Ukraine – conflict

ETC Situation Report #45

Reporting period: 01/03/2025 to 31/03/2025

The Emergency Telecommunications Cluster (ETC) was activated in Ukraine on 03 March 2022 following the escalation of armed conflict between Ukraine and the Russian Federation. ETC Situation Reports are distributed monthly.

Highlights

- The ETC has secured a new frequency license to enable the Very High Frequency (VHF) network expansion in Shostka, Barvinkove, Kryviy Rig, and Velyka Oleksandrivka. Further, the cluster assessed the site for VHF repeater installation in Shotska.
- In March, the cluster installed and integrated a Non-Governmental Organization (NGO) radio communications channel into the existing ETC VHF infrastructure at the Kramatorsk remote sites, enabling a secure, dedicated, and reliable Security Communications System (SCS) for humanitarian responders.
- The cluster established the Ukraine transition phase and exit strategy task force committee to outline and discuss the process flow and timeline of strategies, including service transition, cost-sharing, equipment maintenance, and technical support.

The ETC configures the NGO channel in the ETC VHF infrastructure in the Kramatorsk remote site. Photo: WFP/ETC

Overview

The ongoing conflict continues with intensified conflict that has severely damaged the critical infrastructure, residential buildings, and other facilities in the cities of Kyiv, Dnipro, Sumy, Odesa, Kharkiv, and Zaporizhzhia. These incidents highlight the widespread and ongoing nature of the conflict affecting multiple urban centers in Ukraine.

On 07 March, Ukraine's energy infrastructure in the Odesa, Poltava, Chernihiv, Ivano-Frankivsk, and Ternopil regions was targeted in one of the largest attacks to date, including the central areas of Cherkasy and Kirovohrad[1].

On 11 March, Ukrainian and U.S. officials convened in Jeddah, Saudi Arabia, where Ukraine agreed to a United States of America (USA)-proposed 30-day ceasefire with Russia[2].

The United Nations (UN) humanitarian community, led by Humanitarian Coordinator Matthias Schmale, is preparing an operational readiness plan for a potential 30-day ceasefire, prioritizing aid delivery to inaccessible areas, support for displaced individuals, and addressing protection concerns, with field

[1] Reliefweb_Energy infrustructure
[2] CNN

inputs consolidated into a one-month action plan for humanitarian coordinator review and coordination with partners.

On 23 March, just before scheduled ceasefire discussions, massive drone attacks across the Kharkiv, Sumy, Chernihiv, Odesa, and Donetsk regions of Ukraine resulted the damages to civilian multi-apartment houses[3]. On 27 March, Dnipro in the southeast and Kharkiv in the northeast of Ukraine were attacked by drones and missiles, striking key urban centers[4].

Impact on telecommunications

The ongoing conflict in Ukraine has significantly impacted the country's telecommunications infrastructure, leading to widespread service disruptions. The destruction of communication networks hinders emergency response efforts, disrupts civilian communication, and poses challenges for humanitarian operations.

The current situation underscores the critical need for targeted support to rebuild and maintain telecommunications systems in conflict areas, highlighting the importance of effective communication networks in humanitarian response and civilian protection.

In response to the satellite-based Starlink services disconnection risk and considering that there are over 42,000 Starlink terminals in Ukraine providing connection to most of the region, the European Union is preparing alternatives[5]. Four European satellite firms are vying to provide alternate backup service to Starlink in Ukraine. The firms include French/British satellite provider Eutelsat, the United Kingdom's Inmarsat, Luxembourg's SES, and Spain's Hisdesat[6].

Between 23 and 27 March, the Ukrainian Railway's online reservation system and related services were targeted in a large-scale, non-trivial, and multi-layered cyberattack. Online ticket sales for domestic and international routes were unavailable throughout the several days[7]. Tickets could only be purchased at the railway ticket offices, with huge queues that often took a few hours to clear.

ETC Activities

Coordination

On 05 March, the ETC attended the United Nations Department for Safety and Security (UNDSS) meeting, where the newly appointed UNDSS Chief Security Advisor was introduced to the current operational landscape. The ETC provided an overview of the existing ETC VHF network coverage in Ukraine, the SCS service for NGOs, updates on the Security Information and Operations Centre (SIOC), and the Remote Site on Vehicle (RSoV) kit activities.

On 05 March, the ETC participated in the International NGO Safety Organisation (INSO) meeting in Kyiv, where it presented, discussed, and answered questions regarding the integration of the NGO VHF radio channel into the existing UN ETC VHF infrastructure. This initiative aims to facilitate NGO access to ETC SCS services.

On 5 March, the ETC launched the Ukraine Transition Phase and Exit Strategy Task Force Committee Participation Survey, targeting local UN agencies in the Information and Communications Technology (ICT) Working Group (WG), and identified the members for the Task Force Committee (TFC). On 19 March, the first TFC WG transition phase meeting was held to outline the process flow, timeline and

[3] NYpost
[4] Ukrainianworldcongress
[5] Orbital_Starlink
[6] TNW_satellite
[7] NV_railway

discuss strategies, including service transition, cost-sharing, equipment maintenance, and technical support. Members will collaborate to ensure business continuity during and after the transition.

On 06 March, the ETC participated in the Security Management Team meeting in Kyiv and discussed potential deactivation scenarios for Starlink connectivity services, including account-based and geographical restrictions. Alternative connectivity solutions, such as other satellite providers, multiple Internet Service Provider (ISP) connections, and backup plans for critical operations, were also explored.

On 11 March, the ETC attended the Inter-Cluster Working Group (ICWG) South meeting, where the challenging security situation in the South Hub, due to ongoing missile and Unmanned Aerial Vehicle strikes on civilian infrastructure, was highlighted. The meeting also reviewed cluster reports, action points from the previous session, ongoing emergencies, updates from the Khersonska Area-Based Coordination meeting, and planned inter-agency convoys and ETC support in the Kherson region, including Oleksandrivka, Stanislavska hromada, Bilozerska hromada, and Novovorontsovka hromada.

On 12 March, the ETC participated in the Logistics Cluster national coordination meeting, where the ETC updated the SCS solution that allows NGO users to communicate using the existing ETC VHF infrastructure. On the same day, the cluster attended the Inter-Cluster Coordination Group (ICCG) meeting, where participants discussed the prioritization of the 2025 Humanitarian National Response Plan.

On 19 March, the ETC team in Kharkiv participated in an Office for the Coordination of Humanitarian Affairs (OCHA) meeting focused on a potential 30-day ceasefire between Ukraine and Russia, emphasizing the need for a swift humanitarian response in newly accessible areas. To prepare, the team will develop a Ceasefire Response Plan within expanded ICTWGs from Kharkivska to Khersonska, focusing on access, security, contamination risks, protection, resource allocation, and lessons learned from past operations. Priority hromadas will be identified based on population figures and urgent humanitarian needs.

Security communications (radio)

VHF radio network

The ETC operates 15 priority sites across Ukraine[8] Hosted by the Ukrainian Broadcasting, Radiocommunications & Television Concern (BRT). The cluster monitors all operating equipment in the remote sites through an online system. The UN agencies staff and all other humanitarian responders in all 15 sites can communicate directly with the UNDSS SIOC in Kyiv using the ETC VHF radio network.

On 7 March, the cluster team performed measurements of VHF antenna parameters at the UNDSS shelter in Lviv. The purpose was to verify proper installation, and it was confirmed that all technical parameters were within the correct functional range.

On 13 March, the ETC team installed telecommunications equipment at the Kramatorsk remote site, integrating the NGO channel into the existing VHF network. This enabled NGO access to ETC SCS services via the Kramatorsk repeater in high-risk areas of Donetsk and across the frontline.

From 1 to 17 March, the ETC coordinated with the installation company Ukrradioservice (URS) to prepare communication equipment for VHF network expansion in eastern and southern Ukraine, covering Shostka, Barvinkove, Kryvyi Rih, and Velyka Oleksandrivka, with installation set to begin in April.

On 20 March, the cluster received a new frequency license permit for the new planned site in Velyka Oleksandrivka and Kramatorsk.

On 25 March, the ETC team conducted an assessment mission for the Shotska BRT TV tower to facilitate the further installation of the VHF repeater, confirming the feasibility of improved VHF coverage in the northeastern operational areas of Ukraine. The installation is scheduled for early April.

[8] The following sites: Kyiv, Lviv, Odesa, Mykolaiv, Luch, Poltava, Sumy, Dnipro, Kharkiv, Zaporizhia, Orly, Pershotravensk, Kramatorsk, Kehychivka, and Kropyvnytskyi.

Security Information Operations Centre (SIOC)

On 19 March, the ETC, supported by the URS installation company, troubleshooted the issue with VHF coverage by maintaining the VHF repeater antenna on the Lviv BRT TV tower and performing a radio check test, which showed an improvement in VHF coverage and a signal for clear communication with the SIOC. Further planned radio check exercises with UN agencies will be scheduled to verify the VHF coverage.

Remote Site on Vehicle (RSoV) project

From 3 to 10 March, the cluster maintained the ETC VHF equipment for seven World Food Programme (WFP) Armored Vehicles (AVs) and two soft-skin vehicles and adjusted antennas on four UNDSS AVs and three United Nations Development Programme (UNDP) AVs in Dnipro.

On 06 March, the ETC supported the Logistics Cluster by conducting mobile network maintenance on two trucks.

On 10 March, the cluster troubleshooted and resolved a booting issue with the UNDSS RSoV kit terminal, confirming its proper functionality. The kit was deployed to Kharkiv for installation on the UNDSS armored vehicle.

On 18 March, the ETC troubleshooted the issue with the mobile VHF radio microphone for the Logistics Cluster truck in Dnipro.

Radio programming

During the reporting period, the ETC programmed the following VHF handheld radios:

- two VHF handheld radios for the UNDP in Dnipro;
- one VHF handheld radio for WFP in Dnipro;
- one VHF handheld radio for WFP in Kyiv.

Radio check exercises were continually conducted throughout March to verify the functionality and reliability of the programmed radios.

ETC radio programming services can be requested via email through a ticketing system: ukraine.etcservicedesk@wfp.org

Capacity building

On 11 March, the ETC team provided SCS training for 21 colleagues from the United Nations International Children's Emergency Fund (UNICEF) in Dnipro.

From 17 to 21 March, the cluster team conducted SCS training in Dnipro for nine WFP drivers and for one driver in Odesa on the usage of RSoV kits, including swapping kits between AVs and trucks.

The ETC offers VHF radio use capacity-building sessions to UN agencies to ensure staff are informed and equipped to respond to security incidents in the field. To book security communications training sessions, please use this link.

Satellite phones

On 20 March, the ETC team in the Kyiv Country Office (CO), supported by TEC, received the Inmarsat satellite equipment from the Dubai ETC and managed the procurement and delivery process.

From 21 to 27 March, the ETC tested the Iridium network in a real environment, which continued to face connectivity challenges in central, southern, and eastern Ukraine, affecting call performance.

On 27 March, during an ETC mission to Shostka, the team conducted tests along the Shostka-Kyiv route, confirming high network reliability.

Based on successful results, one Inmarsat docking station will be deployed at the UNDSS SIOC in Kyiv as an alternative to the Iridium network. Plans are also underway to install docking stations at WFP Kyiv CO, Dnipro FO, and Odesa FO, along with mobile units for WFP fleets in Odesa and Dnipro FOs.

Data connectivity

The ETC provides data connectivity services in the inter-agency hubs in four common operational locations—Odesa, Kharkiv, Mykolaiv, and Lviv—and is part of the SCS infrastructure to support the VHF radio network.

On 20 March, the cluster configured the backup ISP connection for the Dnipro remote site.

From 21 to 27 March, in preparation for the internet connection to the BRT TV tower repeater sites at Luch, Mykolaiv, Poltava, and Kharkiv, the ETC team in Kyiv configured the Meraki cloud networks and secured devices for these locations.

During March, the ETC data connectivity service supported 120 unique clients, with an average of 63 clients per day and an average data usage of 9.4 GB per client. In total, 1.1 TB of data was transferred, comprising 846 GB downloaded, and 281 GB uploaded. The ETC Helpdesk recorded 43 tickets in March, 38 of which were resolved, and the remaining 5 are in progress, representing an 88% support rate.

Services for Communities

The ETC continues to support the humanitarian Cash Working Group (CWG) in creating a Chatbot as a one-way communication tool with affected communities in Ukraine to enhance information dissemination on humanitarian Multipurpose Cash Assistance (MPCA). On 26 March, ETC and WFP TEC, with OCHA, Save the Children, and the Kramatorsk support center "MyRazom," tested a chatbot in Dnipro with a focus group of affected populations and IDPs. Feedback was gathered to address shortcomings, which will be resolved by the Chatbot developer. A report is due next week. Planning is complete, and implementation is at 39%, with 80% of the chatbot developed.

The ETC, with the support of the WFP TEC team, launched a new project to support Ukraine's school education. From 17 to 19 March, in coordination with the WFP School Feeding programme, ETC conducted a mission and assessed the current ICT infrastructure and services, network infrastructure, computer, and printing equipment, and power capabilities in seven schools in Kherson and Mykolaiv regions - Novoingulka, Kazankovska, Blahodatne, Voronivka, Chausove, Ivanivska, and Dovga Prystan villages.

On 25 March, ETC and the School Feeding Programme team identified five potential schools in the Kharkiv and Zaporizhzhia regions for assessment. A joint mission is planned to inspect ICT infrastructure, network systems, equipment, and power capabilities at these locations.

Dashboard

See the ETC Dashboard for an overview of service locations.

Funding

The ETC in Ukraine is 30% funded out of a 2025 budget requirement of USD 1.3 million to continue delivering vital communication services.

Challenges

Expanding VHF coverage and data connectivity in locations close to the frontline is becoming more challenging and dangerous for the ETC engineers.

On 14 March, the WFP field office in Odesa reported a challenge with Single-Sign-On authentication on the Ericsson Response server, preventing WFP users from accessing the ETC network, while non-partner authentication remained functional. Further investigations are underway to resolve it.

The risk of cyber-attacks is considered high in the region.

Contacts

NAME	POSITION	LOCATION	CONTACT
Mohamedou Ndiath	ETC Coordinator	Kyiv	Ukraine.ETC@wfp.org
Maksym Khmeliuk	ETC Information Management Officer	Kyiv	Ukraine.ETC@wfp.org

Further information related to ETC Ukraine operation can be found on the website:

www.etcluster.org/emergency/ukraine-conflict

For more information or to be added or deleted from the mailing list, please contact:

Ukraine.ETC@wfp.org