casualties, damage to civilian properties and infrastructure, and a general worsening of the living conditions of civilians on both sides of the contact line. In Zolote-5/Mykhailivka alone, the SMM observed damage to civilian properties on more than 40 occasions during the first half of 2019,

¹⁵ The Zolote disengagement area, established on 1 October 2016 created a 2km buffer zone between the Ukrainian Armed Forces and the armed formations. At the time, the most forward positions of the Ukrainian Armed Forces and of the armed formations in Zolote-4/Rodina and Zolote-5/Mykhailivka were about 1km apart, and significant parts of Zolote-4/Rodina and Zolote-5/Mykhailivka were outside government control.

¹⁶ See SMM Daily Report 22 October 2018.

including to a hospital and a school; while in Zolote-2/Karbonit the SMM saw damage to four houses and a school, as well as damage to nearby gas and electricity infrastructure.

Such infrastructure sites, often damaged from shelling and gunfire, require repairs and regular maintenance to avoid interruption of basic services. During the reporting period, the Mission facilitated and monitored WoS in the wider Zolote area for repairs and maintenance of essential civilian infrastructure on 166 occasions, deploying over 413 patrols related to 20 infrastructure projects. Among these, seven were related to water supply, such as the Mykhailivka–Pervomaisk water pipelines, the Mykhailivka water supply network, the Karbonit pipeline leading to Popasna and the water pipeline between the pumping stations of Western Filtration Station (ZFS) 3 and ZFS 4 between government-controlled Zolote-3/Stakhanovets and Popasna. In the case of the Karbonit pipeline, the ageing water pipeline frequently leaks, more or less on a monthly basis, thus reducing the water supply for about 5,000 nearby residents, and the supply is stopped altogether when the necessary repairs are being conducted. Without the financial capacity to replace the pipe, the Popasna Vodokanal company instead continues to conduct repairs to stabilize supply. Between September 2018 and June 2019, SMM facilitated and monitored WoS for the pipeline on 81 occasions, deploying 243 SMM patrols.

The SMM also facilitated and monitored WoS for repairs and maintenance on twelve electricity projects in the area, some damaged from armed violence, providing power supply to more than 200,000 civilians.

Among these sites were the 100kV high voltage “Mykhailivka-Kadiivka No.1” power line, completed in April 2019 and providing electricity to 85,000 people, as well as the 220kV high voltage “Novodonbaska-Mykhailivka” power line with a branch line to the “Almazna” substation, damaged from shelling in February 2019 and repaired within two days of the damage, restoring electricity to more than 150,000 civilians. Following conflict-related damage in April 2019, the PL-6kV power substation in Katerynivka was repaired within five days, restoring power supply to over 300 residents in Zolote-4/Rodina and Katerynivka.

Despite the provision of security guarantees, the Mission recorded more than 50 ceasefire violations while monitoring the conduct of repairs in the wider Zolote area. For example, in February 2019, an SMM patrol, positioned near Zolote-5/Mykhailivka to monitor the security situation to enable repairs to water pipelines, heard shots of small-arms fire about 200m from their position, followed by the sound of bullets about 10m over their heads and about 5–10m away¹⁷. When the gunfire began, six employees of the Luhansk Water Company who were conducting the repairs took cover behind a tractor. Such ceasefire violations pose a real risk to repair crews, emergency services personnel working at these sites; and expose the infrastructure to potential further damage. Similarly, they pose a threat to the safety and security of SMM staff monitoring and facilitating adherence to the ceasefire to enable the repairs.

¹⁷ See SMM Spot Report 26 February 2019.

CONCLUSIONS

Damage to key infrastructure sites located along or near the contact line threatens civilians' access to basic services

The ability of civilians in eastern Ukraine to access basic services – such as water, gas and electricity – continues to be threatened by infrastructure damage, mainly due to the armed conflict.

Ongoing hostilities along the contact line complicate infrastructure repairs and put at risk the safety and security of workers and SMM staff

Despite commitments undertaken, the sides continue to breach localized ceasefires for repairs and maintenance to infrastructure, thus threatening the lives of repair workers and the SMM staff involved. Regular shelling and shooting causes damage to power lines, pipelines and other key infrastructure sites. Areas along the contact line remain trapped in a cyclical pattern of armed violence that leads to shortages and stoppages of services for civilians, the repeated necessity for regular repairs and maintenance, and delays to such repairs.

The SMM remains committed to supporting priority infrastructure repairs

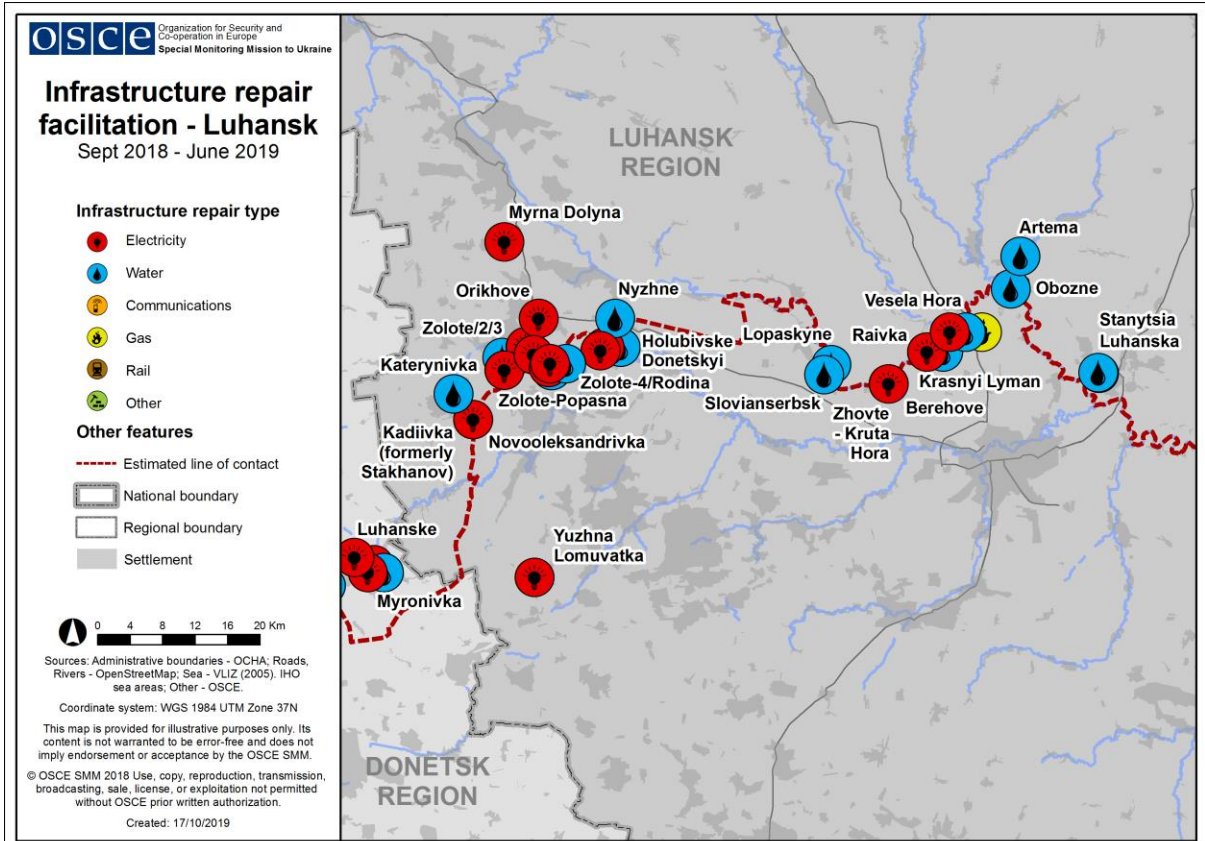
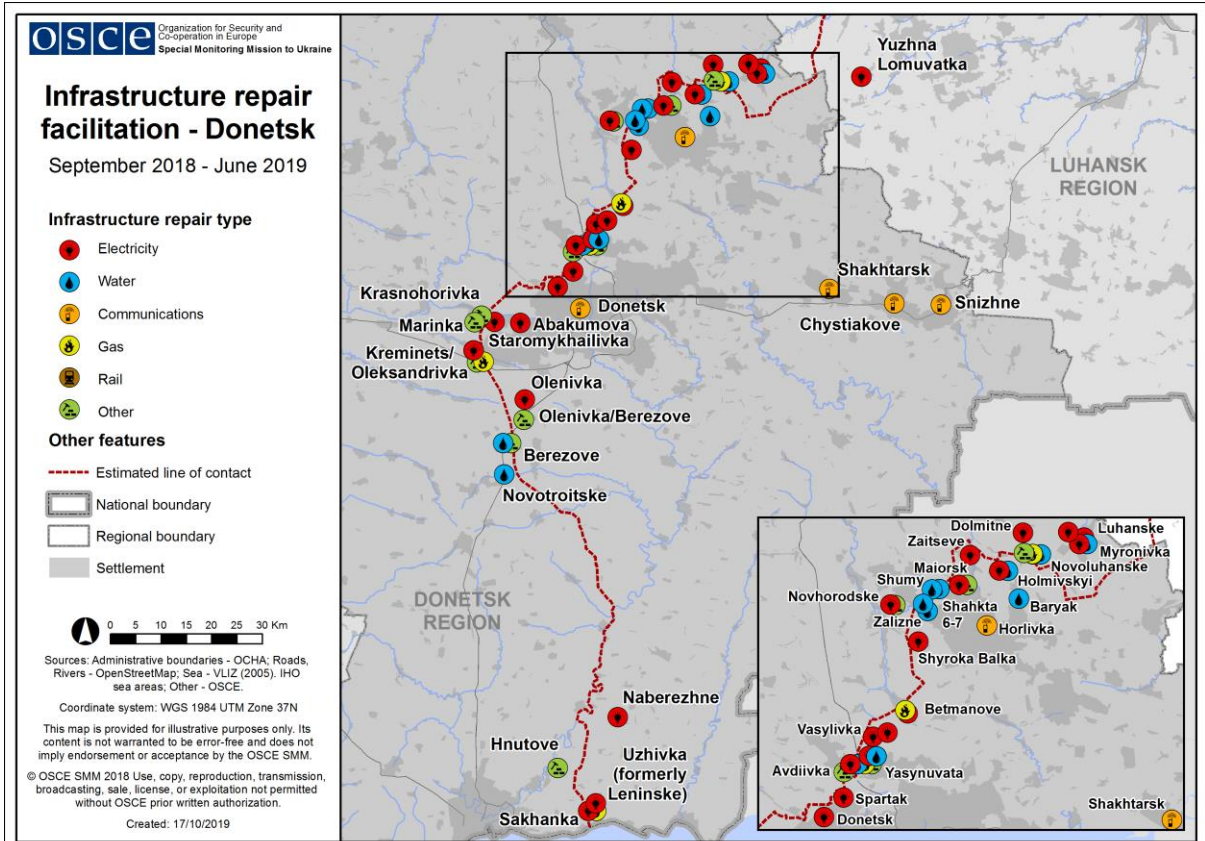
As mandated, the SMM remains committed to facilitating the repair of infrastructure sites deemed of critical importance to the civilian population through facilitating dialogue, monitoring and reporting.

However, while the SMM responded to the need for support to such repairs and maintenance over this reporting period, the increased frequency of damage is indicative of the continuation of armed violence in areas near the contact line. In this respect, the JCCC had proven capable of making substantial and positive contributions to the situation on the ground, particularly in ensuring the integrity of ceasefires, and in facilitating repairs to essential civilian infrastructure. Should there be a decision of the sides to that effect, the SMM remains ready to resume work with the JCCC in its original configuration, to support the facilitation of maintenance and repairs and provide other positive contributions to peace and security in eastern Ukraine.

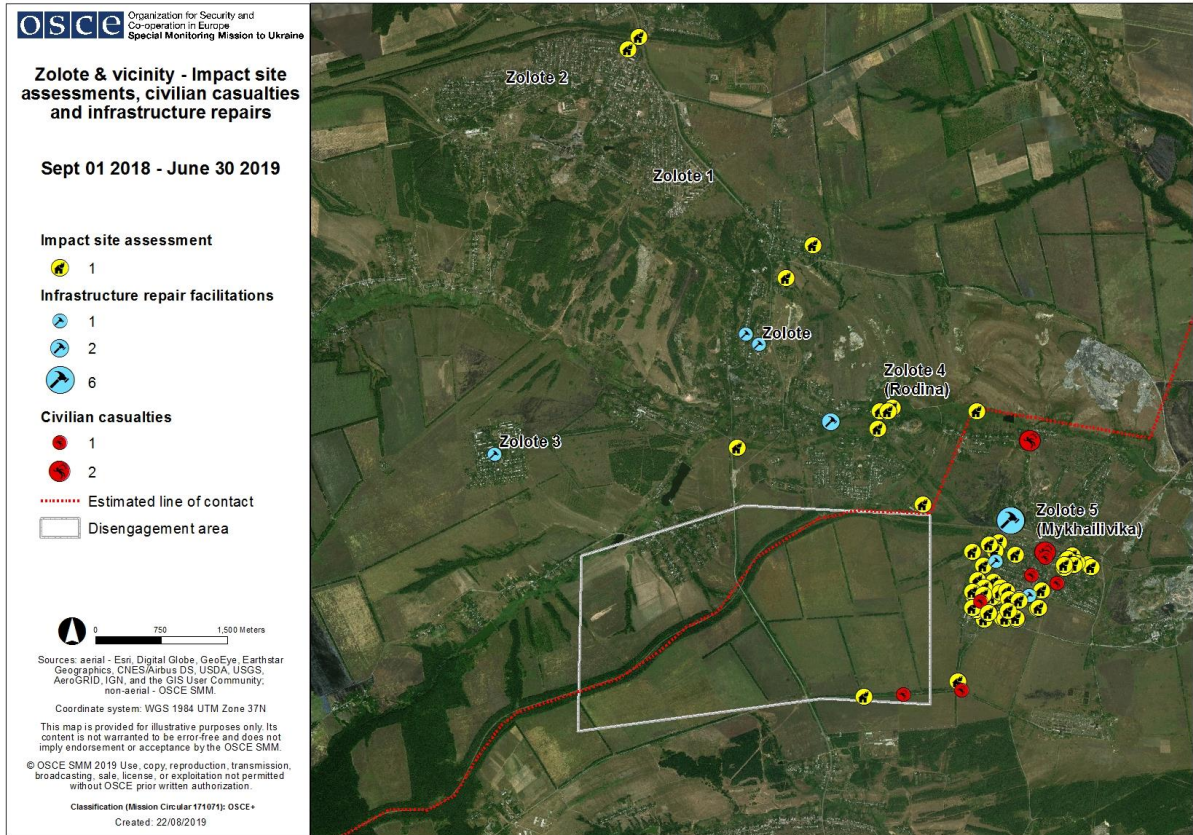
It is the responsibility of the sides to take action to ensure respect for WoS, enable repairs and protect infrastructure from damage

Ultimately, it is for the sides to ensure respect for windows of silence and to take responsibility to repair and rebuild damaged and destroyed infrastructure, and, most importantly, to take appropriate action to protect these sites from being damaged again by indiscriminate armed violence. In the meantime, the humanitarian consequences of shortages of basic services continue to be significant.

ANNEX 1: INFRASTRUCTURE REPAIR FACILITATION IN DONETSK AND LUHANSK REGIONS



ANNEX 2: IMPACT SITE ASSESSMENTS, CIVILIAN CASUALTIES AND INFRASTRUCTURE REPAIRS IN ZOLOTE AREA



ANNEX 3: CEASEFIRE VIOLATIONS NEAR THE DONETSK FILTRATION STATION AND FIRST LIFT WATER PUMPING STATION

