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1. The Secretariat has received a Note Verbale dated 17 May 2023 from the Permanent Mission of the Russian Federation to the Agency.

2. As requested, the Note Verbale is herewith circulated for the information of all Member States.

**ПОСТОЯННОЕ ПРЕДСТАВИТЕЛЬСТВО
РОССИЙСКОЙ ФЕДЕРАЦИИ
ПРИ МЕЖДУНАРОДНЫХ ОРГАНИЗАЦИЯХ
В ВЕНЕ**

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The Permanent Mission of the Russian Federation to the International Organizations in Vienna presents its compliments to the Secretariat of the International Atomic Energy Agency and in connection with the statement of the UK Minister of State for Defence A.Goldie on 21 March 2023, concerning the UK plans to transfer to Ukraine armour-piercing sub-caliber shells which contain depleted uranium, has the honor to convey the following.

First of all we would like to clarify what armour-piercing sub-caliber ammunition with depleted uranium represents. It is an artillery projectile with a core diameter smaller than the calibre of the gun, used for firing against tanks, armoured objects, usually at direct fire ranges.

Uranium itself belongs to the first toxicity class (extremely hazardous substances). Depleted uranium is uranium which isotopic composition is more than 90% uranium-238 and less than 1% – uranium-235. The toxicity of depleted uranium is yet not well studied. Armor-piercing shells with depleted uranium can be assessed as an environmental weapon that has a long-term negative environmental impact on the biosphere in areas contaminated with uranium oxides.

Previously, the European Parliament repeatedly adopted resolutions on imposing an immediate moratorium on the further use of weapons with depleted uranium. On December 2008, 141 States supported the resolution of the UN General Assembly on the need to conduct additional studies on the effects of exposure to

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depleted uranium munitions by the end of 2010. Despite the conducted studies, which made it possible to establish the chemical mechanisms of depleted uranium toxic action, this issue has been further considered by international experts within the UN.

The depleted uranium is used in ammunition due to its high density, which provides high armour penetration. This effect is achieved by using the kinetic energy of the core itself, as well as of its shell. When hitting the armour, the soft steel shell breaks and transmits its energy to the core, which penetrates the armour.

As a result of the impact of the ammunition with depleted uranium, a mobile hot cloud of fine aerosolized uranium-238 and its oxides is generated, which can subsequently provoke the development of serious pathologies. The main radiation hazard from depleted uranium occurs when it enters the body in the form of dust.

Fluxes of alpha radiation from small uranium particles deposited in the upper and lower respiratory tract, lungs, and esophagus cause the development of malignant tumours. Accumulated in the kidneys, bones, and liver, uranium dust leads to internal organ changes.

It should be noted that in armed conflicts the depleted uranium ammunition was used exclusively by NATO countries.

In particular, in 2003 the USA used such ammo in strikes on Iraqi cities: Amara, Baghdad, Basra, Karbala, Fallujah. In total, the United Nations estimates that the USA used at least 300 tonnes of depleted uranium in Iraq.

According to the Iraqi government, in 2005 the cancer incidence in the country because of the use of depleted uranium rose from 40 to 1600 cases per 100000 people. In this regard, Baghdad filed a lawsuit against Washington to the International Court of Arbitration in Stockholm on 26 December 2020 demanding compensation for the caused damage.

We would like to remind that the NATO forces used depleted uranium ammunition during bombardment of Yugoslavia in 1999. In all, some 40000 armour-piercing air-launched projectiles with over 15 tonnes of depleted uranium were used

in that country. There has also been a 25% increase in cancer incidence in the countries of the former Yugoslavia.

The victims of the irresponsible policies of their own leadership were the NATO soldiers who took part in the military campaigns in Iraq and Yugoslavia. The report of the Italian Chief Military Medical Inspector (2016) says that 4095 servicemen of national armed forces deployed in the Balkans (1994-1999) and in Iraq (2003) in areas where NATO forces used depleted uranium ammo were subsequently found to have malignant tumours of various types. In 8% of cases (330 people), diseases were fatal.

In addition, uranium remains in the soil for a long time and pose a risk of negative effects on people, animals, and crops. In a report published in Geneva in 2002, a group of experts who carried out research under the auspices of the UN Environment Programme at the sites of the NATO strikes noted that the experts were surprised by the fact that more than two years after the bombings, particles of depleted uranium were still present in the air. The level of contamination of soil and groundwater in these areas over a long period requires continuous monitoring to assess potential risks.

We would also like to draw attention to documents confirming NATO countries' awareness of the danger of the effects of ammunition with depleted uranium on the troops, civilian population and environment of the territories. For example, the Summary Report of the U.S. Army Environmental Policy Institute to Congress in 1994, entitled Health and Environmental Consequences of Depleted Uranium Use by the U.S. Army, states that there is no technology for reducing the toxicity of depleted uranium and that the remediation of depleted uranium ammunition areas is extremely difficult.

In addition, the report by the UK Royal Society "The health hazards of depleted uranium munitions" in 2001 noted that the main type of cancer for those affected by depleted uranium munitions was lung cancer.

Therefore the Western countries are well aware of the negative consequences of the use of depleted uranium ammunition.

Use of shells with depleted uranium can lead to mass diseases of "unclear etiology" among military personnel and civilians. These diseases are characterized by long-term effects in the form of a complex of symptoms: memory disorder, insomnia, depression, dizziness and headache, muscle weakness, joint pain, inflammation of the skin, disorders of the cardiovascular system, respiratory organs and other internal organs, allergic reactions, impotence. The most unfavourable long-term effects include activation of carcinogenesis and an increase in the incidence of neoplasms.

In addition to the contamination of population, the use of depleted uranium shells would cause enormous economic damage to the agro-industrial complex, especially crop and livestock production, bringing down export of agricultural products for many decades.

The Permanent Mission of the Russian Federation requests the IAEA Secretariat to circulate this Note Verbale as an Information Circular among all IAEA Member States as soon as possible.

The Permanent Mission of the Russian Federation avails itself of this opportunity to renew to the IAEA Secretariat the assurances of its highest consideration.

Vienna, " 14 " May 2023