THEMATIC REPORT

CIVILIAN CASUALTIES IN THE CONFLICT-AFFECTED REGIONS OF EASTERN UKRAINE

1 January 2017-15 September 2020

November 2020
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EXECUTIVE SUMMARY

In 2017, the Special Monitoring Mission to Ukraine (SMM) published a thematic report on civilian casualties that occurred in the Donetsk and Luhansk regions of Ukraine in 2016. The current report examines the period from 1 January 2017 to 15 September 2020. During this period, the SMM confirmed 946 civilian casualties, of which 161 were fatalities.

### Key figures

**Casualties by year**
- 486 in 2017; 238 in 2018; 148 in 2019; 74 in 2020 (1 January to 15 September)

**Casualties by type of incident**
- Shelling: 66 killed and 452 injured
- Small arms and light weapons: 11 killed and 96 injured
- Mines, unexploded ordnance and other explosive objects: 81 killed and 231 injured
- Other: three killed and six injured

**Civilian casualties by region and control**
- 750 in Donetsk region and 196 in Luhansk region
- Government-controlled areas: 223 in Donetsk region and 47 in Luhansk region
- Non-government-controlled areas: 513 in Donetsk region and 144 in Luhansk region
- Areas not controlled by either side: 14 in Donetsk region and five in Luhansk region

**Casualties by sex and age**
- 531 men; 315 women; and 100 children (73 boys and 27 girls)
- 72 per cent of adult civilians killed or injured by mines and unexploded ordnance (UXO) were men; among minors, 90 per cent were boys
- More than 40 per cent of cases where men were killed or injured by mines and UXOs were due to mishandling or attempting to dismantle these objects; this amounted to 87 per cent of cases among boys
- Over 70 per cent of civilians killed or injured by mines or other explosive objects along riverbanks were men

Out of the total 946 civilian casualties confirmed by the Mission, **shelling and fire from small arms and light weapons** (SALW) accounted for 625 casualties (77 killed and 548 injured). More than 85 per cent of these casualties occurred in Donetsk region. Four hotspots that straddle both government- and non-government-controlled areas of the contact line, three in Donetsk and one in Luhansk region, accounted for nearly 75 per cent of civilian casualties due to shelling and SALW-fire.

**Mines, unexploded ordnance (UXO) and other explosive objects** resulted in 312 civilian casualties (81 killed and 231 injured) and caused more fatalities than shelling and SALW-fire combined. Civilians have been killed or injured by these objects in a variety of circumstances, including while working in fields, fishing or walking along riverbanks, in urban areas, and at entry-exit checkpoints (EECP), where civilians cross the contact line. Such incidents have occurred even in settlements far away from the contact line.
Men (186 casualties) were two and a half times more likely to be killed or injured by mines and other explosive objects than women (73), and boys (48) were nearly ten times more likely to be killed or injured by these objects than girls (5). One hundred and fifty casualties due to mines and other explosive objects were cases where civilians mishandled or attempted to dismantle UXO or ammunition. This highlights the need for more targeted analysis of the different experiences of the conflict of men and women, boys and girls, and for enhanced efforts aimed at awareness raising and education for civilians on the dangers posed by these objects.

Due to a variety of factors, including impediments faced by the Mission in the context of the COVID-19 pandemic, as well as due to security restrictions and the denial of information from interlocutors in non-government-controlled areas, there are 41 reports of civilian casualties that occurred between 1 January and 15 September 2020 that the Mission was unable to confirm. The Mission will continue to follow up on these cases and will include them in its reports once the cases have been confirmed.

Agreement was reached in the Trilateral Contact Group (TCG) on additional measures to strengthen the ceasefire on 22 July 2020. In the 51 days from 27 July (when the agreement took effect) to 15 September, the SMM observed a notable and sustained decrease in the number of registered ceasefire violations. During this period, the Mission only received one report of a civilian casualty due to shelling or SALW-fire, which took place on 27 July.

However, incidents related to mines and other explosive objects continued to occur: between 27 July and 15 September, the Mission confirmed and reported eight casualties, of which one was a fatality. This highlights the fact that even when the number of ceasefire violations decreases, mines and other explosive objects still pose a serious threat to the lives of civilians.

It remains critical that the sides respect the ceasefire and adopt measures to reduce the threat posed by shelling and SALW-fire. Furthermore, the report’s observations underscore the imperative for the sides to fully adhere to commitments made in the March 2016 TCG Decision on Mine Action to mark, fence off and map all the areas to be cleared of mines and to educate civilians on the risks and dangers emanating from these devices.
CHAPTER 1: INTRODUCTION

The SMM’s monitoring and reporting of civilian casualties resulting from the armed conflict in eastern Ukraine forms part of the SMM’s mandated aim “to reduce tensions and foster peace, stability and security; and to monitor and support the implementation of all OSCE principles and commitments.” To fulfil its mandate, the Mission, operating under the principles of impartiality and transparency, is tasked with gathering information and reporting on the security situation and with monitoring and supporting respect for human rights, whilst establishing and reporting facts in response to specific incidents and reports of incidents, including those concerning alleged violations of OSCE principles and commitments. All OSCE participating States have committed to respecting and ensuring respect for international humanitarian law, including the protection of the civilian population.

As repeatedly noted in the SMM’s daily reports and in the numerous thematic reports published by the Mission, civilians on both sides of the contact line face significant hardships due to the conflict. Not only have their livelihoods and their ability to access education and health services, among other things, been severely affected; but, most importantly, their lives are at risk due to ongoing shelling and small-arms fire, as well as the presence of mines, UXO and other explosive objects. Between 1 January 2017 and 15 September 2020, a total of 946 civilians were killed or injured as a direct result of the conflict on both sides of the contact line in Donetsk and Luhansk regions.

This report covers the SMM’s observations from 1 January 2017 until 15 September 2020, and contains four main sections presenting: (chapter 2) the methodology for the corroboration of civilian casualties; (chapter 3) a summary of findings of civilian casualties by type of incident, region, as well as sex and age; (chapter 4) the impact of ceasefire violations on the lives of civilians; and (chapter 5) the impact of mines, UXO and other explosive objects, followed by a conclusion.

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1 Deployment of an OSCE Special Monitoring Mission to Ukraine, Permanent Council Decision No. 1117, 21 March 2014
3 The lives of civilians have been severely disrupted by the conflict and the presence of a contact line that they can only cross at five official EECPs. In addition to the dangers posed by the violence on both sides of the contact line, the conflict has separated families and communities and many civilians have to cross the contact line to access services, pensions and social benefits (in government-controlled areas), visit family and relatives, or access employment. Civilian access to basic services such as water, gas, and electricity has also been threatened by shelling and small-arms fire. The SMM routinely facilitates dialogue between the sides and monitors localised ceasefires agreed to by the sides to ensure the repairs and maintenance of civilian infrastructure objects. In the last year the SMM has documented the impact of the conflict on the lives of civilians in four thematic reports: The impact of the conflict on educational facilities and children’s access to education in eastern Ukraine (20 July 2020), The impact of mines, unexploded ordnance and other explosive objects on civilians in Donetsk and Luhansk regions of eastern Ukraine (5 December 2019); Checkpoints along the contact line: reasons why civilians cross the challenges they face, January 2018-October 2019 (28 November 2019); and SMM facilitation and monitoring of infrastructure repair in eastern Ukraine (4 November 2019).
CHAPTER 2: METHODOLOGY

For the purposes of the SMM's monitoring and reporting of civilian casualties, a civilian casualty is defined as a non-combatant who suffers death or physical injury as a direct result of the armed conflict. This includes deaths and injuries caused by any means or method used during the conflict, including shelling, small arms and light weapons, mines, UXO, explosive objects, improvised explosive devices (IEDs) and the dismantling or mishandling of explosive objects. The Mission also includes incidents where civilians were killed or injured in road traffic accidents involving military vehicles. Deaths from injuries indirectly related to the armed conflict such as natural deaths at checkpoints while crossing the contact line, deaths due to lack of access to medical care, death by suicide or other cases of self-harm with weapons used in the armed conflict, as well as cases of domestic violence are outside of the scope of this report.

To corroborate civilian casualties, the Mission relies on accounts from survivors, family members of fatalities, witnesses, medical staff and other interlocutors who have first-hand knowledge of the incident. Statements from interlocutors are supported by observations from the SMM’s ground patrols, as well as by imagery from the Mission’s technical monitoring means.

Impediments to the SMM’s corroboration of civilian casualties

As noted in the semi-annual thematic reports Restrictions to the SMM’s freedom of movement, the SMM continues to face impediments to the implementation of its mandate, including the corroboration of civilian casualties.

Civilian interlocutors, particularly at medical facilities in non-government-controlled areas, are often hesitant to speak to the SMM, frequently citing “orders” or a “lack of permission to talk to the SMM” from those in control, and at times expressing concern about repercussions. For instance, during the spring months of 2019, the SMM encountered frequent refusals at hospital no. 2 in Horlivka and hospital no. 14 in Donetsk city, which prevented the SMM from corroborating some cases for almost three months. In other instances, the presence of mines and other explosive devices may prevent the SMM from reaching the location of incidents or interviewing the relevant interlocutors, causing delays in or preventing the corroboration of civilian casualties.

In addition, since March 2020, the Mission has had to adjust its operations in light of the COVID-19 pandemic, which has affected its ability to corroborate reports of civilian casualties. The time needed for this activity increased as the pandemic led to a reduction in staff and alterations to the Mission’s engagement with interlocutors needed for the confirmation of reports of casualties. Despite the impact of the pandemic, the SMM continues to confirm civilian casualties using alternative means.

As a result of the abovementioned challenges, the Mission is still in the process of corroborating 41 reports of civilian casualties that allegedly occurred between 1 January and 15 September 2020. Those confirmed will be included in the Mission’s future reports.

4 See the latest report on the SMM’s freedom of movement for more information on the impact of the COVID-19 pandemic on the SMM’s operations. The report covers the period from January to June 2020.
Between 1 January 2017 and 15 September 2020, the SMM corroborated 946 civilian casualties, of which 161 were fatalities. In 2017, the number of confirmed casualties rose from 442 in 2016 to 486. While the number of casualties has declined every year in the reporting period (Figure 2), so far in 2020 (January to September) the Mission has confirmed 74 civilian casualties.
The vast majority of civilian casualties were due to shelling (518, including 66 fatalities), including shelling from mortars, howitzers, multiple launch rocket systems and tanks (see Figure 3). The second leading cause of civilian casualties was mines, UXO and other explosive objects, such as IEDs, “booby traps” and ammunition, resulting in 312 civilian casualties, including 81 fatalities. Fire from SALW caused 107 casualties, including 11 fatalities.

While shelling caused the most civilian injuries and fatalities combined, it is important to note that the majority of civilian fatalities in 2017-2019 were caused by mines and other explosive objects. Overall, during the reporting period, mines and explosive
objects resulted in more civilian fatalities than shelling and SALW-fire combined (for more details see Chapter 5: Civilian casualties due to mines, UXO and other explosive objects). In addition to casualties caused by shelling, SALW-fire, mines and other explosive objects, the Mission also corroborated nine civilian casualties due to road accidents with military vehicles in the conflict affected areas.

Casualties by region

Of the 946 civilian casualties corroborated during the reporting period, 750 occurred in Donetsk region and 196 in Luhansk region (see Figure 4). In all of the types of incidents resulting in civilian casualties during each of the years covered by the reporting period, the majority of cases occurred in Donetsk region. There were nearly seven times more shelling-related cases in Donetsk region than in Luhansk region. There was a similar ratio in SALW-fire-related cases, whilst nearly twice as many cases related to mines and other explosive objects were documented in Donetsk region as in Luhansk region.

Twice as many civilian casualties occurred in non-government-controlled areas (657 civilian casualties) as compared with government-controlled areas (270 civilian casualties) (see Figure 5). A further 19 civilians were killed or injured in areas not controlled by either side.

In Donetsk region, the Mission confirmed 223 civilian casualties in government-controlled areas as opposed to 513 in non-government-controlled areas and 14 in areas not controlled by either side. In Luhansk region, the Mission confirmed 47 civilian casualties in government-controlled areas, 144 in non-government-controlled areas and five in areas not controlled by either of the sides.

Among cases related to shelling and SALW, the Mission recorded 459 civilian casualties in non-government-controlled areas and 157 in government-controlled areas, while nine civilian casualties occurred in areas not controlled by either side. Among civilian casualties due to mines, UXO and other explosive objects, 105 casualties occurred in government-controlled areas, 197 in non-government-controlled areas and ten civilian casualties occurred in areas not controlled by either side.
Figure 5: Civilian casualties by control
1 January 2017 to 15 September 2020

Donetsk Civilian casualties
(1 January 2017 to 15 September 2020)

Civilians killed
- 1
- 2 - 5
- 6 +

Civilians injured
- 1
- 2 - 5
- 6 +

Estimated line of contact

Figure 5: Civilian casualties by control
1 January 2017 to 15 September 2020

Source: OSCE, special monitoring mission to Ukraine
Civilian casualties by sex and age

Figure 6: Fatalities by sex and age
1 January 2017 to 15 September 2020
During the reporting period, men accounted for more than 60 per cent of all fatalities and 55 per cent of all injuries across all types of incidents (see Figures 6 and 7 above and Figure 8 below). Among adults, shelling was the predominant cause of casualties, with 273 male and 202 female casualties. Mines and other explosive objects were the second leading cause of casualties for both men and women, with men two and a half times more likely to be killed or injured by these objects than women (186 and 73 casualties, respectively). As noted in the Mission’s 2019 thematic report *The impact of mines, unexploded ordnance and other explosive objects*, the SMM has documented and confirmed numerous cases of civilians dismantling objects to extract parts for economic reasons, out of curiosity or to create souvenirs. Such incidents accounted for 82 of the casualties among men. A further 68 men and 36 women were casualties due to SALW-fire. Of the adult casualties, 199 were men and women 60 years old or older (97 men and 102 women). The majority of casualties over the age of 60 has been due to shelling (66 men and 79 women).

During the reporting period, the SMM has corroborated 100 child casualties (73 boys and 27 girls), with 43 casualties (21 boys and 22 girls) due to shelling. The majority of the shelling incidents where children were casualties occurred while they were in or near their homes or homes of family members with whom they were staying. As indicated in *Figure 8* (below), boys were also nearly ten times more likely to be killed or injured due to mines and other explosive devices than girls (48 and five casualties, respectively). Forty-two of the casualties due to these objects among boys were cases where they mishandled or attempted to dismantle a piece of UXO or ammunition. A further three children, all boys, were injured due to SALW-fire.
Figure 8: Civilian casualties by type of incident and sex and age
1 January 2017 to 15 September 2020
CHAPTER 4: IMPACT OF CEASEFIRE VIOLATIONS ON THE LIVES OF CIVILIANS

The nearly 500km-long contact line runs through or is in close proximity to key cities and towns in Donetsk and Luhansk regions. In Donetsk region, non-government-controlled Donetsk city has a population of around 940,000, and more than 260,000 civilians live in non-government controlled Horlivka and the surrounding areas. In Luhansk region, the wider Zolote area has around 100,000 civilians on both sides of the contact line, and non-government-controlled Luhansk city is home to around 400,000 civilians.

There have been nearly four and a half times as many ceasefire violations in Donetsk region as compared to Luhansk region. During the reporting period, the Mission recorded over 1,143,000 ceasefire violations (see Figure 9 for ceasefire violations by year). While the Mission recorded more than 400,000 ceasefire violations in Donetsk and Luhansk regions in 2017, the number of ceasefire violations steadily declined in subsequent years to some 130,000 ceasefire violations recorded in the first eight and a half months of 2020. The reduction in ceasefire violations has coincided with the reduction of civilian casualties due to shelling and SALW-fire (see Figure 10).

On 22 July 2020, agreement was reached in the TCG on additional measures to strengthen the ceasefire. These measures took effect at 00:01 on 27 July. Since then, the Mission has recorded a significant reduction in the number of ceasefire violations along the contact line. In the 51 days between 27 July and 15 September, the Mission recorded in total just over 1,000 ceasefire violations and received only one report of a civilian casualty due to shelling or small-arms fire, a 37-year-old man who was injured in government-controlled Marinka on 27 July. There were also no reports of damage to civilian property and infrastructure. During previous recommitments to the ceasefire which lasted at least 20 days, the number of civilian casualties due to shelling and SALW-fire had also decreased. Despite the reduction in the reports of civilian casualties due to shelling and SALW-fire, between 27 July and 15 September, the Mission has confirmed and reported eight casualties, of which one was a fatality, due to mines and other explosive objects. This highlights the fact that even if the number of ceasefire violations decreases, mines and other explosive objects still pose a serious threat to the lives of civilians.

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6 In addition, in government-controlled areas of Donetsk region, Avdiivka is home to 30,000 civilians, and Toretsk city council covers more than 60,000 inhabitants. In non-government-controlled areas of Donetsk region, non-government-controlled Mariinka is home to around 300,000 civilian people (information based on data from the State Statistic Service of Ukraine http://databaze.ukrovnosi.gov.ua/PIWEB2007/eng/news/op_popul.s.asp).


8 Ceasefire violations by year: 401,366 were recorded in 2017; 312,554 were recorded in 2018; 299,633 in 2019 and 130,634 in 2020 (1 January to 15 September 2020).

9 Press statement of Special Representative after the regular meeting of the TCG on 22 July 2020 https://www.pzce.org/zh/nanshp2/657885.

10 During the 51 days prior to the 51 days comprising the 27 July-15 September period, the Mission confirmed eight civilian casualties due to shelling and SALW-fire. In contrast, (1) ‘Unlimited recommitment’ starting 21 July 2019 lasted 40 days; three civilian casualties due to shelling and SALW-fire were recorded in the period, while 38 were recorded in the 40 days prior to the recommitment. (2) ‘Harvest ceasefire’ (1 July 2018) lasted 30 days, during which the SMM recorded three casualties and 28 casualties in the 30 days prior to the recommitment. (3) ‘Christmas and New Year ceasefire’ (23 December 2017) lasted 46 days, during which the SMM recorded nine civilian casualties and 33 in the 46 days prior to the recommitment. (4) ‘Beginning of the school year ceasefire’ (25 August 2017) lasted 29 days, during which the SMM confirmed eight civilian casualties and 21 casualties in the 29 days prior. (The number of days a recommitment to the ceasefire has lasted refers to the number of days it took for the number of ceasefire violations to reach levels prior to the recommitment.)
Of the civilian casualties due to shelling and SALW-fire, nearly 75 per cent (464 casualties) occurred in four areas along the contact line. The highest concentration of civilian casualties occurred in the settlements around Avdiivka and Yasynuvata and parts of Donetsk city (northern, central, and eastern areas), with 171 civilian casualties (20 killed and 151 injured). The second most concentrated areas for civilian casualties due to shelling and SALW-fire were the western outskirts of Donetsk city and neighbouring settlements on both sides of the contact line, with 159 casualties (13 killed and 146 injured). The area around non-government-controlled Horlivka and neighbouring settlements on both sides of the contact line saw 83 civilian casualties (14 killed and 69 injured). In Luhansk region, the wider Zolote area had the highest concentration of civilian casualties with 51 casualties (six killed and 45 injured).
In these four areas, on both sides of the contact line, between 1 January 2017 and 15 September 2020 the Mission recorded 274 instances (97 in government-controlled areas and 177 in non-government-controlled areas) of weapons such as tanks, self-propelled artillery and howitzers, anti-tank guns, multiple launch rocket systems (MLRS), all in violation of withdrawal lines agreed to in the Minsk agreements. One hundred and forty-two (30 in government-controlled areas and 112 in non-government-controlled areas) of these instances were in Avdiivka, Yasynuvata and northern, central and eastern areas of Donetsk city. As detailed below, all four of these areas with a high concentration of civilian casualties have seen escalations of violence over the reporting period, which have led to civilian casualties, displacement of civilians and damage to civilian properties and infrastructure.
Conduct of hostilities and escalations in violence

During the reporting period, the Mission observed several areas that emerged as hotspots in terms of armed violence. Presented in this section are five of the most egregious episodes of escalations in violence that resulted in civilian casualties, damage to civilian infrastructure and property and other negative impacts on the lives of civilians. These five episodes all occurred in the four areas noted above where the Mission has confirmed the highest number of casualties. At the end of January 2017, escalation in violence around Avdiivka and Yasynuvata saw nearly 50 civilian casualties in less than two weeks. The area around Horlivka, particularly centred around government-controlled Pivdenne (formerly Leninske) and its Chyhari neighbourhood, saw an increase in violence in May and June 2018, and the volatility around the western outskirts of Donetsk city and neighbouring settlements (Marinka, Oleksandrivka, Staromykhailivka and the Petrovskyi district of Donetsk city) increased over May and June 2019. The areas around Zolote experienced escalations of violence twice during the reporting period, at the end of 2018 and the beginning of 2020. These periods of escalations in violence lasted from about two weeks to a few months, resulting in civilian casualties and damage to private properties and civilian infrastructure.

Avdiivka-Yasynuvata-Donetsk airport area (29 January to 9 February 2017)

As noted above, the area around government-controlled Avdiivka and non-government-controlled Yasynuvata has seen the highest concentration of civilian casualties due to shelling and SALW-fire. Between 29 January and 9 February 2017, violence in the area in and around Avdiivka, Yasynuvata and the Donetsk airport reached levels previously unobserved by the SMM. Between 29 January and 3 February, the overall number of explosions attributed by the SMM to weapons proscribed by the Minsk agreements (including 122 and 152mm artillery, 120mm mortars and MLRS) increased significantly along the entire contact line. The SMM recorded more explosions attributed to MLRS fire in this one week than during all of 2016. Over 60 per cent of observed MLRS usage was recorded during daylight hours.

Seventy per cent of all ceasefire violations documented in this period were recorded in the area around Avdiivka, Yasynuvata and the Donetsk airport. On the evening of 1 February, the SMM observed a local non-governmental organization evacuating 12 children from Avdiivka. On 3 February, the SMM observed impacts and serious damage at a humanitarian warming tent area. Violence significantly decreased by the end of the first week of February but still remained higher than the level commonly observed in this area, with at least 275 explosions assessed as due to fire from proscribed weapons occurring during the last two days of the reporting period.

As a result of the violence, in the period between 29 January and 9 February 2017 alone, the Mission recorded 49 civilian casualties (seven killed and 42 injured)\(^\text{18}\) in settlements such as Avdiivka, non-government-controlled Makivka, as well as Donetsk city, all attributed to shelling and small-arms fire. Nearly 65 per cent of civilian casualties due to shelling and SALW confirmed by the Mission during the months of January and February in 2017 occurred in the same areas during this two-week period. Dialogue facilitation by the SMM and the Joint Centre for Control and Co-ordination (JCCC) reduced the severity of fighting after 5 February.

Chyhari neighbourhood of Pivdenne (formerly Leninske) and the wider area around Horlivka (May to June 2018)

The settlement of government-controlled Pivdenne (formerly Leninske) and its Chyhari neighbourhood (at this time Chyhari was an area not controlled by either side) are situated on the contact line, northwest of non-government-controlled Horlivka and south-east of government-controlled Toretsk (formerly Dzerzhynsk). During the first half of 2018, the

\(^{18}\) Of the 49 casualties, 11 occurred in government-controlled areas (three killed and eight injured) and 38 in non-government-controlled areas (four killed and 34 injured).
Mission observed a deterioration of the security situation in the area, with an upsurge of violence in May 2018. On 18 February, the SMM saw Ukrainian Armed Forces (UAF) personnel present on the high ground to the west of the neighbourhood and, by 7 June, the SMM observed UAF presence within the neighbourhood, as well as a “DPR” flag being flown from the top of a slag heap about 600m south of Chyhari. The deterioration of the security situation exacerbated the already harsh living conditions in Chyhari. Prior to the escalation of violence in May-June 2018, freedom of movement of civilians was severely restricted, as they had to cross internal checkpoints erected by both sides in order to reach Toretsk or Horlivka to access health, education and social services. Ambulances could not reach the settlement, and anyone in need of emergency medical services had to be carried to the outskirts of the settlement. The escalation of violence resulted in civilian casualties and the destruction of houses, as well as the displacement of residents. According to the Donetsk Civil-Military Administration (CMA), the number of civilians living in Chyhari dropped from 175 in May 2018, to zero in February 2019.

During the first quarter of 2018, the Mission recorded about 4,000 ceasefire violations west and north of Horlivka, while in the second quarter of 2018, the Mission recorded about 15,500 ceasefire violations, indicating a deterioration of the security situation in the area. High levels of armed violence and contamination by mines and UXO meant that access to the area by the SMM as well as other international organizations was limited. The SMM was only able to visit the area twice during this period.19

Between May and June 2018, the SMM corroborated 29 casualties from shelling and SALW-fire in settlements within a 10km radius of Pivdenne and Chyhari, including government-controlled Zalizne and Novhorodske, and the government-controlled neighbourhood of Zhovanka in Zaitseve,20 as well as in non-government-controlled Horlivka, Shyroka Balka and Holmivs'kyi, and in the non-government-controlled part of Zaitseve. Two of the civilian casualties occurred in Chyhari. On 27 May, a 70-year-old man sustained injuries due to the explosion of a “booby trap” while trying to repair electricity lines outside his house, and on 16 June a 49-year-old woman suffered shrapnel injuries due to shelling while trying to extinguish a fire which had broken out near her house.

Zolote and Vilnyi Khutir (September to December 2018)

Vilnyi Khutir is a neighbourhood located between Zolote-4/Rodina and Zolote-5/Mykhailivka. After April 2018, the SMM observed a deterioration of the security situation inside the Zolote disengagement area (DA) and around it.21 The SMM’s unmanned aerial vehicles (UAV) spotted over 300 anti-tank mines laid out in the southern part of the DA. By the end of October 2018, positions were separated by less than 300m – within the range of small-arms fire. Between September and December 2018, the Mission recorded over 3,000 ceasefire violations compared with just over 600 ceasefire violations in the previous four months.

As the security situation deteriorated inside the DA, the SMM observed the positions moving closer in its periphery, in Zolote-4/Rodina and Zolote-5/Mykhailivka. In these areas, SMM UAVs spotted newly built positions of the UAF and of the armed formations in and near populated areas between September and October 2018. The proximity of the positions to inhabited areas and the use of weapons led to civilian casualties. The CMA in Zolote informed the SMM that 23 civilians had been displaced between September and December 2018, with 21 civilians remaining in the neighbourhood. Residents told the Mission that civilians had recently moved from Vilnyi Khutir to government-controlled Zolote out of concerns over shelling and gunfire occurring on an almost daily basis.

19 On 18 February, the SMM saw UAF personnel present on the high ground to the west of the neighbourhood. On 7 June, the SMM observed UAF presence within the neighbourhood, as well as a “DPR” flag being flown from the top of a slag heap about 600m south of Chyhari.
20 Zaitseve is a settlement in Donetsk region consisting of three districts, government-controlled Zhovanka and Bakhmutka and non-government-controlled Zaitseve.
21 The three pilot DAs were established by the Framework Decision of the TCG relating to disengagement of forces and hardware agreed in Minsk on 21 September 2016. The decision calls for withdrawal of the UAF and the armed formations as well as hardware from their current positions, starting in three pilot areas, with a view to creating DAs of, as a rule, at least 2km wide and 2km deep. The three pilot areas are near Stanytsia Luhanska (DA1) and Zolote (DA2) in Luhansk region, and near Petrivske (DA3) in Donetsk region. Disengagement began in areas near Zolote and Petrivske in 2016 and in Stanytsia Luhanska in 2019.
Of the nine casualties (five killed and four injured) corroborated by the Mission in these areas throughout 2018, eight occurred between 7 October and 14 November 2018. Two of the eight civilians were killed in areas between positions and the rest were injured or killed in Zolote-5/Mykhailivka, including a 17-year-old girl and a nine-year-old boy.

**Marinka, Oleksandrivka, Staromykhailivka and the Petrovskyi district of Donetsk city (May to June 2019)**

In May 2019, the SMM observed a deterioration of the security situation in government-controlled Marinka and Krasnohorivka and non-government-controlled Oleksandrivka, Staromykhailivka and the Petrovskyi district of Donetsk city. This area is home to around 110,000 civilians. One of the EECPs through which civilians cross the contact line is located less than 1km south-east of Marinka. Prior to the COVID-19 pandemic, over 8,500 civilians crossed the contact line daily through this EECP.\(^{22}\) Between January and 25 June 2019, the Mission recorded more than 1,900 ceasefire violations, with more than 25 per cent (530 ceasefire violations) occurring in May. In the corresponding period in 2018, the Mission recorded 920 ceasefire violations. In June, the SMM’s UAVs spotted UAF trenches within 600m of civilian houses in Marinka, which further decreased the distance between positions. Seven casualties due to shelling and SALW-fire occurred in May and June when the SMM observed a surge in violence. Five casualties were caused in one incident on 14 June when the house of a family, which included a nine-year-old girl, was shelled in Marinka.

**Settlements east of Zolote DA (January to February 2020)**

Between 1 January and 23 February 2020, the Mission recorded more than 13,000 ceasefire violations east of the Zolote DA, concentrated around government-controlled Orikhove and Novotoshkivske and non-government-controlled Berezivske, Holubivske, Holubivka and Donetskyi. These ceasefire violations amounted to nearly 90 per cent of ceasefire violations in Luhansk region recorded by the SMM during this period. By comparison, in the second half of 2019, only five per cent of the ceasefire violations recorded by the Mission in Luhansk region occurred in this area. On 18 February alone, in the early morning hours, the SMM recorded more than 3,000 violations in the area. The SMM confirmed one civilian casualty on this date, a 55-year-old man living in Holubivske who was injured when his street was hit by shelling. In all, between 1 January and 23 February, the Mission corroborated five civilian casualties (all injuries) in the non-government-controlled settlements and damage to 17 civilian properties and to power lines in Holubivske and Donetskyi, which supply more than 3,000 civilians. In February, residents of Holubivske told the SMM that about three out of 11 families residing on Artema Street, a part of the settlement nearest to the contact line, had left the area, while others had to remain, as they had nowhere else to go.

\(^{22}\) SMM thematic report, Checkpoints along the contact line, November 2019, p.8.
CHAPTER 5: CASUALTIES DUE TO MINES, UNEXPLODED ORDNANCE AND OTHER EXPLOSIVE OBJECTS

As the SMM noted in its 2019 report *The impact of mines, unexploded ordnance and other explosive objects*, the conflict-affected regions of Donetsk and Luhansk are highly contaminated by mines, UXO and other explosive objects such as grenades and ammunition. According to the Ukrainian Ministry of Defence, over 7,000km² of land in government-controlled areas and 8,000km² in non-government-controlled areas are contaminated with these objects.\(^\text{23}\) While most of the contaminated areas lie within the 15km zone on either side of the nearly 500km-long contact line, explosive objects have also resulted in casualties in settlements such as Velyka Novosilka, which lies more than 60km away from the contact line in government-controlled Donetsk region.

Since 2017, the Mission has reported over 40,000 mines, mostly anti-tank mines, along roads in and around settlements, within and near the DAs, on agricultural land and around the government-controlled EECPs and the corresponding checkpoints of the armed formations, through which thousands of civilians pass every day to cross the contact line. As noted above, the Mission has reported more than one million ceasefire violations along the contact line during the period covered by this report. It is uncertain how many of these objects have not detonated and now contaminate fields, settlements and roads, posing a risk to civilians.

On 9 March 2020, the SMM saw what it assessed as an IED on the eastern and western edges of the M-04 road near the Donetsk Filtration Station (DFS). At least 24 152mm artillery rounds and an anti-tank mine were placed in two vertical chambers around 1.5m deep. The road is regularly used by the SMM and workers at the filtration station, which supplies water to around 380,000 civilians on both sides of the contact line.

As noted in Chapter 2, between January 2017 and July 2020, mines and UXO have resulted in 312 civilian casualties (see Figure 11 and for sex and age breakdown see Figure 12). The 81 civilians killed by these objects represent half of all civilian fatalities confirmed by the Mission during the reporting period. In 2017, the SMM confirmed 150 civilian casualties due to these objects. However, as in the cases of casualties due to shelling and SALW, the number of casualties has decreased in the subsequent years (see Figure 11 above). The majority of these casualties (201) occurred in Donetsk region. Over 70 per cent of fatalities and over 55 per cent of civilians injured by the objects were men. Among

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\(^{23}\) For more detailed information on how these objects affect the lives of civilians, please see the SMM’s December 2019 report *The impact of mines, unexploded ordnance and other explosive objects on civilians in the Donetsk and Luhansk regions of eastern Ukraine* https://www.osce.org/files/f/documents/8/8/441170_1.pdf
children, 90 per cent of casualties due to mines and other explosive objects were boys.

Additionally, civilians have been killed or injured due to mishandling of grenades, UXO or ammunition. They are killed or injured along riverbanks, in fields while performing agricultural work or collecting firewood, while trying to cross the contact line at the EECPs and corresponding checkpoints, and while visiting the graves of relatives at cemeteries along the contact line. The Mission has also reported on incidents where workers have been killed or injured while preparing infrastructure sites for repair and maintenance work.
Mishandling or dismantling of UXO, ammunition and other explosive objects

Of the cases of civilians killed or injured by mines, UXO or other explosive objects, 150 were instances where they had mishandled or attempted to dismantle these objects (see Figure 13). The instances noted in the map above that are far away from the contact line mostly fall within this category. For 45 civilians, such mishandling led to their deaths. Civilians engaged in the activity for a variety of reasons: to obtain scrap metal to sell, to make souvenirs and out of curiosity, and in some cases the individuals were intoxicated when they mishandled the object. More than 40 per cent of cases when men were killed or injured by mines and other explosive objects were due to their mishandling or attempting to dismantle UXO objects. Among boys, 87 per cent of casualties were because they mishandled or attempted to dismantle UXO, weapons or ammunition. In most cases where women (21 casualties) or girls (five casualties) were killed or injured in such incidents, they were bystanders.

Figure 13: Civilian casualties due the mishandling/dismantling of UXO and ammunition by sex and age 1 January 2017 to 15 September 2020

Civilians have found objects such as grenades, fuses and rocket-propelled grenade rounds in a variety of places, such as forests, fields and riverbanks, as well as areas formerly used as training areas. In more than 65 instances, hand grenades were involved. For instance, on 11 January 2020, a 35-year-old man died at home after a rocket-propelled grenade exploded in government-controlled Shevchenko, Donetsk region, more than 60km from the contact line. A female resident of the settlement told the SMM that the man used to collect scrap metal at a nearby disused military training range and that it was not uncommon for young men and even schoolchildren to engage in this activity.

In April 2017, a 16-year-old boy had to have his hand amputated and suffered injuries to his eye and leg due to the explosion of a piece of UXO he had found outside of his house in Yasyuivata, Donetsk region. In May 2018, a 32-year-old man from Velyka Novosiilka, a settlement near Shevchenko, died when an object he found on a riverbank exploded. In non-government-controlled areas, in September 2019, two boys aged seven and another aged 12 in Krasna Zoria, Luhansk region, were injured when a stun-grenade they had found in a field close to the village exploded.

Rivers and riverbanks

During the reporting period, the Mission has confirmed 31 cases of civilians, the majority (80 per cent) being men and boys, (22 men, six women and three boys) being killed or injured along riverbanks where they stepped on a mine or other explosive object while fishing, looking for firewood or simply walking along the riverbank.

While the majority of the cases occurred in Luhansk region along the banks of the Siverskyi Donets River, mostly on the non-government-controlled bank of the river, the SMM has corroborated casualties along the non-government-controlled bank of the Kalmius River, in Donetsk region as well. Both the Siverskyi Donets River and the Kalmius River form part of the contact line in Luhansk and Donetsk regions, respectively. As noted in the Mission’s 2019 report, civilians in non-government-controlled Naberezhne have told the SMM that they did not allow their children to play close to the banks of the Kalmius River due to the presence of mines and UXO. The SMM has confirmed three child casualties along riverbanks, all in 2017. In April 2017, a 12-year-old boy suffered severe injuries to his hands after an object he had found on the bank of...
the Olkhovaia River near non-government-controlled Vesela Tarasivka, Luhansk region exploded. In August 2017, two boys aged 14 and 15 suffered burns after they lit a bag of gunpowder they found at an abandoned checkpoint near a river in government-controlled Raihorodka, Luhansk region.

On 1 March 2020, a 49-year-old man and a 23-year-old woman both had to have a leg amputated after they stepped on an explosive object while walking along the banks of the Siverskyi Donets River near non-government-controlled Mykolaivka. On 28 February 2020, a 57-year-old man passed away due to heavy bleeding as a result of injuries sustained after stepping on a mine while collecting wood by the same river near non-government-controlled Pionerske.

**Areas near government-controlled EECPs and the corresponding checkpoints of the armed formations**

As noted in both the SMM 2019 report *The impact of mines, unexploded ordnance and other explosive objects* and its November 2019 report *Checkpoints along the contact line: reasons why civilians cross and the challenges they face*, the five points through which civilians can cross the contact line are heavily contaminated by mines and UXO, both around the government-controlled EECPs and the corresponding non-government-controlled checkpoints (see map below for the EECPs and corresponding non-government-controlled checkpoints). Prior to the movement restriction brought about by the COVID-19 pandemic, tens of thousands of civilians crossed the contact line every day to access pensions and social benefits, visit family, obtain medical services, checks on property and a myriad of other reasons.

Between 2017 and July 2020, the SMM confirmed 17 civilian casualties (seven men and ten women) in the vicinity of EECP routes running along government-controlled Novotroitske and government-controlled Maiorsk, at other checkpoints along the contact line or at places where civilians were trying to use informal routes to cross the contact line. Most recently, on 14 May 2020, a 35-year-old woman suffered severe injuries and had to have her foot amputated when she stepped on a mine near the government-controlled Novotroitske EECP in Donetsk region. In February 2019, a 59-year-old man and his 86-year-old mother crossed the contact line from non-government- to government-controlled areas at the EECP near Novotroitske to collect their pensions. On the way back, the mini-van in which they were traveling struck an explosive object, likely an anti-tank mine, close to the corresponding checkpoint of the armed formations near Olenivka, killing the 35-year-old male driver and the woman. In December 2017, a 71-year-old man was injured when he stepped off the main road to relieve himself, despite the presence of mine hazard signs, near government-controlled Berezove, on the road to the Novotroitske EECP. In July 2017, a 38-year-old woman was injured and her 38-year-old husband was killed after they triggered a “booby trap” near the government-controlled Maiorsk EECP. In May 2017, two women were injured between non-government-controlled Horlivka and government-controlled Toretsk after they detonated an unidentified object while trying to cross the contact line near the Maiorsk EECP.
Fields and agricultural land

Twenty-four civilians have also been killed and injured while working in fields and agricultural lands and on the outskirts of towns and villages (15 men and nine women). In April 2017, a woman was killed and ten other men and women were injured while they were clearing leaves off the side of a road in a forest on the outskirts of non-government-controlled Novoazovsk, Donetsk region. In June 2019, two men were injured when a tractor they were driving hit an object that exploded in a cultivated field south of government-controlled Popasna. In November 2017, a 54-year-old woman suffered injuries to her limbs and torso when she accidentally detonated an object while taking her cattle out to graze in a field near government-controlled Kodema, Donetsk region. In June 2017, a 30-year-old man was killed and two other men were injured when they drove their truck over an explosive object. The men were working in a field near non-government-controlled Borzhivka, in Luhansk region.

Demining activities facilitated and monitored by the SMM

In 2019 and 2020, the sides conducted activities related to mine action near educational facilities, cemeteries and agricultural land in settlements along the contact line. The SMM supported these efforts by facilitating dialogue and monitoring localised ceasefires during which such activities were undertaken. In 2019, from 6 to 12 February, the SMM facilitated and monitored adherence to localised ceasefires to enable demining activities near four schools and one kindergarten in government-controlled Hranitne, Mykolaivka, Zolote4/Rodina and

24 This notwithstanding, the SMM cannot confirm whether or not the areas mentioned below are free of mines or UXO.
Stanytsia Luhanska, as well as at three schools and two kindergartens in non-government-controlled Holmivskyi and Olenivka. Later in the year, between 1 and 4 May, the SMM monitored and facilitated adherence to the ceasefire for inspection and demining activities at 19 cemeteries in 11 government-controlled areas (including Zolote area and Katerynivka, as well as Svitlodarsk, Vozdvizhenka, Luhanske and Myronivskyi).

In line with the discussions of the December 2019 Normandy Four Summit, which agreed on the updating of a mine action plan, the issue was discussed in the TCG Working Group on Security Issues (WGSI), with the Co-ordinator proposing a focus on areas frequently used by civilians particularly the areas between the EECPs and the corresponding checkpoints among other areas. Between 30 March and 27 April 2020, the Mission facilitated and monitored the adherence to localised ceasefires for the conduct of inspection and demining activities by the Ukrainian authorities at 44 cemeteries located in 27 settlements in government-controlled areas of Donetsk and Luhansk regions. This period fell during Easter when many civilians visit the graves of their loved ones.

Since June 2020, the Mission also facilitated and monitored the adherence to localised ceasefires for the demining of agricultural land around several settlements in government-controlled Luhansk region, such as Heivka, Hirsky, Stepove Orikhove and Novotoshkivske.

In September 2020, the WGSI reached a common understanding on a Framework Decision on Mine Action, which included 19 of the 20 originally proposed areas for demining, including at all five operational EECPs (Maiorsk, Marinka, Novotroitske, Hnutove and Stanytsia Luhanska). The final endorsement by the TCG is still pending.
CONCLUSION

In the past six years, the conflict in eastern Ukraine has taken a high toll on civilians on both sides of the contact line. Between 1 January 2017 and 15 September 2020, the SMM has confirmed nearly 950 civilian casualties in the conflict-affected areas of Donetsk and Luhansk regions. While the number of casualties has decreased every year since 2017, civilians continue to be killed and injured by shelling, SALW-fire, mines, UXO and other explosive devices. As noted in this report, as well as in other SMM reports, the presence of these weapons results not only in casualties but also impacts the lives and livelihoods of civilians on both sides of the contact line, including their freedom of movement, ability to work and their access to education and health services.

It is critical that the ceasefire is fully respected and that the sides prioritize measures that aim at protecting civilians from ongoing violence, particularly from the use of artillery and mortar fire in and around residential areas.

As noted in Chapter 4, the measures agreed to by the sides on 22 July 2020 to strengthen the ceasefire are having a tangible effect on the number of civilian casualties. Between 27 July, when the measures came into effect, and 15 September, the SMM has observed a notable and sustained decrease in the number of ceasefire violations recorded. Between 27 July and 15 September, the Mission received only one report of a civilian casualty due to shelling or SALW-fire. The measures that the sides agreed to on 22 July included a “ban on the deployment of heavy weapons in and around settlements, primarily at civilian infrastructure, including schools kindergartens, hospitals and public premises”.

It is imperative that the sides adhere to these measures, as the presence of military and military-type hardware and positions in and around civilian dwellings and infrastructure draws fire. Between 1 January 2017 and 15 September 2020, the Mission has observed more than 270 instances of weapons in violation of withdrawal lines on both sides of the contact line, with more than half of these instances occurring in the densely populated area around Avdiivka, Yasynuvata and parts of Donetsk city.

While shelling continues to be the leading cause of civilian casualties, mines, UXO and other explosive objects have resulted in more fatalities during the reporting period than shelling and SALW-fire combined, in particular among men and boys. Even after 27 July, the Mission confirmed reports of eight civilian casualties due to mines and other explosive objects. Mines, ammunition that is left behind by the sides and UXO threaten civilians even if there is a decrease in the number of ceasefire violations. In this regard, in line with its dialogue facilitation function, the SMM has supported the efforts of the sides to obtain security guarantees for demining-related activities while patrols monitored adherence to locally agreed ceasefires during mine clearance. The Mission remains committed to facilitating dialogue and monitoring localised ceasefires to support demining efforts by the sides.

The sides should adhere to commitments made in the March 2016 TCG Decision on Mine Action to mark and fence off areas to be cleared of mines and to provide mine and UXO risk awareness training for civilians. The awareness training should be informed by a thorough gender analysis that goes beyond looking at sex- and age-disaggregated data to fully understand why certain groups are more prone to death and injury by these objects. Mine action has been a topic of discussion at the WGSI. In line with the conclusions of the December 2019 Paris Normandy Four Summit, participants reached an understanding, at the 1 September 2020 WGSI meeting, on an updated mine action plan, including at EECPs and corresponding checkpoints, although endorsement by the TCG is still pending.

The Mission takes the corroboration of civilian casualties seriously and puts significant effort and resources into thoroughly following up on reports of casualties, despite impediments often experienced in non-government-controlled areas and restrictions imposed on the SMM’s operations due to the COVID-19 pandemic, and will continue to include confirmed cases in its reports.

25 Press statement of the Special Representative after the regular meeting of the TCG on 22 July 2020 https://www.osce.org/chairmanship/457985
26 Press statement of the Special Representative after the regular meeting of the TCG on 2 September 2020 https://www.osce.org/chairmanship/463667