

INTERNET IN UKRAINE DURING WARTIME



Maksym Smilianets

*co-owner of Viner Telecom ISP, co-founder of Telecom
Ukraine Conference*

Before the war Ukraine had one of the best broadband Internet coverage in Europe.

Many ISPs, including our company Viner Telecom, already built their networks on PON technology, and our users even in small towns and villages had the high-speed connection.



Viner Telecom is an Internet provider that provides communications in Zhytomyr, Kyiv, Chernihiv, Mykolaiv, and Kherson regions.



**THE FULL-SCALE MILITARY INVASION
OF UKRAINE BECAME A HUGE
CHALLENGE FOR THE
TELECOMMUNICATIONS INDUSTRY
FROM TOTAL DESTROYING TO
WORKING DURING BLACKOUTS**

The greatest difficulties for ISP during war



Destruction of infrastructure

In the first months of the war, the occupiers caused great damage to telecommunications networks in the Kyiv, Kharkiv, Chernihiv, Mykolaiv, and Sumy regions. It took hundreds of kilometers of cable and a lot of equipment to restore the infrastructure in these territories.

Much worse situation now in the occupied territories and in the territories where active fights are taking place. Artillery fire and missile attacks there happen constantly, and ISPs restore the same networks every day.



The greatest difficulties for ISP during war



Stolen equipment and ISP companies' resources

In the occupied territories the occupiers steal equipment, other company resources, and completely take networks under their control.

Switching traffic routing

Traffic switching is one of the biggest problems in the occupied territories. Occupiers first of all turn off mobile communications from Ukrainian operators, and also switch fixed communication channels to the Crimean operator Miranda.

In this way they take full informational control of Ukrainian citizens who are under occupation, spreading propaganda and blocking Ukrainian resources.

Employees and owners of such ISP companies, who were unable to leave, must either obey the occupiers and follow their orders or risk their lives.

The greatest difficulties for ISP during war



Blackouts

This is one of the most difficult challenges faced by Internet providers in many regions of Ukraine. As a result of the destruction of the energy infrastructure, there was only 6-8 hours of light per day, and sometimes electricity was absent for several days.

PON networks were the most profitable in this situation.

Already after the first waves of blackouts many operators provided backup power at their equipment, and even in the absence of electricity, many people stayed connected.



What challenges our company faced?

The large part of the network of Viner Telecom covers Kherson and many villages around Kherson, one of which is the well-known Chornobaivka.

When the region fell under occupation, we tried to the last to keep connection, our employees stand there and made efforts to save the network and our resources.

In May, the occupiers turned off all communication and switched traffic to their channels. They rebuilt the connections and stole our equipment. In this way they operate in all occupied territories.

What occupiers left after the liberation of Kherson?

- The bombed-out building of the radio and television transmission center, where equipment of main regional ISPs was located.
- Blasted and destroyed TV tower.
- Stretchers and explosives were installed in the telecommunications sewers.



They did everything possible for total disconnections of civilian.

What help us?

- Demining the territory at the first stage.
- Starlink terminals and generators, which we received from the Ministry of Digital Transformation.
- Our brave employers.
- The equipment, which we received from Keep Ukraine Connected.

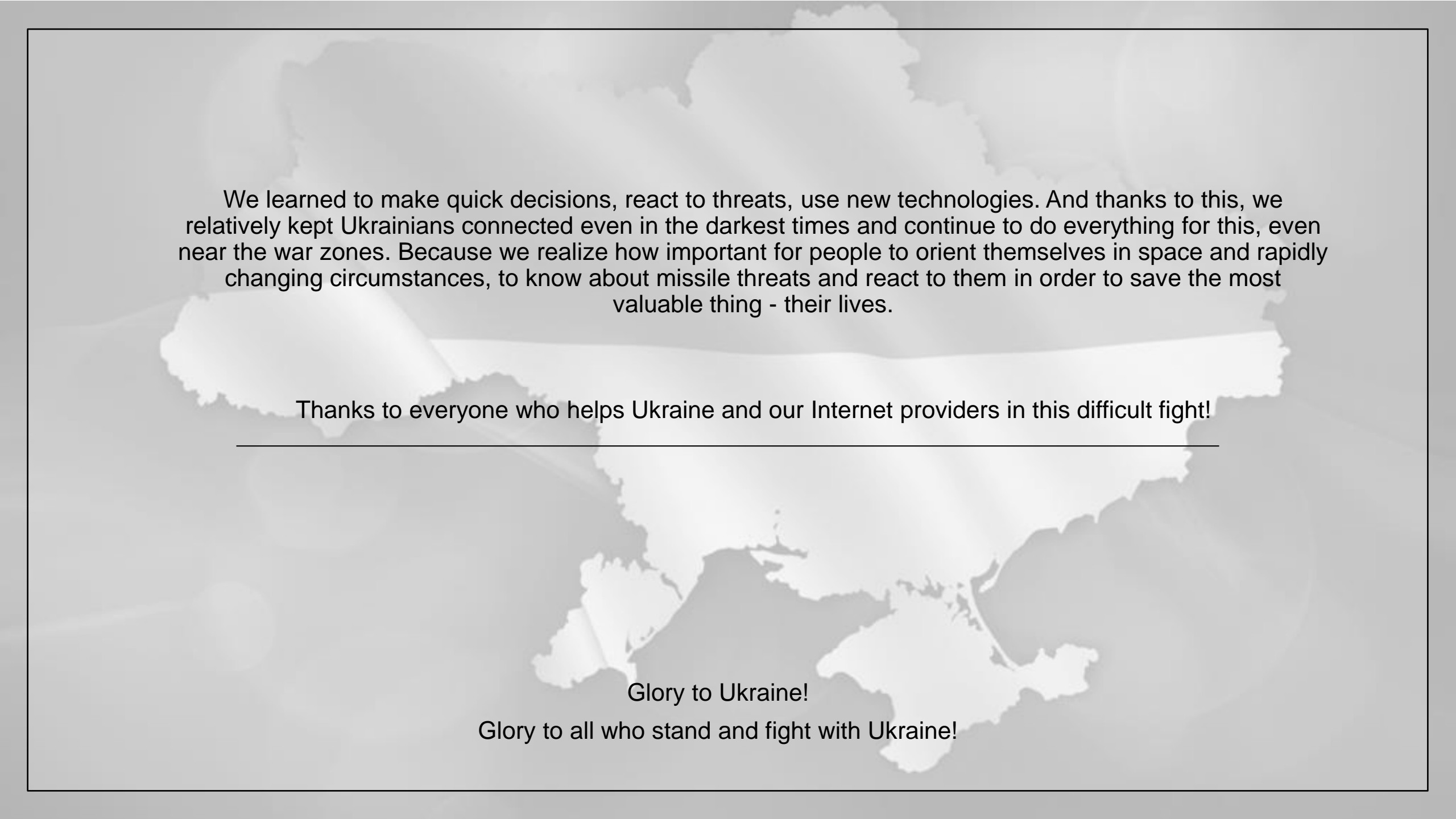


How our networks work now?



- Our region is under constant shelling, which destroys networks every day.
- Our installers, as warriors of the communication front, wear bulletproof vest and continue fight for the restoring networks.
- Destruction cuts off from connections entire settlements and we do everything possible to rebuild them again and again.
- Every day we have new needs for equipment and cable products.





We learned to make quick decisions, react to threats, use new technologies. And thanks to this, we relatively kept Ukrainians connected even in the darkest times and continue to do everything for this, even near the war zones. Because we realize how important for people to orient themselves in space and rapidly changing circumstances, to know about missile threats and react to them in order to save the most valuable thing - their lives.

Thanks to everyone who helps Ukraine and our Internet providers in this difficult fight!

Glory to Ukraine!

Glory to all who stand and fight with Ukraine!