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Chronicles of nuclear terrorism of the russia in **Ukraine**

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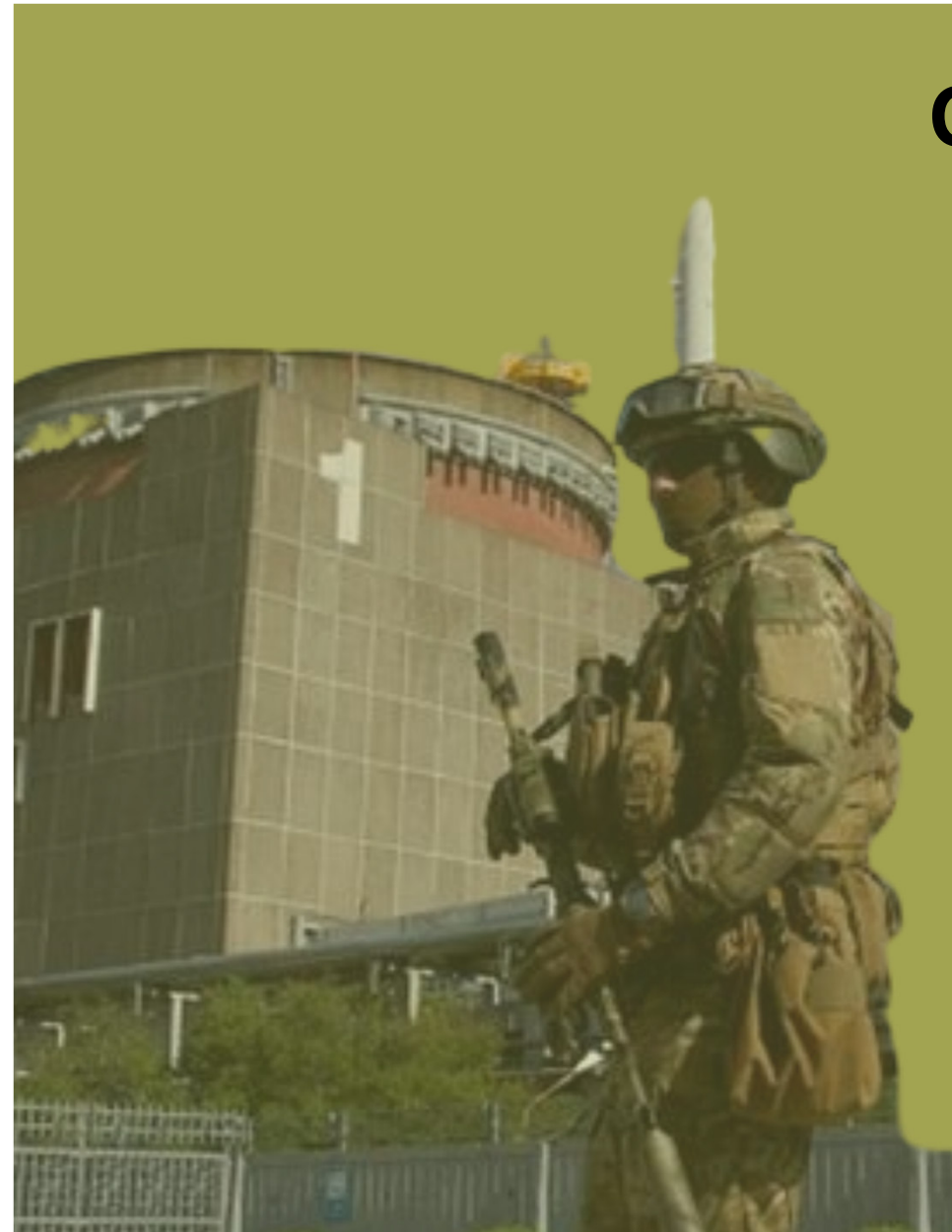
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Chronicles of events

On February 24, 2024 all facilities located in the Exclusion Zone:

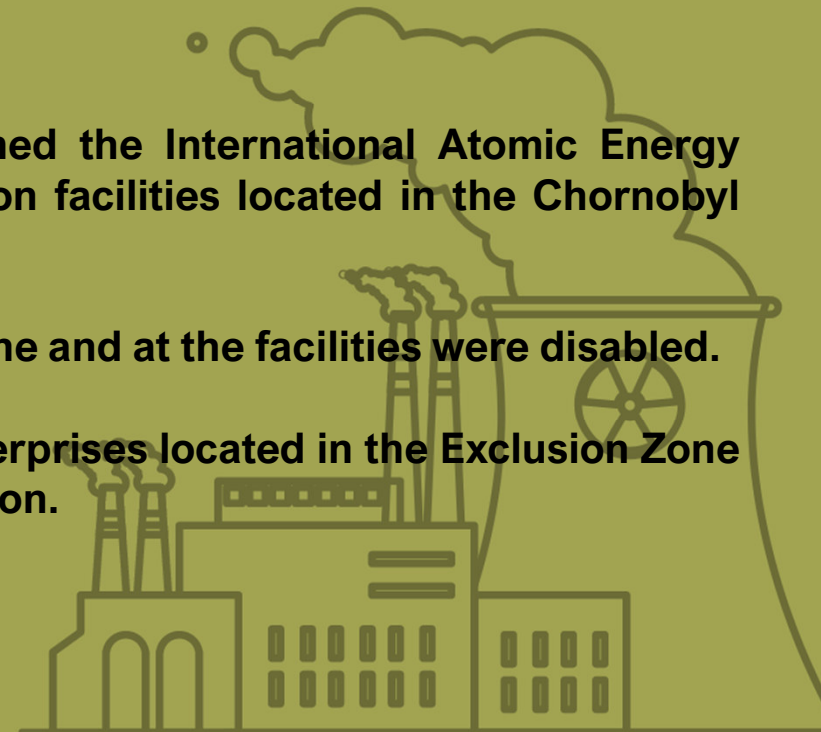
- **Spent Nuclear Fuel Storage Facilities ISF-1 and ISF-2**
- **New Safe Confinement of the Shelter**
- **ChNPP Power Units 1,2,3**
- **Centralized Spent Nuclear Fuel Storage Facility (CSFSF)**

were seized by Russian troops.

The State Nuclear Regulatory Inspectorate of Ukraine informed the International Atomic Energy Agency (IAEA) on the loss of control over nuclear and radiation facilities located in the Chernobyl NPP Exclusion Zone as a result of a military attack.

The automatic radiation monitoring systems in the Exclusion Zone and at the facilities were disabled.

During the occupation period, the external power supply of enterprises located in the Exclusion Zone was interrupted twice, backup diesel generators were in operation.



Chronicles of events

- According to the Ukrainian state authorities, at the end of February, Russian troops planned to seize the Zaporizhzhya NPP and the Pivdennoukrainsk NPP

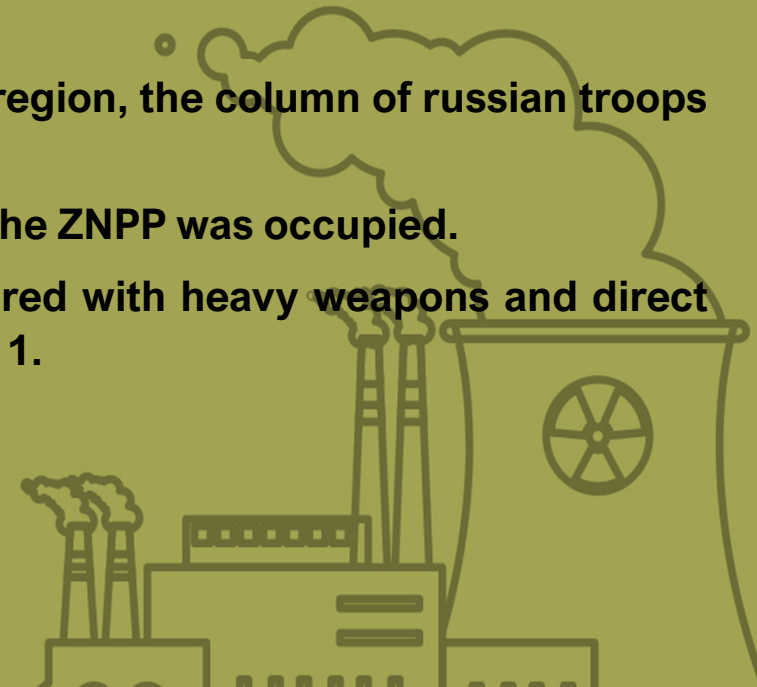
Zaporizhzhya NPP: there are 6 power units with VVER-1000 reactors and a nuclear facility - dry type spent nuclear fuel storage facility.

- Pivdennoukrainsk NPP has 3 power units with VVER-1000 reactors as part of the Pivdennoukrainsk energy complex, which also includes the Tashlyk pumped storage power plant and the Oleksandrivsky hydroelectric power plant.

After a fierce battle near the city of Voznesensk in the Mykolayiv region, the column of Russian troops was stopped at 40 km away from the city of Pivdennoukrainsk.

On the night of March 3-4, 2022, after shelling by Russian troops, the ZNPP was occupied.

The ZNPP administrative building and the training center were fired with heavy weapons and direct fire. A fire broke out in the first diesel generator cell of power unit 1.



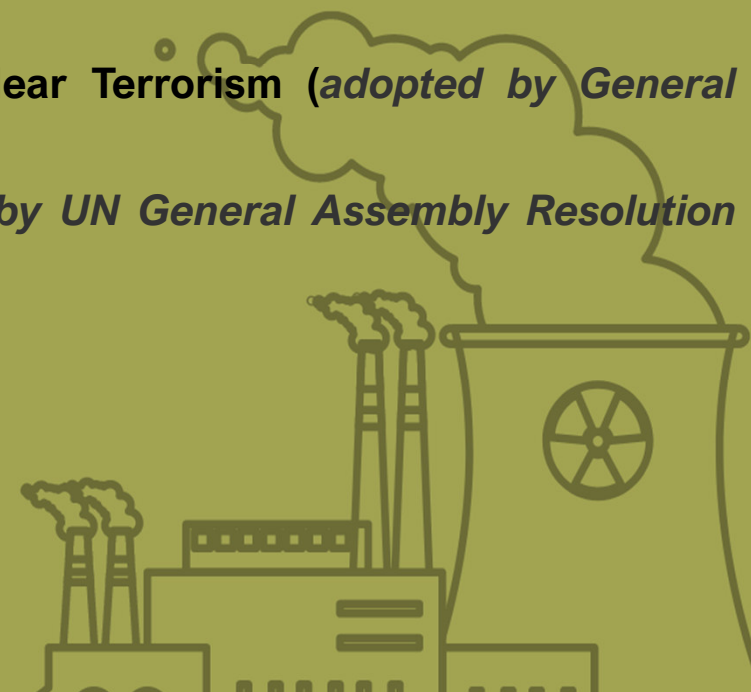
Chronicles of events

It has to be stated that the military seizure of civilian nuclear facilities, the conduct of hostilities and the deployment of heavy weapons with ammunition on the territory of nuclear facilities is a violation of a number of international treaties and conventions such as:

Article 56 of Additional Protocol 1 of June 8, 1977 (to the Geneva Conventions of September 12, 1949): Facilities and structures containing dangerous forces, namely dams, nuclear power plants, must not become objects of attack ... if such an attack could cause the release of dangerous forces and subsequent heavy civilian casualties.

International Convention for the Suppression of Acts of Nuclear Terrorism (*adopted by General Assembly resolution 59/290 of April 13, 2005*),

International Convention Against Taking of Hostages (*adopted by UN General Assembly Resolution 34/146 of December 17, 1979*)



Chronicles of events

On March 3, 2022, the IAEA Board of Governors adopted a resolution condemning the seizure of nuclear hazardous facilities in the Exclusion Zone and demanding their immediate de-occupation.

ZNPP unit 1 was in cold shutdown mode for repair.

ZNPP units 2, 3 and 4 were in operation at rated power for the energy system of Ukraine, ZNPP units 5 and 6 were at 8% of thermal capacity.

On March 6, employees of rosenergoatom (a structure of rosatom State Corporation) arrived at ZNPP.

March 8: arrival of russian journalists from the propaganda media.

As of March 8, out of 4 ZNPP high-voltage power transmission lines, two remained intact: ZNPP-Kakhovska and ZNPP-Dniprovska ones.



Chronicles of events

On March 31, 2022, Russian troops left the Exclusion Zone.

According to the results of the inventory of enterprises, the total damage due to the seizure is 2.5 billion UAH. (according to the Ministry of Ecology of Ukraine).

The central analytical laboratory, the equipment of which was supplied under the EU technical assistance project in 2015 worth 6 million euros, was completely looted.

Stolen:

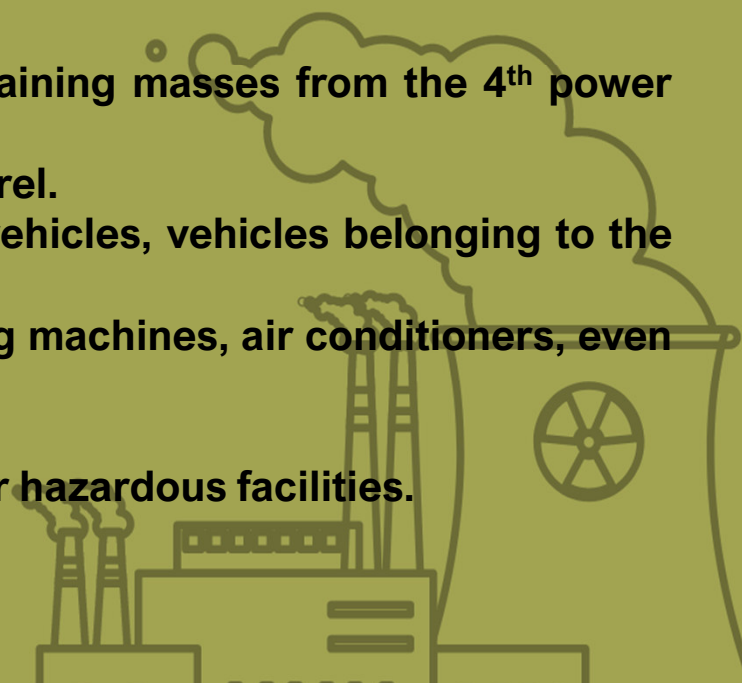
calibration radionuclide samples, high-level samples from fuel-containing masses from the 4th power unit of the Chernobyl nuclear power plant.

In total: 133 radiation sources with a total activity of 7 million Becquerel.

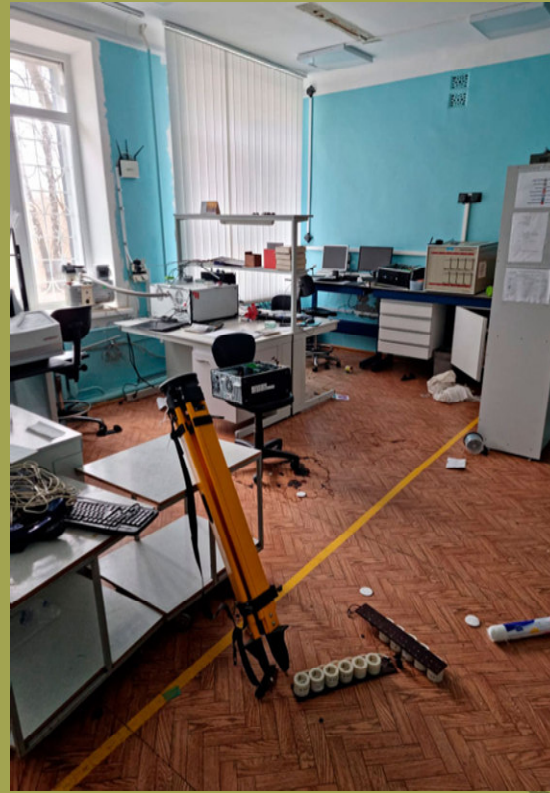
Special vehicles for radioactive waste transportation, fire-fighting vehicles, vehicles belonging to the Exclusion Zone enterprises.

Computers, personal household appliances (electric kettles, washing machines, air conditioners, even tableware and cutlery from the Chernobyl canteen).

The territory of the Exclusion Zone was mined, including near nuclear hazardous facilities.



Chronicles of events



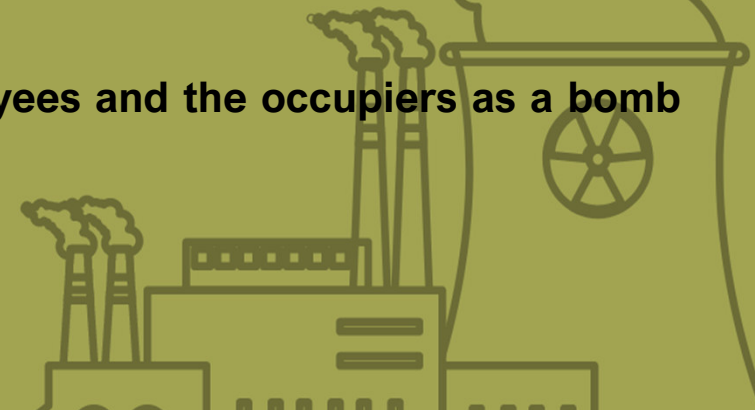
Chronicles of events

The Russian military deployed military equipment and soldiers on the territory of the ZNPP industrial site.

Immediately they started to mine the territory outside the perimeter of the plant, the coastline of the Kakhovky water reservoir. They deployed multiple rocket launchers and artillery on the water reservoir coast in summer settlements, the Enerhodar yacht club and nearby villages.

In August 2022, military equipment, trucks with ammunition were brought into the turbine compartments of power units 1 and 2.

The ZNPP emergency center started to be used by Rosatom employees and the occupiers as a bomb shelter; ZNPP personnel do not have access to it.



Chronicles of events



Chronicles of events

In May 2022, Deputy Prime Minister of the Russian Federation Marat Khusnullin announced in the occupied Kherson region that the Russian Federation was restoring the power line from Crimea to the Kakhovsky substation to switch all generating capacities in the occupied territories to the unified energy system of the Russian Federation, including Crimea.

At the end of July, the power transmission line from the Crimean Isthmus to the Kakhovska substation was restored.

On August 4, 2022, the Plan of transition of the ZNPP to Russian energy system of Autonomous Republic of Crimea was handed over to the Zaporizhzhya NPP Management.

According to the Plan, all power units must be stopped. ZNPP must be disconnected from Ukrainian energy system. For the in-house needs of the NPP, electricity must be supplied from the Crimea.

On August 5, intensive shelling of the ZNPP started, a 750 kV power transmission line connecting the ZNPP with the unified Ukrainian energy system was destroyed.



Chronicles of events

The shelling continued almost the entire August, with periodic destruction of 750 kV power transmission lines and backup lines from the open switchgear of the Zaporizhzhya TPP 330 and 150 kV.

**An emergency shutdown of two operating power units and a transition to power supply from backup diesel generators were registered three times.
The risks of a severe accident with reactor core meltdown increased every day.**



Chronicles of events

Damage to property due to the actions of russian troops at ZNPP and other enterprises in Enerhodar falling under NNEGC “Energoatom” jurisdiction is estimated at 28 billion UAH as of November 1, 2022

Including damage to fixed assets constituting 27 billion 804 million UAH.

Lost profit due to underproduction of electricity at ZNPP is UAH 40 billion.



IAEA in Ukraine in the war conditions

IAEA nuclear safety, security and safeguards personnel arrived in Chornobyl on 26 April. They delivered necessary equipment, carried out radiological and other measurements at the Chornobyl nuclear power plant, which for five weeks (until March 31) was under the control of russian invaders.

July 31, 2022: IAEA mission arrived to Pivdennoukrainsk NPP.

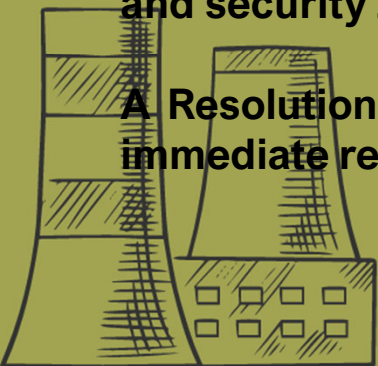
September 1-6, 2022: IAEA mission arrived to ZNPP, 2 experts remained there on a permanent basis.

The rotation took place after 5 weeks, 4 experts arrived to ZNPP.

The mission Report was presented at a meeting of the UN Security Council, convened on the initiative of the russian federation.

Recommendations were made for ZNPP personnel as well as a proposal to establish a nuclear safety and security zone around ZNPP.

A Resolution of the IAEA Board of Governors was adopted on September 12, 2022 demanding the immediate release of the Zaporizhzhya NPP from the Russian military.



How to force the Russian Federation to comply with international conventions and the UN Charter?

Russia conducts a significant trade in nuclear products, including the sale of unenriched uranium, providing conversion services, enrichment, nuclear power plant construction and related services. According to Rosatom, in 2021, the corporation's revenue amounted to \$8.9 billion. The portfolio of nuclear power plant construction is estimated at \$140 billion, according to Rosatom.

Sanctions on this trade would reduce Russia's foreign income and leverage over other countries, increase Russia's isolation and pressure on the Russian economy, and reduce Russia's ability to wage war in Ukraine.

Two-stage deterrence strategy of a nuclear incident in Ukraine:

the first round of sanctions as a “warning shot” to demonstrate the seriousness of intentions and explain to Rosatom that the second “punitive package” of sanctions will be applied in the event of a major nuclear incident in Ukraine as a result of Russia's irresponsible actions at Ukrainian nuclear facilities.

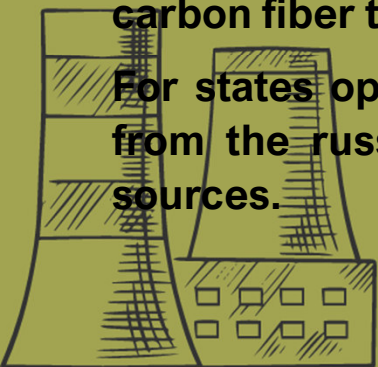


How to force the russian federation to comply with international conventions and the UN Charter?

To be proposed in the first round of sanctions:

- a ban on the supply of uranium concentrate from russia, which will impact russian uranium mining and force supply chains from Central Asia, which are currently carried out through russia, to find an alternative route to the markets of developed countries;
- personal sanctions against members of the rosatom Board, General Director of rosatom (Likhachev) and heads of key subsidiaries of rosatom;
- personal sanctions against rosatom employees who interfered in the operation of nuclear power plants in occupied Ukraine and undertook actions that threatened nuclear safety;
- freezing any new contracts with rosatom for enrichment or reprocessing services, as well as freezing any new contracts for construction of nuclear power plants.
- considering suspending critical nuclear supplies from russia, such as the export of specialized carbon fiber to russia from Korea, the EU and China.

For states operating NPPs of the Soviet design, and 100% dependent on the supply of nuclear fuel from the russian company TVEL, to determine a period of 4-5 years to diversify the fuel supply sources.



How to force the Russian Federation to comply with international conventions and the UN Charter?

Second stage of sanctions:

- nationalization of Rosatom's investments in Western countries for national security reasons;
- revision of all projects involving Rosatom and exclusion of Rosatom from all intergovernmental agreements and agreements on research projects, except in cases where they are considered to help prevent the spread of nuclear weapons and ensure nuclear safety or contribute to humanitarian goals, such as production of medical isotopes;

personal sanctions against all high-ranking officials of Rosatom in the Rosatom holding company and subsidiaries of Rosatom;

sanctions against Rosatom and all of its 262 subsidiaries and 50 affiliated companies, i.e. preventing them from trading in Western currencies or doing business with Western companies with a strictly defined exemption for one company on the Russian side to service any nuclear contracts deemed important.

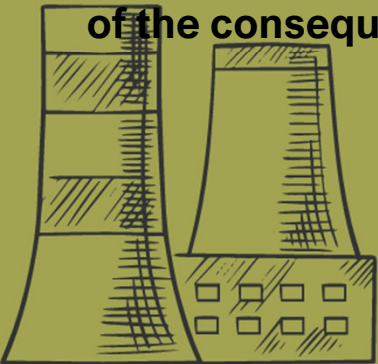


Conclusions

Expressions of deep concern, resolutions of the UN, the Board of IAEA Governors with appeals to the aggressor country Russian Federation to immediately leave nuclear hazardous facilities in Ukraine had no effect.

An attack on energy facilities, and nuclear installations in particular, should trigger an automatic mechanism for a collective response, this is the only way we can deter the dictators of the future.

The next aspect of the protection of energy facilities should be sanctions, which will also be triggered automatically in the event of an attack on a civilian power system. Such a package of tough sanctions should be predetermined and publicly available so that every potential aggressor understands the scale of the consequences that he will face.



Thanks you for your attention!

#StandWithUkraine!

