ANUAL REPORT





We make Ukraine strong



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Glossary_

AE - Airborne electronics

MTC - Military technical cooperation

SBA - Sector Business Association

SDO - State defence order

SRDSC - State Research & Design Shipbuilding Centre

STP - State target programme

LU - the Law of Ukraine

NARP - State Enterprise "Mykolayiv Aircraft Repair Plant "NARP"

AMSE - Armament, military and special equipment

AME – Armament and military equipment

DFC – Defence industrial complex

AD - Air defence

PT - Performance characteristics

KSAMC - Kharkiv State Aircraft Manufacturing Company

NR - Net revenue







Address of the General Director_

2020 is the year of preparation for the great reform

The year 2020 for the whole world was marked by the COVID-19 pandemic. However, for the current status of defence sector - primarily for the State Concern "Ukroboronprom" the year became first of all preparatory to a large-scale reform. I joined Ukroboronprom team at the end of the year, December 3. Prior to that, in 2020, Aivaras Abromavicius was the head of Ukroboronprom, and after him – Igor Fomenko, who still has been working in our team at the position of Deputy Director General for Production. Despite all the difficulties, caused by the coronavirus crisis, I can say that last year laid a solid foundation to implement changes that will allow us to complete transformation the defence industry of our country.

The steps taken in 2020 gave impetus to our joint victories in 2021. After the preparation of the draft law № 3822 "On the peculiarities of reformation of the state defence-industrial complex", it was taken to the Committee on national security, defence and intelligence, and later - to the session of the Verkhovna Rada. It was approved in the second reading and as a whole on July 13. It is a historic and key event, as №3822 gives the legal foundation for deep and comprehensive transformation of defence industrial complex of Ukraine. Also in December 2020, I signed an order that gave the start of corporatization of the Ukroboronprom's enterprises. I want to draw attention to the following important indicators, by which it is possible to evaluate the scope of Ukroboronprom's work in 2020 year.

Production volumes - 2020

The total production output of all enterprises of Ukroboronprom in 2020 compared to 2019 increased for 111%. This equals to UAH 32.4 billion or in other words UAH 3.1 billion more than in 2019. In 2020, the enterprises

of Ukroboronprom manufactured, modernized and repaired:

- armoured vehicles for UAH 5.9 billion, 38% more than last year;
- radar, radio communication systems and special devices for UAH 2.7 billion, 22% more;
- naval equipment for UAH 3.9 billion, 15% more;
- high-precision weapons and ammunition for UAH 6.8 billion:
- aircraft construction and equipment for UAH 11.7 billion;
- other enterprises of the Ukroboronprom for UAH 1.4 billion.

State defence order 2020

Ukroboronprom's enterprises fulfilled 100% contracts under the state defence order (SDO) in 2020. The plan was carried out despite delay in financing SDO for more than 3 months and late contracting which had begun in the second quarter of the year, as well as restrictions, associated with the coronavirus pandemic and quarantine measures.

During 2020, Ukroboronprom's enterprises did not disrupt the implementation of any contract with government customers. Moreover, 56 contracts out of 277 performed ahead of schedule, meaning every 5th contract. The others - according to the plan.

In total, customers received 4,109 new, modernized and repaired weapons. In addition, the enterprises of Ukroboronprom repaired and handed over 1459 units of engines and components.

In addition, in December 2020, a contract was signed under government guarantees between the Ministry of Defence of Ukraine and ANTONOV Company for the supply of three new military transport aircraft AN-178

for our Air Force. This is the first time in recent years the Armed Forces ordered construction of aircrafts!

Despite the huge potential, the share of Ukroboronprom's enterprises in SDO has been falling incessantly during years of war. The reform of the defence industry is aimed to change this situation for the better.

New models of military weapons – 2020

Military weapons, produced at Ukroboronprom enterprises, were introduced into service at Armed Forces of Ukraine in 2020:

- 1) The missile complex "NEPTUNE";
- 2) Tactical combat wheeled vehicle "DOZOR-B";
- 3) Modification of the jet flamethrower RPV-16.

In 2020, equipment of the Ukroboronprom's enterprises that took military tests:

- 1) "Storm" multiple rocket launcher;
- 2) Missile system "Vilkha-M";
- 3) Radar 80K6KS1 for SAM BUK-M1;
- 4) The MiG-29MU2 fighter.

Arms exports - 2020

Ukroboronprom's export in 2020 amounted to USD 912.00 million. Special Exporters have fulfilled their plans for 100% on shipment of products and receipt of funds. The amount of contracts signed by special exporters comes up to USD 622.7 million and is 108% above the plan. That is all despite the abolition or postponing all exhibitions of weapons, despite the lack of opportunities for demonstration and testing of weapons on the territory of customers because of closed borders.

Purchase, rent and sale property - 2020

From January 1, 2020, Ukroboronprom enterprises voluntarily switched to procurement through the system Prozorro. As a result, the amount of savings of the enterprises of Ukroboronprom is more than UAH 1 billion. We are among the leaders of Prozorro system in terms of saved resources. The Register of Surplus Real Estate has been opened and is available for transparent rent. In December, we signed a Memorandum of Cooperation with Prozorro. Sales. Sale and lease of defence enterprises property surplus take place only through the system Prozorro. Sales. As a result, we have not allowed illegal and non-transparent privatization of leased property area up to 21.6 thousand square meters. An increase in income from lease and sale of surplus property of Ukroboronprom enterprises is evident.

Of course, this is not a complete list of successes and achievements of 2020. In the current, 2021, we took the best gains from the previous year, retained, and in many ways passed the key indicators of the first half of 2020. These results became possible thanks to a wellcoordinated team of the President of Ukraine Volodymyr Zelensky and the Government. I also want to thank our partners such as non-governmental organizations Independent Defence Anti-Corruption Committee (NAKO) and the State Watch, Embassy of the United States of America, Great Britain, France, and the military-political bloc NATO. We continue our cooperation this year as well. I am sure that 2021 will be historic for development of the defence industry and the transformation of Ukroboronprom. This is our common goal. Together we make Ukraine strong!

Yuriy Husyev



I. UKROBORONPROM-2020 IN FIGURES AND FACTS



Geography and specialization of Ukroboronprom's enterprises_







Financial and economic indicators in 2020_

Current status of Ukroboronprom's enterprises

NET REVENUE - UKROBORONPROM

(2020) - thousands UAH

37 447 631

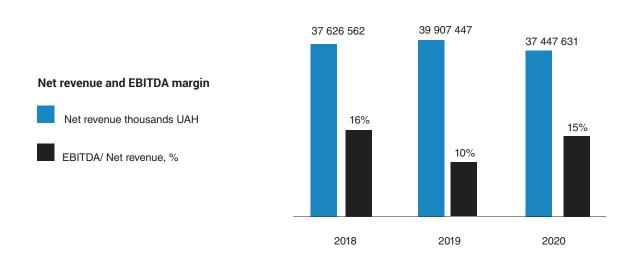
TOP 10 - NET REVENUE (2020) - thousands UAH	24 347 255
ANTONOV Company	7 513 302
SE "State Kyiv Design Bureau "Luch"	3 843 002
SE "Gas Turbine Research & Production Complex "Zorya" - "Mashproekt"	3 541 891
Zaporizhia Machine-Building Design Bureau Progress State Enterprise Named After Academian A.G. Ivchenko	2 050 159
The State Company for Export and Import of Military and Special Products and Services "Ukrspecexport"	1 975 736
SE "Kharkiv Morozov Machine-Building Design Bureau"	1 387 127
SE "Zhytomyr Armoured Fighting Vechicle Plant"	1 153 575
SJSHC "ARTEM"	1 071 805
SE "Kharkiv Plant of Armored Tanks"	915 657
SE "Malyshev Plant"	848 020

EBITDA - UKROBORONPROM

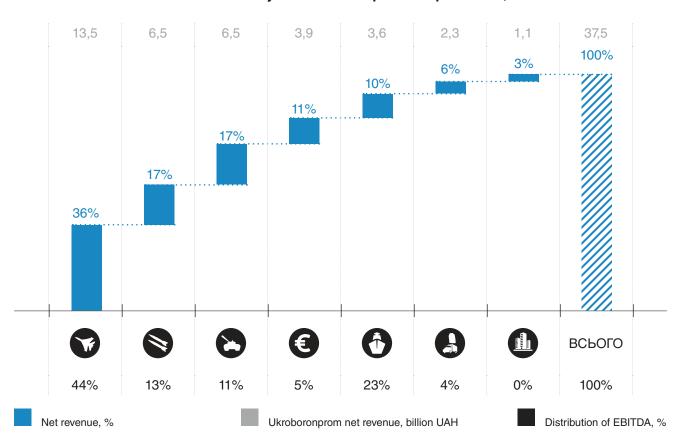
(2020) - thousands UAH

5 954 505

TOP 10 – EBITDA (2020) - thousands UAH	5 182 930
ANTONOV Company	1 851 771
SE "Gas Turbine Research & Production Complex "Zorya" - "Mashproekt"	1 378 252
Zaporizhia Machine-Building Design Bureau Progress State Enterprise Named After Academian A.G. Ivchenko	474 730
SE "State Kyiv Design Bureau "Luch"	390 072
SE "Zhytomyr Armoured Fighting Vechicle Plant"	297 293
SE "Kharkiv Plant of Armored Tanks"	224 226
The State Company for Export and mport of Military and Special Products and Services "Ukrspecexport"	191 203
SJSHC "ARTEM"	148 657
State Enterprise "Shepetivka Repair Plant"	134 082
State Enterprise Kharkiv Machinery Plant FED	92 644



Structure of net revenue and EBITDA by the Ukroboronprom's departments, 2020



The course of Ukroboronprom's reform in 2020: in brief_

February:

- Modeling of centralization of business-functions was carried out.
- The perspective needs in state defence order until 2030 and the impact of national strategic documents on transformation of Ukroboronprom were identified.

March:

- A comprehensive analysis of viability of enterprises - members of Ukroboronprom for 9 criteria was conducted (including assessment of financial stability, technological perspective, the needs of the Armed Forces in products produced by these enterprises, export potential): clustering enterprises into development, rehabilitation and transfer groups for further passing to other governing bodies, for example, to the State Property Fund of Ukraine.
- Recommendations for the model of corporate governance of future industry associations (Business Units) have been developed (based on the analysis of Andriy Boitsun's team with the support of the British government).

April:

- The concept of transformation of Ukroboronprom was formed and presented to the Prime Minister of Ukraine, Verkhovna Rada Committee on national security, defence and intelligence and to other stakeholders. Start of drafting of transformation strategy of Ukroboronprom.
- The Strategic Committee of Ukroboronprom was formed: strategic sessions and strategic research launched.
- Strategies for sector business associations have been drafted in the following fields: radar systems, armoured vehicles, aircraft repair and marine systems.

May:

Modeling of future management of sector business associations (SBA) is carried out with description of the "second line of defence" and a set of anticorruption practices (jointly with EY and with support of the French government) with functional allocation of roles, responsibilities and powers of the corporate center, sector business associations and participating companies.

June:

- Strategies for the High Precision Weapons
 Business Association have been carried out.
- The Code of Corporate Governance has been developed, which approves the vision of the corporate governance model and influences the terms of reference for the development of the charter and other documents of the future corporate center.

July:

- Strategies for the Aircraft Repair sector business associations and Special Exporters have been carried out.
- The preparation of the draft law № 3822 was completed with the support of the Verkhovna Rada Committee on National Security, Defence and Intelligence. This draft law stipulates for the reform of Ukroboronprom State Concern to grant Ukroboronprom's enterprises relief from structural and regulatory restrictions in their work.
- A Cooperation Map has been created, which records economic relations for each key product: the structure and scope of cooperation, participants from Ukroboronprom's enterprises and external companies, criticality for production and the availability of alternatives.

August:

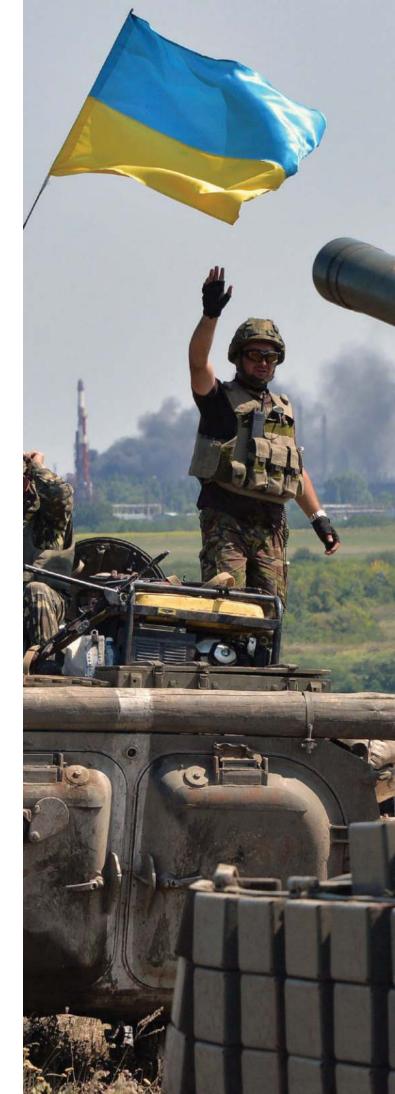
- Strategies have been carried out for the Ammunition and Special Chemicals business association.
- The charter for the new corporate center was created together with EY. The Articles of the charter contain provisions on the work of the Supervisory Board under OECD standards.
- Business plans of six sector business associations have been created to assess the financial dynamics in the future until 2025, as well as development scenarios until 2030.

September:

- The Board of Directors of "Radar Systems" business association was created that consisted of general directors of enterprises of this sector business associations.
- Strategic product portfolio of the "Radar Systems" sector business association was developed, consisting of product platforms - industry association drivers.
- Preparation of the pilot project of the "Radar Systems" sector business association.

December:

- It was decided to transfer 17 enterprises and corporate rights of another 2 joint-stock companies managed by Ukroboronprom to the State Property Fund and the Ministry of Defence.
- The finalized draft Law of Ukraine № 3822 on transformation of Ukroboronprom has been submitted.
- An order on the beginning of preparatory actions for corporatization of Ukroboronprom was signed.



II. DEFENCE INDUSTRY REVIEW



Defence-industrial complex in the world_

As a result of the analysis of the current status of the world's arms market we can identify a number of trends that will affect the development of international arms, military and special equipment markets, identification of promising markets for Ukrainian products.

Indeed, global spending on the defence industry is constantly growing since 2014: in 2020 it reached USD 1.93 trillion, which is 1.9% more than in 2019 (according to the Jane's Information and Analytical Center). According to experts, in 2021 defence growth costs will gradually decline due to the economic consequences caused by pandemic. First of all, such a reduction expected in the US as well as in countries dependent on export of petroleum products. However, due to a number countries of the Asia-Pacific region that are planning to increase defence spending, total spending will not shrink.

In general, European and African countries show decline in weapons imports over the last decade. Instead, the volume of supplies to the countries of Southeast Asia and the Middle East (especially to the Persian Gulf region) increase. Largely the demand for armaments in these countries is conditioned by local conflicts (both existing and potential).

Thus, promising market for the products of Ukroboronprom's enterprises remains the Asia-Pacific region and Middle Eastern countries.

Key areas of military-technical cooperation in these regions in the near future will be cooperation in aviation (repair and modernization of aircraft and helicopters, their support) and in armoured vehicles; supply missile and artillery weapons, anti-tank missile systems and radar stations (radars); logistical support of Mi helicopters; supply of power turbines for the needs of Navy.

However, the demand is also growing rapidly in the markets of North and South America. It is traditionally dominated by the United States and Canada, Brazil raises its position as well. Indeed, in 2020 "The first dialogue of the defence industries of Ukraine and Brazil" was held with

the support of Embassy of Ukraine in Brazil, which gave a new impetus to development of relations in the field of defence between both countries.

One of the most promising countries in the South America for Ukraine in the field of military-technical cooperation is Peru. Significant impetus in relations with this state was signing in 2019 between SFTE "Spetstechnoexport" and the Peruvian National Police contract for the supply of An-178 military transport aircraft. This plane is currently under construction at the ANTONOV Company.

During last five years, we have seen a stable tendency of reorientation of key world's importers of weapons from purely arms purchases to localization of production on their territory, the creation of joint ventures, technology transfer, etc. First of all, this applies to such countries as India, Saudi Arabia, UAE, Egypt, Algeria, Qatar and many others.

National program documents define priority directions of armament development on long-term period, which coincide with the main trends in the field of defence industry, common in most leading countries of the world.

These directions include the creation of:

- modern equipment for intelligence, communication, information protection and automated control;
- robotic, autonomous and remotely controlled models of weapons and military hardware for various purposes;
- high-tech, high-precision means of destruction as part of reconnaissance and strike systems, including long-range ones;
- highly effective, multifunctional samples of combat and special equipment on ground, sea and air platforms;
- modern systems and means of electronic warfare, countering technical intelligence and high-precision enemy weapons;
- modern information tools for the fight in informational area.



Changes in the world are shaping new challenges and opportunities that in the next decade will have significant impact on the development of defence industry complex. We are talking about:

- transition from globalization to isolationism in the countries' economic policy;
- rapid growth of international competition in the world market of armament, military and special equipment (AMSE);
- change in the structure of the world economy (shift of the center of economic development from West to East - to developing countries), lack of resources (energy, food, drinking water), which will stimulate the growth of AMSE markets;
- outpacing growth of emerging markets, especially in Southeast Asia;
- high rates of technological change and the transition to a new technological age (artificial intelligence, development of new communication technologies,

- biotechnology, electronics, etc.), which contributes to the emergence of new and leads to the reduction of old markets, competition among AMSE producers is intensifying;
- the negative impact of geopolitical factors on the export opportunities of Ukrainian weapons; such factors also limit the access of enterprises of the national defence industry to critical technologies, materials and components;
- exacerbation of regional and local conflicts: on the one hand, they lead to increased demand for AMSE, on the other - economic instability, global crisis, pandemics can lead to limited access to international markets, capital for investment, currency risks, reduced demand for military products, which in turn will affect the profitability of long-term export contracts;
- shortage of resources, which will lead to a revision of production costs and increase demand for energy-saving technologies and equipment.

Defence-industrial complex in Ukraine_

History and structure of the defence-industrial complex of Ukraine

History of the defence-industrial complex of Ukraine

The management system of the defence-industrial complex of Ukraine, in particular state-owned enterprises, should take into account the peculiarities of its Soviet and post-Soviet experience, aiming at a gradual integration into European and Euro-Atlantic spaces.

After the collapse of the Soviet Union in 1991, Ukraine received nine of former Soviet defence ministries, which under deprival of sectoral management continued to focus on the previously established industry affiliation and the former Soviet Union system of scientific and technical and production cooperation.

Assignment of the most defence companies under the Ministry of mechanical engineering, military-industrial complex and conversion (later named the Ministry of industrial policy) did not help to solve the problem to ensure effective management system of enterprises.

Attempts to regulate the management of the military-industrial complex with the help of creation of the special Agency under Ministry of industrial policy also did not give the desired result.

Under such a management system, the domestic defence industry was deprived of an adequate response to the transition from planned to market (or mixed) methods of management.

For the same reason, the defence industry began to rapidly lose pace of modernization and technical re-equipment of the main production funds, the high level of which in the planned economy has always been inherent in it.

The defence industry needed a significant update of the product nomenclature and operation mode in conditions of technological isolation.

The solution to these problems was complicated by the lack of systematization in the development and implementation of regulatory legal framework for the defence sector. Some efforts in this direction had tactical, not strategic character.

Creation of the State Concern "Ukroboronprom" as an authorized business entity to manage of state-owned entities in defence-industrial complex became the first domestic experience in building industry not with the central body of executive power, but with business entity.

The structure of the defence-industrial complex of Ukraine

In general, the defence industry of Ukraine includes enterprises belonging to the sphere of management of Ministry of Defence, Ministry of Economy, Ministry of Internal Affairs, the State Space Agency, the State Concern "Ukroboronprom" and separate private enterprises, whose main activity is to develop, produce, modernize, sale and dispose military products.

According to the results of the analysis of the interaction between the central executive bodies and other government authorities, it is determined that the issues that need to be addressed are the following:

 the need to introduce vertically integrated production structures in order to create conditions for the concentration of financial resources in priority areas;



- revision of the share of the public sector in production of military weapons and strengthening the role of private enterprises;
- more effective involvement of enterprises subordinated to the State Space Agency of Ukraine in the implementation of the tasks of the defence industry;
- inconsistency of budget funding with the planned indicators of the government program for the development of the defence industry, which causes insufficient growth of production capacity of enterprises;
- legislative restrictions on the participation of the private sector in the implementation of defence projects and the attraction of foreign investment by state-owned enterprises;
- determining the degree of relevance of the potential of industrial enterprises to the priority areas of development of the defence industry in the framework of government policy, as well as the Strategy for the development of the defence industry for 2028, approved the order No. 442 of the Cabinet of Ministers of Ukraine as of 20.06.2018;
- creation of the Agency for the Development of Defence Technologies and the Government Fund for the Development of the Defence Industry of Ukraine to finance relevant projects;
- liberalization of foreign economic activity for private sector enterprises with the nomenclature of own

production (or for the needs of own production) under the condition of priority provision of such nomenclature for the needs of the security and defence sector, including the state defence order (SDO).

It should be noted that the current formation of the management system of the defence industry is only in a status of limited capacity. Ministries, departments and agencies, involved in addressing issues of operation and development of the defence industry have just been defined. In practice, there is no mechanism of interaction among institutional entities related to the defence industry, and therefore on their own discretion they define the directions and priorities of the defence development strategies. In particular, the lack of information provided by defence and security entities in relation to their needs and, accordingly, the tasks of defence industry enterprises on the development and production of new weapons on medium and long term and, instead, using the "you offer - we consider" paradigm lead to a decrease in scientific, technical and production capacity of domestic producers which do not have enough own funds to create new weapons.

The recent trend in the field SDO, namely, aspirations to import a significant number of weapons (that have high cost in comparison with domestic ones and not always adopted even in countries of its origin), is a significant burden for budget. This leads to dependence on supplies spare parts and components, as well as the actual support of foreign producers-competitors.

Assessment of the status of the defence-industrial complex_

General observations of the functioning of the defence industry in Ukraine show that Ukroboronprom needs a radical transformation and support from the government. The key issues that need to be addressed are:

- 1) weak competitiveness of Ukroboronprom's products on the world arms market;
- 2) inefficient system of State defence order.

The first problem is caused by poor condition of Ukroboronprom's enterprises that does not allow them to participate in an open-market competition.

Ukroboronprom's enterprise are inferior to international ones in terms of production base, technology and personnel quality. All product line of enterprises was created during the Soviet era Union or on the basis of Soviet-era products. The main share of sold military products is the result of modernization or partial improvements. There are only a small number of breakthrough innovations products. The degree of depreciation of fixed assets production of the Ukroboronprom's enterprises as of 2020 year was 64%. Poor scope of internal market and negative dynamics of Ukroboronprom's share in state defence orders do not provide a complete loading of production capacities of all enterprises of Ukroboronprom. The execution of SDO contracts account for only about 30% of the Ukroboronprom's net revenue.

The second problem associated with the inefficiency of the SDO system causes:

Iimited profitability. The level of profitability of Ukroboronprom and the government regulation of the rate of return on SDO do not allow to accumulate the funds needed to modernize production and investment in promising products or new business areas;

- lack of dynamics in production. Unstable capacity utilization of enterprises in the absence of long-term orders within the SDO leads to a broken rhythm of production. As a result, it gives an outflow of key production personnel, low liquidity, inability to plan development and periodic crisis in enterprises;
- insufficient level of investment. The level of investment in research and development does not meet international standards and does not allow for modernization product line, which leads to decrease in competitiveness in world markets. Thus, the annual financial plan for investments in 2018 was fulfilled only by 55%, despite the fact that in absolute terms the volume of capital investments is constantly growing;
- imperfect pricing system. This is because price formation is carried out by the administrative method on the basis of calculation materials and does not take into account modern market relations. When setting the price for defence products, customers do not take into account the cost of the life cycle;
- lack of long-term vision. Close forecast horizon and complete uncertainty regarding the annual SDO, signing contracts with Ministry of Defence and other government customers, start of funding closer to the middle of the year drives up the cost of producing and deterioration of viability enterprises.

Dynamics of production of the private sector of the defence industry, which is accelerating rapidly, and significant growth in number of private enterprises involved in the implementation of SDO, lack of relevant statistics keep off from analysing activities of private enterprises with the same quality as state ones.





The current status of capabilities and readiness of the defence-industrial complex

In the long-term perspective the defence industry must fully provide the defence and security sector with:

- modern intelligence and communication equipment;
- information protection and automated command and control management;
- robotic, autonomous and remotely controlled models of weapons and military equipment for various purposes;
- high-tech, high-precision weapons as part of reconnaissance and strike systems, including longrange;
- highly effective, multifunctional samples of land, sea and air weapons;
- modern systems of electronic warfare, countering technical intelligence and high-precision enemy weapons;
- modern information tools for the battle in the information space.

In addition to improving the management system and improving the financial and economic condition of defence

enterprises, to meet the needs of the security and defence sector in armaments, ammunition, military and special equipment, it is necessary to ensure the achievement of the following levels of defence industrial complex capabilities:

- the ability of economic entities to ensure serial production of basic (complex) samples of weapons;
- absence or significant reduction of the defence industry's dependence on critical imports;
- ensuring a high level of use of domestic innovations in the production of modern critical and energysaving technologies;
- the ability to support the entire life cycle of weapons
 from development to disposal;
- availability of permanent cooperative ties;
- production in complete cycles of a significant amount of final products;
- maximum integration of science, innovation and production; qualified personnel;
- high level of provision with high-tech equipment and the presence of modern machine tool park.

Today, if the trend continues to increase slightly in defence funding only 3-5% of defence enterprises will be able to reach appropriate capacity levels. Their achievement depends primarily on funding government-targeted programs related to creation and production of weapons, production capacity, ammunition, and programs rearmament of the Armed Forces. At the same time increasing SDO by 10-15 billion UAH annually to purchase domestically produced weapons and import exclusively weapons that cannot be produced by Ukrainians enterprises, will have a positive impact not only on the defence industry, but also on related sectors of the economy. Increasing volumes of financing of technical re-equipment production capacity and bringing them to defined in the defence planning documents levels will allow most businesses to acquire relevant capabilities by 2030.

It should be noted that the order № 600 of the Cabinet Of Ministers of Ukraine dated 30.08.2017 on "Some issues of development of critical technologies in the field of production of armaments and military equipment" identified 38 critical technologies that were updated in 2019. These technologies are the priority for scientific, technical and innovative progress in the field of defence and enterprises have to consider them for the development of arms production and military equipment.

Analysis of data provided by the Ministry of Defence on the needs of the Armed Forces indicates that today the Ukrainian defence industry for conditions of stable and full funding is capable to meet the needs of the Armed Forces in the next fields:

- military transport aviation;
- missile armament of aircrafts and armored vehicles;
- high-precision weapons;
- tanks and armored vehicles;
- radar stations, satellite navigation and electronic warfare:
- ammunition:

- tank and aircraft engine construction;
- warships and patrol boats;
- unmanned aerial vehicles;
- automated control and command systems.

At the same time, the schedule of increasing production capacity must take into account the high cost of single and small series production with gradual decrease in the cost of weapons at their serial production.

There is also an opportunity at Ukrainian enterprises to perform all types of modernization and repair of military weapon and equipment that are in service in the Armed Forces of Ukraine.

It should be noted that while developing the approaches for implementation of projects within the state-private partnership shares of public and private capital needs to be clearly defined, as well as intellectual property rights that need relevant legislative and regulatory software.

Legislative regulating procedure for attracting foreign investment in companies, strategically important for defence and security of the state, is of prime importance while implementation of rojects with foreign partners. At the same time amendments to some legislative acts of Ukraine on the creation of favorable conditions to attract foreign investment in defence industrial complex must be elaborated.

For each production segment of defence industrial complex, the base enterprise must be determined, taking into account its financial and economic indicators, the status of production base, staffing, availability of own financial resources, intellectual property.

There are factors that have a significant negative impact on the defence industry:

- lack of available loans for military industrial enterprises;
- weak concentration of financial and other resources on creation of new generation weapon;

- imperfection of the system for defining the needs of the Armed Forces and secrecy of the process of forming SDO and selection of contractors;
- lack of effective government programs for the transition from the production of single and small series products to serial production of new weapon, conducting basic research in the interests of the defence industry, stimulating new scientific and technical research;
- lack of a clear government policy to stimulate innovative development of the defence industry, support for leasing and offset schemes;
- lack of flexible pricing policy for military products;
- underestimation of the export potential of enterprises-manufacturers of weapons and lack of government support for enterprises whose products have significant export potential;
- insufficient coherence of military-technical and military-industrial policy, in particular in development and manufacture of new generation weapon;
- lack of effective mechanisms to attract investment in the industry;
- absence of orders from customers for products that are made according to the approved critical technologies;
- not including into SDO the research projects,
- Iisted in the resolution № 13 of the Cabinet of Ministers of

- Ukraine dated January 11, 2018 "On approval of the Procedure for formation topics of scientific research and scientific technical (experimental) developments that financed by the state budget, and recognition as lost validity of some resolutions of the Cabinet of Ministers Ukraine":
- lack of proper legislation to attract international companies to invest in defence industry enterprises.

To achieve the necessary capabilities the defence industry should focus on ensuring the implementation of such tasks:

- diversification and technical re-equipment of enterprises;
- expanding the range and increasing the volume of competitive military and dual use products;
- creation of competed technological cycles to minimize dependence on external suppliers;
- introduction of the system of logistical support of internal cooperation;
- development of international cooperation;
- wide involvement of research entities into production.

The abovementioned factors and objectives will be taken into consideration when changes to key defence planning documents will take place. A government fund for the development of basic and critical technologies using internal financial resources and foreign investment funds must be stipulated.



Participation of Ukroboronprom in supporting Ukrainian security and defence forces_

Comprehensive analysis of indicators and dynamics of sold products of defence industry enterprises within SDO indicate that the state defence order has a significant impact on financial stability of enterprises. At the same time for large enterprises, which have significant export potential, SDO is not very significant for their financial economic stability, while for small and medium enterprises involved in production chains (produce components, carry out modernization, repair work), participation in the implementation of SDO is in fact the only source of income.

In the structure of customers, the Ministry of Defence and the Ministry of Internal Affairs have the predominant share of orders - about 92%.

It should be noted that the number of state enterprises in SDO is constantly declining since 2015. In 2015, the share of the private sector in SDO was about 30-35%, then in 2019 - about 45%, and in 2020 - more than 50%.

Repairing of weapons, military and special equipment is distributed between public and private enterprises almost equally. However, in the structure of income share of repair services makes:

- 78% for private companies;
- 78% for Ukroboronprom's enterprises.

The structure of production within the SDO is divided into:

high-precision weapons and ammunition;

- aircraft construction and aircraft repairing;
- armored vehicles and repair;
- electronic warfare, communication and air defence equipment.

The largest volumes of state defence orders fall into the segment of high-precision weapons and ammunition, which have grown over the past 4 years more than 4 times. Participation of private sector enterprises in the implementation of SDO in the segment of high-precision weapons and ammunition is quite low and they are limited to performing the function of co-contractors and suppliers of software and components.

The main problems of the Ukroboronprom's enterprises, which significantly affect the possibility of increasing the number of public sector enterprises in the implementation of SDO, are as follows:

- lack of transparency and long-term planning, as well as no awareness of the real needs of public customers;
- inefficient pricing system (calculation materials);
- limiting the levels of profitability for SDO contracts and the presence of an approximate price in the contracts;
- imperfection of the contract system and financing system; asymmetry of rights and obligations of the parties of the contracts;
- discriminatory policy of public customers towards SDO contractors.



Strategic documents_

Basic documents

Till the end of 2020, the following strategic documents in the field of national security and defence have been updated:

- National Security Strategy (Decree of the President of Ukraine of September 14, 2020 № 392);
- Defence Review (report on the results of the review was approved by the Decree of the President of Ukraine of March 24, 2020 №106).

Defence industry development strategy

The purpose of the Strategy is to create conditions for the development of Ukraine's defence industry using the mechanisms of public-private partnership and militarytechnical cooperation with foreign countries to produce high-efficiency weapons, military and special equipment to meet the needs of the Armed Forces of Ukraine, other security sectors and defence, strengthening the export potential of the defence industry of Ukraine.

The Strategy defines the directions of the government defence industrial policy, in particular:

- improvement of the system of strategic planning in the field of defence-industrial complex and planning system of long-term scientific and logistical needs of the Armed Forces of Ukraine and other military formations in military, civilian and dual use products;
- optimization of the system of public administration in the field of defence industry;
- carrying out rational diversification of defence industries:
- carrying out of corporatization of the enterprises of military-industrial complex, introduction of principles of corporate management of the enterprises of

- military-industrial complex accordingly to the principles of the Organization for Economic Cooperation and Development (OECD), the combination of centralized planning with modern market mechanisms;
- introduction of economic mechanisms to stimulate innovation, increase profitability, ensure sustainable financial condition of enterprises of the defenceindustrial complex, restore solvency, application of customs and tax benefits;
- improving the system of standardization, unification and product quality management in accordance with NATO standards;
- import of critical materials, components, element base, critical technologies and minimization of dependence on foreign suppliers;
- simplification of procedures for obtaining by business entities the authority to carry out exportimport operations in the defence production field;
- promoting the development of small and medium enterprises of all forms of ownership in terms of development and creation of innovative technologies and production of high-tech military, special and dual-use products;
- introduction of mechanisms of government protectionism and government support of export potential within the framework of military-technical cooperation;
- introduction of measures to stimulate enterprises to increase the volume of civilian products;
- economic stimulation of the use of new technologies, in particular those related to energy saving and energy supply;
- creation of a system of continuous training of personnel to meet the needs of the defence

industry, increasing motivation and ensuring legal and social protection of workers;

- introduction of effective mechanisms of interaction between government customers and defence contractors;
- implementation of CALS technologies and lean manufacturing systems;
- reviewing needs and updating mobilization stocks at defence industry enterprises;
- ensuring continuous scientific, informationanalytical and regulatory support of measures to reform and develop the defence industry.

An important component of the Strategy is Section V "Ensuring innovation in military-industrial complex", drafted with the participation of specialists from the National Academy of Sciences of Ukraine.

Government programs in the defence industry

Since 2017, the reform and development of the defence industry of Ukraine have been carried out as part of the implementation of tasks and measures of government programs in this field.

Today there are two programs:

1) Government program approved by the Resolution of the Cabinet of Ministers of Ukraine dated March 29, 2017 No. 197-3;

2) Government program appro ved by the Resolution of the Cabinet of Ministers of Ukraine dated May 24, 2017 No. 366-6.

Both programs contain classified information.

In accordance with the requirements of paragraphs 11 p. 2 of the decision of the National Security and Defence Council of Ukraine dated February 18, 2020 "On the main indicators of the state defence order for 2020 and 2021, 2022", enacted by the Decree of the President of Ukraine dated February 27, 2020 No. 59/2020, p. 7 clause 2 of the NSDC decision of 03/11/2021 "On the main indicators of the state defence order for 2021 and 2022, 2023", enacted by the Decree of the President of Ukraine dated 03/30/2021 No. 132/2021, the Cabinet of Ministers of Ukraine has to approve government reform programs on the development of the defence industry, and to ensure the creation and development of the production of ammunition and special chemical products for the period up to 2026. As part of the fulfillment of the tasks specified in these decrees, Ukroboronprom has developed proposals for the draft Government Program for the reform and development of the defence industry complex for the period up to 2026 and submitted them to the Cabinet of Ministers of Ukraine.

Ukroboron prom's Property Policy.

By the order of the Cabinet of Ministers of April 14, 2021 No. 325, the Property Policy of Ukroboronprom was approved, which determines the priorities and the main tasks assigned to Ukroboronprom, the main directions and key performance indicators of its activities.

CHART OF GOVERNMENT STRATEGIC DOCUMENTS

Chart of strategic and planning documents of Ukroboronprom

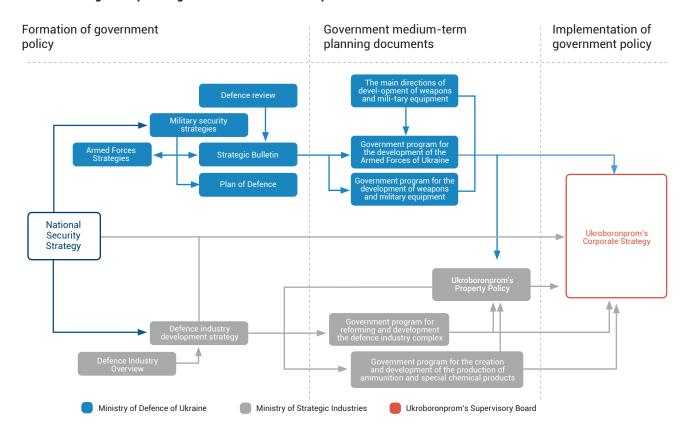
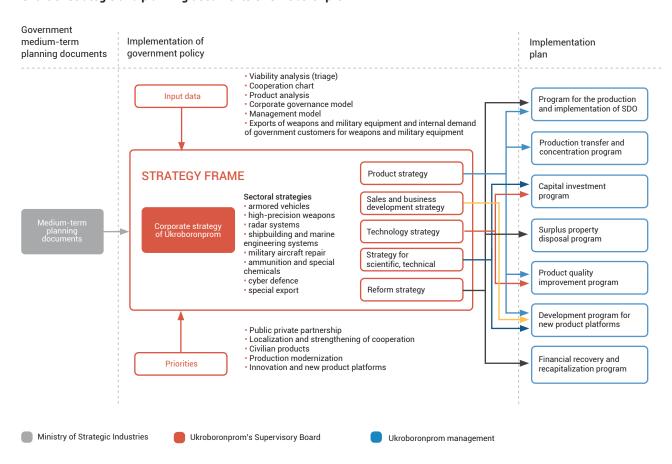






Chart of strategic and planning documents of Ukroboronprom



III. ABOUT UKROBORONPROM



Address of the First Deputy General Director_

The transformation of Ukroboronprom became an urgent need a long time ago. International manufacturers of weapons and military equipment have implemented a corporate management model 20-30 years ago. Ukraine is settling down to this course only now. There are 6 key reasons why it is IMPOSSIBLE to leave the state defence industry unreformed.

First. Today, only 28 out of 137 Ukroboronprom enterprises generate 98% of the proceeds, the rest are in the mode of survival or accumulation of debts, incl. on wages, lack of working money and orders, low liquidity, deterioration equipment and surplus property that you need hold constantly.

Second. The lack of free working capital deprives the enterprises of the state defence industry of the opportunity to invest in the research and development (R&D) of modern high-tech and science-intensive weapons and military equipment, which will allow to get our clients back and to conquer new markets. Today, Ukraine spends only 2-3 percent of net profit on R&D, while successful global defence industry companies - up to 25%.

Third. The total obsolescence of production equipment excludes the emergence of new serial models of weapons and military equipment. Depreciation of equipment in the state sector of the defence industry reaches an average of 64%.

Fourth. Ukroboronprom's enterprises are also burdened by surplus assets: more than 1.85 million square meters from almost 9 million square meters is surplus property that has not been involved in production processes for a long time.

At the same time maintenance costs grow every month, which negatively affects the cost of production and the overall the economic condition of enterprises.

Fifth. The debts accumulated over the years of Ukraine's independence (more than 14 billion UAH) make it impossible for certain state-owned enterprises to effectively fulfill defence orders. Meanwhile, the average age of employees at the Ukroboronprom's factories is growing from year to year and today is 54 years old. And the average age of representatives of the most important professions for the defence industry, senior engineering and design staff, is even greater: 65 years.

Sixth. As a result, all this leads to the fact that one of our employees produces goods and services for USD 20,000 per year, while an employee of a defence company of a NATO member state - USD 350,000. That is, almost 20 times more. This is a big problem for the public sector of the defence industry of Ukraine, since the defence industry all over the world is primarily an innovative industry. Invention of Internet by DARPA (USA) proves this fact.

Under such conditions, Ukroboronprom requires a radical transformation and support for changes on the part of the state and civil society in order to stop destructive processes at its participating enterprises and create on their basis a modern defence-industrial industry that will be able to ensure the emergence and development of the necessary production, technological, innovative and other opportunities of the defence industry of Ukraine in accordance with national priorities and the best world business practices.

Roman BONDAR



Overview_

Ukroboronprom State Concern is an association of diversified enterprises of the defence industry of Ukraine' various branches. Ukroboronprom, formed in 2010, included 137 enterprises that carried out economic activities in the field of development, manufacture, sale, repair, modernization and disposal of weapons, military and special equipment and ammunition, civilian and dual-use products, and also participated in military-technical cooperation with foreign states. The functions of managing Ukroboronprom and control over its activities are carried out by the Cabinet of Ministers of Ukraine.

As of the end of 2020, Ukroboronprom includes 137 enterprises (21 of which are in the temporarily occupied territories), including scientific institutions and industrial enterprises of the defence industries, namely:

- 1) the aviation industry;
- 2) the shipbuilding industry;
- 3) the armored industry;
- 4) the radio-electronic industry;
- 5) branches of instrumentation and communications;
- 6) the ammunition industry;
- 7) the field of special chemistry.
- 8) high-precision weapons.

Enterprises authorized to carry out foreign economic activities in the field of export and import of military products are included in a separate group in Ukroboronprom. These enterprises perform the function of selling the products of the defence industry enterprises in foreign markets, including its warranty and postwarranty service, as well as the provision of services for the repair and modernization of weapons and military equipment.

In December 2020, the Cabinet of Ministers of Ukraine adopted a resolution on the withdrawal of 17 enterprises from Ukroboronprom and the transfer of the corporate rights of two more joint-stock companies managed by Ukroboronprom: 18 - transferred to the State Property Fund of Ukraine for the purpose of their further privatization; one more will go under the control of the Ministry of Defence of Ukraine.

A separate group is also made up of non-core enterprises that do not produce weapons and military equipment.

The total net income of enterprises of Ukroboronprom amounted to UAH 3.74 billion in 2020, and the net profit amounted to UAH 2.5 billion.



Mission, vision, values and principles_

The mission of the State Concern "Ukroboronprom" is to meet the needs of the defence and security forces of Ukraine in modern and high-quality weapons, military and special equipment through:

- increase in operational efficiency, profitability, preservation and further increase in the value of assets, in particular through the implementation of synergistic effects through the manufacture of civil products;
- technological leadership and innovative enterprises for the creation and production of new types of hightech products;
- attracting the most competent and qualified personnel to develop a strong and competitive defence industry with ensuring decent working conditions and a system of incentives;
- recognition as a national leader in the production of weapons and military equipment and an integral part of state security.

The vision of SC Ukroboronprom is guided by the requirements and perspectives, which are enshrined in state strategic documents, in particular the National Security Strategy of Ukraine. The State concern Ukroboronprom should transform itself into a new quality and act as:

1) a modern defence company, which is a regional leader in the production of weapons and military equipment and an integral part of Ukraine's security and defence sector;

- 2) a strategic partner of leading foreign companies in the development and supply of military and dual-use products, as well as civilian products;
- 3) a modern corporate structure with self-sufficient developed sectoral research and production associations, have financially stable assets, reequipped and modernized production, scientific and technical and experimental design base;
- 4) a source of innovative solutions for the Armed Forces and technological solutions for the Ukrainian industry, an example to follow;
- 5) an attractive employer who provides decent working conditions and a developed social sphere, continuous training of personnel and the development of modern knowledge and skills;
- 6) a promising employer for young personnel;
- **7)** a developed system of public-private partnerships, cooperation and scientific and technological relations with national and foreign companies.

The values of the State Concern "Ukroboronprom", which create the foundation for strategic planning and development:

- 1) independence of Ukraine we are patriots of independent Ukraine and are ready to defend it always;
- 2) integration into the European community and NATO is our vector of development;

- **3)** development we value the desire to change, develop, improve;
- 4) care we respect and value the people who work with us,
- 5) meritocracy we value competence, professionalism and object to politicization and nepotism;
- 6) honesty we tell the truth to ourselves, the team and society, we are transparent, predictable and understandable.

The principles of activity of the SC

"Ukroboronprom" are based on values and include the following:

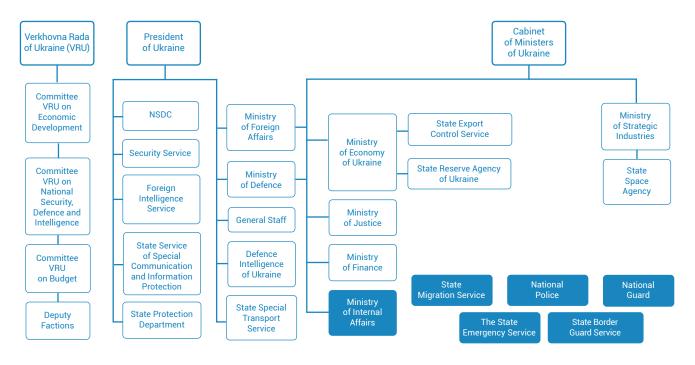
- 1) our decisions are always based on the priority of the security of Ukraine;
- 2) meeting the needs of the customer the security and defence forces is the basis of our motivation and decisions;
- 3) we are ready to adapt our plans and actions to changes in the world arena. Innovation and flexibility help us meet challenges;
- **4)** we do not allow conflicts of interest and support political independence;
- 5) our decisions and actions bring Ukraine closer to the state goal - integration into NATO and the EU. We are actively implementing NATO standards and the principles of the Organisation for Economic Cooperation and Development.



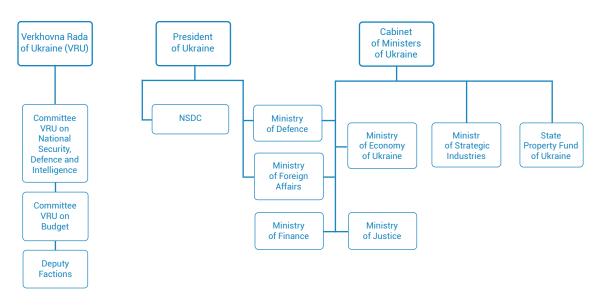


Interaction with stakeholders_

Stakeholders in the national security and defence sector of Ukraine



Stakeholders in the national security and defence sector within the framework of corporatization of the Ukroboronprom Group of Companies



Government customers in the field of defence

Ministry of Strategic Industries (the main institution in the field of defence procurement planning) Ministry of Defence (The main body for the implementation of defence procurement)

Ministry of Defence

Defence

Intelligence

of Ukraine

Security Service National Anti-corruption Bureau Ministry of Justice of Strategic

State Space Agency

State Bureau of Investigation

National Police

State Special

Foreign Intelligence Service

State judicial administration

Ministry
of Internal Affairs

National Guard

Transport
Service

The State

Emergency Service

State
Service of Special
Communication
and Information
Protection

State Protection

Department

Ministry of Economy of Ukraine

Industries

Ministry of Strategic Industries

State Border Guard Service

The main problematic issues that required legal regulation in 2020:

- The need to amend the Resolution of the Cabinet of Ministers of Ukraine dated December 4, 2019 No. 1070 in connection with the need to grant permission to the Treasury to transfer 50 percent of the prepayment received enterprises performing contracts for the supply of defence products, as well as the normalization of certain aspects of the restrictions imposed on managers (recipients) of budget funds for non-implementation prepayment payments;
- changes in the Resolution of the Cabinet of Ministers of Ukraine (August 23, 2017 No. 1093, April 27, 2011 No. 464, February 14, 2018 No. 188) were due to the need to establish a fixed amount of profit as part of the price for the purchase of components (semi-finished products), works (services), as well as other expenses as part of the production cost of products (works, services).

In 2020, it was possible to regulate the establishment of a new level of interest rates on loans under state guarantees for the implementation of programs related to improving the defence capability and security of the state (Resolution of the Cabinet of Ministers of December 28, 2020 No. 1357).

Also, the Resolution of the Cabinet of Ministers of December 16, 2020 No. 1320 normalized the important issue of selling non-core and surplus assets that are not used in production activities, obsolete or completely physically worn out (used the established resource).

With the solution of other problematic issues in 2020, the efforts of Ukroboronprom in the context of interaction with state authorities were aimed at actively involving Ukroboronprom in the processes of long-term (2-3 years) planning of the needs of the Ministry of Defence of Ukraine, especially in the field of aircraft construction and aircraft repair.

Measures were also taken to prevent a certain downtime of enterprises of Ukroboronprom during the first 6 months



of the year, which led to the accumulation of debts in wages, taxes, penalties and fines, due to the late adoption of the state defence order and a protracted tender campaign (which led to the conclusion of contracts with too short deadlines - until November 1).

Also deserve special attention:

transparent transfer to the State Property Fund of Ukraine of enterprises of Ukroboronprom, which have lost their importance for the defence sector of the state;

- advocacy support for Ukroboronprom's countermeasures aimed at countering the illegal alienation of tangible and intangible assets of participating enterprises, incl. for unlawfully rendered court decisions;
- blocking the decision of the Kyiv Arbitration Court on non-fulfillment of contracts with the aggressor country by enterprises of Ukroboronprom.

Key events 2020_

During 2020, Ukroboronprom implemented a number of projects that contributed to the reform of the Ukroboronprom and the increase in the efficiency of enterprises of Ukroboronprom. Major projects were:

- 1. A comprehensive analysis of the viability of enterprises of Ukroboronprom has been completed in accordance with 9 criteria (including an assessment of financial stability, technological prospects, the needs of the army in the products that these enterprises produce, export potential): the distribution of enterprises into development, rehabilitation and transfer to other management bodies, for example, the State Property Fund of Ukraine.
- 2. An analysis of the financial condition of enterprises has been prepared: the amount of overdue financial debt has been determined, a plan for the financial recovery of enterprises of Ukroboronprom has been drawn up; a draft law on financial rehabilitation of enterprises of Ukroboronprom was prepared.
- 3. A draft corporate strategy of Ukroboronprom Group of Companies has been developed, which defines the main directions of development, a strategic product portfolio, as well as a financial model of enterprises that will become part of sector business associations, which made it possible to start developing functional strategies.
- 4. Developed strategies for sectoral business associations: "Radar Systems", "Air repair", "Marine

- Systems", "Armored Vehicles", "Precision Weapons", "Ammunition and Special Chemicals", the strategy of the aircraft building holding and special exporters.
- 5. A model for managing future sector business associations has been created with a description of the "second line of defence" and a set of anticorruption practices with a functional decomposition of the roles, responsibilities and powers of the corporate center, industry associations and companies.
- **6.** The Corporate Governance Code was developed, which approved the vision of the corporate governance model, which influenced the terms of reference for the development of the charter and other documents regulating the activities of the future corporate center.
- 7. The preparation of draft law No. 3822 has been completed, which creates a legal basis for the implementation of Ukroboronprom's reform, removes structural and regulatory restrictions in the work of defence enterprises.
- 8. A cooperation map has been created, in which economic ties are recorded for each key product: the structure and volume of cooperation, participants within the Ukroboronprom and outside, criticality for production and the availability of alternatives.
- 9. A strategic product portfolio has been developed for sector business associations with basic product platforms that will form the basis of orders within the SDO and export.

Problems of Ukroboronprom State Concern_

Since the establishment of the State Concern "Ukroboronprom" in 2010, its member enterprises were in a difficult condition: with accumulated debts and a weak ability to produce competitive products, and Ukroboronprom, as a subject of state property management in the DFC, through organizational and legal and other restrictions proved to be insufficiently effective for solving problems, not being solved for years as a corporate center.

The main limiting factors were:

- 1) the imbalance of powers and responsibilities between Ukroboronprom and the participating enterprises through the legislative definition of Ukroboronprom's key function - the management of state-owned objects as a subject of management;
- 2) Ukroboronprom does not have the legal status of the main manager of budgetary funds, Ukroboronprom's limited capabilities to finance and manage the liquidity of participating enterprises;
- insufficient implementation by Ukroboronprom of modern management systems, methodologies and uniform standards, creation of digital accounting systems for general use;
- 4) lack of modern corporate governance, mechanisms to contain and prevent risks, effective control and supervision over the activities of enterprises;
- 5) the lack of a unified investment policy and tools for its implementation for effective management of the renewal of production capacities and the processes of creating new types of armament, military and special equipment (AMSE).

Despite a significant increase in recent years in the volume of budgetary expenditures to meet the needs of the components of the security and defence sector of Ukraine in the AMSE, the state of the state-owned defence industry system deteriorated systemically through interrelated conditions that continue to cause negative consequences, in particular:

- the insufficient level of internal orders and the negative dynamics of the share of enterprises of Ukroboronprom in the execution of state contracts (agreements) on defence procurement are not able to ensure a full and even load of production capacities of all enterprises of Ukroboronprom;
- unstable capacity utilization of Ukroboronprom's enterprises in the absence of long-term orders within the framework of the implementation of government contracts (agreements) on defence procurement leads to non-cyclical functioning of production. As a result, during periods when there are no orders, this causes a crisis at factories, an outflow of key production personnel, poor product quality, the inability to plan and implement the development of enterprises even in the medium term;
- the low level of investment in renovation and creation of new production facilities leads to the fact that most of the fixed assets at the enterprises of Ukroboronprom are technologically and morally obsolete and require a significant amount of financing and a systematic approach to modernization. Thus, the average depreciation rate of fixed assets of enterprises as of 2020 was 64%, which significantly affects the competitiveness of products in domestic and foreign markets;
- Pobsolete technologies developed during the Soviet era and insufficient funding for development work do not meet the urgent needs of the modern Armed Forces and international standards, does not allow for the modernization of the product portfolio to create competitive advantages through qualitative and quantitative indicators of innovative developments. As a result, the lion's share of products sold is the result of evolutionary modernization or partial improvements with a small amount of innovations, do not cover most of the critical and promising technologies;

- the historically accumulated overdue debt in the amount of about UAH 14 billion worsens the financial stability of enterprises of Ukroboronprom, creating significant restrictions for the development and modernization of production facilities;
- the structure of production assets does not correspond to the volume of workload, and the resulting redundancy of property, personnel and real estate not involved in the core activities of facilities, additional costs, increases the tax burden and reduces the efficiency of enterprises of Ukroboronprom. At the same time, the average labor productivity at the enterprises of Ukroboronprom is 15 times lower than that of international companies (as of 2020 USD 22.7 thousand against USD 350.00 thousand).

These and other negative factors lead to a rapid loss of

financial stability and competitiveness in foreign markets by enterprises of Ukroboronprom. In the absence of proactive synchronized actions of all interested state institutions aimed at reducing or depriving the influence of the identified problems and risks, in the near future the national defence industry will lose its ability to produce modern samples of AMSE, and state enterprises will go bankrupt.

Under such conditions, Ukroboronprom requires a radical transformation and significant integrated support for changes on the part of the state and civil society in order to stop destructive processes at its member enterprises and create on their basis a modern defence industry that can ensure the establishment and development of the necessary production, technological, innovative and other opportunities of the military-industrial complex of Ukraine in accordance with national priorities and the best world business practices.



Strategy and reform_

Why is reform important? (Meanings)

Transformation will provide opportunities to take the necessary actions to improve control, transparency and value creation. The transformed Ukroboronprom will be able to perform the functions necessary for the development of competitiveness and will guarantee:

- Focus on a responsibility for the end result and increase of an independence of industry associations;
- Approval of the strategy and control of its implementation;
- Increase of exports and share in the state defence order;
- Concentration and priority of all resources (finance, production, people, technologies) for the production of the most promising and marginal products;
- Investments in new technologies and new product development.

Strategic directions for the development of the product portfolio

Ukroboronprom will focus on its activities from renovation, maintenance of serviceability and modernization of existing soviet platforms to innovative modernization product platforms and creating new high-tech weapons and military equipment.

1. Repair and maintenance of serviceability of existing weapons and military equipment

- 1) restoration of the functionality of weapons and military equipment is an important component since the beginning of the conflict in the East of Ukraine;
- 2) the volume and importance of repair and maintenance of functionality of weapons and military equipment are falling with a decrease in the intensity of hostilities and due to the scale of work carried out since the beginning of 2014:

- presence in the world of large volumes of weapons and military equipment on soviet platforms - this is a significant potential for our enterprises;
- **4)** workload of enterprises in this direction is decreasing it is necessary to vigorously enter foreign markets.

2. Modernization of existing weapons and military equipment

- 1) light modernization through import substitution
- without significant changes in performance characteristics (PT);
- 2) medium modernization through import substitution with PT changes and improvement of the quality of equipment;
- **3)** deep modernization innovative, transformational type.

3. Creation of new product platforms

- 1) new products based on existing scientific potential;
- 2) creation of groundwork innovative and technological development;
- **3)** creation of new types of weapons and military hardware.

4. Development of the civilian direction of production

- 1) global trend is that defense industry enterprises produce a large share of civil goods;
- 2) internal source of technologies, financial resources and competencies, internal military-civilian integration;
- 3) instrument of self-sufficiency and stability in conditions of unequal funding and workload;
- 4) source of financial stability to ensure supplies for the needs of the defence forces.

Current state of development of Ukroboronprom's operating model

Organizational structure

- The Concern unites enterprises of different types of legal organizational form (state-run, state-owned enterprises), and also manages the corporate rights of the state in the authorized capital of joint-stock companies transferred to its management. The existing legal organizational forms do not contribute to effective management. Some enterprises exist only formally.
- There is no clear distribution of rights and powers between management levels.
- ➤ There is no effective internal communication on key issues (for example, financial issues, import substitution, etc.).

Performance management

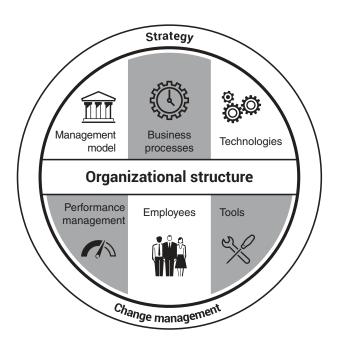
- Management accounting as a financial function is not implemented.
- Enterprises prepare a number of management reports, most of which are of a formal nature.
- ▶ The key performance indicators system (KPI) is under development.
- The top management of the Concern is testing pilot projects for the implementation of a management system by goals.

Business processes

- > Strategy on product platforms under development.
- Some of the processes are formal (preparation and implementation of the budget, financial plan).
- ▶ Some processes (management of treasury operations) in a state of formation.
- A number of processes need to be optimized (example: about 300 personnel are involved in the calculation of wages in only one of the enterprises).

Management model

- Composition of the Supervisory Board, profile of members, selection procedure, remuneration, main functions do not correspond to the leading practices.
- Committees of the Supervisory Board are only formal.
- The Board of Directors as a collegial body does not function.



▶ The rights and powers of the Director General are not clearly defined.

Employees

- ▶ Excess amount employees.
- Absence of qualified personnel with adequate knowledge (finance function, IT, internal control).
- About 20-30% employees are elderly people.
- Absence of financial discipline.

Tools and approaches

- There are no unified tools and approaches to support a unified management and control system.
- ▶ There is an absence of clarity in the actual distribution of rights and powers between enterprises and the Corporate Center, in making the final decision.

Technologies and data

- There is no unified architecture of information systems, which makes it impossible to timely access information and make timely management decisions at the top management level.
- ▶ The reliability, completeness and relevance of data do not always meet the needs of users.
- There is an absence of consolidated financial statements.

Target corporate governance model design

With the involvement of experts, the current corporate governance practice of Ukroboronprom has been analyzed and a high-level target and transitional models of corporate governance have been created based on the results of the research.

The experts carried out a thorough analysis of the national legislation that regulates the activities and role of the state as a policy maker, owner and regulator of SC "Ukroboronprom". As a result, it was proposed to significantly improve the legal framework governing the activities of state-owned defence enterprises, which now makes it impossible to introduce international corporate governance standards into Ukroboronprom and hinders the development of the entire industry.

In particular, the experts recommended repealing at least 11 regulations affecting the current way of managing the Ukroboronprom's enterprises, and making changes to at least 15 laws, codes, resolutions of the Cabinet of Ministers, a number of strategic documents of the Ministry of Defence, as well as harmonizing them with the policy property, which defines Ukroboronprom as the only strategic arms manufacturer.

The experts also proposed a detailed corporate governance structure of Ukroboronprom after transformation - its transformation into a state joint-stock company, described the system of relations between the Cabinet of Ministers, Ministries, the Supervisory Board and the General Director, determined the performance indicators of the Supervisory Board members, described a three-line system of compliance control, the principles of transparency and disclosure of information, and also provided a list of the main internal documents that need to be developed and implemented for the proper corporate governance of the future company.

The research results also contain recommendations on the structure of corporate governance of industry associations that can be created following the transformation of Ukroboronprom. In preparing the

recommendations, the practices of similar international companies in the Defence industrial complex of Norway and Finland - Kongsberg Gruppen and Patria, respectively, were taken as a basis. World practice shows that state-owned companies, even in such a specific area as the defence industry, do not require special legal regulation. Such companies adhere to the same standards as joint stock companies, namely, on corporate governance, independence of members of Supervisory Boards, control systems, transparency and information disclosure.

The next reform project "Improving the corporate governance of Ukroboronprom" was implemented with the technical support of the French government through the FASEP Foundation.

The EY Ukraine and EY France teams assisted in:

- development of a detailed model of corporate governance with the participation of the corporate center, sector business associations and enterprises;
- defining the distribution of roles and responsibilities at the levels of possession, supervision / monitoring and executive management. In the course of the work a comparative analysis (benchmarking) of the target model of corporate governance with international leading practices was performed;
- legal analysis of the requirements of the legislation of Ukraine concerning the development of a target model of corporate governance;
- development of draft internal documents on corporate governance;
- determining the necessary changes to existing practices, procedures, processes in order to further develop the corporate governance model.

The project team prepared the results: key components of corporate governance, a three-level target model of corporate governance, including RACI matrices, with detailed distribution of roles and legal analysis, presentation materials for key stakeholders and draft internal documents. The analysis of the current activities

² The EY Ukraine and EY France project teams consisting of Frederic Elkeslasi, Partner, EY France, Konstantin Nevyadomsky, Partner, EY Ukraine, Albert Sych, Partner, EY Ukraine, Legal Services, Thierry Moreau, Partner, EY France, Celine Chevillon, Senior Manager, EY France, Legal Services, Victoria Shmuratko, Senior Manager, EY Ukraine, Oksana Fedorova, Manager, EY Ukraine, Andriy Moskalyuk, Manager, EY Ukraine, Legal Services, Senior Consultant, EY Ukraine, Victor Malbai, Consultant, EY France, Natalya Dudka, Consultant, EY Ukraine, Valentina Lishenyuk, Consultant, EY Ukraine, legal services, prepared a report within the project.

of the Ukroboronprom Group revealed a number of things in each of the elements of the operating model (governance model, organizational structure, business processes, technologies and data, performance management, tools and approaches, employees of Ukroboronprom) that require improvement. The results also showed that the current state of development of the operating model of the Ukroboronprom, as well as the tasks assigned to it in accordance with the Property Policy, requires the creation of a corporate center, that is a requirement for the further development of the corporate governance system.

The key components of the corporate governance model

Component A Management architecture

- ▶ Role of the Corporate Center
- The structure, composition and functions of management bodies at the levels:
 - · Corporate center
 - · Business units
 - Enterprises
- Roles and distribution of authority / responsibility in key management processes

Component B Control mechanisms of management

- Internal audit
- Management of risks
- Compliance and anti-corruption activities
- Methodology and internal control

Component C Operations management

- Procurement department
- Financial and investment department
- ▶ HR department
- Manufacturing department
- Development and innovations
- Sales and after-sales services department
- IT department

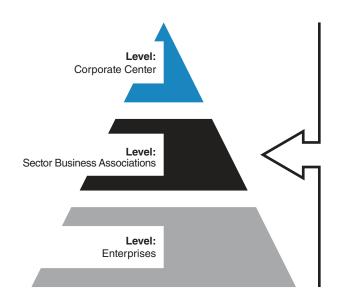
As part of projects to assist in the corporate governance reform, we review existing corporate governance practices, as well as review the legal and regulatory framework governing corporate management in the Ukroboronprom Group and at enterprises.

The review covers the current management structure of the Ukroboronprom Group and its interaction with enterprises.

Based on a comparison of an existing corporate governance practices with the leading practices (regulations and standards, reference companies) and taking into account the high-level target corporate governance model:

- We are developing a detailed target corporate governance model (the role of the corporate center and sector business associations).
- We define the distribution of roles and powers on the target corporate governance model.
- We develop drafts of regulatory documents.
- We define the necessary changes for the development of existing practices, procedures, processes to achieve the target corporate governance model.

Implementation of a three-level governance model at Ukroboronprom State Concern Group



- Formation of a corporate strategy in accordance with the principles of national strategies and government policies.
 Monitoring the compliance of the strategy with the provisions of the state property policy.
- Introduce a culture of transparency and business ethics ("the tone from the top "), breaking the "soviet" methods that have developed historically and are still used today.
- Transformation and implementation of a unified corporate governance structure, uniform rules, processes and procedures in accordance with leading international and Ukrainian practices.
- Internal control system gain in accordance with international standards and leading practices.
- Ensuring coordination between enterprises to achieve savings and improve operational efficiency.
- Achievement of continuous activity of the Defence Industry of Ukraine.

Ownership Policy and Corporate Governance Plan

At the end of 2019 - at the beginning of 2020, Ukroboronprom together with the Cabinet of Ministers of Ukraine prepared the Ukroboronprom's Ownership Policy draft and the Corporate Governance Plan, that are designed to:

- substantiate the state form of ownership, to coordinate it with the state policies and public authorities functions regarding the Ukroboronprom;
- determine main directions (key areas of activity) and principles of corporate governance;
- define strategic financial and non-financial goals.

The Ownership Policy determines the priorities according to which the state owns Ukroboronprom, the main tasks, the implementation of which is entrusted to Ukroboronprom, the main directions and KPI of its activities.

Corporate Governance Code

One of the stages of the Ukroboronprom reform was the creation of its own Corporate Governance Code. It is intended to give a general description of the global statements of corporate governance and to establish the principles of further reform of corporate governance at Ukroboronprom. The creation of the Code is a consequence of a radical reform of the corporate governance system of the Ukroboronprom.

The Code was based on the National Corporate
Governance Code of Ukraine, especially in terms of goals
and recommendations. Ukroboronprom also recognizes
the OECD Guidelines on Corporate Governance of StateOwned Enterprises as a general management standard
that all State-Owned Enterprises have to follow (http://www.oecd.org/corporate/guidelines-corporate-governance-SOEs.htm) and uses as a guide the Recommendations
for the management Ukrainian State-Owned Enterprises

management of the Ukrainian Corporate Governance Academy (https://ucga.com.ua).

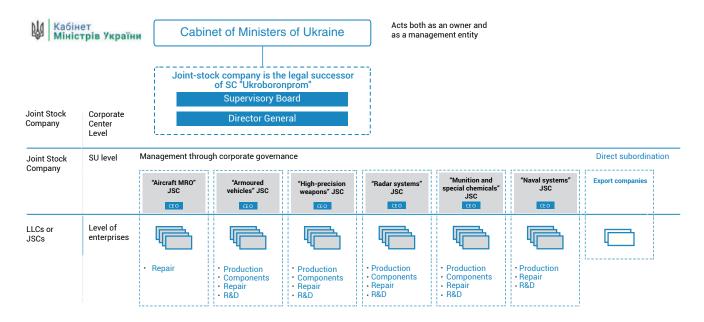
The implementation of these practices and observation of the recommendations will help fuel investors confidence to Ukroboronprom. In the mentioned Code are stated the basic requirements established by the legislation, and adds recommendations on leading practices, which are developed taking into account the expectations of investors in order to increase confidence in the Ukroboronprom. The document also clearly defines the role of the governing bodies in the Ukroboronprom's activities. Finally, it defines the role of other stakeholders of Ukroboronprom and the desire for sustainable development and growth.

Target structure of the State Defence Industry

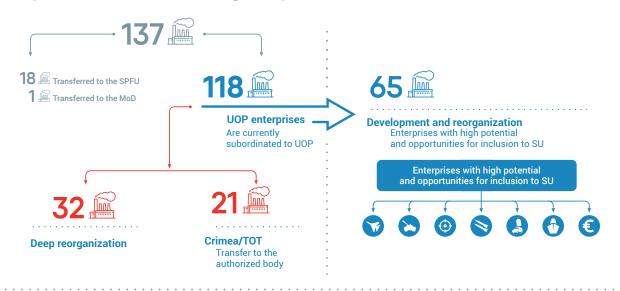
The key principle of the new Defence industrial Complex architecture:

- > Split of functions between the Owner and the Policy maker to prevent corruption and political pressure.
- Efficiency of defence enterprises activity.
- Development of new products and innovations. **Ministry of Strategic Industries** of Ukraine Policy maker functions: Development of the Defence industrial complex policy and the rules of partnership with the state Кабінет Міністрів України Development and monitoring of innovations and scientific and technological developments Owner functions: Control of the implementation of **Cabinet of Ministers of Ukraine** State-Owned Enterprises the Defence industrial complex development policy Ministry of Economy of Ukraine Management efficiency controller functions: Joint-stock company is the legal successor of SC "Ukroboronprom" Efficiency control of the State-Aerospace systems S NAFTOGAZ Owned Enterprises management Corporate governance improvement Ministry of Defence of Ukraine State customer functions: **(** Possibilities and needs planning -State Defence Order Resources programming / budget formation Making decision on purchasing €

Target corporate model



Enterprises distribution in the target corporate model



Enterprises with high potential and opportunities for inclusion to SU

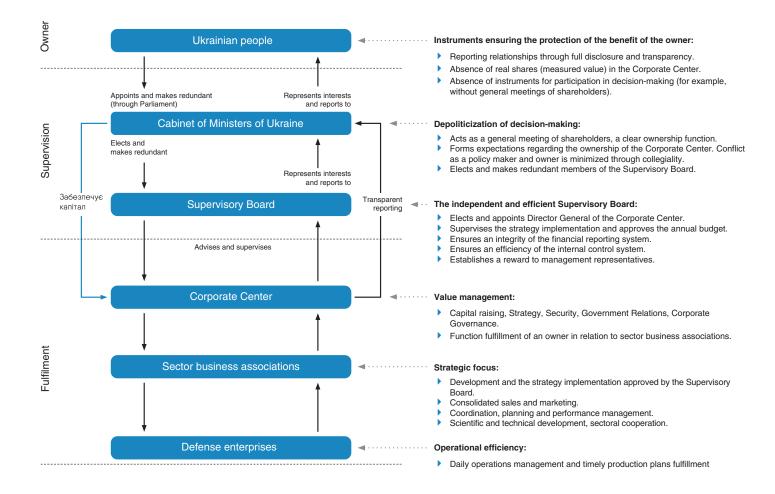
A. based on requirements:

- Strategy of Defence Industry Complex development until 2028.
- State targeted programme for the Defence Complex development.

B. based on the analysis:

- Research and production cooperation of enterprises.
- Current and future product portfolio ("product map") of enterprises.
- Needs of Security and Defence Forces in WME.
- Enterprises viability.

Roles and functions on the target corporate model





Target functions of the Corporate Center

PURPOSE

Maximizing added value and achieving the goals specified in the ownership policy

Functions

Formation and business portfolio management

- Approval of the strategic development direction and development of a vision for the future
- Approval of the strategy of the sectoral business associations
- Coordination of the strategy with the state policy and its approval
- Creation of joint enterprises and attraction of strategic partners
- Raising capital and approving large capital investments
- Corporate Center Structuring
- Formation of potential projects portfolio and product platforms
- New technologies funding

Efficiency improvement of the business portfolio

- Coordination and approval of key decisions related to significant juridical acts
- Activity monitoring of sectoral business associations
- Top-management election and reward policy formation
- Coordination of main areas of interaction and an implementation of synergistic effect between holdings
- Creation of joint cross-industry service centers

Fund raising and risk management

- Capital structure definition, capital and investment attraction
- Development and implementation of risk management policies
- Implementation of compliance policies and anti-corruption control instruments
- General financial supervision providing on the enterprises operating results on a regular basis

External Relations Management

- Cooperation with an owner and the regulator representatives
- Formation and implementation of the sustainable development strategy and corporate social responsibility
- Management of relations complex with financial partners, investors and banks

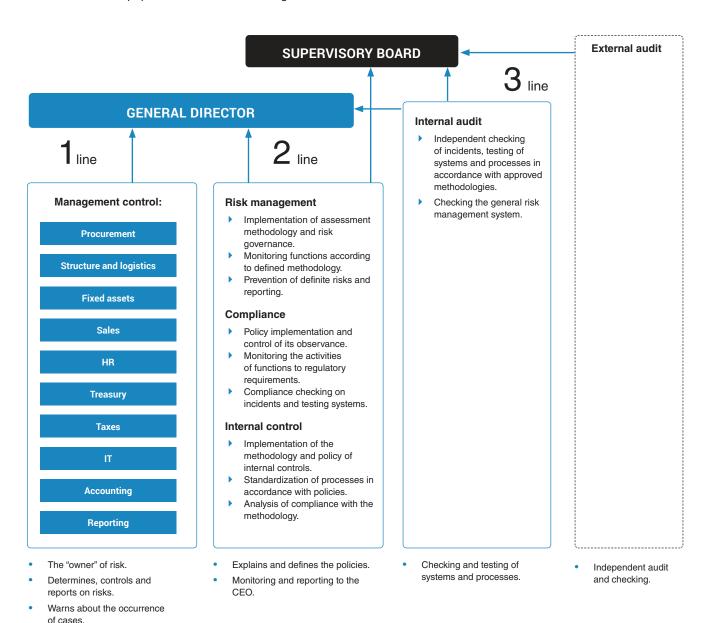
Evolution of the Corporate Center

Stage	STABILIZATION	CONSOLIDATION	DEVELOPMENT
Events	 Triage analysis Sector business associations strategy approval Enterprises corporatization Preparing measures on creation of sectoral business companies Financial recovery Reform of the export companies Corporate governance reform 2020-2021 	 Formation of sectoral business associations Development of Ukroboronprom's strategy and sectoral business associations Concentration and relocation of production capacities Restructuring and rehabilitation of troubled enterprises Reporting consolidation Resource concentration 	 External financing attraction Joint enterprises creation and foreign partners attraction Investing in the development of new types of products Digital transformation of branches
Role	QUASI-REGULATOR	STRATEGIC DESIGNER	FINANCIAL HOLDING
Functions	 Control and high-level coordination of enterprises activity Representing the interests of enterprises in relation to government authorities Approval of the policies governing the activities of the Concern Properties management and control over the use of funds Marketing and coordination of export sales Management of the enterprises' corporatization process Creation of a fund for defence recovery and delegation of asset management functions to it 	 Approval of sectoral development strategies Creation of management standards, reporting and common types of digital systems Freeing up and managing resources to support and stimulate the development of enterprises Delegation of operational decisions to the level of sector business associations Consolidated fund raising Exports promotion and creation of strong sales centers at the level of sector business associations Methodological support 	 Attraction of financing and redistribution of resources for investment in promising projects Lobbying the holding interests before government authorities and international community Financial control over the operating results of sector business associations Investing in new directions and startups to attract international partners Corporate governance and the creation of the effective Supervisory Boards Risk management and development of anticorruption initiatives

Three lines of defence

In accordance with the best management practices, Ukroboronprom will use the "three lines of defence" concept to supervise the efficiency of goals fulfilment of the ownership defined by the ownership policy and structure formation of relationships between the shareholder, the Supervisory Board and the Executive Board. This concept provides for the functioning of

an effective management control on the first line of defence at the level of operational management, the implementation of the compliance function, risk management, internal control on the second line of defence, and internal audit activities on the third line of defence.





Compliance reform

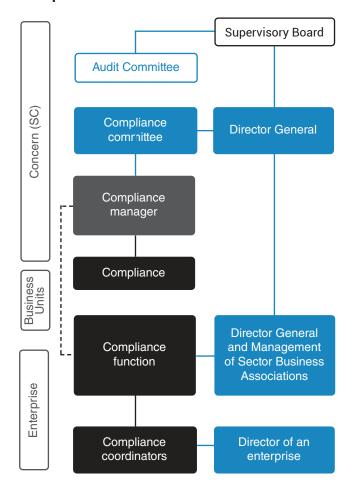
The creation of the compliance function is an important component of the general Transformation project of Ukroboronprom, and work on this began in 2020. The compliance function will be built on the principles and standards of the OECD. Compliance is an important corporate governance tool, an internal control system that is based on internal policies and procedures, that is aimed at preventing the occurrence of possible losses or loss of reputation as a result of non-observance with established standards, non-observance with legal requirements, corporate ethics rules, or conflict of interests. An independent compliance office is the key to transparency of Ukroboronprom's activities and contributes to increasing the level of trust on the part of key stakeholders: government authorities, investors, partners and clients,

and also contributes to strengthening Ukroboronprom's positions in the world market.

The first tasks of the newly created compliance office are the preparation of the methodological basis for the compliance function, in particular the development and implementation of:

- Code of Corporate Ethics
- Compliance Programs
- Compliance policies: policy for resolving conflicts of interest, policy for managing compliance risks, policy for checking the business reputation of counterparties, procedures for operating the trust line, procedures for internal investigations of compliance incidents.

Compliance function model



Supervisory Board

Brings into accord a strategic approach, acts as the ideologist of implementing a culture of honesty, transparency and business ethics ("the tone from the top").

Audit Committee

Checks compliance reporting.

Director General

- Approves the Compliance Policy, Code of Ethics.
- Implements a culture of honesty, transparency and business ethics.

Compliance committee

 A collegial body consisted of senior management representatives that reviews compliance incidents along the entire vertical, an auxiliary tool in the management of the function's work.

Compliance Leader

 Implements the Compliance program and reports on the results to the Supervisory Board and Director General.

Compliance function at the level of sector business associations (SBA)

Ensures the implementation of the Compliance program in BU and reports on the results to the SC.

Compliance Coordinators

 Monitoring the implementation / operation of the Compliance Program at enterprises; report to BU.

Internal control

The implementation of the internal control function at Ukroboronprom began in 2020.

Internal control is a process that is carried out by the Supervisory Board, management and employees at all management levels of the Ukroboronprom, aimed at ensuring reasonable guarantees of achieving the goals and strategy of Ukroboronprom.

The purpose of the Internal Control System is to ensure sufficient confidence of the Supervisory Board and the Director General in the implementation of the Ukroboronprom's strategy in the following areas:

- The efficiency and effectiveness of Ukroboronprom operations and its members, including the preservation and fair use of their property;
- Reliability and completeness of financial and nonfinancial reporting data;
- Compliance with legal requirements, internal regulations and ethical standards of doing business;
- Preservation of assets;
- Reliability of the accounting system.

Introduction of risk management function

From 2022, Ukroboronprom will implement a risk management function, in order to ensure the achievement of the Ukroboronprom's goals set by its strategy by developing and maintaining the organizational structure, processes, and resources aimed at identifying, assessing, managing, and monitoring risks.

The main tasks of the risk management function will be:

- Timely identification of risks;
- Prevention of risks and reduction of their consequences to an acceptable level;
- Monitoring the impact of risks on the achievement of strategic, operational goals, and reputation of Ukroboronprom;
- Informing the Supervisory Board about the risk management process;
- Development of risk management culture.

Introduction of the internal audit function

Internal audit is a tool of the Supervisory Board and to ensure the independence of the unit should be functionally subordinated to the Supervisory Board through the Audit Committee..

Area of responsibility of internal audit:

- evaluation and provision of appropriate recommendations aimed at improving the corporate governance process
- assessing the effectiveness of risk management processes and promoting their improvement
- assisting Ukroboronprom in ensuring effective controls by assessing their effectiveness and productivity, as well as by maintaining their continuous improvement.

The reform provides for the introduction of the internal audit function after corporatization and renewal of the composition and functionality of the Supervisory Board.

Horizons of corporate change



- Introduction of corporate governance according to OECD standards
- Corporatization of enterprises
- Elaboration of development strategy 2030
- Coordination of Ukroboronprom's development strategy with national strategic documents
- Clearing of accumulated problems (debts, problem assets, bankruptcy)
- Transfer of non-core enterprises to the State Property Fund of Ukraine (SPFU) and other Central Executive Bodies (CEBs)

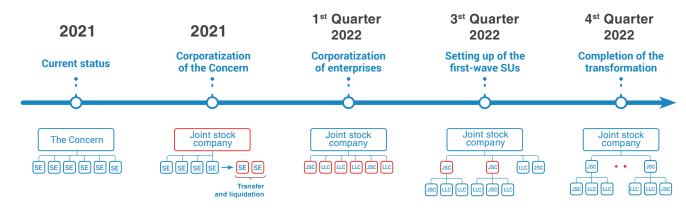


- Consolidation, restructuring, and rehabilitation of defence assets
- Deployment of OECD standards in industry associations
- Creating industry associations
- Building centralized corporate functions
- Comprehensive modernization of production
- Consolidated reporting and resources
- Attracting international investors and setting up joint ventures



- Development of new products and services in promising directions
- Attracting international capital
- Establishment of international cooperation
- Digital transformation and implementation of innovations
- Construction of new plants and reconstruction of production facilities

Roadmap for reform - 2021-2022



- Development of a transformation model
- Creation of a legislative framework for transformation
- Coherence with higher level strategies
- Enactment of Laws No. 3822, No. 3823, and Strategy of Defence complex development

- Transformation of the Concern into the Joint stock company
- Transfer to the SPFU of enterprises that do not produce defence products
- Liquidation of inactive enterprises
- Creation of a modern management system of defence industry enterprises
- Implementation of corporate governance

- Corporatization of enterprises within the Joint stock company
- Implementation of business processes and control systems
- Implementation of a new corporate strategy for development and innovation
- Mergers and production concentrations
- Financial recovery of the Concern's enterprises

- Setting up of the first-wave SUs
- Elimination of surplus property
- Introduction of corporate governance at SUs
- Modernization and renewal of production assets
- Completion of creation of 6 SUs
- Finalization of corporate structure development
- Attraction investments and creating joint ventures
- Creation of innovative production centres of the defenceindustrial complex

PRINCIPLES:

- Preservation of defence capability and ability to 100% fulfilment of the SDO
- Full control of transformations by the state shareholder
- Transparency and prevention of corruption
- Minimization of bankruptcy risks and risks of deterioration of financial condition of enterprises
- Formation of the foundation for the creation of new types of weapons and equipment
- Creating conditions for building joint ventures and attracting investment

I quarter 2021

- The first reading of the draft law №3822. Supporting the draft law until the second reading;
- Complete inventory of property. Preparation for the beginning of corporatization (state and treasury enterprises);
- Creation of the Transformation Office of Ukroboronprom;
- Preparation for the creation of an sector business association "Radar systems";
- Functional analysis of enterprises of sector business associations "Radar Systems";
- Submission of the draft Property Policy to consideration by the Cabinet of Ministers of Ukraine;
- Submission of the draft Development Strategy of the Defence Industry Complex – 2030 to consideration by the Government.

II quarter 2021

- Approval of the Roadmap for reforming the Concern by the Supervisory Board of the Concern and submission to consideration by the Government;
- Approval of the Development Strategy of the Defence Industry Complex - 2030 and the Roadmap for reforming the Concern at a meeting of the National Security and Defence Council of Ukraine;
- Acceptance of the Concern's Ownership Policy by the Cabinet of Ministers of Ukraine.

III quarter 2021

- Second reading and adoption of the legislative draft №3822;
- Approval of the state target programs in a sphere of Defence industrial complex;
- Approval of a corporate strategy and strategies of the sector business associations by the Supervisory Board of the Concern;
- Functional analysis for the sector business associations of the first wave;
- Approval of a technology strategy for the sector business associations of the first wave and a capital investment program until 2030;
- Organizational and regulatory support of measures to transform Ukroboronprom into a joint stock company (JSC) after the adoption of the legislative draft №3822.

IV quarter 2021

- Adoption of the draft law No. 3823 in the first reading;
- Functional analysis for the sector business associations of the second wave;
- Development of a technology strategy for the sector business associations of the second wave and a capital investment program until 2030;
- Development of strategic plans for the development of enterprises of the sector business associations of the first wave:
- Restructuring of bad debts of Ukroboronprom's enterprises;
- Appointment of the head of the Executive Board and members of the Supervisory Board of JSC – the legal successor of the SC "Ukroboronprom";
- Adoption of the Government's decision on the transformation of the SC "Ukroboronprom" into a jointstock company;
- Establishment of JSC the legal successor of the SC "Ukroboronprom" and the termination of the SC "Ukroboronprom" (without interrupting the activity).

I-II quarters 2022

- Issue and accounting of securities of JSC the legal successor of the SC "Ukroboronprom";
- Development of strategic plans for the development of enterprises of industry associations of the second wave;
- Implementation of the program for the transfer and concentration of production;
- State registration of business companies before the transfer of shares (stakes) to the sector business associations;
- State registration of industry associations;
- Second reading and adoption of the draft law No.3823;
- Transfer of non-core enterprises to SPFU (second wave), deprivation of surplus property;
- Preparation of a technical and financial assessment for innovation and production centers in Kyiv.

III-IV quarters 2022

 Introduction of blocks of shares (stakes) of business companies (transformed by state and treasury enterprises) into the authorized capital of the sector business associations;

- Issue and accounting of the business associations shares;
- Implementation of the product quality improvement program;
- Implementation of the program for the development of new product platforms.

Reform Benefits

The proposed model of management of the Defence industrial sphere has an optimal management logic in market conditions:

- concentration of powers for the development and implementation of the state Defence industrial policy in the Cabinet of Ministers of Ukraine;
- delimitation of the functions of political and economic management between the subjects of management, the first of which belongs to the competence of the Cabinet of Ministers of Ukraine, and the second - in JSC (the legal successor of the SC "Ukroboronprom"), the sector business association;
- preservation of the maximum possible consistency of political and economic management methods, taking into account the fact that the Cabinet of Ministers of Ukraine is the founder of the JSC (the legal successor of the SC "Ukroboronprom"), which in turn fully controls all the sector business association.

The role of the main system-forming factor in the proposed model is played by corporate dependence, which, being a product of property relations in market conditions, is a much stronger source of economic, managerial and industrial coercion than an administrative influence.

The proposed organizational structure of the Defence industrial complex makes it possible to eliminate the well-known contradictions that relate to the relationship between strategic and current, sectoral and functional economic management, as well as to reach a certain compromise between them.

This effect is provided by:

simultaneous placement of the corresponding blocks of shares or stakes in each enterprise of the Defence industrial complex (joint-stock company) in the authorized capital of the joint-stock company (the legal successor of Ukroboronprom State Corporation), corresponding to the sector business association;

- entry of any enterprise, participating in the implementation of a project of increased complexity and responsibility, into the sector business association, which manages this project;
- an appropriate distribution of powers between such entities.

The proposed reform scheme ensures the completion of the market transformations of the Defence industrial sphere and the absence of any alternative to the dominance of market principles both at the sectoral level and in the life's work of business companies, which is achieved by:

- corporatization of state defence enterprises, their transformation into business companies with preservation of 100% control of shares / stakes;
- organization of horizontally integrated sectoral business associations;
- formation of a hierarchy of subjects and objects of economic management, building an appropriate chain of command, which is based on corporate dependence, and also provides for a clear distribution of powers at different levels of this hierarchy;- crossover to predominantly market-based management methods, when, under corporate governance conditions, the right to make final decisions will belong to the meeting of shareholders of member-enterprises, in which they are assigned a dominant role due to the ownership of the corresponding blocks of shares in such controlled enterprises;
- achieving a fundamentally new quality of economic activity of the primary link of the Defence industrial complex, enterprises, by optimizing the main directions of their functioning (restructuring), switching to a jointstock organizational and legal form (corporatization), implementing targeted measures to introduce market principles for organizing the research and production process, expanding the sphere of use of commodity-money relations in servicing internal relations, increasing the flexibility of internal economic management and the emergence of additional motivation based on increased economic interest.

The possibility of such a construction of the organizational structure of the national Defence industrial complex and management system is based on the proper scientific and methodological support of the Defence industrial complex reform process, namely:

- a methodology for a deep technical and financial assessment of the economic activities of defence enterprises, which is based on the development of the scientific, technical and production mission of each of them, the study of the existing and potential opportunities for sustainable functioning in market conditions and the solution of urgent tasks of the defence industrial problems;
- methodological support for the restructuring of the Defence industrial complex enterprises, based on the use of a set of integrated economic standards, which allow purposefully optimize the main aspects of their economic activities and at the same time preserve the parity of interests of the state, industry, regions and enterprises themselves.

In the proposed model, conditions are organically formed for a wider presence in the Defence industrial complex activities of business entities of non-state forms of ownership: the possibility of their entry on an equal basis into the sector business associations, intended for the implementation of the most important tasks on the development and manufacture of weapons and military equipment, and the associated right to officially receive the corresponding part of the profit based on the results of the implementation of such projects; the latter comes automatically and creates a reasonable motivation for expanding the share of businesses involved in the defence industry.

Thus, it is provided a real (not a formal) equality of all forms of ownership in the Defence industrial sphere.

The Defence industrial complex Reform should be considered as a necessary but insufficient condition for its gradual approach to the state of self-sufficiency and the future regime of self-development. So, the completion of market transformations in the Defence industrial complex does not yet guarantee the expansion of the resource base for the life's work of the Defence industry to an acceptable level that industrially developed countries have.

To achieve this effect, additional targeted efforts are required to further improvement both the defence industry itself and related areas, for example, by:

 implementation of urgent institutional transformations in budgetary, military-technical and defence-industrial

- policies, financial-credit and tax systems, insurance and customs sectors, etc.;
- intensification of foreign economic activity due to diversification of sources of import supplies and export channels of national weapons and military equipment, other science-intensive products;
- expansion of military-technical cooperation of Ukraine with foreign countries, maximum use of all possible forms and methods related to the Defence industry;
- consolidation and further development of public-private partnerships, attracting a wide range of non-stateowned enterprises to defence-industrial activities on a mutually beneficial basis;
- works on import substitution, "ukrainization" of the production of raw materials, spare parts and components that were previously supplied from abroad;
- intensification of the conversion (diversification) of military production and development by defence enterprises of manufacturing of new types of civilian products, consumer goods, etc.

The functional capacity of management entities (relevant governmental authorities, JSCs (the legal successor of SC "Ukroboronprom"), sector business associations oriented to manage specific projects with increased risks), which have necessary powers, is aimed to create prerequisites for the effective application of the ISO standards methodology, namely:

- clear and reliable definition of the goals of the defenceindustrial activity in each period of time;
- development and implementation of an effective defence industrial policy;
- formation of management mechanisms that make it possible to properly structure the management process into separate procedures (planning, control, maintenance and improvement of activities);
- stable functioning of the Defence industrial complex in market conditions through capable management mechanisms and in accordance with state policy, which is being implemented;
- definite level of efficiency and effectiveness of activities;
- further evolutionary improvement of the life's work of the Defence industrial complex with the use of adapted tools, that corresponds to the generally recognized principles of world industrial development.

Reform risks and challenges

The inherited control system of the Defence industrial complex causes a number of threats and challenges that will need to be solved:

Ineffective management

- the status of "quasi-ministry". A lack of powers and limited ability to fully manage Ukroboronprom's enterprises;
- low management readiness. An ineffective accounting and reporting system, low digitalization, ineffective planning and control system, a lack of a high-quality structure and described processes;
- a lack of a development strategy and operational implementation plan, corresponding to the purpose of existence and goals determined by the state.

Corruption risks

- low level of corporate governance. A lack of distribution of responsibility between management levels and almost no powers of the Supervisory Board to control the activities of management;
- lack of a "second line of defence". A check and balance system has not been created in the form of risk management, internal control and compliance systems;
- independent audit. A low quality of an independent financial audit of activities.

Technological backwardness

- overage technologies. Most of the Ukroboronprom's armament, military and special equipment are products of the former USSR. The structure of income is dominated by income from the repair and modernization of soviet armament, military and special equipment;
- a lack of a technology card. A low long-term vision of the path of technological improvement and production of products and lack of sufficient funding for research and development;
- a limited product offer. A small range of export products that are available to the Ukroboronprom's

clients, and a small number of promising developments that can expand it in the future.

Unstable quality

- a low entrance control. Deficient processes and control system, which creates conditions for the formation of risks of getting into the production cycle of low-quality materials, components, equipment, etc.;
- an absence of a quality management system. Mostly inconsistency of production processes at enterprises with international quality management standards and an absence of a unified methodology;
- a low control of technological discipline. Inadequate control over the observance of production standards and the implementation of technological cards of manufacturing.

Low efficiency

- low qualifications and constant absence of employees. Insufficient adherence to the market level of social standards, an absence of investment in professional training and low wages compared to private companies;
- low productivity. Revenue per employee is 20 times less than in the same sphere in the world due to the presence of surplus employees and low production culture..

Absence of investment resources

- unreasonable cost of capital. Through expensive financial resources in the Ukrainian market,
 Ukroboronprom has limited opportunities to attract the capital necessary for development;
- absence of attractiveness. The absences of transparency and corporate governance, low interaction with the private sector in Ukraine and abroad make it impossible to attract partners and investors;
- legal restrictions. The existing organizational and legal form does not allow effectively attracting investments for development and re-equipment.



Supervisory board_

Legislative field

The corporate governance of Ukroboronprom is regulated by special legislation and falls under the Law of Ukraine "On Peculiarities of Management of State-Owned Objects in the Defence-Industrial Complex" of June 16, 2011 № 3531-VI (as amended). This Law in particular defines the governing bodies, their duties and responsibilities, as well as the system of their relationship. Current Ukroboronprom's corporate governance standards are low compared to the standards of state-owned enterprises in the non-defence industry, as well as corporate law of joint-stock companies and limited liability companies. Harmonization of standards with general principles of corporate law is provided in the draft law "On the peculiarities of reforming the enterprises of the defenceindustrial complex of state ownership", prepared by Ukroboronprom, which has already been adopted by the Verkhovna Rada of Ukraine in the first reading.

International standards, codes, recommendations

From the set up date until 2019, Ukroboronprom did not declare any international standard of corporate governance as the ultimate goal. At the end of 2019, immediately after the new management team tool the office, as well as at the initiative of the Cabinet of Ministers of Ukraine, one of the most important goals was the corporate governance reform of Ukroboronprom. Such reform planned to implement a number of measures to bring management practices of G20/OECD Principles of Corporate Governance (2015) and the OECD Guidelines on Corporate Governance of State-Owned Enterprises (2015). The main activities on harmonization of practices contain creation of a target management model, statute, internal regulations, Corporate Governance Code in accordance with OECD standards began in 2020 and continue to this day.

Governing bodies

The governing bodies of Ukroboronprom are:

Supervisory Board

- Board of Directors
- General Director

The highest governing body of Ukroboronprom is its Supervisory Board, which protects the interests of the state, controls and regulates the activities of other governing bodies of Ukroboronprom.

The Supervisory Board consists of five members, three of whom are appointed by the President of Ukraine and two by the Cabinet of Ministers of Ukraine. The term of office of the members of the Supervisory Board is five years. Members of the Supervisory Board work free of charge and are not employed by Ukroboronprom.

Meetings of the Supervisory Board are convened by the Chairman or on the initiative of at least two members of the Supervisory Board or the General Director of the Ukroboronprom if necessary, but at least each quarter.

The General Director of Ukroboronprom, who has the right of advisory vote, is invited to the meeting of the Supervisory Board.

The General Director of Ukroboronprom is responsible for ensuring the activities of the Supervisory Board.

The Supervisory Board makes decisions that are binding.

The Board of Directors of the Ukroboronprom is a collegial governing body. The Board of Directors consists of the General Director of the Ukroboronprom, his deputies, as well as representatives of the members of the Ukroboronprom.

The Chairman of the Board of the Ukroboronprom is the General Director of the Ukroboronprom.

Meetings of the Ukroboronprom's Board of Directors are organized by the General Director of the Ukroboronprom or a person authorized by him.

The General Director of Ukroboronprom carries out the general management of the companie's activities.

He is appointed by the President of Ukraine on the proposal of the Prime Minister of Ukraine and dismissed by the President of Ukraine.

The Director General is included in the advisory bodies formed by the President of Ukraine, the Cabinet of Ministers of Ukraine, central executive bodies, which carry out functions on formation and implementation of state policy in the field of functioning and development of defence industry, development of scientific and technical potential in armaments and military equipment.

Members of the Supervisory Board of Ukroboronprom in 2020:

- 1. **Prokhorenko Oleg** (Chairman of the Supervisory Board 31.01.2020 21.10.2020) former Chairman of the Board of PJSC Ukrgasvydobuvannya. Order of the Cabinet of Ministers of Ukraine of October 23, 2019 № 1005-r " On qappointment of member of the supervisory board of the Ukroboronprom State Concern".
- 2. Smilyanskyi Ihor (October 2019 October 2020) General Director of Ukrposhta Joint Stock Company (by consent). Decree of the President of Ukraine of № 734/2019 "On members of the Supervisory Board of the Ukroboronprom State Concern".
- 3. Anthony John Tether (January 31, 2018) served as Director of the Defense Advanced Research Projects Agency (DARPA) from June 18, 2001, until February 20, 2009. Order of the Cabinet of Ministers of Ukraine of January 31, 2018 № 42-r " On qappointment of member of the supervisory board of the Ukroboronprom State Concern".
- 4. **Andriy Yermak** (October 2019 June 2020) Head of the Office of the President of Ukraine. Decree of the President of Ukraine № 734/2019 "On members of the Supervisory Board of the Ukroboronprom State Concern".
- 5. **Abromavicius Aivaras** (07.10.2019 12.06.2020) General Director of Ukroboronprom. Decree of the President of Ukraine of June 12, 2019 № 402 "Aspects of the Supervisory Board of the Ukroboronprom State Concern.
- 6. **Vitrenko Yuriy** (Chairman of the Supervisory Board October 7, 2019 January 25, 2020) ex-Executive Director of the Naftogaz Group Joint-Stock Company (National Joint-

Stock Company Naftogaz of Ukraine) (by consent). Decree of the President of Ukraine "On Amendments to the Decree of the President of Ukraine from October 7, 2019 № 734".

- 7. Arakhamia David (09.07.2019 29.01.2020) Chairman of the Servant of the People faction in the Verkhovna Rada of Ukraine of the IX convocation. Decree of the President of Ukraine of July 9, 2019 № 499/2019 "On members of the Supervisory Board of the Ukroboronprom State Concern".
- 8. Horbulin Volodymyr (December 2020 May 2021) Ukrainian politician, scientist, statesman. Doctor of Technical Sciences (1994), Professor (1995), Academician of the National Academy of Sciences of Ukraine (1997). Adviser to the President of Ukraine (since 1999), Director of the National Institute for Strategic Studies (2014 2018). On October 9, 2020, he was reelected as First Vice President of the National Academy of Sciences of Ukraine.
- 9. **Ivashchenko Valerii** (October 2020 to present) First Deputy Minister of Strategic Industries, Deputy Minister of Defence of Ukraine in 2007-2009, Acting Minister of Defence from 2009 to 2010. Reserve Colonel.

The main powers of the Supervisory Board are:

- approval of the development strategy of Ukroboronprom;
- approval of financial and investment plans, annual budget (financial plan) and investment plan, investment plans for the medium term, as well as performance indicators;
- control over the implementation of these plans;
- ensuring that Ukroboronprom pays contributions to the State Budget from the profit;
- approval of the annual reports of the General Director;
- initiation of inspections and audit of financial and economic activities of Ukroboronprom and its participants, determination of the auditor of Ukroboronprom.

Monitoring and control

Ukroboronprom is not subject to the requirement of the law on the obligation to conduct an external audit of the activities of state-owned companies. During 2011-2019, the audit was not performed by internationally recognized auditors, but in 2020 the management of Ukroboronprom held a competition, and the Supervisory Board selected Baker Tilly as the external auditor. This company will ensure the audit of consolidated financial statements and audit of Ukroboronprom participants by one auditor.

The formation of the "third line of defence" is still ongoing and the Supervisory Board is actively involved in this, although there are no legal requirements for its establishment. Already in 2020, members of the Supervisory Board conducted a series of interviews with candidates for the position of Head of Internal Audit. Such unit is planned in the new structure with direct subordination to the Audit Committee of the Supervisory Board.



IV. BUSINESS AND OPERATING ACTIVITIES



Key indicators: finance, production, state defence order_

Current state Ukroboronprom

NET REVENUE – UKROBORONPROM (2020)

UAH thousand

37 447 631

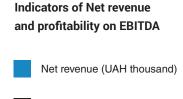
TOP 10 - NET REVENUE (2020) UAH thousand	24 347 255
ANTONOV Company	7 513 302
SE "LUCH"	3 843 002
SE GTRPC "Zorya" – "Mashproekt"	3 541 891
SE Ivchenko-Progress	2 050 159
SC "Ukrspecexport"	1 975 736
SE "KMBD"	1 387 127
SE "Zhytomyr AFVP"	1 153 575
SJSHC "ARTEM"	1 071 805
SE "Kharkiv PAT"	915 657
SE "MalyshevPlant"	848 020

EBITDA - UKROBORONPROM (2020)

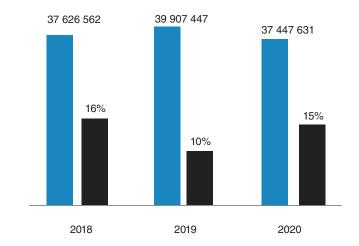
UAH thousand

5 954 505

ТОП 10 — EBITDA UAH thousand	5 182 930
ANTONOV Company	1 851 771
SE GTRPC "Zorya" – "Mashproekt"	1 378 252
SE "Ivchenko-Progress"	474 730
SE "LUCH"	390 072
SE "Zhytomyr AFVP"	297 293
SE "Kharkiv PAT"	224 226
SC "Ukrspecexport"	191 203
SJSHC "ARTEM"	148 657
SE "Shepetivka Repair Plant"	134 082
SE KHMP FED	92 644

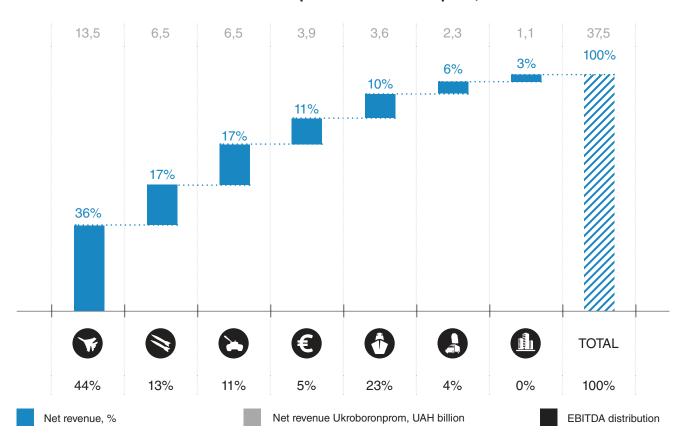


EBITDA/ Net revenue, %

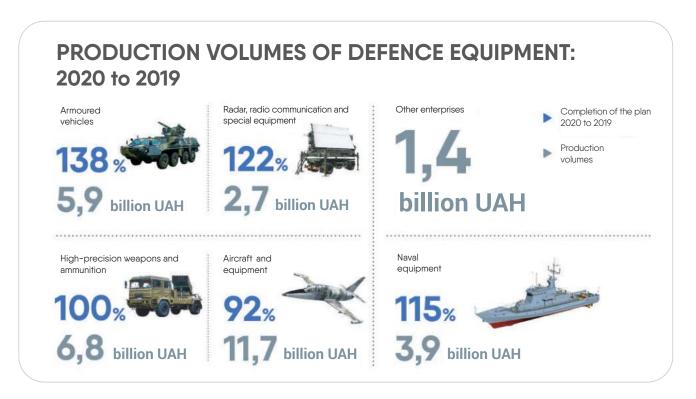


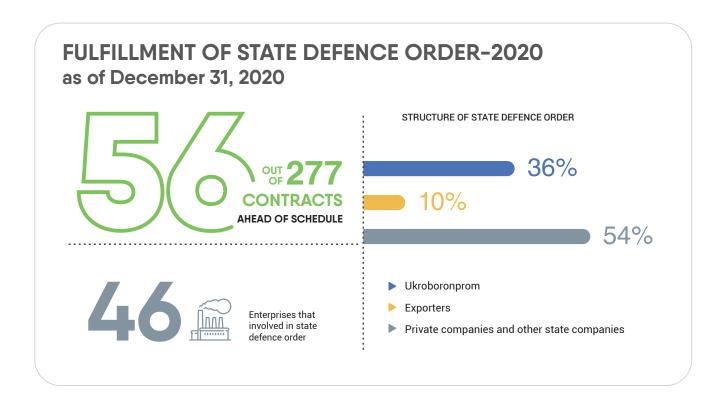


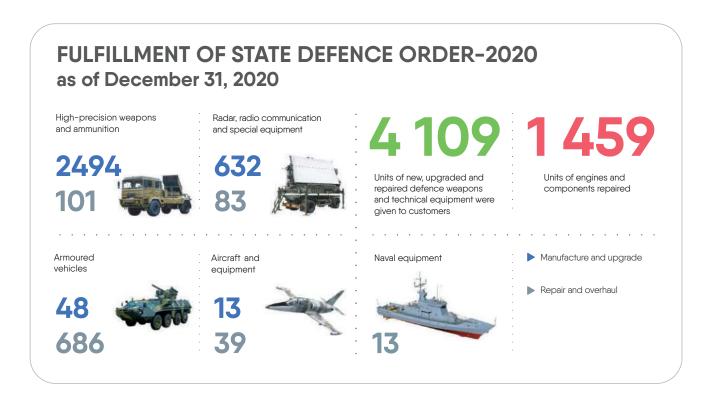
Structure of Net revenue and EBITDA on departments Ukroboronprom, 2020













PLANNING AND PREPARATION OF MANUFACTURING

5,7

Total amount of signed contracts during 2017-200 for purchase more than 2 400 units of modern machinery

2,4
billion UAH

Amount of signed contracts in 2020

0,5

Amount of drafted contracts and their realization in 2021-2022

Updated and extended the duration of the programs until 2024 and provided proposals for their amendment

26

enterprises involved

40

contracts signed

Together with Ministry of economic development completed the review of defence Ukroboronprom companies

Aircraft and equipment_

AIRCRAFT MANUFACTURING AND MRO PRODUCTION RESULTS

billion UAH

2020	2019	20 / 19
11,7	12,7	92%



- The strategy of the "Aircraft repair" sector business association and the strategy of the aircraft building holding have been developed;
- A contract was signed with the Ministry of Defence of Ukraine for the production of 3 Antonov An-178-100R aircraft;
- Proposals to a number of draft laws on financial rehabilitation of Kharkiv State Aviation Production Enterprise submitted to the state executive bodies;
- The draft Concept of the State Targeted Scientific and Technical Program for the Development of the Aviation Industry, and also the project of the Program of development of aviation industry is prepared;
- The need for State defence order'20 for Mykolayiv Aircraft Repair Plant "NARP" was defended in the profile committee of the Verkhovna Rada;
- Financial assistance was provided to Kharkiv State Aviation Production Enterprise for conducting production activities.

Key achievements:

- In 2020, the net revenue of enterprises coordinated by the Aircraft Construction Department amounted to UAH 13,544.6 million.
- The volume of sales (products, works, services) amounted to UAH 13,600.6 million, including UAH 1,426.7 million for defence authorities and UAH 10,543.8 million for export.

Product line description:

Manufacturing: components and spare parts for hydro, fuel, air, navigation and other systems of MiG-29, Su-27, An-26, An-32, An-148, An-178 aircraft, Mi helicopters-2,

Mi-8, Mi-24, mine protection system "Oberig-C", supercharger 5903-8038.010.

Repair, development and modernization: modernization and overhaul, repair, maintenance and works to extend the life of aircraft: L-39, MiG-29, Su-25, Su-27, An-26, An-30, An- 32, An-72 (74), Il-76; helicopters: Mi-8, Mi-14; aircraft engines: Al-25TL, RD-33, R-95Sh, AL-21F-3, AL-31F, D-30KP(2); auxiliary power units: KLA-2 (3), GTDE-117, VKA, Al-9V, TA-6A, TA-8V, unified suspended refueling unit UPAZ-1, and other units and systems for aircraft.

Status of execution of contracts for defence agencies and export customers: planned volumes of works on repair and modernization of aircraft, production of components for the state defence order and in accordance with export contracts performed in full within the stipulated time.



Urgent problems:

- There is an emergency situation with aircraft repair companies in the repair and maintenance of aircraft for the Armed Forces of Ukraine due to the introduction by the Ministry of Defence of Ukraine measures that actually prohibit public procurement of goods and services originating in Russia. As a result, the contract with SE "AVIAKON" for the overhaul of Mi-24 helicopters was threatened to fail, which in turn poses a real threat to the rotation of a separate helicopter detachment of the UN Mission in the Democratic Republic of the Congo.
- For the same reason, the military missions of the Ministry of Defence of Ukraine under the order of the Deputy Minister of Defence of Ukraine for European Integration dated 10.02.2020 № 1403/z/1 and the order of the Cabinet of Ministers of Ukraine dated 11.09.2014 № 829-r, blocked the shipment of finished products from State Enterprise "Odesa Aircraft Plant" (Odessa). At the same time aproval of calculation materials provided by State Enterprise "Zaporizhia State Aircraft Repair Plant "MiGremont" (Zaporozhye) and STATE ENTERPRISE "PLANT 410 CA" (Kyiv) is constantly put off.
- Extremely small volumes of orders for repair and overhaul of military aircraft and helicopters of all types, which leads to a difficult situation for most aircraft repair companies.
- In aircraft manufacturing work continues on resolving the issue of import substitution for upgraded An-74, An-148, An-158 aircraft.

- In aircraft repair and manufacturing enterprises there is an insufficient availability of highly qualified workers, there are also problems with the training of workers and engineers.
- Large debts and difficult financial and economic condition of Kharkiv State Aviation Production Enterprise, where wage arrears amount to over UAH 200 million.

Development and growth plans:

- ensuring the proper level of serviceability of aircraft and armaments of the Armed Forces of Ukraine and other law enforcement agencies;
- continuation of modernization of the main types of combat and military transport aircraft and helicopters of the Armed Forces of Ukraine;
- preservation and further development of militarytechnical cooperation with foreign countriescustomers for repair and overhaul of aircraft;
- deal with crisis state of Kharkiv State Aviation
 Production Enterprise by providing conditions for the resumption of serial production of aircraft An-140;
- establishing cooperation with foreign manufacturers of airborne electronic equipment and components in order to create conditions for the resumption of production of An-148/158/178 aircraft at ANTONOV Company;
- Negotiations with leading aircraft manufacturers in North America and Europe on joint participation in the production programs of components for civil and military aircraft.

Armoured vehicles_

ARMOURED VEHICLES PRODUCTION RESULTS

billion UAH

2020	2019	20 / 19
5,9	4,3	138%



- The state defence order has been 100% compele;
- The strategy of the branch association "Armoured vehicles" is developed;
- In 2020, the production volumes of the Ukroboronprom's armoured enterprises exceeded similar volumes in 2019 by UAH 1.6 billion;
- "Dozor-B" has been put into service; qualification and preparation for production is carried out at State Enterprise "Kharkiv Morozov Machine-Building Design Bureau" (SE "KMBD");
- SE "KMBD" fulfilled problematic contracts for the supply of armoured personnel carrier BTR-4E for the Ministry of Defence and the National Guard;
- A infantry fighting vehicle BMP-1 was modernized the with a modern combat module;
- A set of measures to adopt the armoured personnel carrier BTR-3DA is being implemented.

Key achievements:

- In 2020, the net revenue of enterprises coordinated by the Department of Armoured Vehicles amounted to UAH 6,463.4 million.
- The volume of sales (products, works, services) amounted to UAH 6,463.7 million, including UAH 5,192.8 million for defence authorities and UAH 859.5 million for export.

Product line description:

Manufacturing: T-80UD, BM "Oplot", BTR-3, BTR-4, command and staff BTR-4KSh, armoured recovery vehicle on the basis of BTR-4, armoured sanitary vehicle, repair station on the basis of KrAZ, simulator of BTR-4, "Dozor-B"; engines: 5TDF, 6TD, 6TD-2, ZTD of various modifications,

gun KBA-3 (2A46M), weapons and ammunition, automatic guns ZTM1ta ZTM2, barrel KBA-2-01.00.000, caliber 30 mm, barrel KBA.113-00.00.000, caliber 30 mm; automatic grenade launcher KBA.117, caliber 30 mm; machine gun KM-7,62, machine gun tank KM-7,62, machine gun tank upgraded KTM-7,62).

Repair, development and modernization: tanks "Yatagan", main battle tank BM BULAT, T-80UD, T-80B, T-80BV (BV-1, B-1), T-64A, T-72 T-55, T- 54 and their modifications, BREM-84, BTR-50, -60, -70, -80, BTR-70DI, BMP-1M, BMP-1, BMP-2 (-2K), BMD-2, BMD-1, BTRD BREM-2, GM-575, GM-568, GM-578.

Status of execution of contracts for defence authorities and export customers: as a result, 98% of state contracts for sate defence order were actually executed on time and in full. Export contracts are fulfilled on time by 100%.



Urgent problems:

- significant reduction or cessation of R&D and production of important models of armaments, military and special equipment to ensure the state's defence capabilities, as well as civilian products to meet priority state needs;
- loss of a number of basic and critical technologies, the absence of closed production cycles of most types of military and civilian products;
- significant lag in technological development from the leading countries of the world;
- extremely low use of fixed assets and low productivity, significant energy intensity of production;
- a significant gap between science and industry, the lack of a comprehensive approach to creating innovative products for military and civilian use, the innovation cycle of which in many cases ends at the initial stages and is not brought to the stage of mass production;

- depreciation of fixed assets, significant physical and moral deterioration of the research and production base;
- critical state of providing highly qualified employees, increasing problems of training workers and engineers;
- large debts and difficult financial and economic condition of most enterprises.

Development and growth plans:

- ensuring the equipping of the Armed Forces of Ukraine and other law enforcement agencies with new high-tech models, types of weapons and equipment of the required quality and quantity in a timely manner;
- preservation and development of high-tech export potential of enterprises within the framework of military-technical cooperation;
- expanding the production potential of competitive science-intensive and high-tech civilian products.

High-precision weapons and ammunition_

HIGH-PRECISION WEAPONS AND AMMUNITION PRODUCTION RESULTS

billion UAH

2020	2019	20 / 19
6,8	6,8	100%



- Developed strategy of the "High-precision weapons" and "Ammunition and special chemicals sector business associations";
- The anti-ship missile system "Neptun" was adopted by the Armed Forces of Ukraine;
- > State contracts have been concluded for serial production of "Neptun" complex and MLRS "Vilkha" rockets;
- Fulfilled state contracts for the supply to the Armed Forces of the following: ATGM "Corsar", RK-3K, RK-2C, Control System Module 9M55K;
- Successfully conducted firing tests of existing mock-ups of guided artillery shells of 152 mm caliber "Barvinok" using a laser rangefinder, a prototype of which was manufactured by State Enterprise "Izyum Instrument-Making Plant";
- A working model of a new generation infrared homing device for the R-27 missile has been prepared and inspected by the Indian customers at State Joint Stock Holding Company "ARTEM".

Key achievements:

- For 2020, net revenue of enterprises, activities which is coordinated by the Department for High Precision weapons and ammunition, amounted to UAH 6,498.2 million.
- Volume of sales (products, works, services) amounted to UAH 6,498.2 million, including for defence authorities – UAH 1,933.6 million, for export – UAH 2,482.8 million

Product line description:

Manufacturing: products R-624, BSU-624, portable antitank guided missiles "Stugna-P", portable anti-tank guided missiles "Corsar", missiles RK-2C, RK 3K, RK-3OF, simulators for "Stugna-P", training and operating models

of RK-2C, RK-3, RPV-16, AKVS "GURT-M", optical and opto-electronic devices for armoured vehicles and antitank missile systems such as:

sights PRG, PZU-7, PN-5, OP-4M, guidance devices LKKV-V, PN-V, PN-1, PN-K, 9S816, USK-1, 9Sh135, 9Sh119M1, PN-90 and others.

Development and modernization: R&D project "Alder-M", R&D project "Neptun", R&D project "Kovsh-522", R&D project "Kovsh-55", R&D project "Agat-R", "Agat-ICH".

Repair: products 5V55K (R), air-defence missile system "Strela-10", reconnaissance and control mobile station 9S80, Special Test Equipment 9V839, tracked self-propelled anti-aircraft "Tunguska", system "GURT-M", infrared homing device 9-B1101K. Extension of the service life: 9M83 for S-300V1, X-29 missiles, 9M55K missiles ("Smerch").



Status of execution of contracts for defence authorities and export customers: as a result, 100% of state contracts for state defence order were fully executed. Export contracts are 100% fulfilled.

Urgent problems:

Termination of funding by the Ministry of Defence for R&D of:

- domestic guided missile R-27;
- guided artillery shell "Barvinok" caliber 152 mm;
- 152 mm artillery shot "Kovsh-52";
- metal charges type Zh-47, Zh-48 for artillery shots of 152 mm caliber.

Lack of orders from the Ministry of Defence for the production and supply of military products developed at the company's own working capital, namely:

- shells OF-29 caliber 152 mm; RS-80, signal mines SM-Sh, smoke grenades GD-1, thermobaric grenades RGT-27.
- significant lag in technological development from the leading countries of the world;
- extremely low use of fixed assets and low productivity, significant energy intensity of production;

- a significant gap in cooperation between science and industry, the lack of an integrated approach to the creation of innovative products for military and civilian use, the innovation cycle of which in many cases ends at the initial stages and is not brought to the stage of serial production;
- aging of fixed assets, significant physical and moral deterioration of the research and production base;
- lack of highly qualified employees, increasing problems of training workers and engineers;
- large debts and difficult financial and economic condition of most enterprises.

Development and growth plans:

- creation of new modern models of missiles that must be aimed at targets in different climatic and combat conditions with the use of integrated guidance systems for radar, optical fiber using thermal, radar and television guidance systems to supply to the Armed Forces of Ukraine and other law enforcement authorities;
- preservation and development of high-tech export potential of enterprises within the framework of military-technical cooperation;
- expanding the production potential of competitive science-intensive and high-tech civilian products.

Naval equipment_

NAVAL EQUIPMENT PRODUCTION RESULTS

billion UAH

2020	2019	20 / 19
3,9	3,4	115%



- The strategy of the "Marine equipment" sector business association is developed;
- Marine components were shipped to China and India;
- Repair of turbine equipment for frigate "Hetman Sahaydachniy" was performed;
- > The PZh-61U floating dock for the Ukrainian Navy was delivered under State defence order;
- Works for the Myanmar Navy are performed;
- Completed 3 R&D projects on the creation of new ships;
- ▶ R&D on creation of rocket boats are executed, re-equipment of patrol boats "Starobilsk" and "Slovyansk" of type "Island" within State defence order is begun;
- 9 warships and 2 civilian ships were repaired.

Key achievements:

- In 2020, the net revenue of enterprises coordinated by the Shipbuilding Department amounted to UAH 3,646.5 million.
- The volume of sales (products, works, services) amounted to UAH 3,664.5 million, including UAH 78.2 million for defence authorities and UAH 3,351.7 million for export.
- State Research & Design Shipbuilding Centre has developed a project of a training complex for diving for the Ukrainian Navy.

Product line description:

Manufacturing: State Enterprise Kyiv Scientific Research Institute of Hydrodevices at own expense has developed and manufactured a radio-hydroacoustic system based on passive un-directional RGB-16V "Yatran".

Repair, development and modernization: medium-level repair of engines DS-71 frigate "Hetman Sahaydachniy"; dock repair of medium landing ship "Yuriy Olefirenko"; dock repair of Landing Craft Utility "Svatove".

Status of execution of contracts for defence agencies and export customers: by the end of the year, 100%

of state contracts with the Ministry of Defence were fully executed on time. Export contracts are 100% fulfilled on time.

Urgent problems:

- Lack of long term forecast indicators of state budget expenditures. There is still insufficient a information on planning for creation of ships and boats of the Ukrainian Navy for the coming years, starting in 2020. The lack of a long-term (five-year) ship repair plan leads to constant adjustment of annual plans for the use of funds.
- Existence of long-term plans will allow to form coordinated long-term production plans of plants and plans of repairs of Navy vessels, to form repair sets of spare parts, to create groups of the experts focused on performance of certain works, operative repair crews that will essentially increase efficiency, quality and terms of works.
- Long-term absence of the state defence order for construction (modernization) of warships, ships and boats (corvette, rocket boat) for the needs of the Ukrainian Navy and the Marine Guard of the State Border Guard Service.
- Providing state support for programs to create modern competitive equipment, including gas turbine engines with a capacity of 32, 60 MW, etc.), which will determine the export potential of the enterprise and the state in the near future.
- Unsatisfactory condition of launching devices (berths), completion embankments, production equipment due to their long service life, as well as failure to carry out maintenance repairs. As a result, the restoration of these facilities requires significant funds.
- Large debts and difficult financial and economic condition of most enterprises.

Debts to State Enterprise "Mykolayiv Shipyard" for the maintenance of the cruiser since 2015 exceed UAH 110 million.

Development and growth plans:

- promotion of new types of domestic shipbuilding products on domestic and foreign markets;
- restructuring and optimization of the existing production system;
- modernization, technical re-equipment and ensuring efficient use of production capacities of shipbuilding enterprises;
- improvement of the regulatory framework for stimulating the development of shipbuilding;
- providing state support to shipbuilding enterprises that fulfill or plan to fulfill the state order within the framework of state targeted defence programs in terms of preparation for production and creation of production facilities, development, development and implementation of new technologies;
- modernization and re-equipment of existing production;
- development and implementation of new shipbuilding technologies;
- creation of a new and modernization of the existing scientific and experimental base;
- development of standards for shipbuilding and advanced training of engineering and technical personnel and workforce;
- reconstruction and carrying out of technological re-equipment of machine-building and instrumentmaking complex in the field of shipbuilding.



Radar, radio communication systems and special devices_

RADAR, RADIO COMMUNICATION SYSTEMS AND SPECIAL DEVICES PRODUCTION RESULTS

billion UAH

2020	2019	20 / 19
2,7	2,2	122 %



- The strategy of the "Radar Systems" business unit is developed;
- For the first time in Ukraine the contract for repair of the line of microwave devices for S-300 was mastered and concluded;
- Timely repairs and successful tactical exercises with combat firing of TOR 9K330;
- Access to state tests of the new radars 80K6KS1 for BUK-M1 to replace the Soviet-made ones;
- Demonstration of the new generation 90K6E radar for a foreign customer was carried out, pre-contract works on signing contracts were initiated;
- Tests of MLRS "Bureviy"

Key achievements:

- In 2020, the net revenue of enterprises coordinated by the Department of Radar, Radio Communication Systems and Special Devices amounted to UAH 2,275.3 million.
- The volume of sales (products, works, services) amounted to UAH 2,275.4 million, including UAH 1,610.7 million for defence agencies and UAH 316.3 million for export.

Product line description:

Radar equipment

Production: radar stations: 90K6E, 36D6M;

mobile autonomous secondary radar "Route"; counterbattery radar complex 1L220E;

complex "Mandat-B1E R-ZZOUM"; "Delta" (coastal radar station); "Delta-M" (ship's radar station); "Mineral-U"; klystrons (KIU-5, KIU-7, KG-3R, KU-137R, KIU-43R), etc.

Repair: Radar P-18, 19; HP3 1Л22 (HP3-4, 6); PRV-16 radar, etc.

Radio electronic equipment

Production of new types: "Kashtan-3M" (combined system of electronic intelligence and counteraction); Sarmat (ship's optoelectronic small and medium caliber artillery fire control system), etc.

Repair: missile system S-125; SAM TOR, etc.

Communication technology and EW

Production of new types: "Kashtan-3M" (combined system of electronic intelligence and counteraction); Sarmat (ship's optoelectronic small and medium caliber artillery fire control system), etc.

Special Instrumentation

Production: unmanned aerial vehicle Spectator-M1; gun LVG 30 (2A42), components for the gun; product SA-10U (specially equipped body-van); mobile laboratory of measuring equipment PLVT-UA2-5, etc.

Status of execution of contracts for defence authorities and export customers: following the results of 2020, State defence order and measures of the repair plan of the Armed Forces of Ukraine were 100% executed on time and in full. Export contracts are 100% fulfilled on time.

Urgent problems:

- Significant dependence on state defence orders.
- Annual reduction of R&D funding for the development of the latest models of armaments, military and special equipment to ensure the state's defence capabilities.
- Increasing the number of potential competitorsmanufacturers of radar equipment, EW and CBD in the world and, in particular, in NATO countries.

- Lack of highly qualified specialists (workforce, engineering and technical workers).
- Technological lag and critical depreciation of fixed assets.
- Loss of a number of basic and critical technologies.
- Difficult financial and economic condition of most enterprises.
- Lack of a comprehensive approach to the creation of innovative products for military and civilian use, the innovation cycle of which in many cases ends at the initial stages and is not brought to the stage of serial production.

Development and growth plans:

- Ensuring the equipment of the Armed Forces of Ukraine and other law enforcement authorities with the latest models, types and types of weapons and equipment;
- preservation and development of high-tech export potential of enterprises within the framework of military-technical cooperation;
- expanding the production potential of competitive and high-tech products.



The structure of production departments_

Aircraft construction and aircraft repair department

End-products developer-manufacturer

Number of enterprises: 1

ANTONOV Company
Net revenue: UAH 7,5 billion

Number of employees: 9400 people

Component developer-manufacturer

Number of enterprises: 4

State Enterprise "Kharkiv Aggregate Design Bureau"

Zaporizhia Machine-Building Design Bureau
 Progress State Enterprise Named After Academian
 A.G. Ivchenko

State Enterprise Kharkiv Machinery Plant FED

State Enterprise "Novator"

Net revenue: UAH 3,2 billion

Number of employees: 5985 people

End-products manufacturer

Number of enterprises: 1

Kharkiv State Aircraft Manufacturing Company

Net revenue: UAH 67 million

Number of employees: 1800 people

Repair

Number of enterprises: 8

- State Enterprise "Lutsk Repair Plant "Motor"
- State Enterprise "PLANT 410 CA"
- State Enterprise "Lviv State Aircraft Repair Plant"
- State Enterprise "Odesa Aircraft Plant"
- State Enterprise "Zaporizhia State Aircraft Repair Plant "MiGremont"
- State Enterprise "Chuguiv Aircraft Repair Plant"
- State Enterprise "Mykolayiv Aircraft Repair Plant "NARP"
- State Enterprise "Konotop Aircraft Repair Plant "AVIAKON"

Net revenue: UAH 2,9 billion

Number of employees: 6230 people

Developer

Number of enterprises: 2

- State Enterprise "General Aviation Design Bureau"
- Ukrainian Research Institute of Aviation
 Technology, Public Joint-Stock Company

Net revenue: UAH 5 million

Number of employees: 50 people

Asset and corporate rights department

End-products manufacturer

Number of enterprises: 2

State Enterprise "Rubin"

Rubizhne State Chemical Plant "Zorya"

Number of employees: 20 people

Component manufacturer

Number of enterprises: 3

State Enterprise "Kyiv State Plant "Burevisnyk"

State Enterprise "Production Association "Karpaty"

State Enterprise "Electric Systems"

Net revenue: UAH 1,1 billion

Number of employees: 5340 people

Export

Number of enterprises: 3

The Subsidiary of The State Company "Ukrspecexport" The State Foreign Trade Enterprise "Tasko-Export"

State Enterprise "Specialized Foreign Trade Firm "UKROBORONEXPORT"

Number of employees: 4 people

Repair

Number of enterprises: 5

- State Enterprise "Zmiyivs'kyy Repair Energomechanical Plant"
- State Production and Technical Enterprise "Pivdenaviapromnaladka"
- State Enterprise "Kyiv Automobile Repair Plant"
- Ternopil State Scientific Technical Enterprise "Promin"
- State Enterprise "Zhytomyr Radio Equipment Maintenance Plant "Promin"

Net revenue: UAH 40 million

Number of employees: 147 people

Developer

Number of enterprises: 4

- Public Joint-Stock Company "State Joint-Stock Holding Company "Topaz"
- State Enterprise "Special Design Bureau "Spectr"
- State Enterprise "Ukrainian State Scientific Research Institute of Construction Materials "Prometheus"
- State Enterprise "Design Bureau of Laser Technology"

Component developer-manufacturer

Number of enterprises: 1

State Scientific Research Enterprise "CONECS"

Number of employees: 32 people

Armored Vehicles department

End-products manufacturer

Number of enterprises: 2

State Enterprise "Kharkiv Mechanical Plant"

State Enterprise "MalyshevPlant"

Net revenue: UAH 0,86 billion

Number of employees: 3431 people

Component manufacturer

Number of enterprises: 3

Public Joint Stock Company "Research-And-Production Association "Kyiv Automatics Plant"

State Enterprise "Research and Production Complex "Fotoprylad"

Net revenue: UAH 80 million

Number of employees: 950 people

Repair

Number of enterprises: 8

State Enterprise "Zhytomyr Armoured Fighting Vechicle Plant"

State Enterprise "Mykolayiv Armoured Plant"

State Enterprise "Kharkiv Plant of the Special Machines"

State Enterprise "Lviv Armoured Fighting Vehicle Plant" State Enterprise "Kharkiv Plant of Armored Tanks"

State Enterprise "45 Experimental Machinery Plant"

State Enterprise "Kyiv Armoured Plant"

State Enterprise "Kharkiv Automobile Plant"

Net revenue: UAH 3,95 billion

Number of employees: 3430 people

Developer

Number of enterprises: 4

State Enterprise "Kharkiv Instrument-Making Plant Named After T.G. Shevchenka"

State Enterprise "Ukrainian Research Design-Technological Institute of Elastomer Materials and Products"

State Enterprise "Kharkiv Morozov Machine-Building Design Bureau"

State Enterprise "Kharkov Engine Design Bureau"

Net revenue: UAH 1,43 billion Number of employees: 1330 people

End-products developer-manufacturer

Number of enterprises: 3

State Enterprise "Design Bureau "Artillery Armament"

State Enterprise Scientific and Technical Complex "Precision Mechanics Plant"

Joint Stock Company "Plant "Mayak"

Net revenue: UAH 140 million Number of employees: 540 people

High-precision weapons and ammunition department

Component manufacturer

Number of enterprises: 6

- Public Joint Stock Company "Kyiv Radar Plant"
- State Enterprise "Spetsoboronmash"
- State Enterprise "Krasylivsky Agregate Plant"
- The State Enterprise "Shostka State Plant "Impulse"
- Shostka State "Zirka" Plant
- Konstiantynivka State Scientific Industrial Enterprise "Kvarsyt"

Net revenue: UAH 0,76 billion

Number of employees: 4550 people

Repair

Number of enterprises: 1

State Production and Technical Enterprise "Granit"

Net revenue: UAH 20 million **Number of employees:** 70 people

End-products developer-manufacturer

Number of enterprises: 3

- State Enterprise Scientific Industrial Complex "Progress"
- State Joint Stock Holding Company "ARTEM"
- State Enterprise "State Kyiv Design Bureau "Luch"

Net revenue: UAH 5 billion

Number of employees: 3700 people

Component developer-manufacturer

Number of enterprises: 2

- Public Joint Stock Company "Central Design Bureau "Rythm"
- State Enterprise "Izyum Instrument-Making Plant"

Net revenue: UAH 0,36 billion

Number of employees: 1080 people

Radar, Radio communications and special instrumentation department

End-products manufacturer

Number of enterprises: 1

State Enterprise "Radiovymiruvach"

Net revenue: UAH 41 million

Number of employees: 208 people

Component manufacturer

Number of enterprises: 1

Zaporizhya state entrprise "Radioprylad"

Net revenue: UAH 50 million

Number of employees: 305 people

Repair

Number of enterprises: 6

State Southern Production and Technical Enterprise

- State Enterprise "Radio Technical Equipment Repair Plant"
- State Enterprise "Lvivskyi Radioremontnyi Zavod"
- State Enterprise "Balakliya Repair Plant"
- State Enterprise "Shepetivka Repair Plant"
- Joint Stock Company "2 Repair Plant of Communications Aids"

Net revenue: UAH 0,9 billion

Number of employees: 1110 people

Developer

Number of enterprises: 1

State Enterprise "Scientific Research Institute of Radio Electronic Techniques"

Net revenue: UAH 3 million Number of employees: 24 people

End-products developer-manufacturer

Number of enterprises: 9

- State Enterprise "Scientific and Production Complex "Iskra"
- Joint-Stock Company Meridian n.a. S.P. Korolyov
- "Scientific Technical Complex "Impuls" State Enterprise
- State Enterprise "Central Design Office "Proton"
- State Enterprise Research Institute "Kvant"
- State-Owned Enterprise Plant Generator
- State Enterprise "Orizon-Navigation"
- Kvant Radar Systems Scientific Research Institute
- State-Owned Enterprise "Lviv State Plant "LORTA"

Net revenue: UAH 1,2 billion Number of employees: 4692 people

Component developer-manufacturer

Number of enterprises: 2

- Joint-Stock Company "Research Institute of Electromechanical Devices"
- State Enterprise "Institute for Scientific Research "Shtorm"

Net revenue: UAH 47 million Number of employees: 140 people

Shipbuilding and Marine engineering department

Developer

Number of enterprises: 1

State Research & Design Shipbuilding Centre

Net revenue: UAH 20 million Number of employees: 200 people

End-products developer-manufacturer

Number of enterprises: 2

Kherson State Plant "Palada"

State Enterprise "Gas Turbine Research & Production Complex "Zorya" - "Mashproekt"

Net revenue: UAH 3,5 billion

Number of employees: 8700 people

Component developer-manufacturer

Number of enterprises: 1

 State Enterprise Kyiv Scientific Research Institute of Hydrodevices

Net revenue: UAH 10 million

Number of employees: 50 people

Repair

Number of enterprises: 1

State Enterprise "Mykolayiv Shipyard"

Net revenue: UAH 50 million

Number of employees: 300 people



Exports_



RESULT OF SPECIAL EXPORTERS' WORK - 2020

million USD



Receipt of funds

Plan completed at



Products are being shipped

\$443,4 \$622,7

Plan completed at

100%



Amount of concluded contracts

Plan completed at

108%

TOP EXPORT PRODUCTS



"SKIF", "CORSAR" portable antitank missile systems



Air defence equipment



Repair and modernization of aviation equipment and aircraft engines



Marine gas turbine engines and units



Engines, components, and spare parts for armoured vehicles

UKRSPECEXPORT - RESULTS OF WORK 2020



\$237,1 million

Receipt of funds

109%

Product shipment plan

98%

Implementation of the plan for receipt of funds – 15% higher than in 2019

- Intensification of work in the quarantine conditions: the management structure is updated, potential and presence in the foreign markets are kept, efficiency of work is increased
- As a result, almost 100% of the implementation of the revenue plan in 2020 and overfulfillment of the plan of products shipment by 9%
- Opening of new perspectives in the field of aircraft repair
- Expansion of cooperation in the South Asian region a major contract for the construction of a plant for the repair of light armoured vehicles in one of the countries has been signed

SPETSTECHNOEXPORT – RESULTS OF WORK 2020



\$128,7 million

Receipt of funds

91%

Product shipment plan

96%

Implementation of the plan for receipt of funds compared to 2019

- The structural reform of the enterprise was successfully carried out. Project management tools have been introduced, a beta-version of the CRM-system of the defence enterprise is being created
- Intensification of presence in the Latin American market – participation in a number of major tenders for the supply of military goods of Ukrainian production, as well as the provision of relevant services
- Launch of cooperation in the East Asian market. The contract with a foreign customer for the supply of radar has been fulfilled, new contracts are expected to be concluded
- Cooperation with a number of countries in Europe and the Middle East in the field of guided missile weapons is expanding
- Productive cooperation in the South Asian market continues. After a long break, contracts with one of the region's state customers have been renewed

UKRINMASH - RESULTS OF WORK 2020



\$55,9 million

Receipt of funds

116%

Implementation of the plan for receipt of funds compared to 2019

101%

Product shipment plan

- Expansion of cooperation in the areas of "An" aircraft repair with the countries of Southeast Asia and Europe
- Continuation of fruitful cooperation with one of the countries of the Middle East on the ATGM subject
- Several major import contracts have been concluded and are being executed in the interests of the MoD

PROGRESS - RESULTS OF WORK 2020



\$40,4 million

Receipt of funds

107

Implementation of the plan for receipt of funds compared to 2019

76% Product shipment plan

- Entering a new market cooperation with one of the countries of North America for the supply of "SKIF" ATGM
- Successful execution of the contracts for the supply of "CORSAR" ATGM to a South Asian customer and one of the Central African countries. New contracts and increased supplies are expected
- Entering the Eastern European market and intensifying cooperation in the supply of spare parts for aircraft and the provision of services for the aircraft repair
- The negotiation process with one of the Middle Eastern countries on the continuation of the contract has been resumed

UKROBORONSERVICE - RESULTS FOR 2020



\$34,1 million

Receipt of funds

102...

Implementation of the plan for receipt of funds compared to 2019

106%

Product shipment plan

- Cooperation is underway, and new opportunities for cooperation with one of the countries of North Africa in the field of air defence technology are being discussed;
- The implementation of a major contract for the design and supply of a ship power plant for a customer from South Asia continues;
- Contracts within the framework of the state defence order in the interests of the MoD are being successfully implemented.

Goals of special exporters

Medium-term focus on sales of existing product platforms: continuing the transition from sales of surplus assets to sales of finished products. Entering the growth trajectory of existing products with their simultaneous modification to the requirements of export markets. Active marketing with the participation of the state. Development of military-technical cooperation and offset agreements.

Maintaining positions in traditional markets and geographical diversification: in-depth work in our traditional markets through comprehensive sales of all products in the portfolio. Active expansion in new markets.

Formation of the product portfolio of the future:

cooperation with enterprises-developers and manufacturers on formation of products with export opportunities. Active participation in the development of new product platforms.

Development of customer-oriented relations of special exporters with manufacturers: effective cooperation of special exporters with manufacturers, open communication, and service-oriented relations. Common work to improve product quality.

Solving national problems of arms exports: improving the efficiency of export control (deadlines), solving financial and credit issues with the participation of Ukreximbank, solving the problem of coordination, permits of the Ministry of Defence of Ukraine, constructive cooperation with the attaché and special services.

Development of export capacities of industry associations: formation of new export subdivisions of industry associations, their staffing and coordinated work with existing special exporters.

Reforming special exporters: optimizing the number of special exporters, forming effective relations with foreign economic departments of future industry associations.

Key achievements

- In 2020, in the context of the global coronavirus pandemic, the indicators of foreign economic activity of Ukroboronprom's special exporters decreased by 14% compared to 2019 and amounted to USD 496,2 million.
- The leading positions were occupied by "Ukrspecexport" - 48% and "Spetstechnoexport" - 26%.
- In total, in 2020, Ukroboronprom's special exporters exported arms, military equipment and services to almost 50 countries.
- The volume of concluded contracts of Ukroboronprom's special exporters in 2020 amounted to USD 622,8 million.

Description of the product line

The main types of military products and services supplied for export: ATGM, their components and missiles to them; machine kits for light armoured vehicles assembling; radar and air defence equipment of various types; small arms, automatic guns, ammunition; supply of a wide range of spare parts and components for weapons, etc.

Main services: repair of MiG-29, L-39, Su-27 aircrafts, Mi-8/Mi-17 helicopters, their engines, spare parts and components; services for the organization of production of light armoured vehicles and ATGM on the territory of foreign customers; repair and modernization of air defence armaments.

Various types of ammunition, communications equipment, anti-sniper systems, parachute equipment, small arms, light armoured vehicles, etc. were supplied by special exporters in the direction of import.

Contract performance status for defence agencies and export customers: all contracts are performed according to product delivery schedules (works). Possible problematic issues are promptly resolved through negotiations between the parties to the contract.

Urgent problems

- Unreasonable refusals by Ukraine's Ministry of Defense regarding the possibility of exporting military goods by the Ukroboronprom's enterprises, including contrary to the decision of the Interagency Commission for Policy in Military-Technical Cooperation and Export Control to issue a permit.
- Untimely receipt of permits for export of military goods from the State Service for Export Control of Ukraine.
- Unresolved issue of making agent payments to foreign customers.
- Imperfect pricing mechanism under the state contract under the state defence order in the implementation of the purchase of products (works, services) for imports in the part of determining the level of profit and impossibility of hedging exchange rate securities.

- The nomenclature of modern and technological samples of weapons is rather limited, low rates of production, problems with quality.
- Problems with meeting the requirements of foreign customers to provide bank guarantees during the implementation of large-scale export contracts, etc.

Development and growth plans

- Joint development and production of weapons with foreign partners.
- Transition from pure production and supply of products to technology transfer, creation of joint samples of weapons.
- Expanding the presence in the markets of Latin and South America, deepening cooperation with the Middle East.



Asset management_

The state concern "Ukroboronprom" manages the property of state-owned defence enterprises, including state-owned enterprises that are part of Ukroboronprom, as well as blocks of state-owned shares in the authorized capital of joint-stock companies operating in the defence industry, and managed by Ukroboronprom.

The issues of property management of Ukroboronprom's enterprises are allocated in separate statutory functions in the Charter, namely Ukroboronprom:

- ensures the keeping of records of state-owned objects managed by Ukroboronprom, control over the effective use and preservation of such objects;
- provides the members of Ukroboronprom with consent to the lease of state property, proposals on the terms of the lease agreement, taking into account the need for effective use of the leased property;
- agrees to the alienation and write-off of objects of state property management at Ukroboronprom members;
- controls over the use of leased state property, which is managed by the members of Ukroboronprom, and performs other functions related to the property, enshrined in the Charter.

Ukroboronprom is comprised of 97 enterprises (additional 21 enterprises - in the temporarily occupied territories) and the total area of real estate is 8,360,344 square meters, which in turn is located on land with a total area of 5 054 hectares.

The overall ROA for 2020 was 3.8%.

In total, enterprises use 7,468,471 square meters for their economic activity (or 89% of the total area).

Ukroboronprom's enterprises have 891,873 square meters (or 11%) of surplus property that is not used for economic activities, namely: 808 163 square meters of industrial premises, 83 710 square meters – community use. Such property may be leased or alienated.

Challenges of 2020:

- for almost half a year the Government did not approve the Procedure for leasing state property - only on June 3, 2020 the Resolution of the Cabinet of Ministers was adopted № 483 "Some issues of renting state and communal property";
- lease and alienation of property of joint-stock companies took place without competitive procedures;
- there is no protection of intellectual property and commercialization of IPRs owned by the Ukroboronprom's enterprises;
- the discrepancy between the provisions of regulations did not allow the alienation of real estate of state enterprises;
- low percentage of state registration of real estate.

In the area of asset management, attention was focused on proper accounting of property, as well as its transparent and efficient use, prevention of corruption in terms of property management.

Key achievements

1. The system of real estate accounting has been improved

The module "State-owned objects and objects owned by joint-stock companies with ownership rights" has been introduced, which enables Ukroboronprom to promptly receive and analyze updated information online on available state property and implemented management decisions, including information on:

- all available objects of state property, which are accounted for on the balance sheet of enterprises (location, area, type of object, inventory number, initial / residual / expert value, data on state registration, intentions to dispose);
- implemented management decisions on the lease of state property (data on the lease agreement, its term,

information about the tenant, appraiser, the cost of rent 1 sq. m, etc.);

- implemented management decisions on the write-off and alienation of state property (data on the expected financial result from the alienation, the use of funds received from the alienation, etc.);
- existing encumbrances on real estate;
- potential leases.

The module includes information on 13,773 units of real estate (buildings, structures, land plots).

In order to counter the so-called raider attacks on the property of state-owned enterprises, attention is focused on the need for state registration of real estate. Thus, as of the beginning of 2020, 39.56% of real estate was registered, at the end of the year the figure was 44.43%, or the total number of registered property increased by 466 units.

2. A system of efficient use of state property has been created, i.e. by leasing through Prozorro system

The procedure for approving the lease has been optimized by developing a new Procedure for proposals for the disposal of state property, taking into account the latest changes in legislation by the Cabinet of Ministers of 03.06.2020 № 483.

Within the framework of the new Procedure, Ukroboronprom has developed a transparent mechanism of criteria for determining the starting price of the leased object, additional lease conditions, which allow:

- increase the economic effect of the use / disposal of property;
- increase the expected financial result from the implementation of management decisions;
- ensure the preservation of the leased object.

Mandatory actions of state-owned enterprises and jointstock companies for competitive selection at the most attractive price of the tenant using an electronic auction through the Prozorro system, as well as posting information on thematic web resources (sites) for rent and disposal.

Applying these criteria and tools, the Ukroboronprom's management decisions for 2020 increased the efficiency of property lease by 30.1%, or UAH 951,904.80 / month (or UAH 11,422,857.00 / year) compared to the proposals received from applicants.

Note: the efficiency of Ukroboronprom's management decisions to agree on lease terms in 2018 amounted to 6.44% (UAH 174,610.00 / month), in 2019 - 21.7% (UAH 761,435.15 / month).

In 2020, Ukroboronprom processed 219 proposals of the participating companies regarding the approval of the lease of property.

Based on the results, management decisions were prepared and 180 lease agreements of state property with a total area of 64,069.80 sq. meters, which will receive UAH 3,162,474.45 rental income per month (about UAH 32.30 million per year), of which UAH 948,742.33 are payable to the budget, UAH 2,213,732.11 - rental income of enterprises.

Avoided an unreasonable change in the purpose of the use of leased property with an area of 221.9 square meters in the center of Kyiv, which allowed to receive an additional UAH 1.2 million / year.

3. Procedures for the sale of state property with the use of Prozorro. Sales have been created

Together with the Ministry of Economic Development, SE "Prozorro" worked out problematic issues of alienation of property by enterprises, Ukroboronprom provided proposals, which are included in the resolution of the Cabinet of Ministers "Some issues of alienation of state property" from 16.12.2020 № 1320.

During 2020, Ukroboronprom approved:

13 management decisions on the alienation of 137 units of fixed assets, the expected financial outcome is UAH 18.2 million. 23 management decisions of Ukroboronprom on writeoff of 99 units of property, the expected financial result is UAH 10.3 million.

In order to increase the economic effect of alienation and prevent the sale of fixed assets of enterprises at their residual value, an algorithm was developed for determining the initial cost of alienation of property and a roadmap.

In total, in 2020, 69 units of automobiles as well as 28 machines and equipment were expropriated.

The total starting (initial) sale price was UAH 3,633,780.00, the actual sale value according to the auction results was UAH 4,293,484.00, which indicates an actual increase in the amount of expected funds from the sale of alienated property by UAH 713,604.00.

Illegal and non-transparent (without competition) privatization of state property with a total area of 21.6 thousand square meters was not allowed at a reduced cost.

4. Procedures for sale / lease of property of joint-stock companies with the use of the Prozorro system have been introduced

Ukroboronprom's orders approved approximate internal regulations on the procedure for selling the property of a joint-stock company and the procedure for transferring property for rent exclusively using the Prozorro system, as well as posting information on appropriate web resources on the sale and alienation of property.

Using the new rules of lease of JSC property, 27 packages of documents of joint-stock companies on the lease of property with a total area of 21,884.4 square meters were considered, Ukroboronprom provided conditions for 26 lease agreements with a total area

of 25 531.17 square meters, which will allow to receive income of UAH 6,188,584.16 including VAT per month (yearly – UAH 74,263,009.92 including VAT), while the management decisions of Ukroboronprom will increase rental income by more than UAH 4,3 million / lease term.

5. The enterprises of Ukroboronprom, which have lost their significance for the defence-industrial complex, have been optimized

In order to ensure the transfer of 19 enterprises that have lost their potential for the defence industry, a draft decision of the Government was prepared and sent to the executive authorities for approval.

According to the Resolution of the Cabinet of Ministers of Ukraine dated 09.12.2020 №1229, 17 enterprises were withdrawn from Ukroboronprom and 16 of them were transferred to the SPFU for privatization, 1 - to Ministry of Defence of Ukraine, also transferred shares of 2 joint stock companies to SPFU.

6. Unified approaches to the effective use of intellectual potential have been developed

A comprehensive mechanism for managing intellectual property rights, using intellectual potential, protecting the products of enterprises from unfair competition and promoting the commercialization of intellectual property rights (IPR) in enterprises, in particular:

- Approved Regulations on the creation, acquisition, use and protection of intellectual property rights;
- The Register of technical documentation of all types available at the enterprises is developed. According to the results of the analysis of the information provided by the enterprises, 3942 units of technical

documentation are available at the enterprises, of which 3135 are owned by the enterprises. The Intellectual Property Management Department in Ukroboronprom has been established, which will systematically deal with the issues of protection, accounting and commercialization of IPOs.

Due to abovementioned, the following issues remain relevant for resolution:

- 1. Development and approval of documents that are part of the Ukroboronprom's Policy in the field of intellectual property management, namely:
- approximate regulations on the intellectual property unit;
- sample job description of the employee on intellectual property;
- sample agreements on service IPR and payment of remuneration for their use;
- model agreements on the creation of IPR for order, the alienation of IPR, as well as license agreement (agreements);
- indicative provision on the protection of information that constitutes a trade secret;
- Procedure for maintaining the Ukroboronprom's IPR Register.

This will allow:

- effectively protect against unfair competition;
- create mechanisms to prevent "theft" of IPRs;
- introduce unified approaches to the management of IPR of enterprises;

- create conditions for effective use of intellectual potential.
- 2. Development of a comprehensive software solution for systematization and analytical processing of the data set on IPR (Register of IPR), which will allow:
- to form a portfolio of IPR and keep it up to date;
- provide different levels of management with information necessary for effective planning, control and management decisions on IPR;
- to prevent abuse of enterprises when investing in new developments;
- control the efficiency of spending money and time for new developments;
- check the adequacy of ways to protect existing and emerging IPR;
- prevent duplication of costs for similar developments;
- identify IPR in products that are in demand;
- protect the interests of the IPR owner from free use

In 2021, Ukroboronprom will continue to implement existing developments in the field of proper asset protection, transparent and efficient disposal of property, increase revenues from the use of non-core assets and reduce the area of unused property.

7. The Intellectual Property Management Department of Ukroboronprom has been established, which will systematically deal with issues of protection, accounting and commercialization of IPR of the enterprises.

REVENUE FROM LEASE AND SALE OF ASSETS IN 2020



Sale and lease of surplus assets of defence companies are made exclusively through Prozorro.Sales 5 1 S Million UAH

RESULT FROM EFFECTIVE UKROBORONPROM MANAGERIAL DECISIONS CONCERNING LEASE IN 2020

on

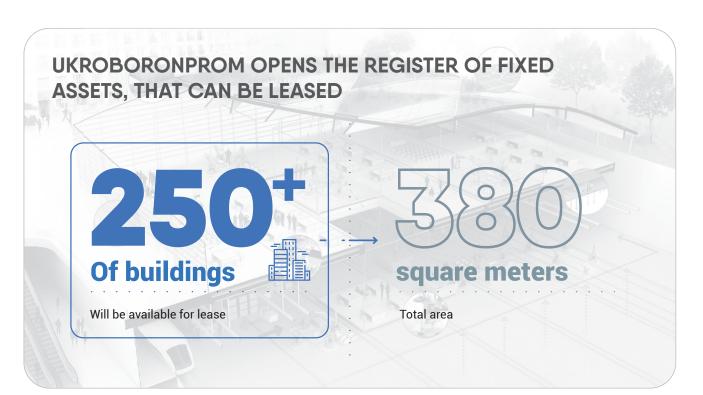
30,1%

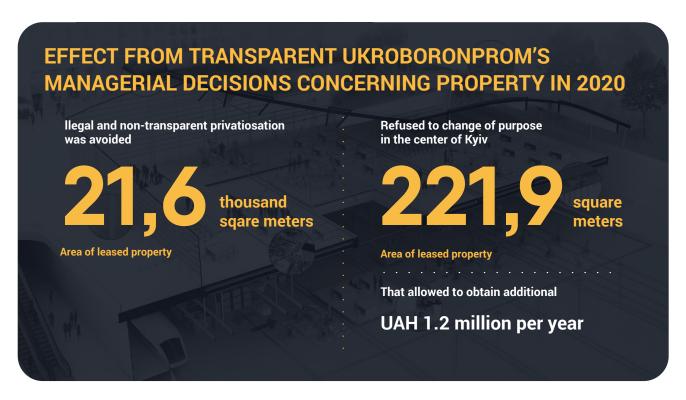
lease efficiency has grown

on

11,43
Million UAH / year

more enterprises receive





Procurement_

Major changes that took place during 2020

In 2020, Ukroboronprom joined Prozorro on its own initiative and became one of the leaders in Prozorro system in terms of resources saved. Starting from January 2020, the procurement was transferred to the open electronic trading system of Ukraine - Prozorro.

- The "institute of responsible persons" was created (analog of authorized persons in accordance with the Law of Ukraine "On Public Procurement"). As a result, 170 people responsible for procurement at enterprises were approved (130 main, 40 - acting).
- In 2020, 70 enterprises and Ukroboronprom conducted open tender procurement.
- of appeal, through which any participant in the procurement can appeal a decision of the company during procurement. The Board for Complaints is headed by the Deputy Director General for Security, the Director for Procurement, and the Board also includes the heads of departments and the Director for Legal Affairs. This allows for impartial and professional consideration of relevant decisions that are binding on businesses. In 2020, 391 appeals were received, including 337 complaints and 54 information messages. A total of 95 complaints were satisfied (50 on the board, the other 45 were resolved by the enterprises themselves).
- In 2020, Prozorro set a record for the number of participants - 38 (tender of State Company "Ukrspecexport"), so far no one has managed to surpass this record;
- Created an online resource of the buyer, consisting of 3 modules: "Electricity" - information collection and analysis, "Documents" - placement of relevant information and regulations, video training, "Conclusions" - checking contractors through an online request.

- Typical tender documentation has been developed to facilitate the work.
- Heads of procurement departments were trained and completed the courses "Leadership" and "Category Management". Based on the results, 4 strategies in the areas of procurement were developed and defended: construction services, electrical equipment, fuel and lubricant groups and tools.
- Vchasno and Smartsign services have been introduced, through which current issues can be quickly resolved, including aprove form letters in electronic, orders, directives, contracts, acts of services provided, etc. and sign documents with an electronic digital signature (hereinafter - EDS). 31 companies have implemented these services.
- Developed a semi-automated system for building ratings of procurement activities of the Ukroboronprom's enterprises;
- Ukroboronprom's website has created an "Electronic Procurement Rating" for all companies of Ukroboronprom, which shows online monitoring of the results of the use of the Prozorro system in the procurement activities;
- Memoranda were signed and the only best conditions were obtained for cooperation of the Ukroboronprom's enterprises (discounts, deferred payments, delivery) with large chain stores, with large dealers - suppliers of auto parts.

Procurement in 2020:

- more than 20 thousand procedures have been created;
- number of participants 5.5 thousand;
- the expected cost of procurement was more than UAH 8 billion;
- estimated savings of more than UAH 650 million.

EFFECT FROM VOLUNTARY TRANSFER OF UKROBORONPROM'S ENTERPRISES TO PROZORRO TRADING PLATFORM IN 2020







Security_

The introduction of radical structural changes increases the need to forecast, identify and minimize the impact of security threats to personnel and resources of Ukroboronprom, the causes and conditions that lead to financial, material and reputational damage, as well as disruption of its sustainable operation and development.

To achieve these goals, a number of regulations have been put in place to build an effective system of corporate security and its management: corporate security policy and strategy, information security policy, regulations on the organization and operation of the security system in enterprises.

In order to introduce in Ukroboronprom uniform approaches to the prevention, detection and cessation of corruption and the introduction of zero tolerance to them by employees approved the procedure for combating corruption.

The signing of a memorandum of cooperation was an extremely important step in strengthening cooperation to consolidate efforts aimed at cooperation in the exchange of information on criminal corruption offenses under investigation by the National Anti-Corruption Bureau of Ukraine.

In addition, digitalization of work and communication with security departments of enterprises was carried out. Namely:

- 1. The software complex "Information and analytical platform" Electronic security passport "is introduced.
- A system of monitoring, aggregation, verification and analysis of information has been introduced, which includes verification of individuals and legal entities, as well as analysis of open sources of information.
- The process of selection, verification, certain stages of hiring and accounting of candidates for positions is automated.

The system of corporate security for the supply of weapons, military and special equipment, production of new and modernization of existing equipment to ensure the operational capabilities of forces and means of the security and defence sector, as well as the implementation of foreign economic contracts, is implemented at various levels: strategic, operational, tactical - to ensure the sustainable operation of Ukroboronprom and neutralize threats to its security.



SECURITY AND CYBERSECURITY

reports of detected abuses totaling about UAH 202,5 million were sent to law enforcement agencies

criminal proceedings were opened, materials were added to 2

candidates were tested for positions in the concern and enterprises and nominees for state awards, of which 69 people were rejected

suppliers were checked for possible corruption risks when concluding contracts, 119 contracts were processed for compliance with the stated conditions



Strategy for corporate security



Policy of corporate security



information security



combating



organization and functioning of the enterprises



Memorandum on cooperation and exchange of information with NABU in order to combat corruption



Information and analytical platform "Electronic Security Passport": modules "Criminal Proceedings", "Conclusions", "Educational and Practical Hub", "Enterprise" – tested, module "Emergencies / Extraordinary Situations" (incidents) - tested



Software module for automation of the process of selection, verification, hiring and accounting of candidates for positions "Staff-Check"



IT-system for monitoring, aggregation, verification and analysis of

54 cyberattacks repulsed

An effective mechanism for counteracting cyberattacks with the participation of special units of law enforcement agencies of Ukraine has been created, 54 targeted cyberattacks on the Ukroboronprom's information infrastructure have been repulsed, 74 information messages have been sent to law enforcement and coordination bodies.

Human resource management_

Salaries of employees of enterprises - members of Ukroboronprom:

Indicator	2018	2019	2020
Average monthly labor costs per employee, UAH	11 746,3	13 330,9	13 731,1

In 2020, targeting was introduced for 30 heads of participating companies. From 2021, it is planned to extend the practice of goal setting to all managers of participating companies and introduce a similar practice for employees of Ukroboronprom.

Human Resources Development and Support Projects for the Transformation of Ukroboronprom

According to the results of 2020:

Ukroboronprom was reorganized - in order to optimize the organization of the structure in February 2020 3 management levels were reduced (from 8 to 3-5), the number of managers was halved (including the number of deputy general directors - from 11 to 5 positions, more than twice)), the salary structure is simplified and closer to market practices with wage differentiation according to qualifications.

- New rules of organizational design of Ukroboronprom and participating companies have been introduced.
- The selection function was launched, the policy and procedures for ensuring effective hiring in the Concern and Ukroboronprom enterprises were approved. All final candidates for positions in Ukroboronprom, heads of enterprises, as well as their deputies, are selected, the system of which includes a security check, psychophysiological examination using a polygraph and a series of interviews with relevant managers.
- Training and communication 50 open webinars were held for Ukroboronprom's employees from internal and external experts. A Knowledge Library has been created and is regularly updated.
- Psychophysiological research a system of psychophysiological research of staff using a polygraph.



Finances_





Summarized Balance Sheet (Statement of Financial Position) as of 31.12.2020 Measuring unit: UAH mln

ASSETS	Line Code	At the beginning of the reporting period	At the end of the reporting period
1	2	3	4
I. Non-current assets			
Intangible Assets	1000	2 150,4	1 977,6
Cost	1001	2 495,9	2 424,9
Accumulated depreciation	1002	345,5	447,3
Construction in progress	1005	1 259,0	956,1
Property, plant and equipment:	1010	15 694,4	16 385,2
Cost	1011	33 624,6	35 905,9
Accumulated depreciation	1012	17 930,2	19 520,7
Investment property	1015	725,9	633,6
Cost of investment property	1016	366,3	279,8
Depreciation of investment property	1017	31,8	44,8
Long-term biological assets	1020	2,5	2,7
Cost of long-term biological assets	1021	2,5	2,7
Accumulated depreciation of long-term biological assets	1022	0,0	0,0
Long-term financial investments:			
Accounted under equity method	1030	165,0	157,8
Other financial investment	1035	197,8	213,9
Long-term accounts receivable	1040	591,3	600,1
Deferred tax assets	1045	167,0	260,1
Goodwill	1050	0,0	0,0
Deferred acquisition expences	1060	0,0	0,0
Remaining balance in corporate insurance reserve funds	1065	0,0	0,0
Other non-current assets	1090	166,2	235,0
Total section I	1095	21 119,5	21 422,1

Summarized Balance Sheet (Statement of Financial Position) as of 31.12.2020 (continued) Measuring unit: UAH mln

ASSETS	Line Code	At the beginning of the reporting period	At the end of the reporting period
1	2	3	4
II. Current assets			
Inventories	1100	22 750,0	21 647,1
Production inventories	1101	6 820,3	7 388,1
Work-in-progress	1102	12 657,9	11 758,3
Finished goods Goods	1103	2 545,7	2 038,2
	1104 1110	722,1	462,5
Current biological assets		8,8	8,5
Reinsurance deposits Received promissory notes	1115 1120	0,0 0,0	0,0 0,0
Trade accounts receivables	1125	6 110,0	5 512,5
Accounts receivable: prepayments made	1130	4 806,1	5 030,3
Due from budget	1135	1 104,1	733,5
Including income tax prepaid	1136	236,0	106,4
Accounts receivables: on settlements for accrued revenues	1140	34,2	4,8
Accounts receivables: on settlements for internal payments	1145	732,0	877,4
Other current accounts receivable	1155	3 430,4	3 947,7
Current financial investments	1160	606,0	1 244,7
Cash and cash equivalents	1165	6 073,2	11 589,5
Cash	1166	0,7	4,2
Bank accounts	1167	5 769,5	11 238,4
Prepaid expense	1170	191,9	232,8
Reinsurers' share in insurance reserves	1180	0,0	0,0
Including in:			
Long-term commitment reserves	1181	0,0	0,0
Claims reserves or future payments reserves	1182	0,0	0,0
Unearned premium reserves	1183	0,0	0,0
Other insurance reserves	1184	0,0	0,0
Other current assets	1190	794,3	647,8
Total section II	1195	46 641,0	51 476,6
Non-current assets classified as held for sale and disposal groups	1200	159,7	183,6
Total assets	1195	67 920,2	73 082,3

Summarized Balance Sheet (Statement of Financial Position) as of 31.12.2020 (continued) Measuring unit: UAH mln

EQUITY AND LIABILITIES	Line Code	At the beginning of the reporting period	At the end of the reporting period
1	2	3	4
I. Equity			
Share capital	1400	10 198,6	10 198,6
Unregistered capital contributions	1401	0,0	0,0
Revaluation reserve	1405	2 720,9	2 900,0
Additional paid-in capital	1410	4 113,8	4 814,7
Share premium reserve	1411	0,0	0,0
Accumulated exchange rate differences	1412	79,5	79,5
Legal reserve	1415	628,5	713,6
Retained earnings (accumulated deficit)	1420	8 582,1	9 479,9
Unpaid capital	1425	3 584,4	3 584,4
Withdrawn capital	1430	0,0	0,0
Other reserves	1435	0,0	0,0
Total Section I	1495	22 659,5	24 522,4
II. Non-current Liabilities and Provisions	'		
Deferred tax liabilities	1500	935,9	737,8
Pension commitments	1505	114,8	132,9
Non-current bank borrowings	1510	1 440,7	1 226,5
Other non-current liabilities	1515	599,7	1 029,2
Non-current provisions	1520	1 022,6	781,3
Non-current provisions of staff expenditures	1521	164,6	169,0
Purpose financing	1525	655,3	913,5
Charity support	1526	0,0	0,0
Insurance reserves	1530	0,0	0,0
including:			
non-current liabilities reserve	1531	0,0	0,0
loss reserves or future payments reserves	1532	0,0	0,0
unearned premium reserves	1533	0,0	0,0
other insurance reserves	1534	0,0	0,0
Investment contracts	1535	0,0	0,0
Prize fund	1540	0,0	0,0
Jackpot payment reserve	1545	0,0	0,0
Total Section II	1595	4 769,0	4 821,2

Summarized Balance Sheet (Statement of Financial Position) as of 31.12.2020 (continued) Measuring unit: UAH mln

EQUITY AND LIABILITIES	Line Code	At the beginning of the reporting period	At the end of the reporting period
1	2	3	4
III. Current commitments and commitment guarantees			
Current bank borrowings	1600	5 437,2	5 489,0
Notes payable	1605	0,0	0,0
Accounts payable:			
current portion of long-term liabilities	1610	707,5	137,1
trade accounts payble	1615	6 509,4	6 105,8
due to budget	1620	1 563,2	2 168,9
including income tax payable	1621	58,4	156,7
social charges payable	1625	661,9	736,6
salary payable	1630	868,9	948,1
Advances received	1635	13 825,2	16 436,1
Accounts payable on settlement with participants	1640	178,8	166,6
Accounts payable on internal settlements	1645	322,8	559,3
Accounts payable on social charges	1650	0,0	0,0
Current provisions	1660	2 236,9	1 993,4
Deferred income	1665	797,0	854,5
Deferred commission income from reinsurers	1670	0,0	0,0
Other current liabilities	1690	7 205,8	8 059,3
Total Section III	1695	40 314,6	43 654,7
IV. Liabilities related to non-current assets held for sale and disposal groups	1700	177,1	84,0
V. Net asset value of non-governmental pension fund	1800	0,0	0,0
Total Equity and Liabilities	1900	67 920,2	73 082,3

Summarized Statement of Profit and Loss

I. PROFIT AND LOSS STATEMENT

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
Revenue	2000	37 447,6	39 575,9
Net earned insurance premium	2010	0,0	0,0
Gross written premiums, sum	2011	0,0	0,0
Reinsurance-ceded premiums	2012	0,0	0,0
Change of reserve of unearned premiums, gross sum	2013	0,0	0,0
Change of reinsurers' share in reserve of unearned premiums	2014	0,0	0,0
Cost of sales	2050	26 022,2	27 132,1
Net losses from insurance compensation	2070	0,0	0,0
Gross			
profit	2090	11 448,4	12 597,4
loss	2095	23,0	153,6
Income (expenses) from change of long-term liabilities reserves	2105	0,00	0,00
Income (expenses) from change of other insurance reserves	2110	0,00	0,00
Change of other insurance reserves, gross amount	2111	0,00	0,00
Change of reinsurers' share in other insurance reserve	2112	0,00	0,00
Other operating income	2120	4 262,4	3 896,5
Earnings from movements in the values of assets, measured at fair value	2121	7	20,5
Earnings from initial recognition of biological assets and agricultural products	2122	0,0	0,0
General administrative expense	2130	(3 250,5)	(3 236,8)
Selling and distribution expense	2150	(1 467,3)	(4 394,2)
Other operating expense	2180	(6 022,3)	(7 012,6)
Expenses from movements in the values of assets, measured at fair value	2181	()	()
Expenses from initial recognition of biological assets and agricultural products	2182	0,0	0,8

Summarized Statement of Profit and Loss (continued)

I. PROFIT AND LOSS STATEMENT

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
Operating:			
profit	2190	5 708,0	3 080,5
loss	2195	(760,6)	(1 383,8)
Income on equity investments	2200	0,0	0,0
Other finance income	2220	266,7	209,4
Other income	2240	349,200	1198,9
Income from charity	2241	0,5	0,6
Finance costs	2250	(810,9)	(1 078,6)
Loss on equity investments	2255	()	(1,0)
Other expense	2270	(1 495,4)	(170,5)
Profit (loss) from impact of inflation on monetary lines	2275	0,0	0,0
Profit or loss before income tax			
profit	2290	3 970,1	3 307,1
loss	2295	(712,9)	(1 452,2)
Profit tax (expense) benefit	2300	-715,4	-657,9
Profit (loss) on discontinued operations after tax	2305	0,0	0,0
Net profit or loss			
profit	2350	3 251,2	2 657,0
loss	2355	(709,4)	(1 460,0)

Summarized Statement of Profit and Loss (continued)

II. COMPREHENSIVE INCOME

Measuring unit: UAH mln

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
Revaluation of the property, plant and equipment	2400	154,2	508,6
Revaluation of the financial investments	2405	0,0	0,0
Currency translation reserve	2410	0,0	0,0
Share of movements in comprehensive income of subsidiaries, associates and joint ventures	2415	0,0	0,0
Other comprehensive income	2445	116,4	-72,4
Other comprehensive income before income tax	2450	270,6	436,6
Income tax related to items of other comprehensive income	2455	-0,5	0,3
Other comprehensive income, after income tax	2460	271,1	436,3
Total comprehensive income (sum of lines 2350, 2355 and 2460)	2465	2812,9	1633,3

III. OPERATING EXPENSE BY ELEMENTS

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
Materials	2500	8 684,1	10 257,0
Staff costs	2505	11 102,3	11 190,0
Social charges	2510	2 298,3	2 334,5
Depreciation and amortisation	2515	1 746,2	1 807,3
Other operating expense	2520	9 370,6	11 615,4
Total	2550	33 201,5	37 204,2

Summarized Statement of Profit and Loss (continued)

IV. EARNINGS PER SHARE

Measuring unit: $\mathbf{UAH}\ \mathbf{mIn}$

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
Average annual number of ordinary shares	2600	326488822	326488822
Diluted average number of ordinary shares	2605	326488822	326488822
Net profit (loss) per 1 ordinary share	2610	-51,32099	-109,95008
Net profit (loss) per 1 ordinary share (diluted)	2615	-51,32099	-109,95008
Dividends per ordinary share	2650	2,37671	1,56204

Summarized Statement of Cash Flows (direct) for 2020

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
I. Cash flows from operating activities Proceeds from:			
Sales of products (goods, works, products)	3000	29 054,8	27 884,9
Return of taxes and charges	3005	793,5	1 415,7
including value added tax	3006	760,5	1 361,7
Purpose financing	3010	163	187,1
Proceeds from subsidies, subventions	3011	8,1	14,5
Advances from buyers and customers	3015	21 165,1	17 870,4
Proceeds from return of advances	3020	232,9	264,6
Proceeds from interests on balance of running accounts	3025	65,4	122,9
Proceeds from debtors' forfeits (fines, penalty)	3035	23,0	21,9
Proceeds from operating lease	3040	198,9	189,8
Proceeds from copyright royalties and renumerations	3045	80,5	71,6
Proceeds from insurance premiums	3050	0,0	0,0
Proceeds from repayment of loans from financial institutions	3055	0,0	0,0
Other proceeds	3095	3076,5	5684,3
Outflows from:			
Goods (works, services)	3100	(17 120,6)	(21 006,1)
Labour costs	3105	(9 185,9)	(9 178,8)
Benefits-related deductions	3110	(2 351,5)	(2 382,9)
Tax liabilities	3115	(4 121,7)	(4 517,1)
Outflows from income tax	3116	(344,5)	(580,4)
Outflows from VAT liabilities	3117	(1 066,7)	(1 149,3)
Outflows from VAT liabilities	3118	(2703,6)	(2 782,5)

Summarized Statement of Cash Flows (direct) for 2020 (continued)

ITEM	Line Code	For the reporting period	For the same previous reporting period
1	2	3	4
Outflow from advances	3135	(8614,7)	(10 839,1)
Outflow from returning advances	3140	(235,2)	(169,1)
Outflow from purpose contributions	3145	(6,5)	(14,8)
Outflow from liabilities under insurance contracts	3150	(0,6)	(3,0)
Outflow from financial institutions for lending	3155	(0,0)	(0,0)
Other outflows	3190	(4 387,7)	(6939,8)
Net cash flow from operating activities	3195	8 835,2	-1 337,5
II. Cash flows from investing activities Proceeds from sale of:			
financial investments	3200	592,0	6,2
non-current assets	3205	7,4	2,6
Proceeds from derivatives:			
interest received	3215	35,0	36,3
dividends received	3220	0,0	0,0
Proceeds from derivatives	3225	0,0	0,0
Proceeds from repayment of loans	3230	15,0	33,3
Proceeds from disposal of subsidiary and other entity	3235	0,0	0,0
Other proceeds	3250	0,0	229,5
Outflows from:			
financial investments	3255	(1 132,7)	(0,2)
non-current assets	3260	(567,4)	(821,4)
Outflows from derivatives	3270	(0,0)	(0,0)
Outflows from loaning	3275	(11,8)	(17,4)
Outflows from acquisition of subsidiary and other economic entity	3280	(0,0)	(17,8)
Other outflows	3290	(0,2)	(2,1)
Net cash flow from investing activities	3295	-1 062,7	-551,0

Summarized Statement of Cash Flows (direct) for 2020 (continued)

ITEM	Line Code	For the reporting period	For the same previous reporting period	
1	2	3	4	
III. Cash flows from financing activities Proceeds from:				
Issue of shares	3300	0,0	17,8	
Loans and borrowings received	3305	2 264,0	2 816,1	
Proceeds from disposal of share in subsidiaries	3310	0,0	0,0	
Other proceeds	3340	135,8	236,0	
Outflows from:				
redemption of own shares	3345	(0,0)	(0,0)	
loans and borrowings repaid	3350	(4 114,0)	(2 019,0)	
dividends paid	3355	(664,3)	(647,0)	
interest paid	3360	(705,8)	(638,3)	
Outflows from financial lease liability	3365	(0,5)	(1,9)	
Outflows from purchase of share in subsidiaries	3370	(0,0)	(0,0)	
Outflows from payments to uncontrolled shares in subsidiaries	3375	(0,0)	(0,0)	
Other outflows	3390	(14,8)	(134,6)	
Net cash flow from financing activities	3395	-3 099,6	-370,9	
Net increase in cash and cash equivalents	3400	4 672,9	-2 259,4	
Cash and cash equivalents at the beginning of the year	3405	6 073,2	8 862,7	
Effects of exchange rates changes on cash and cash equivalents	3410	843,4	-530,2	
Cash and cash equivalents at the end of the year	3415	11 589,5	6 073,1	

Summarized Statement of Equity Measuring unit: UAH mln

Item	Line Code	Share capital	Revaluation reserve	Additional paid-in capital	Legal reserve	Retained earnings (accumulated deficit)	Unpaid capital	Withdrawn capital	Total
1	2	3	4	5	6	7	8	9	10
Balance at the beginning of the year	4000	10 198,6	2 998,0	4 275,5	628,5	10 742,8	-3 584,4	0,0	25 259,0
Adjustment: Accounting policy change	4005	0,0	-230,9	0,0	0,0	114,5	0,0	0,0	-116,4
Correcting mistakes	4010	0	-19,2	-66	0	- 492,3	0	0	-577,5
Other changes	4090	0	-27	-95,7	0	-1 782,9	0	0	-1 905,6
Balance at the beginning of the year (corrected)	4095	10 198,6	2 720,9	4 113,8	628,5	8 582,1	-3 584,4	0	22 659,5
Net profit (loss) for the reporting period	4100	0	0	0	0	2541,8	0	0	2 541,8
Other comprehensive income for the reporting period	4110	0	155,2	119,4	0	-1,8	0	0	272,8
Revaluation of the property, plant and equipment	4111	0	108	0	0	1,6	0	0	109,6
Revaluation of the financial investments	4112	0	0	0	0	0	0	0	0
Currency translation reserve	4113	0	0	0,1	0	0	0	0	0,1
Share of movements in comprehensive income of subsidiaries, associates and joint ventures	4114	0	0	0	0	0	0	0	0
Other comprehensive income	4116	0	46,1	117,5	0	-3,4	0	0	160,2
Profit distribution: Dividends to shareholders	4200	0	0	0	0	-12,7	0	0	-12,7
Channelling profit to registered capital	4205	0	0	0	0	0	0	0	0

Summarized Statement of Equity (continued) Measuring unit: UAH mln

ltem	Line Code	Share capital	Revaluation reserve	Additional paid-in capital	Legal reserve	Retained earnings (accumulated deficit)	Unpaid capital	Withdrawn capital	Total
1	2	3	4	5	6	7	8	9	10
Charge to the Legal reserve	4210	0	0	0	85,1	-85,1	0	0	0
Portion of net profit attributable to the State Budget of Ukraine	4215	0	0	0	0	-959	0	0	-959
Portion of net profit for establishment of special trust funds	4220	0	0	261,7	0	-263,6	0	0	-1,9
Portion of net profit for material incentives	4225	0	0	5	0	-25,9	0	0	-0,9
Participants' contributions: Capital contributions	4240	0	0	0	0	0	0	0	0
Repayment of debt from capital	4245	0	0	0	0	0	0	0	0
Withdrawal of capital: Redemption of shares	4260	0	0	0	0	0	0	0	0
Resale of repurchased shares	4265	0	0	0	0	0	0	0	0
Cancellation of redeemed shares	4270	0	0	0	0	0	0	0	0
Withdrawal of a share in the capital	4275	0	0	0	0	0	0	0	0
Dilution of nominal value of shares	4280	0	0	0	0	0	0	0	0
Other changes in equity	4290	0	23,9	314,8	0	-295,9	0	0	42,8
Purchase (sale) of an uncontrolled share in a subsidiary	4291	0	0	0	0	0	0	0	0
Total changes in equity	4295	0	179,1	700,9	85,1	897,8	0	0	1 862,9
Balance at the end of the year	4300	10 198,6	2 900	4 814,7	713,6	9 479,9	-3 584,4	0	24 522,4





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