ORIGINAL PAPER

DOI: 10.26794/2220-6469-2023-17-1-31-44
UDC 338–245(045)
JEL N00

Change of the Management System and Formation of the Russian Wartime Mobilization Economy Model during the First World War

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ABSTRACT

The problem of the economic transformation has always been one of the main issues for the economists of all times. Nowadays it gains particular relevancy. The first experience of transforming the peacetime market economy into the economy based on the wartime mobilization principles was acquired by Russia during the First World War, which is considered the first total war in history. To provide the army with all the necessary weapon, ammunition and food a concentration of all the powers, resources and assets was needed. To win it was necessary to change the system of the governmental administration by filling it with new content. The article highlights the main stages of the new management structure formation, which could face the challenges of that time; a characteristic of the new administrative bodies is given as well as the general range of problems which the government faced while reforming the administration system.

Keywords: wartime mobilization economy; stavka of the supreme commander; main artillery directorate; S.N. Vankov's organization; special administrative commission on artillery; special council; All-Russian zemstvo union; All-Russian union of cities; military-industrial committees

For citation: **Shapkin I.N. Change in the management system and formation of the Russian wartime mobilization economy model during the First world war. *The World of the New Economy.* 2023;17(1):31-44. DOI: 10.26794/2220-6469-2023-17-1-31-44**

History repeats itself
Thucydides (c. 460 — c. 400 BC).

INTRODUCTION

The events of present days convince us of the topicality of the aphorism expressed by the ancient Greek historian. Indeed, much of what is happening now resembles in form and content what Russia faced a hundred years ago. Russia approached the beginning of the First World War with the experience of a failed war with Japan, with incomplete reforms, economic and political contradictions, with an erroneous military-strategic assessment of the future war, etc. "There was a striking unanimity in European military circles regarding the likely duration of the war: military writers of all countries, and the most respected representatives of the General Staff maintained the idea that the coming war could not be long, that its probable duration would be about 3 months, and the maximum would be about half a year, that all serious military operations would be over by then and the fate of the war would be decided," wrote in the 1920s the General, Professor N.A. Danilov [1]. The war would deplete the stocks of expensive weapons, ammunition and equipment and it would force the enemy to sit down at the negotiating table. The military plans did not rely on organizing military production, but on supplying the army and navy with peacetime-prepared supplies.

Strategic planning errors led to military, economic, moral and image losses for Russia. Only the mobilisation of all forces and resources could overcome the complexities and difficulties caused by both previous miscalculations and new problems. The logic of war demanded a restructuring of the governing bodies. Success on the frontlines depended on the awareness and the speed of decision-making.

NEW GOVERNING BODIES AT THE INITIAL STAGE OF THE WAR

Three days before the outbreak of the war a document was adopted which determined the structure of army command during the war — the "Field command of the troops in wartime". The Stavka of the Supreme Commander-in-Chief was declared the supreme body of military administration. It was created at the beginning of the war and it consisted of the Quartermaster-General's Office, which was responsible for developing operational issues, the Office of the Chief of Military Communications, which managed the transport in the war zone, and the Naval Office. The Chief of Staff had a civilian office and even a diplomatic section. However, there was no structure in charge of supplying and ensuring armaments to the army. "Under the Supreme Commander-in-Chief," — General A.A. Manikovsky later noted, — "there was no special body responsible for and in charge of supplying the active armies. [2]. The Facility and maintenance departments of the Military and Naval Ministries were to handle the most complex organizational, managerial, and logistical tasks. They were tasked with the delivery of weapons, ammunition, and equipment from the rear army depots to the active army. During the first year and a half of the war the post of an intendant i.e., commissaryship did not exist in the army. It was only on January 5, 1916 that a temporary provision for the Field Inspector-General of Artillery under the supervision of the Supreme Commander-in-Chief was approved, who was entrusted with the general management and supervision of the timely, orderly supply of the troops with weapons and ammunition. [3].

The war necessitated the creation of new management institutions. In August 1914, a Directorate for Food Supplies to the army fronts (the so-called "Khlebarmia") was established under the General Directorate of Agriculture, which had local (but not in all provinces) staffs of commissioners [4]. The document promulgated on 29 August 1914, entitled "Regulations on Localities Under Martial Law," granted the army commanders broad powers: to prohibit or restrict the export of food and forage from the front-line zone, it also allowed them to set purchase prices for products intended for army shops and regulate the production of certain branches of the food industry. Part of the management of the economy in the front-line areas passed into the hands of the military and wartime administration.

A decree of 8 December 1914 granted similar rights to commanders of rear military districts. By a law of 17 February 1915, in accordance with the governors and commissioners, they could fix maximum prices for food purchased for the army, restrict its export, and carry out requisitions. In March 1915 the Ministry of Trade and Industry set up a Committee for the Supply of Food to the Population, which had previously been the responsibility of the Ministry of Internal Affairs; the Minister of Railways was charged with overseeing the extraction and export of coal from the Donbass.

The measures taken were mainly ad hoc, not always well thought out and systematic. This confused the activities of the military authorities and the local administration and caused inter-agency conflicts.

For a long time, the idea that the war would be short-lived had had a very negative effect on government circles. This can explain the inconsistent and haphazard manner in which the government acted at the beginning of the war. The result was the armament crisis and the "shell famine" at the end of 1914. By this time the military leadership came to the conclusion that emergency measures were needed. The stockpiles were running out and the state industry was unable to fully supply the army. Quartermaster-General of the Stavka Yu.N. Danilov wrote in exile: "The size and scale of the needs exceeded all the most sweeping assumptions and, therefore, it was increasingly difficult to go on satisfying them. The rear could not keep up with the front, and the army was shrinking day by day as its supplies were diminishing". [5].

At first, the Tsar and his inner circle believed that it was sufficient to extend the powers of the

existing civil and military authorities. They did not envisage the creation of new administrative structures. However, the failures at the fronts showed the low efficiency of the existing administrative system. Particular dissatisfaction was caused by the activities of the General Artillery Administration (GAA) which supplied the army with arms and ammunition.[1]

The shortage of ammunition prompted the Chief of Stavka, Grand Duke Nikolai Nikolayevich, to initiate and propose the creation of a Special Administrative (Ordinance) Commission on Artillery. On February 15, 1915 it was established as part of the War Ministry. The Commission was to "promote the provision of the army in the field of artillery equipment by monitoring and controlling the activities of institutions involved in the artillery supply: the use of available means of combat, the procurement of new means by order, purchase, as well as expanding the productivity of factories, the application of new inventions in the artillery field, etc." [6].

It was commissioned to establish working "ties between the army in force and the bodies in charge of producing and supplying artillery items". The Commission was given the right to control the activities of the GAA and its subordinate organisations and persons involved in the execution of military orders, and the management of public and private enterprises. A noteworthy point of the Regulations is that "the control and general attitude to private and state factories in fact should not go beyond the existing legal provisions, the highest approved resolutions of the Council of Ministers and interdepartmental agreements". [7]. This meant that the authorities were still clinging to peacetime procedures, which provided for bidding for government contracts, observing a large number of formalities in their execution, and so on.

The Commission made many efforts to provide fuel, materials, equipment, and labour for the defence enterprises. One of the major and most successful measures was the establishment of a special organisation by General S.N. Vankov. The task of producing three-inch shells, that was the main calibre in the field artillery, using the French technology, was given to a commissioner of the GAA in the shortest possible time. While continuing to produce shells complying with the Russian standards, the organization needed to engage new enterprises. Having started work in April 1915, in a month it managed to engage 49 medium and small enterprises in fulfilling a million-dollar order, creating a "closed-cycle" production [8]. [8]. All enterprises were grouped into four groups headed by the "parent" factory. By 1917, Vankov's organization employed 442 state and private factories, producing the entire range of products needed to create shells. It participated in the construction of new industrial enterprises. [9].

The war demonstrated the shortcomings of the existing management system, which was unprepared for large-scale military confrontation. Its most important flaw was its unpreparedness to quickly restructure its work, to adapt to new conditions and demands, and the lack of clear coordination and interaction between the management bodies.

In the early months of the war, the supreme power used its decades-long practice of decision-making. During the peace years, when faced with challenges, the government responded by setting up commissions and meetings involving officials and interested parties, inviting experts. These temporary bodies had no power of any kind. They had only a consultative function. This practice, which went on for many years, helped to develop a certain type of a manager who tended to make exclusively collegial decisions, who tried to delegate and shift responsibility to others, who could not find a quick and systematic approach to resolving the problems at hand. There were very

[1] GAA was established on December 28th, 1862. It provided the troops with all types of weapons and ammunition, ensured combat training of artillery units, was responsible for the improvement of military technology and weapons. On the eve of World War, I the GAA Command was responsible for 50 military factories that produced artillery weapons, 22 central artillery depots, and 12 district offices. 200 private companies contracted to produce artillery weapons and ammunition.

few Russian managers who were prepared to take responsibility without the fear of consequences. The "meetings system" was also in place during the war, i.e., the old management style of decision-making was reproduced under extraordinary conditions.

SPECIAL ORDINANCE COMMISSION FOR ARTILLERY

The logic of development, meanwhile, dictated changes in state-building issues. During 1915 the system of military and economic regulation began to take shape. The following establishments were created: a Special Ordinance Commission for Artillery (January 1, 1915), a Special Meeting on Strengthening the Supply of the Active Army with Essential Allowances types (May 1915), a Special Meeting on strengthening the artillery supply of the Active Army, renamed on June 7, 1915 into a Special Meeting to combine activities to provide the army in the field of military and material supplies.

There were high expectations for the work of these new structures. They were given considerable powers. The Special Ordinance Commission on Artillery (SOC) "to establish a real link between the active army and the bodies in charge of the manufacture and supply of artillery items" was charged with the duty "to contribute in all measures to provide the active army with artillery supplies". The chairman of the SOC, subordinate to the Stavka, was charged with "presenting to the GAA and its subordinate bodies the requirements of the army", seeking their implementation, "demanding from the bodies concerned the information about the needs of the army", and applying measures to meet these needs, "both within the Empire and abroad". [10].

The Commission had the right to control all the institutions of the military department connected with supplying the army with artillery supplies; to inspect and control the activities of enterprises of all forms of ownership, which fulfilled the orders of the GAA; to execute the requisition of property and sequester enterprises in cases where they were unable to obtain the voluntary consent of their owners to perform military orders. At the same time however, the provision contained a proviso that "the control and general attitude to private and state factories and plants should not go beyond the current legal provisions". [10]. This restriction indicated the half-heartedness and inconsistency of the decisions made, i.e., on the one hand, the Commission was given greater rights up to requisitions and sequestration, but on the other hand, it had to be guided by the legislation of pre-war times

The creation of the Special Ordinance Commission on Artillery (SOC) was the first attempt to establish an organisation of an extraordinary character. However, its activities were very poorly coordinated with those of the General Staff (Stavka) of the Supreme Commander-in-Chief, the Council of Ministers, and individual ministries, especially the War Ministry and its directorates, so it was abolished by the order of Nicholas II on 30 June 1915.

As the history of the war has shown, the new management structures were not particularly effective. The results were far from what had been hoped for. There were many reasons for this. Among the most important were a narrow departmental approach to solving the problems, a lack of coordination between different levels of institutions, and the ambitions of the heads of the government departments. Created as a response to military challenges, they were abolished after a short time because of the conflict with the existing management model. Quite typical was a situation where complex issues were resolved at the level of personal contacts between the leaders. In testimony to the Supreme Commission of Inquiry, Grand Duke Sergei Mikhailovich lamented: "There was no possibility of taking measures to raise the productivity of the factories other than personal or through his representatives appeals to the leadership". [10]. But despite the short duration of their activities, they laid the basis for the mobilisation deployment of industry and created the conditions for the involvement of new

enterprises in solving the tasks at hand. In times of emergency, unconventional solutions were needed, as well as new people.

The Russian army's heavy defeat in the Carpathians, the rapid retreat from Galicia and the "great retreat" in the spring and summer of 1915 sent shockwaves through the country. The outburst of indignation in society was unprecedented. No one had expected such a catastrophe. The difficult situation at the fronts made it necessary for the authorities to concentrate all the country's resource potential in their hands and to start involving private business in the fulfilment of the army's tasks. This was demanded not only by the military situation at the fronts, but also by the patriotic public in the country.

Due to military setbacks, the military industrial management system had to be adjusted, and the regulatory role of the state had to be strengthened in order to bring together the public and private industrial sectors. Planning, interaction between government agencies, and the coordination between the executive bodies and the civil society organisations became a priority for all government agencies.

SECTORAL MEETINGS

In the summer of 1915, the authorities came to the conclusion that a solution to the emerging situation would be to establish special administrative bodies with greater powers to intervene in the economy. The war had disrupted the established production, trade, and financial ties. Problems of fuel, transport and food supply became particularly acute. To resolve them, three special, «sectoral» meetings on fuel, transport and food were established. On 30 August 1915 a Special Meeting on the Arrangement of Refugees was set up.

All of them were given considerable powers. The Special Fuel Board could set "ceiling prices" for all types of fuel, distribute fuel among the consumers, change board members and company directors, impose sequestration, order fuel audits, change the terms of contracts, etc. The Food Council was given exclusive rights. It could procure food and forage for the army by all means, regulate trade and prices, confiscate livestock, food, forage and seeds and override the decisions of local authorities regarding trade and supply of towns. The Special Conference on Transportation focused on increasing the capacity of the railways, supplying them with rolling stock, building access tracks, and purchasing rolling stock. It was authorised to establish "compulsory use" of railway rolling stock, steamers, barges, etc.

The purpose of the Special Meetings was to coordinate and unify the efforts of all the governing bodies. They were all of an emergency, temporary nature [12]. In order to coordinate their activities, a Special Ministerial Conference was created in the summer of 1916 under the direction of the chairman of the Council of Ministers, to which all the sectoral meetings were subordinated.

The Special Meetings were "supreme institutions" in their field. They were headed by the respective ministers, who had extraordinary powers, the right to set up their own apparatus and a network of local committees and branches. Only the Transport Conference had no local apparatus. Its orders were carried out by the apparatus of the Ministry of Transport. The heads of the meetings were responsible to the Tsar. The Chairmen of Special Meetings were vested with considerable rights, but their decisions were not binding, but only recommendatory in nature and needed approval by the Chairman of the Special Defense Conference. The agenda of the meetings was proposed by the Chairman.

The work of the Special Meetings followed a well-established pattern — through branch committees, preparatory commissions, etc. The chairmen of the working bodies were appointed by the chairmen of the Meetings, who determined the range of issues to be dealt with. The records were kept by the offices of the respective ministries.

SPECIAL CONFERENCE ON DEFENCE

On 17 August 1915 a "Special Conference for the discussion and unification of defence measures" (Special Conference on Defence) began its

work. It consisted of the members of the State Duma and State Council, the representatives of ministries and departments, and big business. Among the members of the Conference were few people with practical experience of industry, who understood the issues of supplying a multimillion army. General A.A. Manikovsky would later write that "the Conference is too crowded a body for productive work". [2].

The new organisational structure was to become the central coordinating and regulating body for the management of the emerging military-mobilisation economy. The Special Council supervised the distribution of military orders between Russian and foreign factories and firms; controlled the activities of public and private enterprises fulfilling the orders of the War Department; facilitated the construction of new factories and the expansion of the existing ones; agreed on the transportation of military goods; provided defense plants' workers with food, set wages at these enterprises.

The Chairman of the Special Defence Conference, the Minister of War, had exceptionally wide-ranging powers. He could close enterprises that did not fulfil government orders; he could demand priority fulfilment of orders from the treasury; sequester private enterprises and appoint commissioners to manage them; remove soldiers from service as well as remove directors, managers and boards of enterprises working for defence; and appoint managers of enterprises. Resolutions of the Council of Ministers of 16 January and 25 October 1916 further increased the rights of the chairman of the Council.

A special meeting was formed on the principle of unanimity. The Chairman set the agenda and could invite anyone to the meeting. If he was not present at the meeting, the Assistant Minister of War chaired it. The chief of the Office of the Minister of War was responsible for managing the affairs and the office work of the meeting. The entire state apparatus was subordinate to the Ministry of War, which is logical, since in August 1915, the Supreme Commander-in-Chief of the War Ministry, and the Minister of Defence were in charge. And it was Nicholas II who became the Supreme Commander-in-Chief in August 1915. Under the new configuration of power, the civilian departments occupied a secondary position. The meeting is a body designed to deal with military tasks — logistical and administrative support issues as well as sustainment operations have been relegated to the back burner and faded into insignificance. The provision of the population was outside the view of the Defence Council, with the most negative consequences.

There were district commissioners in the local communities. Most of them were military officers, mostly in the rank of the general. On 10 September 1915 "factory meetings" were established in 12 industrial and regional centres — Petrograd, Moscow, Nizhny Novgorod, the Urals, Kiev, Ekaterinoslavsk, etc. The meetings consisted of the representatives of local government agencies, zemstvo and city union organisations, military-industrial committees, and industrialists. The government thus recognised that the knowledge and experience of the latter could be useful in wartime conditions.

The meetings coordinated the work of enterprises in the local communities, built cooperative links between the enterprises, and implemented measures to make fuller use of the resources and production potential of the regions [12]. It was through them that they controlled the activities of the factories that carried out military orders. Their chairmen were given the right to carry out general and private requisitions, set workers' wages, change the nature and volume of the production, and issue advances, allowances, and loans. They made representations to the chairman of the Meetings for the removal from service of members of the boards, directors, and managers of public and private factories, if this was necessary.

The Special Defence Conference was supported by nine expert groups, whose activities were determined by the chairman. There were the following commissions: a general commission, a preparatory commission on artillery matters,

an observation commission, an evacuation commission, a requisitioning commission, a commission on providing enterprises fulfilling military orders with manpower, a commission on revising norms of sanitary and medical supplies for the army, a preparatory commission on aviation matters and a statistical bureau [6]. A special questionnaire commission was established under the Supervisory Commission, which was engaged in statistical and economic research, recording strikes, labour force, finding out the degree of industrial utilisation of individual districts and whole industries for defence work [6]. In addition to the permanent commissions, temporary committees were periodically established under the Meeting to monitor the activities of industrial districts and individual defence enterprises and develop various normative documents.

The Special Council procured arms abroad through the Russian Government Committee in London and the Committee for the Procurement of War and Material Supplies in the United States. It was entrusted with the task of placing and monitoring military orders from foreign manufacturers.

Meetings of the Defence Conference were held twice a week. A detailed journal of the meetings was kept and signed by the members of the meeting. In the event of disagreement with a decision taken by the chairman of the meeting, the members of the meeting were able to record a dissenting opinion. The workload was considerable. Sometimes up to 18 cases were considered at one meeting. The decision was sent to the Executive Commission, which prepared contracts with the executors. The Supervisory Board monitored the progress of the deliveries and the correct and timely performance of the contracts. Based on its conclusions, decisions were made on sequestrations, requisitions, changes of factory boards, etc.

The Special Defence Board was the main military customer. It accounted for 97% of all orders [11]. It received huge advances, up to 60% of the order amount, millions of non-repayable subsidies for production development, reconstruction of evacuated enterprises, and the purchase of machines, tools, and raw materials abroad. The Special Defence Conference had sanctioned the construction of no less than 75 new defence enterprises. Thanks to it, the chemical, automotive, aviation, electrical, bearing, and machine tool industries began to flourish. [13].

The leaders of the Special Meetings were obliged to report about all the decisions to the chairman of the Defence Conference. The Chairman could suspend the decisions of other meetings and, if he was unable to reach agreement with them, he would refer the matter under the consideration to the Council of Ministers. The Minister of War had wide-ranging powers in the industrial and financial fields. He was in charge of financing military orders within the country, spending money abroad. The order of their expenditure was approved by the Special Board. It could give enterprises binding orders, establish, and close industrial enterprises, set maximum prices for raw materials and finished products, set wages, carry out requisition of stocks of raw materials and semi-finished products, restrict private trade, change directors, and board members of enterprises, impose sequestration on immovable property, etc.

The defence meeting sought to coordinate the work of all the meetings. But in real life this was difficult to achieve, as the heads of the meetings were equal and acted independently. All the Special Meetings were given wide-ranging powers — they were responsible for providing the army with the necessary resources and facilities. The Council of Ministers was in charge of people's livelihood. Their interaction was irregular. Thus, there were two 'parallel' structures working in the rear, both of which were loosely connected, each trying to establish its own 'rules of the game'. [14].

Decisions taken by the Defence Council were often vague and inconsistent, even though it was vested with a broad mandate. Every issue was subjected to endless scrutiny, passed from one commission to another. Many of them were drowned in endless disputes and approvals, especially in complex and ambiguous cases, such

as the requisition of equipment from private enterprises, advances and loans for the expansion and refurbishment of private enterprises, etc. As I.V. Majewski rightly noted: "The Special Meeting in most cases did not actually make decisions, but only made recommendations". [15]. And A.A. Manikovsky, the head of the GAA, spoke more sharply, calling it a "politician's talking shop" with incredible discord, bureaucracy, and red tape routine [2].

In the early days the dialogue with the industry was conducted by the Defence Council through compromises and agreements rather than through directives and orders. The involvement of private industry was based on peacetime laws and regulations and was surrounded by a host of formalities which, in the words of General E.M. Smyslovsky, Assistant Chief of the General Artillery Administration (GAA), "became an artificial fortification, that was binding the procurer by the hands and feet". [16].

Another shortcoming of the Meeting was the lack of systematic work. Often, under the influence of a dynamically changing situation, it began to tackle new tasks without completing the old ones. The peacetime management style was carried over to wartime management style. Of course, many problems had to be solved for the first time by the state. Officials had no developed procedures, algorithms, or "protocols" for action. The government had to search by «trial and error» method for adequate and workable managerial tools and mechanisms to deal with the evolving circumstances.

The creation in August 1915 of military regulatory bodies in the form of a system of Special Boards, headed by the Special Defence Board, which had interdepartmental coordinating functions, was an important factor in the mobilisation and militarisation of industry and in the development and condition of all branches of production.

The experience of action of the structure of the Special Councils, the competencies of its individual structures, and the powers of its officials developed along the lines of centralisation, moving away from the consultative and collegial order of decision-making towards placing personal responsibility of the decision maker or whoever was in charge, which was fully justified by the wartime conditions. The war demanded from the State the continuous expansion of the scope of its intervention in all the most important branches of the national economy, in the activities of individual firms and manufacturers.

The institution of special meetings continued after the events of February and October 1917. They survived until March 1918, i.e., until the conclusion of the Brest Peace Treaty.

In addition to the Special Meetings, which were responsible for the overall management of military and economic mobilisation, bodies were set up to regulate particular branches of industry. In July 1915 a Committee for the Supply of Raw Materials to Cotton Factories was set up under the Ministry of Trade and Industry, followed by Committees for the Cloth, Flax and Jute Industries, which were based on the industry monopoly associations. The committees had a consultative function, but often the issues discussed at their meetings became ministerial decisions.

The syndicates "Prodamet" (Society for the Sale of Products of Russian Metallurgical Plants), "Krovlya" (Housetop), "Med" (Copper) and the Society of Copper-Rolling Plants with their extensive accounting and distribution apparatus were involved in the task of providing industrial enterprises with labour. Mining and metallurgical workers were actively involved in the work of the "Committee on the metallurgical industry" headed by General A.Z. Myshlaevsky, established in January 1916. Workers of the oil industry actively cooperated with the Chemical Committee established under the Chief Artillery Directorate and headed by Academician V.N. Ipatyev. The "Provoloka" ("Wire and cable") Syndicate was involved in the wirework of the Chief Military Technical Directorate [9].

In the spring of 1915, the question of the need for private business involvement in the defence sector became evident. The question of

the relationship between the government and the business came to the fore. On what principles should this relationship be based? How was it possible to achieve an equitable distribution of wartime burdens to all groups of the country's population, and prevent the owners of enterprises fulfilling military orders from becoming over-wealthy? How to curb the price appetite of private suppliers? These and many other questions had to be answered.

At first, traditionalism and an inability to take a fresh look at the emerging situation were manifested, for example, in the fact that military orders were allocated primarily to state (state-owned) enterprises and a small group of proven private companies, which had carried them out before the war. However, in the conditions of total full-scale war these enterprises were not able to provide the warring army with the necessary equipment in the required volume.

The country had no developed system for attracting private business for state needs, or for mobilising private industry. The lack of mechanisms for regulating relations between the government and private business, entrepreneurs and workers, and the government's indecision to militarise defence enterprises had a negative impact on the efficient use of existing production facilities. The government had to build relations with business from the ground up. Despite the difficulties, the number of private enterprises working for the fulfilment of military orders increased steadily at the outset of the war. By August 11, 1915, their number increased from 125 to 254, and the number of those fulfilling the orders of the Ministry of Intendant Department — increased from 169 to 575. [15].

PUBLIC ORGANISATIONS

Russian liberals were the first to set up the institutions of a military-mobilisation economy. They were given the right to form their own organisations and participate in the work of the executive branches of power. On 12 August 1914, the All-Russian Zemstvo Union (RZU) was established, and on 16 August the All-Russian Union of Towns (RTU). The Zemstvo Union united the representatives of zemstvo, the Town Union — united the public figures of the city, the intelligentsia, persons of "free professions", etc. [15]. The highest authority of each union was the congress of commissioners. Between the congresses, their affairs were conducted by the main committees of the unions under the chairmanship of the plenipotentiaries.

The Zemstvo Union was a branched structure. By the end of 1916, the number of Zemstvo Union institutions reached 7728, including the main committees — 174; provincial committees — 3454; front committees — 4100. By September 1917, there were 630 towns (about 75% of the total number) in the Union of Towns. The unions employed hundreds of thousands of people.

Starting from the first days of their existence, the organisations developed large-scale activities. The government entrusted the Zemstvo Union with the supply of food and medicines to the front, and the formation of medical and nutritional units. Field hospitals were opened at the front, as well as bathing and laundry units, workshops, warehouses, bakeries, etc. were operating at the front. With the assistance of Zemstvo Unions, brigades from Saratov, Petrograd, Stavropol, Tula, and other provinces were sent to the front. Since 1915, Zemstvo Union engaged in the organization of small industries and workshops for the production of cartage equipment and engineering and construction tools [17]. A pharmaceutical plant was opened in Moscow, which annually produced goods worth more than 1 million roubles. If at the beginning of the war the financial resources of the Zemstvo Union did not exceed 12 million roubles, allocated by zemstvo systems, then by January 1, 1916 the total amount of government allocations rose to nearly 190 million roubles.

The budget of the Union of Towns for the second half of 1916 for the treatment of the sick and wounded, for transport and sanitary measures reached 41.5 million roubles. The expenditure of the Union for 1917 amounted

to 232 million roubles, while the turnover was 464 million roubles. The Union fed 4.3 million workers and 8.6 million refugees in the feeding stations. In 13 sanitary trains of the Union of Towns 340,000 wounded were transported. By autumn of 1916 the number of beds on its books reached 200 thousand. 1 million 260 thousand wounded passed through the Union hospitals from 1914 to January 1916. [17].

On 10 July 1915 these unions set up the "Main Committee for the Supply of the Army of the All-Russian Zemstvo and Town Unions" (Zemgor), a united all-Russian committee of public organisations. The government granted Zemgor the rights of a paramilitary organisation. Its officials wore uniforms and were exempt from military service.

The purpose of the organisation was to coordinate the activities of small and handicraft and cottage industries to improve the supply of the army. It focused on converting them to the manufacture of military products. Zemgor's activities made it possible to provide the army with field fortification entrenchment tools, scrap tools, harness and saddlery, carts, release grenades, bombs, artillery shells, etc. The organisation supplied enterprises with raw materials, fuel, and necessary supplies.

It built its own industrial enterprises. It owned tanneries, canneries, fur shoe factories and dozens of small repair and tailoring workshops. In Moscow, Zemgor owned a factory for military field apparatus; a workshop which made the measuring instruments and gauges, or calibers needed in shell production; two mechanical factories; and an enterprise in Podolsk which made three-inch shells. At the end of 1916, Zemgor activities were discontinued.

On July 25–27, 1915 the 1st All-Russian Congress of Military-Industrial Committees (MIC) was held, and on August 27 of the same year the governmental "Regulations on Military-Industrial Committees" and the "Decree on the Procedure for the Formation and Operation of Military-Industrial Committees and Congresses" were adopted. These policy documents defined the organisations' legal status, their aims, and objectives.

"Regulations" stipulated that MICs were established for the time of war to assist government agencies in supplying the army and navy with all the necessary equipment and provisions, while the committee was a public organization that enjoyed the rights of a legal entity, i.e. the right to enter into contracts with private and public institutions and public organizations, as well as the right to own property, enter into binding relations, organize the acceptance and delivery of items for the army and navy needs, to appear in court. The treasury allocated 300 thousand roubles to the military-industrial committees. Subsequently, the government granted the MIC the right to receive 1% of all government contracts placed with their participation.

A network of MICs was established throughout the country. They were organised even in areas where there were no or almost no industrial enterprises capable of fulfilling military orders, such as Andijan in Fergana province, Kurgan in Tobolsk province, Petropavlovsk in Akmola province, Dagestan, and other localities. By the beginning of 1916, 220 local MICs had begun work, united in 33 provincial structures [18]. Their work was led by the Central Military and Industrial Complex, located in the capital. Congresses of representatives of the MIC were held in Petrograd. In 1915–1918, its printed edition,— "Proceedings of the Central Military Committee", was published.

The Military-Industrial Committees, financed by the treasury, remained unaccountable to the authorities. They formed their own governing bodies and recruited employees to work for them. The committees were public structures [19]. They were responsible for mediation between the treasury and industry, distribution of military orders, regulation of the raw materials market and supply of enterprises with raw materials, rationing prices for raw materials, regulation of foreign trade (procurement), labour market and transport.

The MIC was originated by liberal social activists who believed that "the mobilisation of industry

should be organised by industrialists themselves",[2] and the new organisation could become a nationwide structure for the coordination of industry without the involvement of the authorities. Some of them went further. They saw the committees as essential elements of civil society, as one of possible mechanisms for regulating the economy in the post-war period. Quite often, the leaders of the MIC took an oppositional stance to politics in general and to the specific actions of the government, emphasising this at every opportunity. The contribution of the MIC to the solution of the tasks faced was quite insignificant. By the beginning of 1917, according to the estimates of some researchers, they accounted for 2–3% of the total value of military orders, of which only 50% were fulfilled, and according to other researchers — 17% and 11% correspondingly. [20].

The existence and expansion of the functions of public organisations led to ambiguous attitudes towards them. Negative reactions came from right-wing parties, parts of the government and members of the ruling family. There was clear opposition between civic and state institutions.

On 31 March 1918 the Central Military-Industrial Committee was renamed to become the Central People's Industrial Committee and then abolished on 24 July 1918.

The management structure during the war years was in constant flux. The search was on for the most appropriate managerial model for the current situation and an acceptable organisational form for dealing with emerging problems. The fall in prestige of the Special Defence Conference led to the establishment in December 1915 of the "Council of Five". The "Council of Five" consisted of the leading ministries (Military, Internal Affairs, Trade and Industry, Agriculture and Railways), which was to concentrate on solving current issues, including: deliveries of food and fuel to industrial centres; increasing productivity in coal mines and excavating plants; speeding up the circulation of wagons, etc. However, due to interdepartmental conflicts, the "Council of Five" was abolished in March 1916.

MILITARY MOBILISATION ECONOMY. ECONOMIC OUTPUT BY FEBRUARY 1917

Despite the illusions at the beginning of the war, the logic of development forced the authorities to start shifting the national economy to a military-mobilisation track and to embark on a mobilisation policy. A change in the trajectory of economic development inevitably led to the reform of the former administrative bodies, filling them with new content, and the establishment of new institutions.

The new management structures were elements of a military-mobilisation, emergency economic model based on coercion, state regulation and control. It involved the coercive use of economic and non-economic instruments and methods for the state's purposes. Its effectiveness was determined by the state's ability to make maximum use of all existing production capacities to meet the needs of the army and the population during the war period.

The new institutions sought to be guided by the following principles in their activities:

1. Simplicity, accessibility of plans and solutions, avoiding incomplete information or misinformation.
2. The planning, consistency and coherence of the decisions made and their prompt implementation.
3. Accurate fulfilment of tasks by those who set and perform them.
4. Flexibility, ability to quickly rearrange as new tasks and "inputs" arrive, etc.

The main tools of economic restructuring were restrictive, administrative, and anti-market measures; the use of coercion and control of business activities; the concentration of considerable administrative powers, enshrined in laws, in the hands of state institutions; actions aimed at expanding the public sector in the economy, serving the demands of the army and industry, working for the front and the victory, etc.

[2] Organisation of the Military-Industrial Committees. Pg.: Printing-office by P.P. Gershunin; 1915. 289 p.

Under the conditions of the emerging military-mobilisation economy several economic policies can be distinguished. The government used militarisation and requisitioning of labour. A special labour regime was introduced in state military enterprises, i.e., workers were prohibited from transferring from one enterprise to another, strikes were banned; soldiers were seconded to industrial enterprises; forced forms of labour were spread, night work and overtime were widely used, etc.

Machines, equipment, entire factories, land, and premises were requisitioned for use by enterprises fulfilling military orders. Forced associations of industrial enterprises were carried out. An example of this was the "organisation of S.N. Vankov".

In 1915–1916, 94 major industrial enterprises were sequestrated (effectively nationalised). Even profitable enterprises working for the defence were subjected to this measure.

The war economy required planning, forecasting and precise calculations. The production of shells, gunpowder, rifles, and explosives was planned, followed by railway transportation and the procurement of food supplies. In 1916 a plan to transform the entire national economy into a single planning system was even discussed.

In foreign trade, the government established a monopoly on foreign trade. In February 1916. The Special Conference on Defence forbade private entrepreneurs and business organisations to manufacture orders abroad. They could do so only through an ombudsman of the Special Meeting. All currency for foreign purchases was concentrated in his hands.

In 1916 a card system for the distribution of bread, meat and sugar was introduced in a number of large cities. Prior to the February Revolution, this system had only been introduced in 18 cities, including Moscow. At the end of November 1916, Minister of Agriculture A.A. Rittich introduced bread distribution. In 31 provinces about 700 million poods of bread were to be procured by such means. Thus, by 1917 the foundations of a war-mobilisation economy had been laid in the country, the most important features of which were:

5. The existence of an authorised body vested with supreme state authority and closely connected to the military high command.

6. The existence of a national economic plan, including estimates of state income and expenditure. The plan had to be consistent with strategic military planning.

7. Consistent implementation of the plan, associated not only with the need for internal organisational and technical changes in the elements to be mobilised, but also with the formation of a system of bodies subordinated to a higher centre (military organisation of the national economy, militarised national economy).

8. The legislative (legal) forms of economic mobilisation could be very different, ranging from "free involvement" ("free" coercion) to various coercive measures (legal conscription, nationalisation and militarisation, subordination to military bodies and discipline) [21].

The result of all these efforts was the reorganisation and adaptation of the peacetime economy to the needs of the war economy. During 1915–1917 the state and the public succeeded in increasing industrial production. In 1916, gross industrial output in the country rose by 21.5% compared to the pre-war level. At the same time, the volume of mechanical engineering production had increased by more than 4 times in comparison with 1913 — from 200.2 to 954.6 million roubles. Despite all the difficulties of wartime, the technical equipment of enterprises increased significantly. By the summer of 1916, 39 large machine-building plants purchased additional equipment which cost 130 million roubles. The total cost of equipment of all private plants associated with the defense, which had not exceeded 100 million roubles before the war, approached 1 billion roubles. [22].

At the end of 1916, 1,800 out of 2,290 enterprises (81%) were reoriented towards military production. Of the 2.4 million workers employed in industry, 2 million (86%) worked at enterprises serving the needs of the front [15]. Armament production grew at a very high rate. In August 1916 the number of rifles that were produced was 1100%

more than in August 1914. Cannon production between January 1916 and January 1917 increased by more than 1000% and 76mm shells production increased by 2000%. Production of gunpowder and explosives increased by 250–300% [22].

For all the miscalculations and mistakes, the outcome of the economic mobilisation was impressive. Contemporaries of the events wrote of this: "When the defence work was unfolding in 1915, those who were intimately acquainted with the available means and working conditions of our industry and technology found it difficult to believe that such results could have been achieved as could have been established at the end of 1916. An impartial historian will subsequently be forced to admit that, by and large, Russian machinery coped with the situation and did much more widely and much sooner what the national defence had the right to demand from it". [23].

CONCLUSIONS

At the beginning of the war, the government and military leadership showed a lack of understanding of the situation, the scale and depth of the problems. Patriotism and sacrifice were not enough for victory. The ineffective system of state organisation caused problems in supplying the army with arms, food, ammunition, communication facilities and medical equipment.

What was needed was not only an awareness of the problems facing society, but also the political willpower to resolve them. Gradually the reorganisation of the governing institutions began. Unfortunately, the state institutions of the new mobilisation economy appeared very late and were not always effective, which had an impact at the fronts.

The history of the First World War has shown that successful warfare requires well thought-out mobilisation plans, which are difficult to reconcile with the principles of a market economy and the interests of enterprise. Russia lacked the most important condition of industrial age warfare — competent economic planning aimed at a balanced development of the entire national economic complex. As a result, by 1917 non-military industries had sharply reduced the volume of production, embittering, and enraging the suffering population.

However, despite the great difficulties, the government did not undertake a total mobilisation of the economy. In the shortest possible time the country underwent revolutionary changes in industry and technology, in the field of mass communication, in the organisation of the economic life of the country and in the system of internal social relations.

In 1916 the country made considerable economic progress. Many of the programmes and solutions prepared by the tsarist government would later be used by the Bolsheviks in the years of "war communism" and the new economic policy.

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Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 20.12.2022; revised on 10.01.2023 and accepted for publication on 05.02.2023. The author read and approved the final version of the manuscript.