

## **HALO Ukraine Factsheet**

HALO Ukraine has grown from a programme of 400 staff working out of Kramatorsk in 2016 to a national workforce of 900 women and men working across five oblasts in 2023, including Brovary, Kharkiv, and Mykolaiv. We are on track to have 1200 deminers by the end of this year.

We are constantly recruiting and training personnel who join from all walks of life, from hairdressers and maths teachers to dancers and screenwriters. All new deminers have to complete a rigorous training programme and pass, according to international mine action standards (IMAS) – the gold star of humanitarian mine clearance.

Our vision is to recruit and train more to enable us to move eastwards as soon as land is liberated. If we are to meet the Ukrainian government's ambition of clearing most mined areas within a decade, that is likely to need up a workforce of up to 10,000 deminers.

Ukraine has seen the heaviest landmine and unexploded ordnance contamination in Europe since WW2. About 30 per of Ukraine's territory (174,000 km2 - an area twice the size of Austria) has been exposed to intense combat operations and will require rapid assessment and survey to ensure it is safe for people to return home, farm and rebuild their lives.

Satellite imagery is showing hundreds and hundreds of km of deep defensive positions in the areas controlled by Russia, and most of those positions will include landmines, likely laid in their hundreds of thousands, if not millions. A World Bank and Ukrainian Government report in Spring 2023 estimate tha cost of removing explosive hazards will cost \$38 billion. They have been laid in industrial quantities and will require industrial clearance techniques to remove them.

We do not have to wait for the end of the war to start clearing landmines. The nature of mine laying in Ukraine follows the course of the conflict, so in liberated cities like Kharkiv and Mykolaiv, we have already cleared around 5,500 mines between April and June alone this year, which is an extraordinary number.

The main type of mines that we are clearing at present are pressure plate-initiated devices. We are also finding a great deal of trip wires, booby traps, and grenades, as well as a small number of more sophisticated devices. The majority of mines are anti-vehicle mines, one the most common being the TM-62 and its variants.

HALO has a dedicated R&D unit which is trialling emerging technologies on a daily basis. We are investing heavily in mechanised, armoured clearance equipment and techniques, as well as remote-controlled mech to make clearance work as safe and as fast as we can possibly make it.

Based on our experience in the rest of the world, it is likely to take many decades to reach the last landmine in Ukraine and will require a sustained commitment from both private and public sources working in partnership to invest millions over a multi-year period.

The HALO Trust has not experienced any accidents while demining since the start of the invasion, but we have recorded just over 1,000 civilian casualties from mines and UXO and around 300 fatalities. Anti-vehicle mines account for about 40 per cent of accidents, and anti-personnel mines about 32 per cent. There are no published figures for accidents among Ukrainian military or civilian personnel.