

THEMATIC REPORT

Civilian casualties in eastern Ukraine 2016

“When will this be over?”

The question SMM monitoring officers are asked most often in Donetsk and Luhansk regions on both sides of the contact line.

September 2017

Published by the OSCE Special Monitoring Mission to Ukraine

© OSCE Special Monitoring Mission to Ukraine 2017

All rights reserved. The contents of this publication may be freely used and copied for non-commercial purposes, provided that any such reproduction is accompanied by an acknowledgement of the OSCE Special Monitoring Mission to Ukraine as the source.

Available electronically in English, Ukrainian and Russian at:
<http://www.osce.org/ukraine-smm>

Table of contents

A. Summary	- 1 -
B. Introduction	- 2 -
C. Customary international humanitarian law	- 3 -
D. SMM findings	- 4 -
1. Corroborated civilian casualties	- 4 -
i) Incident types	- 5 -
ii) Civilian casualties per region	- 7 -
2. Ceasefire violations and civilian casualties	- 10 -
3. Conduct of hostilities and civilian casualties	- 15 -
i) The use of heavy weapons in and near populated areas.....	- 15 -
ii) The impact of mines, UXO and IEDs	- 22 -
iii) Relocation of checkpoints and fighting along crossing routes.....	- 27 -
E. Concluding observations.....	- 30 -

A. Summary

In the context of OSCE's engagement in and around Ukraine, the Permanent Council Decision No. 1117 tasked the OSCE Special Monitoring Mission to Ukraine to "monitor and support respect for human rights and fundamental freedoms".¹ Furthermore, the SMM facilitates and supports the implementation of the Minsk agreements, which aim the achievement of a peaceful resolution of the conflict.

In line with its mandate and with the overall aim to reduce tensions and foster peace, stability and security in Ukraine, the SMM monitors and reports on the impact of ongoing violence which continues to endanger the lives of civilians, cause civilian casualties, and damage vital civilian infrastructures.

The Mission confirmed 442 (88 killed, 354 injured) civilian casualties occurring in Donetsk and Luhansk regions in 2016. Cases occurred predominantly in Donetsk region. Weapons proscribed by the Minsk agreements² have been extensively used, most often tanks, mortars and artillery. Shelling, mostly occurring during the night, from various artillery systems with large calibre, represents the major cause of civilian casualties. The SMM observed the increased use of heavy weapons near the contact line, recurrently from October, of multiple launch rocket systems (MLRS). The majority of injured and killed civilians were men. Mines, explosive remnants of war (ERW), booby traps and improvised explosive devices (IED), which proportionally cause more fatalities than shelling, were responsible for most of the remaining casualties. Boys (under 18 years old) were predominantly affected by incidents attributed to mishandling of explosives, representing almost 90 per cent of child victims.

Little progress was registered in the marking, fencing and mapping of mine contaminated areas along the crossing routes, used daily by an estimated 25,000 civilians. The use of small arms and light weapons (SALW) caused the majority of victims recorded in the immediate vicinity of entry-exit checkpoints (EECPs). The SMM also noted that on many occasions the relocation of checkpoints on those routes triggered an escalation of violence in nearby hotspots, resulting in casualties. The SMM established that during the reporting period, the Ukrainian Armed Forces, "LPR" and "DPR" armed formations continued to often fire out of and into residential

¹ OSCE, Permanent Council, Decision No. 1117, Deployment of an OSCE Special Monitoring Mission to Ukraine (SMM), PC.DEC/1117, March 2014.

² The Minsk agreements are composed of the 5 September 2014 Protocol, the 19 September 2014 Memorandum, the 12 February 2015 Package of Measures, including the Addendum of 29 September 2015 and the 21 September 2016 Framework Decision of the Trilateral Contact Group relating to disengagement of forces and hardware.

areas, as they located armed positions in and near civilian objects. With sides positioning themselves as close as 200m from each other in some instances, civilians living near the approximately 500km-long contact line were and continue to be particularly vulnerable to the indiscriminate use of weapons. In many settlements close to the contact line there was no distinction between armed positions and civilian dwellings as armed units were embedded in villages, including through occupation of private properties. The SMM findings reveal the situation of elderly people as of particular concern, notably in areas that were not fully controlled by any of the sides, where they represented about 40 per cent of casualties. All sides are responsible to take all necessary measures to ensure the protection of civilians from ongoing violence and to take precautionary measures to limit effects of attacks.

B. Introduction

This expert report examines cases of civilian casualties documented by the Mission throughout 2016 in relation to ceasefire violations and the conduct of hostilities. By providing data on the number of ceasefire violations, types of weapons used and information on the most affected locations, the SMM seeks to underline the effects of certain patterns of hostilities on both the lives and the physical integrity of the civilian population. For the purposes of this report, a civilian casualty therefore refers to a non-combatant who suffers injury or death as a result of hostilities.

The findings in this report are based on regular monitoring by the SMM from 1 January to 31 December 2016 in the Donetsk and Luhansk regions of Ukraine. Every case was corroborated by consulting at least three independent sources, gathering accounts from victims and witnesses, speaking with medical workers, law-enforcement officials, military personnel, members of armed formations and other interlocutors. The SMM monitors also carried out impact site assessments in populated areas and other locations, where civilian casualties were reported, gathering information, among other things, on types of weapons used and the proximity of civilian and military objects to craters. By monitoring the situation along the crossing routes, the SMM also identified the impact of restrictions to civilians' freedom of movement on their safety and security while travelling across the contact line. Information available on areas contaminated by mines, ERW, booby traps and IEDs are also taken into account in this report.

The corroboration process depends on the operational environment. In order to carry out its mandated tasks, the SMM's freedom of movement is critical. From 1 January to 31 December 2016 the SMM encountered nearly 1,950 restrictions to its freedom of movement - 66 per cent of which occurred in non-government-controlled areas. These restrictions undermined the SMM's ability to access incident sites, hospitals and morgues, particularly in "DPR"- and "LPR"-controlled areas. Zones where intensity of violence was observed often coincided with the areas where all sides

restricted the SMM's freedom of movement.³ Refusal of "LPR" and "DPR" members to discuss cases with SMM also impacted the corroboration process. Due to these restrictions, 12 per cent of casualties reported to the SMM could not be corroborated fully and are not included in the overall numbers in this report.

The corroboration process can take months and the Mission reviews the status of cases as information becomes available. When information is unclear, the Mission does not record a case as confirmed until more satisfactory or reliable information is obtained.

C. Customary international humanitarian law

The SMM for the purposes of this report is referring only to the body of customary international humanitarian law (IHL)⁴, which is applicable to all armed conflicts.⁵ These rules oblige parties to the conflict to distinguish between the civilians and combatants,⁶ civilian objects and military objectives, avoid indiscriminate attacks,⁷ and take all feasible measures to avoid and minimize injury to civilians or their property.⁸ Furthermore, customary rules of IHL contain general prohibition of locating military objectives in densely populated areas⁹ and provide certain restrictions concerning use of explosive devices and certain other means and methods in the conduct of hostilities.

³ OSCE SMM Thematic Report, *Restrictions to SMM's freedom of movement and other impediments to fulfilment of its mandate*, January to June 2016, <http://www.osce.org/ukraine-smm/261066?download=true>.

⁴ Customary international law consists of norms that come from "a general practice accepted as law" and exist independently of treaty law. The Rules referred to in this section were codified in the Study on customary international humanitarian law conducted by the International Committee of the Red Cross and originally published by Cambridge University Press. The study identified 161 rules of customary IHL that constitute the common core of humanitarian law binding on all parties to all armed conflicts. These rules enhance the legal protection of victims of war throughout the world. See Customary IHL database containing all rules identified by the ICRC [Electronically available at <https://www.icrc.org/customary-ihl/eng/docs/home>].

⁵ The SMM is mandated to "[g]ather information and report on the security situation in the area of operation" and is not in a position to classify the nature of the conflict in Ukraine (as either international or non-international armed conflict).

⁶ See Commentary to the Rule 1, which stipulates that the term "combatants" in this rule is only used in its generic meaning and indicates that these persons do not enjoy the protection against attack accorded to civilians, but this does not imply a right to combatant status or prisoner-of-war status, as applicable in international armed conflicts [Electronically available at https://www.icrc.org/customary-ihl/eng/docs/v1_rul_rule1].

⁷ These are attacks which are of a nature to strike military objectives and civilian objects without distinction, either because they are not or cannot be directed at a specific military objective or because their effects cannot be limited as required by IHL. ICRC, *International humanitarian law, a comprehensive introduction*, August 2016.

⁸ See Rule 1 – The Principle of Distinction between Civilians and Combatants, Rule 7 – The Principle of Distinction between Civilian Objects and Military Objectives, Rule 11 – Indiscriminate Attacks, Rule 14 – Proportionality in Attack, Rule 15 – Precautions in Attack [Electronically available at https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul].

⁹ See Rule 23 – Location of Military Objectives outside Densely Populated Areas, Rule 24 – Removal of Civilians and Civilian Objects from the Vicinity of Military Objectives [Electronically available at https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul].

D. SMM findings

1. Corroborated civilian casualties

Between 1 January and 31 December 2016 the SMM documented 442 cases of civilian casualties in the areas affected by the conflict in eastern Ukraine: 88 civilians were killed (22 women, 58 men, one girl of less than two years old and five boys as well as two adults whose sex is unknown) and 354 were injured (118 women, 209 men, 12 girls and 15 boys) with male victims representing 64 per cent of the overall total number. More than 70 per cent of all killed and injured individuals are adults between 18 and 64 years old with the majority aged between 46 and 64. At least 78 victims¹⁰ were aged over 65.

Table 1

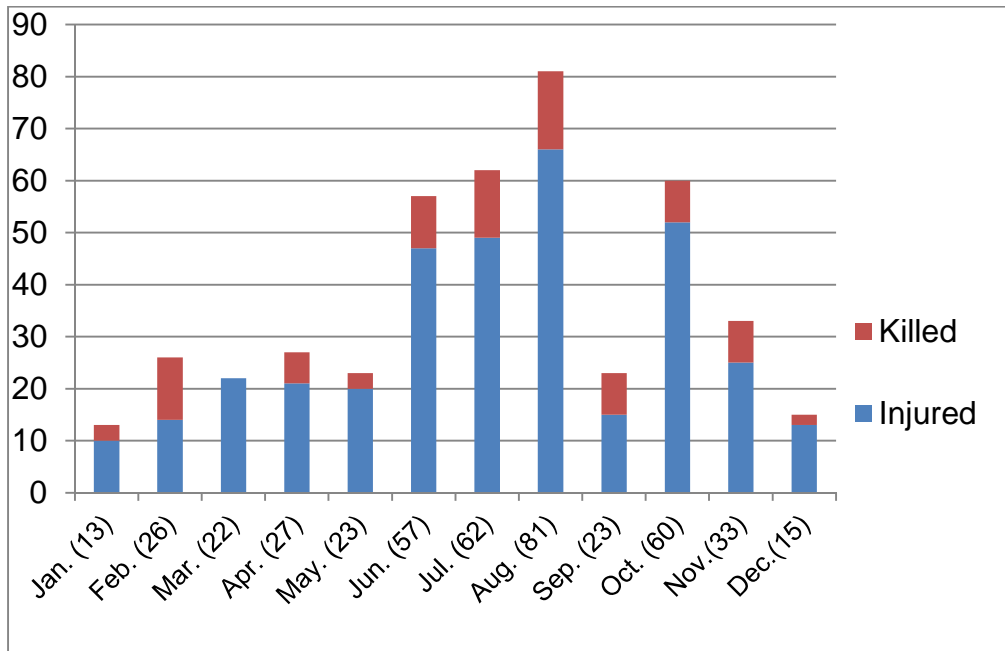
	Adults				Children				Total
	Women	Men	Sex unknown	Total adults	Girls	Boys	Sex unknown	Total children	
Killed	22	58	2	82	1	5	0	6	88
Injured	118	209	0	327	12	15	0	27	354
Total	140	267	2	409	13	20	0	33	442

Table 2

	Casualties per month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Killed	3	12	0	6	3	10	13	15	8	8	8	2	88
Injured	10	14	22	21	20	47	49	66	15	52	25	13	354
Total	13	26	22	27	23	57	62	81	23	60	33	15	442

¹⁰ This number is not exact as, for some corroborated cases, the SMM was not able to confirm the age of the victim, for example in cases where the victim was described as “in his 60s” or simply “elderly”.

Figure 1

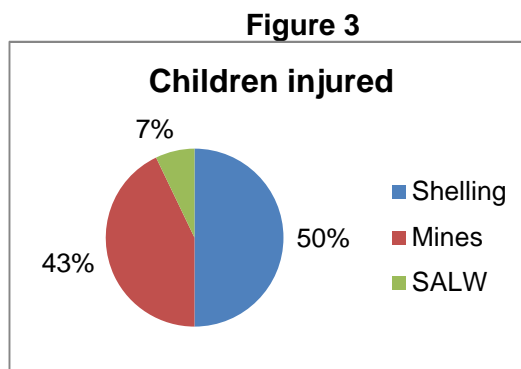
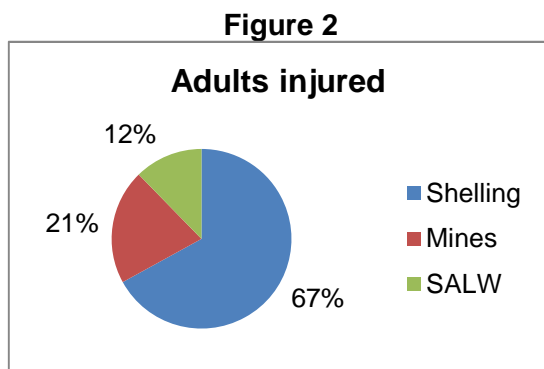


i) Incident types

The vast majority of casualties were attributed to shelling, including from artillery and mortars with large calibre: 263 civilians – 32 killed and 231 injured – were victims of fighting involving weapons proscribed by the Minsk agreements. Women were proportionally more affected by shelling than other type of incidents, constituting 41 per cent of total number of victims for this type of incident.

In total, 115 civilians – 37 killed and 78 injured – fell victim to various types of explosives, including mines, ERW, booby traps and IEDs, which were the second highest cause of casualties. Boys represented approximately 75 per cent of the overall number of child victims of this category of weapons. Also, proportionally, mines/UXO/IEDs resulted in a higher rate of fatalities than shelling, 32 per cent versus 12 per cent. The majority of victims of shelling, 88 per cent, survived with injuries, compared to only 68 per cent of victims of mines/UXO/IEDs.

Small arms and light weapons (SALW) accounted for 14 persons killed and 42 injured. Shooting along crossing routes is of serious concern, particularly at Marinka and Maiorsk EECs areas where the Mission reported five cases between July and December 2016.



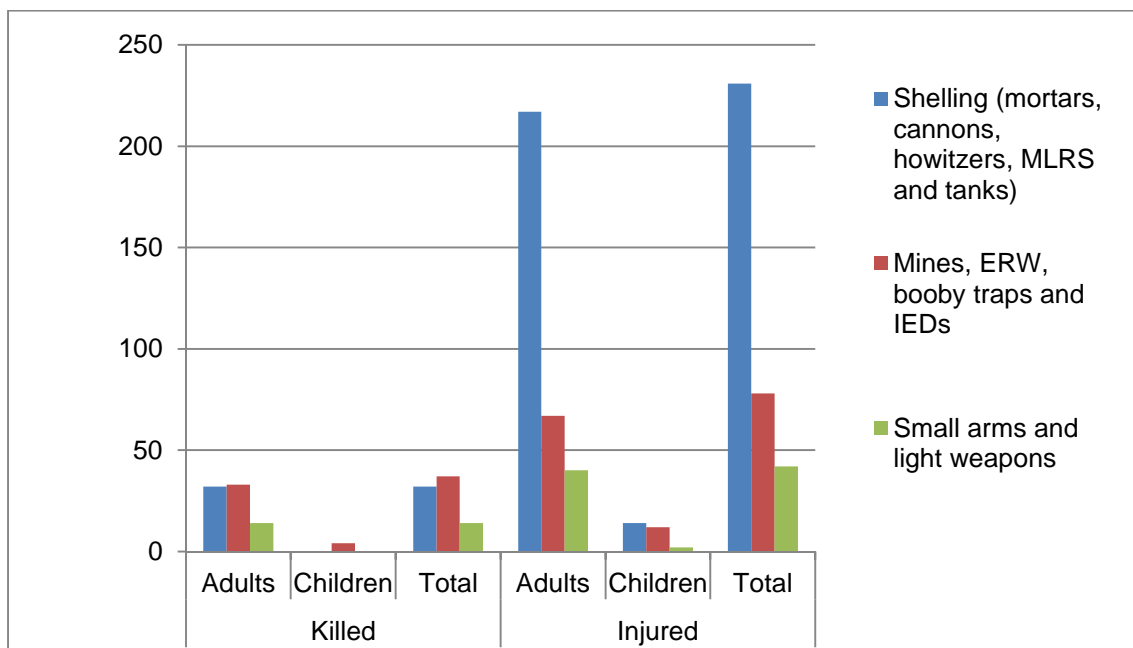
The SMM also documented four civilian casualties from road incidents involving military vehicles and four other conflict related cases.¹¹

Table 3

Type of incident (weapon)	Killed			Injured			Total
	Adults	Children	Total	Adults	Children	Total	
Shelling (mortars, cannons, howitzers, MLRS and tanks)	32	0	32	217	14	231	263
Mines, ERW, booby traps and IEDs	33	4	37	67	12	78	115
Small arms and light weapons	14	0	14	40	2	42	56
Road incidents with military vehicles in the conflict zone	2	0	2	2	0	2	4
Other conflict related cases	1	2	3	1	0	1	4
TOTAL	82	6	88	88	28	354	442

¹¹ Two young boys were killed by downed power lines on 26 June in “DPR”-controlled Pikuzy; one woman died because of stroke during shelling in Horlivka in July and one woman requested hospitalization for smoke inhalation resulted from shelling in Makiivka in October.

Figure 4



ii) Civilian casualties per region

The majority of casualties – 281 out of 442 – occurred in non-government-controlled areas, with 57 civilians killed and 224 injured while 148 casualties (28 killed and 120 injured) were reported in government-controlled areas. Additionally, 13 cases (three killed and ten injured) occurred in locations not fully controlled by any of the sides¹² where 40 per cent of victims were over 65 years old.

Incidents leading to civilian casualties mostly occurred in Donetsk region where the Mission confirmed 355 cases: 68 killed and 287 injured. Of these, 242 (45 killed, 197 injured) were recorded in “DPR”-controlled areas, 108 (21 killed, 87 injured) in government-controlled areas and five (two killed and three injured) in areas along the contact line between armed positions.

Luhansk region saw a lower number of casualties than Donetsk with 20 civilians killed and 67 injured: 40 (7 killed, 33 injured) were recorded in government-

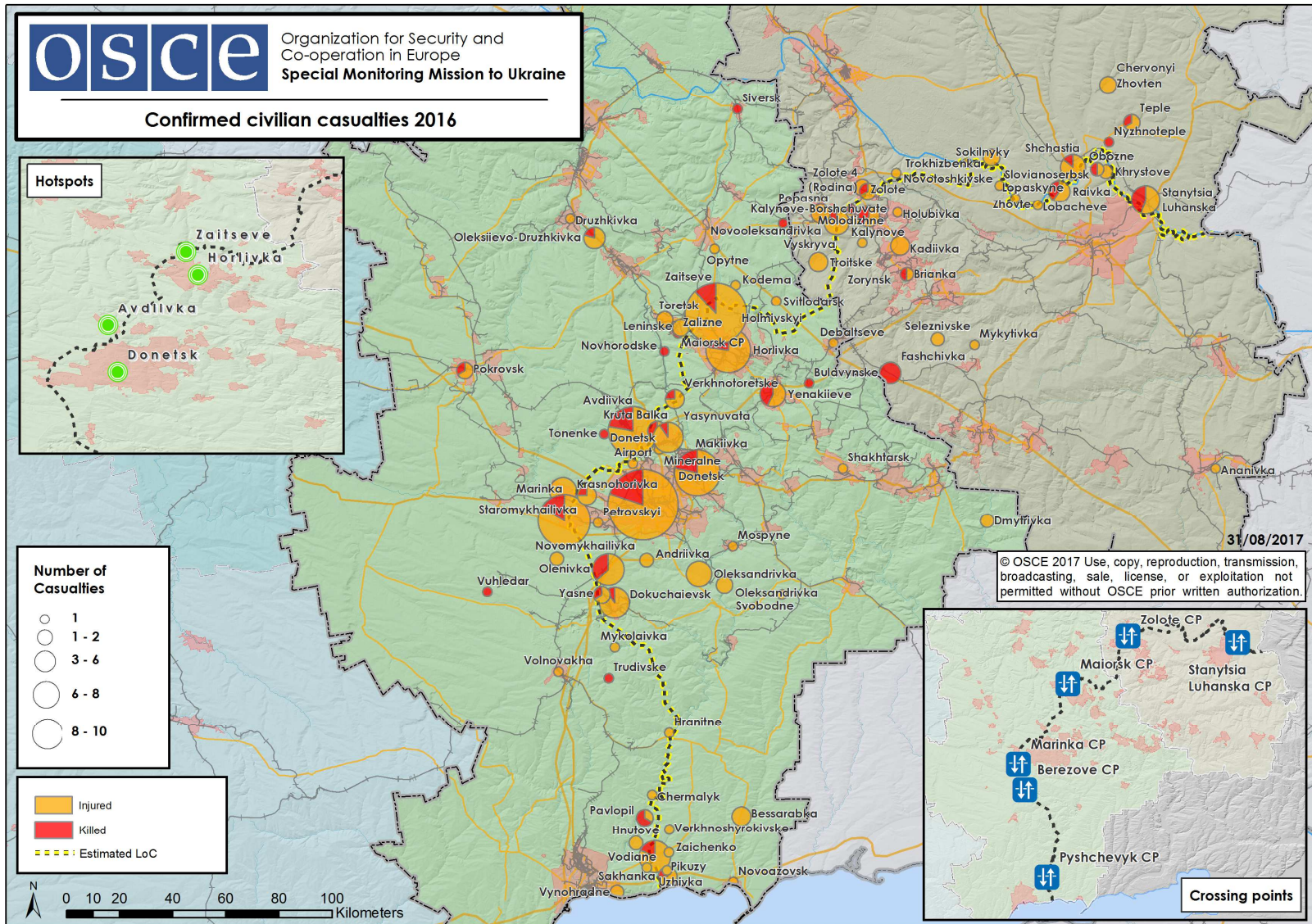
¹² Those locations include Marinka, Novooleksandrivka, areas between Maiorsk CP zero and Horlivka CP zero, part of Zolote-4, areas of Zaitseve not under control of any of the sides. For example, Novooleksandrivka was the location of six casualties in 2016 (four due to shelling). Approximately 90 residents, mostly elderly women, continue to reside there, with no access to medical services, no electricity or water and extremely restricted freedom of movement. Two small children also live in the village.

controlled-areas, 39 (12 killed, 27 injured) in non-government-controlled areas, while six persons were injured in Novooleksandrivka, a village close to the contact line without the effective control of either side, as well as one man injured in Zolote.

Table 4

	Casualties per region			
	Government-controlled	Non-government-controlled	Control of none of the sides	Total
Killed	28	57	3	88
Injured	120	224	10	354
Total	148	281	13	442

This distribution is in part a result of the particular location of the contact line which stretches around the periphery of two major urban settlements, Donetsk and Horlivka, both located in parts of Donetsk region not controlled by the Government. In 2016, ceasefire violations recorded in the periphery of these two cities accounted for some 25 per cent of all the ceasefire violations recorded by the Mission along the entire contact line. Correspondingly the majority of civilian casualties documented by the Mission relates to those areas.



2. Ceasefire violations and civilian casualties

On 5 September 2014, the Protocol agreed in Minsk called for an immediate cessation of the use of weapons. More than two years later the adherence to ceasefire is not respected and civilian lives are constantly under threat.

A close examination of the data collected by the SMM shows that there is a correlation between ceasefire violations and corroborated cases of civilian casualties caused by shelling and SALW and that increased intensity of fighting contributes to an increase in the number of civilian casualties. The impact of hostilities on civilian lives and livelihoods varied from location to location depending on different factors, such as the population size, distance between populated areas and routes crossing the contact line, and the positioning and movement of weapons inside of and close to populated areas.

From September to December 2015, the SMM noted that renewed commitments of sides to comply with the ceasefire¹³ contributed to decreasing number of civilian casualties¹⁴, despite continued ceasefire violations. Since January 2016, however, the number of ceasefire violations recorded by the SMM in 2016 increased gradually with a first sharp spike of violence in mid-April and then again in June, July, August, October, November, and December. In October, the increase of violence was particularly notable in the eastern sector of Mariupol where the number of ceasefire violations recorded in the area increased by more than 1,000 per cent comparing to the previous month. The use of weapons proscribed by the Minsk agreements – notably artillery pieces, including MLRS, also increased dramatically.¹⁵ In total, around 60 per cent of the cases of firing MLRS and artillery systems recorded in 2016 were observed from October to December 2016.

As shown in the ceasefire violations table below, flare-ups observed in mid-November and again in the second half of December were the most violent recorded by the Mission in 2016. A renewed commitment to adhere to the ceasefire came into

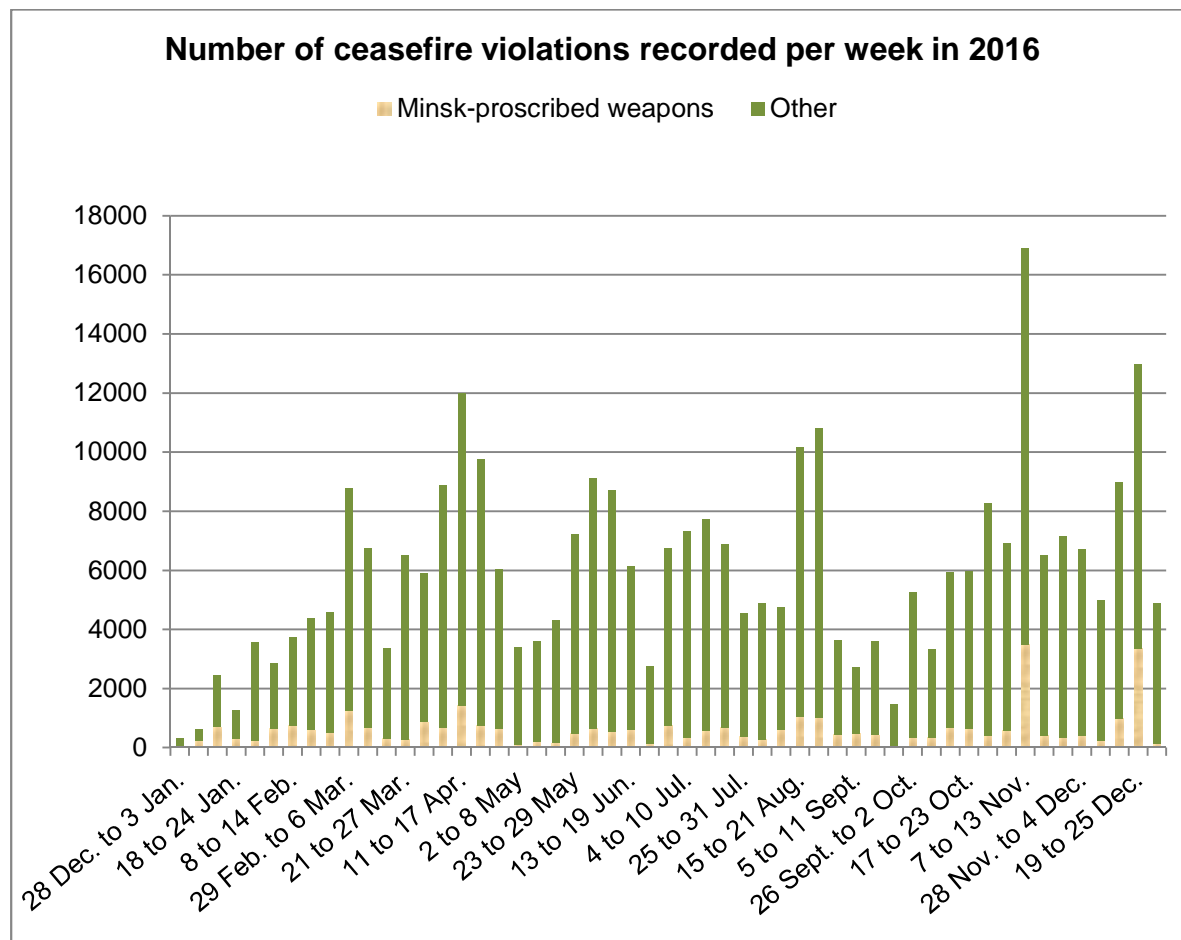
¹³ The Addendum to the Package of measure of 12 February is a plan for withdrawal to a distance of 15km each side for tanks, artillery pieces up to 100mm in calibre, and mortars up to, and including 120mm in calibre, creating a 30km security zone.

¹⁴ “The number of civilian casualties recorded by HRMMU between 16 August and 15 November 2015 was 178 (47 deaths and 131 injured). This is 232 per cent decrease compared to the previous reporting period (16 May-15 August) when 413 civilian casualties (105 killed and 308 injured) were recorded”. OHCHR Report on the human rights situation in Ukraine from 16 August to 15 November 2015.

¹⁵ The SMM recorded the firing of at least 560 artillery rounds, 200 mortar rounds and 60 MLRS rockets in the area compared with 90, 10 and 0 in September.

effect at midnight on 24 December resulting in a sharp decrease in ceasefire violations during the following week.

Figure 5



The increased violence in the region was reflected in the number of civilian casualties. Thus, during the first four months, on average 22 casualties per month were confirmed, with the lowest number in January (13) and the highest in April (27). During the Orthodox Easter holiday in May there was a temporary decrease in fighting, which resulted in a 40 per cent reduction in terms of ceasefire violations recorded over the month and a drop in civilian casualties in May (23). March was the only month with no fatalities. Starting in June, however, and during the next two months,¹⁶ the Mission registered a high number of ceasefire violations and increased

¹⁶ During July and August fighting in Donetsk region was focused at the hotspots of Donetsk airport-Avdiivka-Yasynuvata area, "DPR" controlled Horlivka, government controlled Svitlodarsk and further south in the wider area of Shyrokyne.

civilian casualties – a monthly average of 63 persons with the highest number of 81 cases in August – a level unseen since August 2015.¹⁷

In September, following the call by the Trilateral Contact Group (TCG) to the parties to recommit to the ceasefire on the occasion of the start of the school year,¹⁸ the number of ceasefire violations recorded decreased by some 65 per cent from the previous month and the number of civilian casualties dropped to 23 cases in September (down 70 per cent from August). The situation changed again in October with an escalation of fighting resulting in 60 civilian casualties, a high number comparable to figures documented throughout the period June-August, with 223 casualties (41 killed, 182 injured); meanwhile, the number of violations had increased by some 115 per cent from the previous month.

Starting from the second half of the month of November, a gradual decrease in casualties was observed with 33 (8 killed, 25 injured) and 15 (2 killed, 13 injured) cases recorded in November and December respectively. Despite the week between 19 and 25 December registering the second highest peak of ceasefire violations by proscribed weapons in all of 2016, the number of casualties by shelling was low, without any fatalities. On the contrary, 46 per cent of the casualties were caused by SALW, including two civilians who were killed in the northern outskirts of Horlivka near Maiorsk EECP, an area which is not fully controlled by any of the sides.

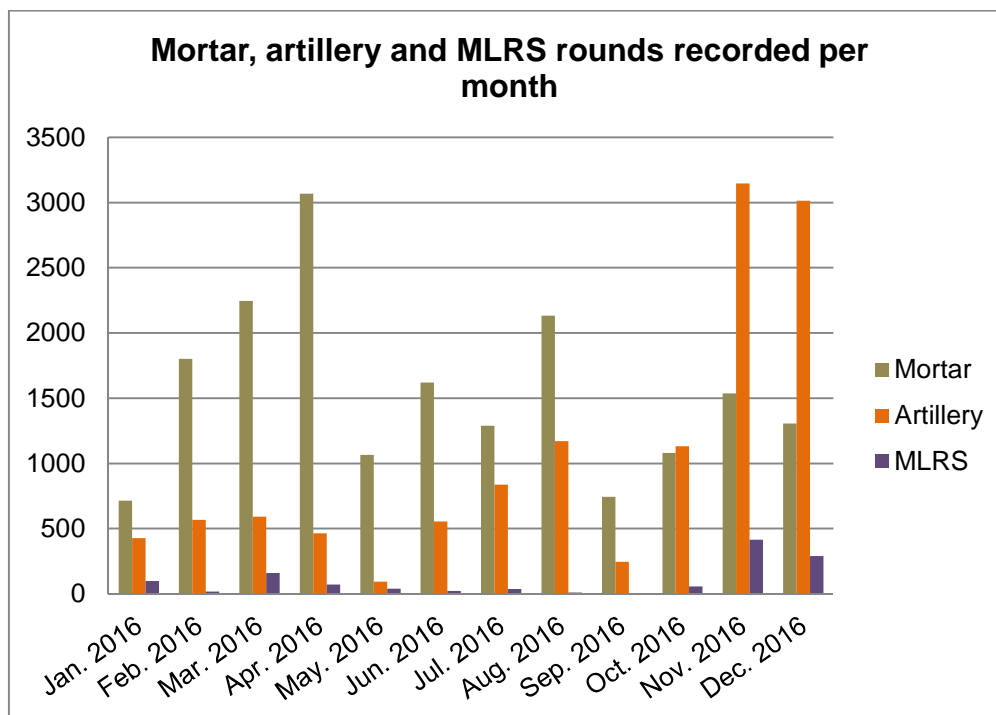
Additionally the Mission noted that from January to the end of May 2016, the majority of attacks that led to civilian casualties occurred during the evening, night and early morning hours. From June onwards, however, the SMM confirmed attacks also being carried out during daytime hours, even if on a lower scale. The Mission corroborated at least 42 cases (5 killed, 37 injured) attributed to daytime shelling between 08:00 and 18:30; and at least 95 (17 killed, 78 injured) to night-time and early morning shelling. Almost 75 per cent of attacks occurred between 19:00 and 03:00. The SMM also observed that many of the surges in violence generally started with the use of SALW and then escalated to mortars and artillery.¹⁹

¹⁷ UN High Commissioner for Human Rights Zeid Ra'ad Al Hussein statement on 3 August 2016 [<http://www.ohchr.org/FR/NewsEvents/Pages/DisplayNews.aspx?NewsID=20329&LangID=E>]

¹⁸ Trilateral Contact Group statement on ceasefire as of 1 September 2016 at <http://www.osce.org/cio/262096>

¹⁹ For example, in January the SMM heard an intense exchange of fire occurring in the "DPR"-controlled areas of Shyroka Balka and Ozerianivka (34 and 35km north-east of Donetsk, respectively). Initial bursts of small arms, anti-grenade launchers and heavy machine-guns were followed by mortar and tank fire, and eventually expanded to include artillery, and even MLRS.

Figure 6



Since mid-April, the SMM has observed an increasing number of weapons missing from permanent storage sites and from known holding areas: some of these facilities were even found completely abandoned at the time of the SMM visit. In the meantime, heavy weapons were increasingly being used. The SMM witnessed a significant increase in the use of long-range artillery, and MLRS on numerous occasions particularly during the first and last quarter of the year.

The majority of ceasefire violations observed along the contact line were recorded in areas that are prone to escalations of violence – most of which have been “hotspots” since September 2014. Constant forward moves towards the contact line by the sides constitute a major factor for the prevailing instability. In 2016, these hotspots included Avdiivka-Yasynuvata-Donetsk airport area,²⁰ the south-western, western and northern outskirts of “DPR”-controlled Horlivka, the area located between “DPR” controlled Debaltseve and government-controlled Svitlodarsk. Other hotspots also included, in the southern Donetsk region the areas of “DPR”-controlled

²⁰ While in the end of December 2015 the triangle Pavlopil-Kominternove-Oktiabr was a major hotspot, in February 2016 a new hotspot emerged. The fighting escalated in the area between government-controlled Avdiivka (17km north of Donetsk) and “DPR”-controlled Yasynuvata (16km north-east of Donetsk) after the Ukrainian Armed Forces moved their position into an industrial area on the south-eastern edge of Avdiivka referred to as Promzona (industrial zone). As a result, the distance between the sides’ forward positions has shrunk with just 100m apart from each other.

Dokuchaievsk, Sakhanka and Pikuzy (former Kominternove), and in government-controlled Vodiane and Shyrokyne. In these hotspots, fighting was observed almost daily with periods of intense clashes. In Luhansk region the high-intensity conflict areas are in and around Stanytsia Luhanska pedestrian bridge and Popasna/Zolote as well as Troitske and Slovianoserbsk.

In Donetsk region, 113 casualties were recorded in the south-western parts of Donetsk city area,²¹ 76 were injured near “DPR”-controlled Horlivka²² and among them, 42 in the area of Zaitseve village, 43 within the Avdiivka-Yasynuvata-Donetsk airport area,²³ and 15 in the Pikuzy/Shyrokyne area²⁴. The only hotspot around which only one injury from shelling was recorded despite the high level of violence observed in the course of the year (representing some 20 per cent of the ceasefire violations recorded along the contact line), was in the area located between government-controlled Svitlodarsk and “DPR”-controlled Debaltseve.²⁵ The other 11 casualties in Donetsk region occurred sporadically in other locations²⁶ close to the contact line.

In Luhansk region the number of ceasefire violations recorded by the SMM in the proximity of populated areas and urban areas continued to increase, especially in the western part of Luhansk region, adjacent to Donetsk region; the western portion of the contact line is not separated by the Siverskyi Donets river unlike on the north-eastern side. Fighting in these hotspots has resulted in 87 civilian casualties, included 20 in Popasna/Kalynove area,²⁷ 9 in Stanytsia Luhanska, 11 in the Slovianoserbsk²⁸ area, and 10 in the Kadiivka (formerly Stakhanov) area.²⁹ Hotspots

²¹ Including government-controlled Krasnohorivka and “DPR”-controlled Staromykhailivka, Government-controlled Marinka and “DPR”-controlled Oleksandrivka, “DPR”-controlled Petrovskiy district of Donetsk city, including Trudovskiy settlement, “DPR”-controlled Kuibyshevskiy district of Donetsk city, “DPR”-controlled Kirovskiy district of Donetsk city and Leninsky district of Donetsk city.

²² Including Horlivka city, including its Besarabka neighbourhood, Mykytivka District and the villages of Holmivskiy, and Mykhailivka.

²³ Including Yasynuvata, Avdiivka, Kyivskiy district of Donetsk city, Kruta Balka and Opytne.

²⁴ Including “DPR” controlled Pikuzy, Vodiane and Sakhanka.

²⁵ Low number of casualties might be explained with the military position being located outside of the town, close to large fields on the outskirts of the city. Ukrainian Armed Forces and “DPR” positions are divided by a field, and no residential buildings are located in the area.

²⁶ District of government-controlled Toretsk, including Novhorodske, Artemove and Toretsk, government-controlled Verkhnotoretske, as well as government-controlled Pervomaiske and Novomykhailivka, places which do not fall under hotspots categories.

²⁷ Including “LPR” controlled Molodizhne, Kalynove, Kalynove-Borshchuvate, Zolote and Novooleksandrivka villages.

²⁸ Including government-controlled Lobacheve, Lopaskyne and “LPR”-controlled Raivka, Zhovte and Obozne.

²⁹ Including “LPR”-controlled Brianka and Pervomaisk.

with many ceasefire violations but few civilian casualties include Kalynove and Sokilnyky.³⁰

3. Conduct of hostilities and civilian casualties

i) The use of heavy weapons in and near populated areas

Certain cities, towns and villages affected by ongoing violence include some of Ukraine's most densely populated areas. According to official statistics the population of Donetsk and Luhansk regions in 2013 was 4.43 million and 2.25 million, respectively. While updated official numbers are lacking, the UN Office for the Coordination of Humanitarian Affairs (OCHA) in Ukraine estimated that approximately 800,000 civilians currently live within 5km on either sides of the contact line, with an estimated 200,000 people in government-controlled areas and another 600,000 in non-government-controlled areas.³¹ A large part of the contact line runs in close proximity to the most populous cities of Donetsk region – “DPR”-controlled Donetsk city (with a pre-conflict population over 1 million) and “DPR”-controlled Horlivka (which had a pre-conflict population of over 292,000 residents³²). While the fighting is concentrated to a larger extent in hotspots adjacent to Donetsk, the majority of civilians caught in crossfire live in “DPR”-controlled areas. Also, SMM findings reveal that the locations where the majority of the civilian casualties occurred are known as locations with a heavy presence of armed elements: Zaitseve, Dokuchaievsk, Pikuzy, Marinka, Staromykhailivka, and several districts of Donetsk city, especially Petrovskiy district.

The village of Zaitseve, located in the northern outskirts of “DPR”-controlled Horlivka, continued to be divided³³ into two parts with firing positions maintained by sides as close as 200-300m from each other.

³⁰ In Kalynove the forward positions are far from the populated areas; in Sokilnyky all the houses have been abandoned by the residents, approximately 300 in total, who are displaced to nearby villages and have stated to SMM that they wish to return home.

³¹ OCHA, Ukraine: Humanitarian Snapshot (as of 8 September 2016), <http://reliefweb.int/report/ukraine/ukraine-humanitarian-snapshot-8-september-2016-enruuk>

³² Horlivka city is divided into three districts, namely Kalininskyi and Mykytivka districts and Horlivka city centre. Source: Census 2001.

³³ The southern part of Zaitseve is known as Zhovanka. It is divided into “upper” Zhovanka (government-controlled) and “lower” Zhovanka (“DPR”-controlled). There is approximately 1.5 km distance between the armed forces and the last “DPR” checkpoints, including the Bakhmutka river which runs nearby. Locals fish there. The local shop and a bus stop are located on the non-government controlled side of Zaitseve, and locals walk through areas between checkpoints (“grey zone”) to get there. Prior the division, the entire population of Zhovanka was estimated at 3,346 people. Currently, there are about 105 households (220 people) in Zhovanka, 160 households (280 people) in Bakhmutka and the rest of the population lives in Pisky.

On 26 March, around 06:00 in the morning, a 70-year-old woman sustained shrapnel injuries to her right leg while in her house located in Zhovanka (government-controlled part of Zaitseve). She told the SMM that soldiers, who appeared to have been located very close to her house, evacuated her to the nearest hospital in Bakhmut. (SMM interview, March 2016)

Ceasefire violations recorded in that zone represent some five per cent of all the ceasefire violations recorded by the Mission along the entire contact line. More than 60 per cent of the ceasefire violations in the whole Horlivka area were recorded in Zaitseve mainly due to indiscriminate shelling of residential areas and civilian infrastructure. Muraviova Street in government-controlled Zhovanka, overlapping with the contact line, suffered the worst damage with the majority of its houses now beyond repair. Two streets of the same size adjoining it are controlled by the sides of the conflict: Maresieva Street is controlled by the Ukrainian Armed Forces and Lisianskovo Street by the “DPR” members. In such areas, as in other villages exposed to risk of shelling, some residents informed SMM that they still used their basements or small food cellars (located inside or outside the main house) as a bomb shelter on a regular basis. A significant decrease in civilian casualties in Zaitseve observed in September continued throughout the last quarter. This was consistent with the decrease in violence observed in the area compared with the previous months. The number of ceasefire violations recorded in the northern outskirts of Horlivka was 45 per cent lower than in August when similar levels of violence were recorded in the region.

On 26 August a 56-year-old female resident of the non-government-controlled part of Zaitseve was in her garden when four shells landed about four to five metres from her. She received numerous shrapnel wounds to the chest, limbs and back. She called her daughter who dragged her to the house, provided first aid and phoned an ambulance, which refused to come to the village because the shelling was continuing. She was then taken to a safe distance from the shelling scene. Approximately one hour later an ambulance picked her up. (SMM interview, August 2016)

With sides positioning themselves close to each other and to residential areas, including next to private houses, the intensity of violence caused extensive damage to residential buildings in those places and in some cases resulted in the destruction

of homes. The SMM continued to see significant damage to populated settlements on both sides of the contact line,³⁴ including collapsed walls and damaged roofs, countless shattered or broken windows and shrapnel damage to the outer walls of apartment buildings and houses. In many cases people received injuries and the damage made the homes uninhabitable or resulted in extreme exposure to the weather conditions, causing even more hardship and increased vulnerability for the residents. In “LPR”-controlled Kalynove-Borshchuvate for example, on 13 October 2016 the SMM observed damage to a civilian house caused by 120mm mortars; living in the house was an elderly woman and a family with a three-year-old child. The impact from the mortar damaged windows and the interior, in addition to severely damaging the storage shed across the yard destroying most of their winter food supplies.

The SMM has regularly reported on the presence and use of heavy weapons, including large calibre mortars and artillery, within the security zone and residential areas,³⁵ all in violation of the Minsk agreements. The SMM carried out impact site assessments in locations on both sides of the contact line, confirming that the sides launched mortar (120mm and 82mm) and artillery (152mm and 122mm) attacks into residential areas. The blasts and fragmentation of these weapons can kill, injure or damage anyone or anything within their wide impact zone which can range from 35 to 200m, depending on the weapon used.

The renewed use of MLRS poses a considerable risk. These weapons are often designed to attack an area rather than a precise target, firing ammunition over a large distance in a short period of time. The Mission confirmed the use of MLRS in residential areas.³⁶ In government-controlled Toretsk (former Dzerzhynsk, Donetsk region), a girl was injured by the use of this weapon in August.

In the majority of residential areas where the SMM conducted impact site assessments, the local population said they often saw mobile firing positions in their

³⁴ See SMM Thematic Report *Hardship for conflict-affected civilians in eastern Ukraine*, February 2017, <http://www.osce.org/ukraine-smm/300276?download=true>.

³⁵ For instance, on 28 August, 350m from Stanytsia Luhanska hospital, SMM could clearly see fresh traces of the use of 120mm mortars. On 29 August, SMM visited a Ukrainian Armed forces' firing position next to the Stanytsia Luhanska hospital and found evidence of a new location that is used for firing mortars; see: <http://www.osce.org/ukraine-smm/261556>. In areas outside government control, on 24 December the SMM saw one stationary BMP-2 at a checkpoint west of Kalynove; one BMP-2 heading east near Debaltseve, one BMP-1 in Debaltseve, and one anti-aircraft gun (ZU-23) mounted on one stationary APC (MT-LB) near Verhulivka; see <http://www.osce.org/ukraine-smm/291136>.

³⁶ For instance, in Horlivka in January and in December, in Pervomaiske in February, in Pervomaiske and Makiivka in July, in Krasnohorivka in August and in November; in eastern sector of Mariupol in October, in Marinka in November; close to Dokuchaievsk in August and in November; in Svitlodarsk area in December.

neighbourhoods: “they bring troops and weapons, they fire and then quickly leave”³⁷, exposing civilians to retaliatory fire. This tactic is widespread and used by the sides, particularly by armed formations.³⁸ Shelling during the day in Mariupol, Donetsk region, for example, was described as so close and audible, that pupils from the local school took refuge in the nearest shelter.³⁹ In another example, on 23 December, local residents of government-controlled Talakivka, Donetsk region, complained that firing positions were so close that they could see the flashes when weapons were firing. In many instances, civilians reported that the shelling occurred overnight and that armed persons had approached them requesting to use the roofs of their houses as firing positions.⁴⁰ Targeting positions in populated areas carries a high risk of civilian collateral damage, and the SMM was informed by civilians that they perceived themselves as targets due to such tactics.

Many residents of the Donetsk region of Ukraine, mostly elderly and pensioners, often informed the SMM that they felt compelled to stay. Some of them indicated that they faced financial difficulties that prevented them from starting a new life somewhere else. Others said they felt too old to move or expressed family or professional reasons to stay. Similar statements were shared with SMM in Luhansk region. In a government-controlled village in Luhansk region, a 75-year-old man explained: “The soldiers asked us if we were scared to stay in [the village], and we said yes, but we have nowhere to go. I was a coal miner for 40 years”.⁴¹

The south-western part of Donetsk city, where some five per cent of the ceasefire violations recorded by the Mission along the contact line were observed, remains one of the areas where the highest number of civilian casualties caused by shelling was recorded in 2016, amounting to 38 per cent of the total number of this category and representing 70 per cent of casualties in this area. Locations of concern include government-controlled Krasnohorivka, “DPR”-controlled Staromykhailivka, government-controlled Marinka, “DPR”-controlled Oleksandrivka and “DPR”-controlled Petrovskiyi district, including Trudovskiyi area of Donetsk city, where ongoing hostilities endanger an estimated 123,500 residents.⁴² Moreover, fighting

³⁷ SMM interviews in October and in November 2016.

³⁸ Center for civilians in conflict (CIVIC), “*We are afraid of silence*”, *Protecting civilians in the Donbas region, November 2016*, <http://civiliansinconflict.org/resources/pub/we-are-afraid-of-silence-protecting-civilians-in-the-donbass-region>

³⁹ SMM interview, December 2016.

⁴⁰ See SMM Thematic report *Hardship for conflict-affected civilians in eastern Ukraine*, February 2017, <http://www.osce.org/ukraine-smm/300276>

⁴¹ SMM interview, October 2016.

⁴² In January 2017, “DPR” members stated that the population of Dokuchaievsk is about 25,000 and less than 4,000 in Oleksandrivka village. In May 2017, the Deputy Head of Marinka district informed SMM that approximately 9,000 residents leave in Krasnohorivka town while 6,500 in Marinka town. During the same month,

around Marinka-Oleksandrivka, located near one of four EECs in Donetsk region, has taken place since the beginning of the conflict.

On 12 August the SMM visited a house in Donetsk city's Petrovskyi district and observed shrapnel damage to the fence, door and a wall of the house as well as broken windows. The SMM assessed that the damage had been caused by an 82mm mortar round, fired from an undetermined direction, which had destroyed a shed upon impact in the yard of a neighbouring home. In the house the SMM observed the body of an elderly man lying on the floor, covered in blood. The man had sustained an injury to his chest and left hand. The man's wife (80 years of age) informed the SMM that the shelling had occurred at approximately 01:45 and had lasted for 15 minutes (SMM interview, August 2016).

Furthermore, the presence of "LPR" and "DPR" armed formations in populated areas is often accompanied by the occupation of civilian objects, including houses.⁴³ In the village Pikuzy,⁴⁴ which currently has about 176 inhabitants,⁴⁵ "DPR" members used abandoned houses within and on the edges of the village. The positions were shelled leading to civilian casualties and damage to civilian objects.

On 24 July a male resident of Pikuzy (30 years old) was injured in his lower limbs at approximately 20:35 from an explosion some 40m from the house, in a backyard. The SMM assessed the damage as most likely having been caused by either a mortar or an automatic grenade launcher. (SMM interview, July 2016)

In addition, the SMM also observed that the presence of Ukrainian Armed Forces is often accompanied by the occupation of civilian objects.⁴⁶ Occupation of public

"DPR" members reported that Staromykhailivka village has about 4,000 residents and that the number of residents in Petrovskyi district is approximately 75,000.

⁴³ To illustrate: from mid-September to mid-October the SMM conducted monitoring activities related to occupation of civilian houses in 33 villages of Luhansk region and noted cases of occupation of houses by armed persons in 13 villages located in non-government-controlled areas, confirmed by property owners, neighbours and armed persons.

⁴⁴ The section of the contact line which is located east and northeast of Mariupol represented in 2016 more than 10 per cent of the CFVs recorded by the Mission in the security zone.

⁴⁵ This figure is provided by a "DPR" member ("village administration").

⁴⁶ From mid-September to mid-October the SMM noted cases of occupation of houses by armed persons in 14 villages under control of the government confirmed by property owners, neighbours and armed persons.

buildings also has a negative impact on the access of civilians to public services, including education and medical care. The SMM has observed military-type installations and armed people inside or near schools and kindergartens on both sides of the contact line. In August for instance, in Luhansk region the SMM visited 41 educational establishments (schools, universities, student dormitories, kindergartens, summer camps and colleges) on both sides of the contact line and found 12 cases where parts of their premises were used by armed elements.⁴⁷

The hostilities have heavily affected vital civilian infrastructure, water and electrical facilities, located close to the contact line and in hotspot areas.⁴⁸ For example, the area around Donetsk Water Filtration Station (DFS), which purifies water for more than 345,000 people⁴⁹ on both sides of the contact line, was shelled numerous times since August 2016,⁵⁰ causing repeated disruption of service. During the reporting period, more than 16,000 people in Marinka and Krasnohorivka in Donetsk region were without gas since summer 2014 when a gas pipeline was damaged,⁵¹ and 280 residents of Zhovanka had no electricity since June 2016. In June 2016, two boys were electrocuted in Pikuzy by damaged power lines.⁵²

Attacking, destroying, removing or rendering useless civilian objects and in particular objects indispensable to the survival of the civilian population is prohibited under international humanitarian law.⁵³

On 19 July, at approximately 17:00, a 19-year-old man sustained a bullet wound to his head, while he was standing in the yard of his house, located on Lermontova Street, Avdiivka. The young man was visiting his parents during a summer break from Medical University. (SMM interview, July 2016)

⁴⁷ Ten in government-controlled area (out of 27 visited) and two in “LPR” controlled area (out of 14 visited)

⁴⁸ For example, in government-controlled Kalynove-Popasna the SMM observed effects of what was assessed to be 122mm artillery impacts damaging a water tower, electrical transformer box, electrical lines, a garden and the roof of a civilian house. Hostilities also affect infrastructure not on the contact line. On 11 November, there was heavy shelling near the power substation in non-government controlled Brianka, which resulted in two civilian casualties, one killed and one injured, and caused a power cut which affected up to 15,000 people, including two operational coal mines where miners were trapped for ten hours underground.

⁴⁹ Figures provided by Voda Donbasa in December 2016

⁵⁰ On 3 August, on 19 November, on 1, 19 and 23 December.

⁵¹ See SMM Thematic Report *Hardship for conflict-affected civilians in eastern Ukraine*, February 2017, <http://www.osce.org/ukraine-smm/300276>.

⁵² See SMM Daily Report 151/2016 of 27 June, <http://www.osce.org/ukraine-smm/248801>.

⁵³ Customary IHL database containing all rules identified by the ICRC [Electronically available at <https://www.icrc.org/customary-ihl/eng/docs/home>].

notes 4 and 5 - Rule 54.

DFS is located within Avdiivka-Yasynuvata-Donetsk airport area, by far the most violent hotspot in the security zone, representing more than 40 per cent of all ceasefire violations recorded by the Mission along the contact line. Compared to this high level of violence, the number of civilian casualties is relatively limited. Notably, the area located between Avdiivka and Yasynuvata, is heavily industrialized⁵⁴ and home to an important railway and road junction north of Donetsk city, which is the fastest and most direct connection from Donetsk city to Horlivka, the largest “DPR”-controlled cities. Fighting, which escalated in March often focused near this major transport junction running parallel to part of the contact line between Avdiivka and Yasynuvata.

While the majority of the ceasefire violations happened in the industrial zone of the city, residential areas were not protected from danger, as they are located less than 2km away. Between 22,000 and 23,000 people⁵⁵ are estimated to live there.

On 30 November, at approximately 07:00, a male individual in his fifties, while in his front yard in the old town of Avdiivka, sustained shrapnel injuries to his abdomen. He said that he went outside to feed his dog and clean up the yard when he heard an explosion near his house. (SMM interview, November 2016)

Conversely, neighbouring villages and towns, such as “DPR”-controlled Makiivka which is adjacent to Avdiivka-Yasynuvata-Donetsk airport area saw a considerable number of casualties, amounting to 23 cases, almost 90 per cent of which resulted from shelling. An example is the incident which occurred on neighbouring streets of a residential area in Makiivka on 27 October, leading to nine casualties (two killed, seven injured). Many of those interviewed by the SMM described being thrown against the wall or the floor during the impacts and being injured by flying shrapnel and shards of glass from shattering windows. The SMM confirmed the deaths of two men as a result of injuries sustained during the shelling. The SMM assessed two of the impact sites as caused by 122mm artillery rounds fired from a north-westerly direction.

⁵⁴ For instance, Avdiivka Coke Plant used to be the largest in Ukraine and employ 4,000 people before the conflict. During the peak of violence in August 2014 the plant stopped working and resumed operations following ceasefire agreement in September 2014.

⁵⁵ Figures provided by Avdiivka Social Protection Department.

In the “Mikroraion Stroitel” residential area, a married couple with their daughter were coming back home when the explosion occurred. The husband was killed on the spot and the daughter sustained injuries. The six-year-old girl was delivered to a hospital with injuries and shrapnel wounds to her face and additional damage to the tissue on the left side of her head. In addition, the left side of her jaw had been broken. (SMM interview, October 2016)

ii) The impact of mines, UXO and IEDs

The 19 September 2014 Memorandum prohibits the installation or laying of mines within the boundaries of the security zone and requires that all mines previously installed or laid in the security zone must be removed. Additionally, the TCG’s decision of 3 March 2016 on Mine Action provides that by 31 March 2016 sides should have ensured “the marking, fencing off and mapping of all the areas that are to be demined and are located in the immediate vicinity of entry-exit checkpoints for civilian population at the contact line and along the roads leading to these checkpoints”. When landmines are used, particular care must be taken to minimize their indiscriminate effects.

Despite the commitment made by the sides, the SMM has observed little progress in their implementation. Mine hazard signs exist at all five crossing routes, however most marking is not standardized or consistent. Mines/UXO signs have different sizes and shapes and are not placed at regular intervals. Overall, minefields are not demarcated and fencing was observed at only two government-controlled checkpoints. The sides using landmines must record their placement.

The SMM frequently reported about mined areas and newly laid mines, including presence of anti-tank mines close to checkpoints along the crossing routes.⁵⁶ At

⁵⁶ For instance, during the first week of April the SMM observed Armed Forces of Ukraine laying mines near a checkpoint in Zolote. The following week, on 13 April the SMM observed for the first time three anti-tank mines near road H-15 between a governments controlled checkpoint in Marinka and a “DPR” checkpoint near Oleksandrivka (near the site of a mine explosion that destroyed a minivan and killed and injured several civilians on 10 February). During the same week, the SMM saw for the first time five anti-tank mines in populated areas of “LPR”-controlled Zhovte (18km north-west of Luhansk) along the Siverskyi Donetsk River, marked merely with sticks with plastic bottles on top. Near a government checkpoint north-east of Berezove (31km south-west of Donetsk) the SMM saw a used rocket-propelled grenade tube and the possible live round of a hand-held grenade launcher, both located (5 and 2m respectively) to a long queue of more than 150 civilian cars. In “DPR”-controlled Verkhnohyrokiivske (formerly Oktiabr) the SMM noted 20 new mine hazard signs on both sides of the road stretching for some 100m. In government-controlled Berdianske the SMM saw 20 new mine hazard signs just 30m from the shoreline. The area parallel to the path leading to the closed ferry crossing route in Zhovte continued to be contaminated with mines and UXO. Twelve anti-tank mines are placed on boards on the road at a militia crossing area at “LPR” controlled Zolote 5 on the contact line, which represents the only asphalt road for emergency, funeral or medical services for residents of non-controlled Zolote 5.

Marinka checkpoint for instance, everyday pedestrians have queued for months around ten unprotected anti-tank mines placed on the side of the road.⁵⁷ On 10 February a minivan was destroyed on the southern side of the H15 highway⁵⁸, close to this checkpoint,⁵⁹ when a driver attempted to avoid the queue of vehicles waiting to cross and drove over an anti-tank mine. Three people were killed, including the driver and two pedestrians standing near the vehicles.

The existence of only one available entry-exit checkpoint in Luhansk region forced a number of civilians to undertake dangerous unofficial crossing routes in Zolote,⁶⁰ and informal ferry crossing routes.⁶¹ The Zolote-Pervomaisk crossing route is not opened for official crossing,⁶² so civilians use informal footpaths in order to cross the contact line. This resulted in four casualties confirmed by the SMM from trip wires: three in July and one in November. In the direct vicinity of the EECP, both the Armed Forces of Ukraine and "LPR" armed formation have installed numerous lines of defence with minefields, trenches and technical obstacles.⁶³

Landmines, IEDs and explosive remnants continue to pose a threat to the lives and physical integrity of civilians. Since control over some areas has changed and positions have moved since the summer of 2014, areas which are now accessible to civilians may include contaminated areas, which, when insufficiently marked and fenced, increase risks for civilians.

During 2016, the SMM corroborated 115 (37 killed, 78 injured) casualties from different explosives in towns and settlements in conflict-affected locations and in

⁵⁷ They were removed in February 2017.

⁵⁸ See SMM Daily Report of 11 February 2016, <http://www.osce.org/ukraine-smm/221851>.

⁵⁹ On 26 January 2016 SMM observed 11 new anti-tank mines and an anti-personnel mine for the first time as part of a fortified Ukrainian Armed Forces position.

⁶⁰ As an illustration, in one of the cases, on 18 July a married couple was injured by a booby-trap in Zolote, while crossing the contact line on their way back to government-controlled area. They told the SMM that they decided to use an informal and dangerous path through the forest after having heard on the news that Stanytsia Luhanska official checkpoint was temporarily closed due to uncontrolled fires in the nearby area.

⁶¹ An incident involving three victims was reported on 31 October on the road from government-controlled Trokhizbenka towards Lopaskyne next to the Siverskyi Donets River, which serves as the natural contact line in the area. This road incident allegedly caused by SALW and self-propelled grenade launcher shooting at three civilian cars is likely related to one of the two informal ferry crossing routes in Luhansk region.

⁶² This EECP is planned as a vehicle crossing route only and no pedestrians would be allowed to pass. There is infrastructure installed on the government-controlled side, but no crossing installations observed on "LPR" side. The only accessible route is a road which goes from UAF checkpoint to the "LPR" controlled checkpoint and is approximately 2,500m long. Similarly as in Stanytsia Luhanska EECP, both sides of this road are mined. Earlier reports indicate possible presence of both anti-tank and anti-personnel mines.

⁶³ Both sides of the road are mined and self-detonations/malfunions or unintended activations of explosive devices have been reported. The road has been cleared to the extent of tarmac only. Anti-tank mines which were earlier installed in front of previous "LPR" block were destroyed in situ, probably because they had been set up as non-removable. There is no emergency infrastructure in case of escalation, the road is so narrow that there is not enough place to bypass should a vehicle breakdown occur. There is no fencing at all on both sides of the road. Marking is only partial with approx. 1,300m still to be marked. There is no alternative road to cross, other roads on either side are not cleared or declared mined, and so are inaccessible for SMM and local population.

checkpoint areas. Among 74 (25 killed, 49 injured) casualties recorded in Donetsk region and 41 (12 killed, 29 injured) in Luhansk region, 57 (14 killed, 43 injured) occurred in government-controlled areas and 53 (21 killed, 32 injured) in areas not controlled by the Government. The SMM also corroborated five (two killed, three injured) casualties occurring in areas that are not under the effective control of either side, usually located between armed positions. There, co-ordination of mine action is particularly crucial as none of the sides takes responsibility or the initiative to demine or to clear.⁶⁴

Furthermore, the Mission recorded instances where new anti-personnel mines, as well as trip wire devices and booby-traps are being continuously laid, including in Zaitseve, Petrovskiy district, Marinka and Zolote.⁶⁵ Anti-personnel mines, which are designed to be exploded by the presence, proximity or contact of a person, and to incapacitate, injure or kill one or more persons, pose a great danger to civilians, as they are set off very easily. For instance, near “LPR”-controlled Zhovte in October, an electrician was wounded by an anti-personnel mine while conducting repairs on the electrical line.

On 23 August a man was killed by a mine explosion close to the Bakhmutka River while fishing. Another elderly man was killed in the same area by a mine explosion on 19 November while grazing his cattle. The river runs parallel to the area of government-controlled Zhovanka and is considered part of the areas under the control of neither side. (SMM interviews, August and November 2016)

The SMM noted civilians, particularly male adults, have been killed, injured and maimed by mines, UXO and IEDs, not only while travelling across the contact line,⁶⁶ but mainly when walking to their homes, and even more often while engaging

⁶⁴ For instance, in Zaitseve area, on 11 August SMM observed an UXO on the side of the road in the areas under effective control of neither side after Maiorsk checkpoint. SMM reported to the JCCC representatives on the spot but since it is in the areas controlled by none of the sides they informed SMM that they cannot do anything about it. There are mine awareness signs put out at the checkpoints by ICRC. In Novooleksandrivka, SMM regularly observes UXO in gardens of village residents; however, no demining team is willing to enter the village as it is in area controlled by neither side.

⁶⁵ For instance, SMM confirmed four casualties from trip wires, three in July and one in November, taking place on informal paths used to cross the contact line. Trip wires placed on civilian properties which resulted in injuries were also reported on three occasions in government-controlled Troitske, in March, April and May, a figure confirmed to SMM in June by Troitske medical clinic.

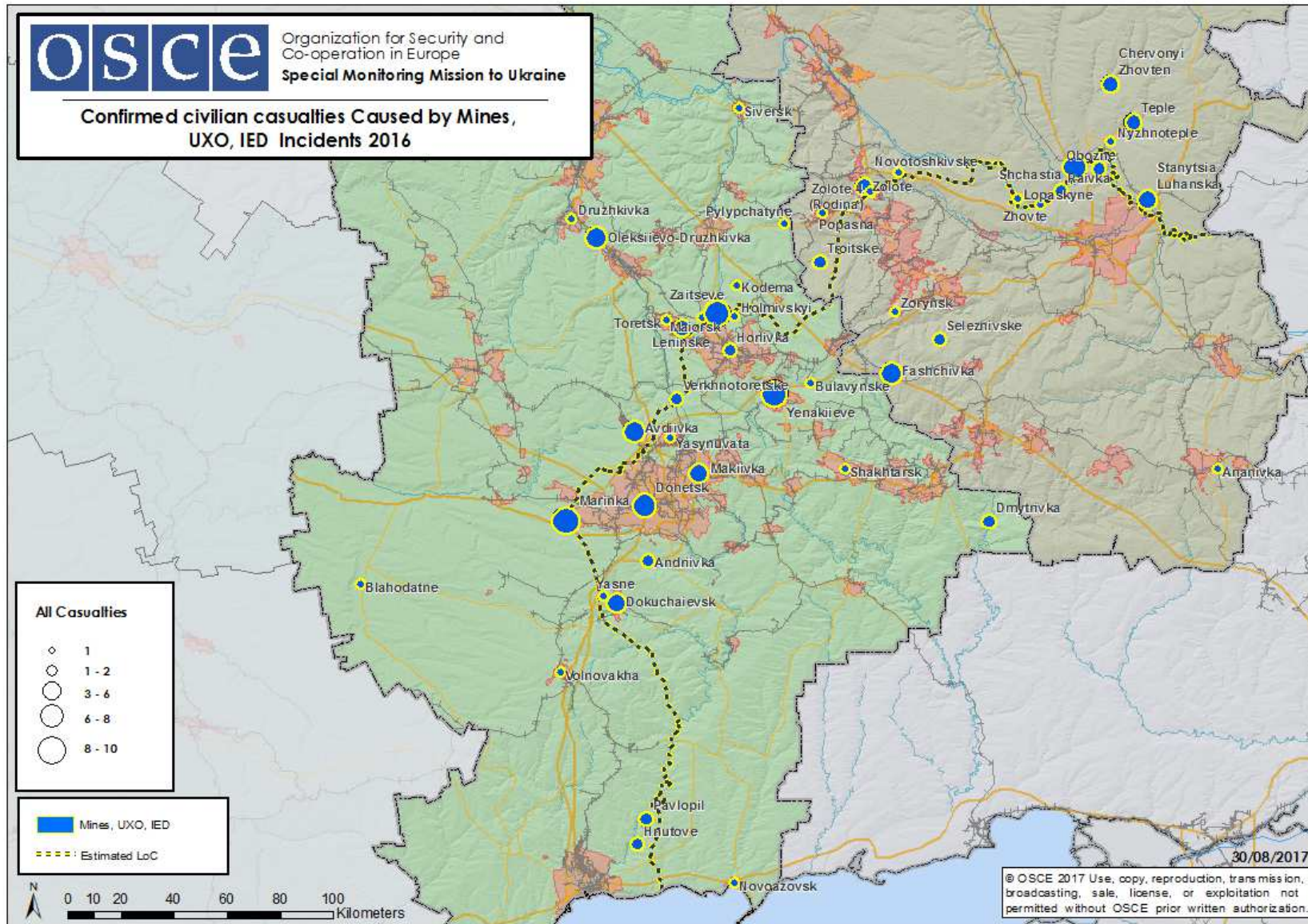
⁶⁶ For example, on 26 October a young man with hearing and speech impairments sustained leg injuries from an improvised explosive device while moving on foot between “DPR”-controlled Horlivka CP zero towards government-controlled areas.

in agricultural works⁶⁷, fishing, collecting mushrooms or firewood.⁶⁸ Moreover, numerous incidents predominantly affecting minors are due to mishandling explosive devices. Notably, 31 civilian casualties (13 killed, 18 injured) confirmed by the Mission were attributed to mishandling of explosives in possession of civilians, more than 50 per cent of them children. Almost 90 per cent of child victims are boys; approximately 50 per cent were killed. Children face particular danger from unexploded ordnance, which has been left on site, sometimes for long periods of time. Dangerous activities specifically affecting them include dismantling and usage of those devices as toys⁶⁹, which demonstrates a low level of mine awareness and underlines a continued need for mine education.

⁶⁷ To illustrate, on 18 May a man was killed and another seriously injured when a tractor on which they were travelling struck an anti-tank mine near government-controlled Pavlopil. Before starting to cultivate the land the owner had received clearance from the State Emergency Agency (SEA) that his field had been examined and cleared. At the time of the incident the men were going to the river to take water needed for their agricultural work. According to a relative of the deceased, SEA did not warn them beforehand that the river banks could be mined. That area was not marked with warning signs.

⁶⁸ In February, one civilian was killed and two injured in government-controlled Teple while collecting firewood. In April a man was injured when he went for fishing and stepped on anti-personnel mine around Dokuchaievsk. In July a civilian was injured while fishing in Lopaskyne. In September, a young man sustained injuries to his leg after detonating a mine while collecting mushrooms in "LPR"-controlled Raivka and in November a man was killed in the same location while fishing. In October, four civilians were injured by a booby trap or mine while collecting mushrooms, two in Perevalsk district, Donetsk region, one in government-controlled Novotoshkivske and one in Shchastia, both in Luhansk region.

⁶⁹ For example, on 4 July in "DPR" controlled Yenakiieve three minors – one-year-old boy, 1.5 year-old girl and 5 year-old boy - were killed and one adult was injured by an explosion of under barrel grenade launcher that one of the children tried to dismantle. Also a 14-year-old boy suffered wounds to his liver and eyes, and two other children suffered superficial wounds in "DPR"-controlled Yenakiieve (41km north-east of Donetsk) when an UXO they were playing with exploded. The SMM noted numerous piles of artillery shells in the areas where the injuries allegedly occurred, most within 75m of civilian houses. (See SMM Daily Report of 27 May 2016, <http://www.osce.org/ukraine-smm/243356>). On 20 August in government-controlled Chervony Zhovten two boys found an UXO in a field and tried to burn it, after which it exploded, injuring them and their friend.



iii) Relocation of checkpoints and fighting along crossing routes

There are five official crossing routes⁷⁰ on the contact line (four in Donetsk and one in Luhansk, the latter for pedestrians only) and an average of 700,000 civilians pass through related entry-exit checkpoints (EECPs) on a monthly basis.⁷¹

During 2016, while the contact line has barely moved, the SMM observed the sides moving forward closer to the contact line leading them to close proximity, sometimes within each other's range of vision; this has occurred notably at crossing routes in Donetsk and Luhansk regions: in government-controlled Berezhove and "DPR"-controlled Olenivka; in government-controlled Maiorsk and "DPR"-controlled Horlivka, near Zaitseve; in the area of Novooleksandrivka; near the closed Zolote-Pervomaisk EECP; and at the Stanytsia Luhanska bridge. Advances contributed to increased tensions and risks for civilians' safety and security, including while travelling along the contact line. Also, the rotations of armed forces and of armed formations were reportedly perceived as imminent offensives, fuelling tensions.

Simultaneously long queues and waiting times at checkpoints exposed civilians to shelling and small arms crossfire. The SMM regularly observed shelling and the presence of explosive remnants of war⁷² in the immediate vicinity of crossing routes. Also, the State Border Guard Service of Ukraine (SBGS) frequently reported that some civilians stayed overnight in the area between sides' checkpoints, the most dangerous moment to be in close proximity of military targets.

Overall, the SMM confirmed seven killed and 21 injured civilians in the immediate vicinity of crossing routes (19 in Donetsk region and 9 in Luhansk region), of which 30 per cent were caused by shelling (one killed and eight injured) while the majority were caused by SALW (43 per cent), also including credible reports of sniper fire. The SMM also noted that in many occasions the relocation of a checkpoint along a crossing triggered escalation of violence resulting in casualties. This pattern has been observed since the end of December 2015 and beginning of January 2016 when the sides moved their positions closer to each other in the area of government-

⁷⁰ Novotroitske, Marinka, Maiorsk, Pyshevyk, Stanytsia Luhanska.

⁷¹ Average calculated on the basis of SBGS's statistics between January and October 2016.

⁷² For example, the SMM observed that grenades had been attached to the temporary wooden structure that connects parts of the broken bridge at Stanytsia Luhanska. After the SMM raised the issue with the Joint Centre for Control and Co-ordination (JCCC), "LPR" members removed four VOG-17 grenades. Attaching improvised explosive devices to these pillars is reckless as it endangers each one of the estimated 4,500 people who cross the bridge daily.

controlled Pavlopil and Pikuzy,⁷³ with the latter consequently taken over by “DPR” members and, as a result, the situation escalated in the area.

In mid-April, the SMM noted that an armed forces’ checkpoint south-west of Donetsk city, near government-controlled Berezove, was moved 3km further north on the H20 road and towards the “DPR”-controlled area. Immediately after, the “DPR”-controlled checkpoint in Olenivka was relocated closer to the newly established checkpoint in Berezove, narrowing the distance between the two sides’ checkpoints to approximately 2km. Tensions increased, including through exchange of fire leading to casualties among civilians.⁷⁴ On 27 April, at 02:45 in the morning, in “DPR”-controlled Olenivka mortar shells hit several vehicles queuing along the road 600m from the last “DPR” checkpoint. The SMM confirmed that four civilians were killed and five were injured by munitions of at least 120mm, and likely both 122mm and 152mm artillery, weapons whose presence within the security zone is explicitly forbidden by the Minsk agreements. This attack also caused damage to private and public property, including a medical clinic.

This incident illustrates how the presence of armed positions close to populated areas and the contact line endangers civilians caught in the conflict. At least 500m from the clinic and 200m from the place of the incident, the SMM observed several residential houses, blocked by ammunition boxes (marked with 120mm mortar sign) and other materials, such as sandbags, assessed as quarters of armed “DPR” members. The SMM observed four heavily armed “DPR” members guarding one of the buildings.

In June, the SMM observed the movement of armed positions along both sides of the Zaitseve-Horlivka crossing route. The Mission noted a newly established armed forces’ checkpoint, located 500m south-east of the last government checkpoint in Maiorsk and 1,500m north-west of a “DPR” checkpoint on the north-western outskirts of Horlivka, which the previous week had been moved 900m further north-west of the last “DPR” checkpoint. Escalation of fighting was observed in the area of Maiorsk-Zaitseve and north-eastern parts of Horlivka city. For instance, in the aftermath of a shelling in Horlivka on 27 June, one civilian was killed and one injured in different locations. A few days later, shelling on 2 and 7 July injured an elderly man (79 years old) and a couple (a 63 year old woman and a 71 year old man). On 30 July, around 19:00hrs, a man in his late 50s sustained shrapnel injuries while in the yard of his

⁷³ A man was killed in Pavlopil by small arms on 7 January while daily shelling injured a man in Pikuzy on 25 January.

⁷⁴ This case recalls similar patterns observed in Shyrokyne, Zaitseve and Hnutove in the past, where a small move of positions from one side led to a reaction from the other side and to a local escalation.

house located approximately 700m from Horlivka checkpoint zero.⁷⁵ He later shared with SMM that the reason he went outside was to check whether his house was damaged from the afternoon shelling.

Also, on 21 October, the EECP from Zaitseve was relocated to Maiorsk, closer to the contact line. As a result, the distance between government-controlled checkpoints (EECP and CP zero) was reduced from nearly 19km to approximately 1km. On 27 October (less than a week after the relocation occurred), the SMM recorded over 250 undermined explosions over 2.5 hours in the morning alone, which subsequently resulted in a temporary closure of Maiorsk-Horlivka EECP for civilians crossing the contact line.⁷⁶ The proximity increased security risks for civilians. Illustratively, on 14 December, a man was killed and another injured by a gunshot while queuing to enter a bus at the Maiorsk checkpoint. At the same time, an elderly woman who witnessed the incident had a heart attack and passed away while on her way to the hospital.

Escalation at Stanytsia Luhanska bridge taking place in mid-June continued with both sides erecting and reinforcing forward positions as close as 400m from one another. "LPR" members stated that their objective was to improve protection of the bridge area, while government representatives characterized their movement as a defensive reaction. With forward positions being within eyesight of one another, the sides exchange fire in the immediate vicinity of the bridge, which is the only crossing route in Luhansk region. The moment when civilians cross either EECP, they find themselves along this 1,300m line as there is no escape route, no shelter or cover for civilians to hide should the situation become kinetic, except for military bunkers. The grassy areas on either side are full of mines and UXO, so citizens can only proceed along the crossing route.

The SMM confirmed four people being injured and one killed in Stanytsia Luhanska as a result of violence (shelling and SALW), while four cases resulted from mines or explosive devices encountered as pedestrians tried to go around the EECP to avoid being exposed to shelling while waiting for hours to go through all checkpoints. Safe passage of civilians is further hampered due to the lack of willingness from the sides to repair the seriously damaged wooden ramp of this pedestrian bridge. The potential Zolote-Pervomaisk EECP, which could considerably improve the movement

⁷⁵ Zero checkpoints are the closest checkpoints on the contact line behind which is a checkpoint of the opposite side.

⁷⁶ Prior to that, on 19 October near Maiorsk CP zero, the SMM saw a Ukrainian Armed Forces military truck carrying a mortar 82mm *Vasilek* (2B9) heading towards Zaitseve. The mortar was in violation of the 15km withdrawal line.

of civilians, remained closed. Similarly, the potential Shchastia EECP remains closed.

Also in the western part of Luhansk region, Armed Forces of Ukraine's positions moved forward significantly over the course of the year in the area of Novooleksandrivka village, which was a flashpoint all year for casualties, with a total of seven casualties in 2016.

While no significant changes in positions were reported in areas around Marinka-Oleksandrivka and Pyshchevyk-Verkhnoшыrovkivske (formerly Oktiabr), these crossing routes or checkpoints are subject to frequent shelling and shooting, including during the daytime.⁷⁷ For example, a 46-year-old man received a gunshot wound at 12:45 on 26 August while queuing to enter the government-controlled area at approximately 30m east of Marinka EECP. The SMM was informed about shelling in the EECP areas of Pyshchevyk on 19 October at night time while the Mission witnessed daily shelling at the "DPR" controlled Verkhnoшыrovkivske EECP on 9 November during the movement of civilians.⁷⁸

There are no bomb shelters or any kind of protection in case of shelling or other armed attacks throughout all checkpoints with the exception of government controlled-Pyshchevyk EECP which has a bomb shelter qualified as available and sufficient.⁷⁹

E. Concluding observations

The SMM continues to follow up and report on cases of civilian casualties as part of its monitoring of the security situation in eastern Ukraine. The sides can reduce human suffering and civilian casualties on both sides of the contact line through the following means:

⁷⁷ For instance, the SMM directly observed shelling at Marinka-Oleksandrivka EECP twice in October. On 17 October, during the shelling of Marinka-Oleksandrivka EECPs, the SMM vehicles were blocked in the queue for nearly one hour together with dozens of civilian vehicles without any chance of moving to a safer place. Despite the clear risk faced by civilians, and notwithstanding the strong urging of SMM, those at the "DPR"-controlled checkpoint did not let the cars cross towards Marinka EECP due to lack of "DPR"-members' decision. On 27 October a similar situation happened at Marinka-Oleksandrivka crossing route, involving again the SMM vehicles amongst other dozens of civilian vehicles. On 25 August in Marinka the SBGS representatives were forced to suspend operations and evacuate the area temporarily. On 7 November at 17:15 and on 10 November at 07:15, pedestrians at Stanytsia Luhanska bridge told SMM that they came under SALW and heavy machine gun fire on the pedestrian bridge, and they took shelter in the bunkers of the armed personnel

⁷⁸ See SMM Spot Report of 10 November 2016, <http://www.osce.org/ukraine-smm/280761>

⁷⁹ There is one in Novotroitske EECP, but assessed as insufficient, http://reliefweb.int/sites/reliefweb.int/files/resources/ukraine_humanitarian_snapshot_checkpoints_20170403.pdf

- full adherence to the ceasefire and implementation of other obligations contained in the Minsk agreements, in particular regarding the withdrawal of prohibited weapons;
- compliance with the 21 September Framework Decision of the TCG relating to disengagement of forces and hardware;
- the exercise of maximum restraint, fully assuming the responsibility to protect civilians, including taking necessary precautions to spare civilian lives, in particular by prohibiting indiscriminate attacks which do not distinguish between civilians and combatants, between civilian objects and military objects;
- moving forces and hardware used for the conduct of hostilities out of civilian buildings and settlements to help ensure that armed positions and civilian settlements are clearly distinguished, including moving forces and hardware away from vital civilian infrastructure;
- ensuring that schools and hospitals are respected, including through removing any armed personnel, fighters, or weapons from school and hospital premises.
- cessation of the use of mortars and other indirect and imprecise weapons in civilian-populated areas;
- reduction of wait times and provision of protective shelters at existing entry-exit checkpoints and opening of new official civilian crossing routes, especially for vehicular passage;
- respecting the principles of distinction, proportionality and precaution for the protection of civilians.