

## Report from Ukraine

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On February 24, everything changed not only for Ukraine, but for the whole world. Russia's invasion of the territory of the sovereign state of Ukraine made it clear that no one can be immune against attack in the XXI century. Millions of Ukrainians were forced to leave their homes because of the "russian peace". Thousands of Ukrainians died, including children. The war had a negative impact on all spheres of Ukraine's activity, including science and education. It will take years, decades to restore everything with world anti-war coalition support.

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## 1. Introduction

The calendar in Ukraine stopped on February 24, 2022. And a new countdown began. The Russian army invaded the territory of the sovereign state of Ukraine and is conducting full-scale hostilities. This fatal decision has already killed many innocent people and undermined the foundations of the collective security system. The responsibility for resolving this new war in Europe lies entirely on the Russian Federation.

### 1.1 Another section

Across the country, the United Nations Human Rights Monitoring Mission (hereafter HRMMU) had verified, as of 7 August, 12,867 civilian casualties since the full-scale war began 5,401 people killed (including 2,081 men, 1,420 women, 169 boys and 147 girls) and 7,466 injured (including 1,511 men, 1,095 women, 225 boys and 157 girls) [1]. More than half of all casualties were recorded and corroborated in the eastern part of Ukraine – Donetsk and Luhansk regions. HRMMU believes the actual totals are considerably higher, as the receipt of information from some locations has been delayed, and many reports are still pending confirmation.

In Kharkiv, a city of 1,5 million people, there are destroyed more than four thousand residential buildings, 468 administrative buildings, 430 education facilities, 99 medical facilities. Most of them cannot be restored. The sounds of an air alarm, as well as about the danger of artillery shelling, sounded over 1,000 times in Kharkiv since the beginning of the war.

In total, more than 3000 settlements were captured, Ukraine recaptured 1100 and now there are battles on 20% of the territory of my country. Completely wiped off the face of the earth Mariupol, Popasnaya, several hundred smaller villages.

Over fifteen million Ukrainians became refugees. More than six million of them are abroad and three million will never return to Ukraine.

According to the report of World Intellectual Property Organization the Ukraine's Global Innovation Index was 45th among 131 world economics before the war. There were 204 actual international agreements on cooperation with scientific structures of over 50 countries of the world (140 among them with National Academy of Sciences of Ukraine). 51 400 researchers worked on Ukraine's scientific potential, 45,4% of them female. 1 141 889 students studied in 155 Universities, 25 668 PhD students (91,4% in the Universities).

Safe, quality and continuing education in Ukraine remains under threat. Large-scale destruction of and damage to educational facilities, combined with the outflow of qualified teaching personnel and the use of schools for non-educational purposes, have led to their closures in the hardest-hit locations and increased reliance on students on online learning. Across Ukraine about 2,300 educational institutions have been affected by the hostilities, 286 of which have been destroyed. One in ten schools and learning facilities (3,500 out of 31,347) are not available for educational activities as they are being used to host the internally displaced, and three out of four (75%) of learners have to study online. At least 43,000 teachers have been displaced by the war, with Kharkivska, Kyivska and Zaporizka oblasts reporting the highest teacher-outflow rates. The situation concerning teacher availability in Donetska and Luhanska oblasts – impacted by the armed conflict there since 2014 – was already difficult prior to the start of the war in February.

Huge damage has been done to the scientific infrastructure. 9 organizations are involved in CERN projects from Ukraine. Almost all of them suffered.

The Kharkiv Institute of Physics and Technology of National Academy of Sciences of Ukraine and Kharkiv National University suffered the most damage, 100% of their structures were damaged. Some of them cannot be restored. Its territory was attacked by more than 60 missiles, some of them exploded near the building at Nuclear fuel cycle facility. Object is still under fire.

At the Institute for Scintillation Materials of National Academy of Sciences of Ukraine (hereafter – ISMA NAS of Ukraine) all growth facilities were taken out from the buildings affected by the bombing. Crystal growth production were organized in the basements. They are slowly starting up. Scintillation plastics according to the contracts for CERN experiments is producing. Now 35% employees of ISMA NAS of Ukraine go to work, 40% work remotely. 12% of employees went abroad, 40% of them found work in the field of science.

### **1.1.1 Sub-sub-section**

Ukrainians are standing strong to defend the peace and democracy in Europe, at a high price for our cities, our people and our children.

### **References**

- [1] <https://reports.unocha.org/uk/country/ukraine/>